

# FOREIGN INVESTMENT IN HOSPITAL SECTOR IN INDIA: Trends, Pattern and Issues

Shailender Kumar Hooda

Working Paper

181

April 2015

**ISID**

Institute for Studies in Industrial Development  
New Delhi

**FOREIGN INVESTMENT  
IN HOSPITAL SECTOR IN INDIA:  
Trends, Pattern and Issues**

**Shailender K Hooda**

**ISID**

**Institute for Studies in Industrial Development**

4, Institutional Area, Vasant Kunj Phase II, New Delhi - 110 070

*Phone: +91 11 2676 4600 / 2689 1111; Fax: +91 11 2612 2448*

*E-mail: [info@isid.org.in](mailto:info@isid.org.in); Website: <http://isid.org.in>*

---

**April 2015**

ISID Working Papers are meant to disseminate the tentative results and findings obtained from the ongoing research activities at the Institute and to attract comments and suggestions which may kindly be addressed to the author(s).

## CONTENTS

<i>Abstract</i>	1
1. Introduction	1
2. Data and Methods	4
3. Foreign Investment Inflow into Indian Hospital Sector: Status and Trends	7
4. Investment Inflow by Country Routes and Regional Spread	13
5. Investments in Hospital Sector from Leading Corporate Groups	16
6. Investment by Care/Treatment/Service Classification	19
7. Conclusion	21
References	26

### *List of Box(es)*

<i>Box-1</i>	Details of Data Sources	5
--------------	-------------------------	---

### *List of Figure(s)*

<i>Figure 1</i>	Distribution of FDI Equity Inflows in Health Sector	8
<i>Figure 2</i>	FDI Equity Inflows in Hospital Sector by Different Routes: April 2000 to October 2014	9
<i>Figure 3</i>	Nature of Investment in Hospital Sector in India	10
<i>Figure 4</i>	FDI Equity Inflows Received in Hospital Sector: April 2000–March 2014	11
<i>Figure 5</i>	Private Investment in Hospital Sector as Per Cent to GDP: A Comparison	12
<i>Figure 6</i>	FDI Equity Inflow Received in Hospital Sector by Location	14
<i>Figure 7</i>	Countries' Routes of FDI Inflows in Hospital Sector: April 2000–October 2014	15
<i>Figure 8</i>	Private Investment in Hospital by Leading Companies: January 2000 to September 2013	19
<i>Figure 9</i>	Foreign Investment in Hospital Sector by Cares and Service Classification	20
<i>Figure 10</i>	Private Investment in Hospital by Bed Capacity: January 2000–September 2013	21

*List of Table(s)*

<i>Table 1</i>	Structure of Selected Sources of Funds of leading Corporate Hospitals in India	13
<i>Table 2</i>	List of Leading Corporate Hospital Groups that Received FDI Equity Inflow from April 2000 to October 2014: Analysis by Foreign Collaboration, Country and Regions	17

# FOREIGN INVESTMENT IN HOSPITAL SECTOR IN INDIA: Trends, Pattern and Issues

*Shailender K Hooda\**

---

*[Abstract: This study examines the status of and trends in foreign investment inflow into the Indian hospital sector and highlights the emerging issues from 2000 to 2014, the era of liberalised foreign investment. During this period a significant number of multinational players focussed on the Indian hospital sector—expanding their presence through partnerships and investments in joint venture projects. Though foreign investment inflow to hospitals increased hundredfold during the period, an examination of selected major corporate hospitals of India, however, reflects that international investments constitute a small share within total financing; rather, it is the long-term domestic borrowing that dominates. Overall, foreign investments has largely been used in super-speciality and tertiary cares services, particularly in metropolitan cities, while investment for primary and secondary cares, clinical research, drug development, diagnostic services for rural area remained negligible. The study argues that private investment can play a complementary role in providing tertiary and speciality care services, particularly in the untapped hospital market, and it should not be considered as a substitute for public provisioning of healthcare services. The government will have to increase its healthcare spending manifold in order to provide cost-effective care to the general population across the country, including in the remotest areas.]*

---

**Keywords:** FDI, Hospital Sector, Foreign Financing, Super Speciality Hospital, India

**JEL Classification:** I11– Analysis of Health Care Markets

## 1. Introduction

Countries around the world follow different approaches to provide healthcare services to their people. Following a welfare state approach, some countries spend a sizable amount of public funds on healthcare provision, while others rely more on the private sector for healthcare services (Hooda, 2013). Over the period, the private healthcare industry has rapidly expanded in most of the developed countries like USA, Australia and Europe. The commercialisation or marketisation of healthcare has taken root not only in hospitals,

---

\* Author is Assistant Professor at ISID, New Delhi

but also in related sectors such as pharmaceuticals, medical devices/equipment, diagnostics, telemedicine, health insurance, and so on. The US has been a leader of the pro-market-model—where market forces have largely controlled financing, provisioning and research in the healthcare sector. Financing is largely managed through insurance companies, provisioning by large hospital corporations, and research by pharmaceutical and medical equipment companies. The government's role has been minimal and includes providing public/social insurance to the elderly and the poor, drawing up regulatory guidelines for the private sector and giving subsidies for private medical care (Baru, 2006). This market model was, however, highly criticized during the eighties, and even now, it is not widely accepted. In spite of this, many countries have been moving towards the American model of care where the private sector plays a dominant role. The phenomena is spreading even to Socialist countries like China and emerging economies like South Africa, Latin America and Asia, including India (Baru, 2006; Lefebvre, 2010).

Across the world, the process of corporatisation and privatisation of hospitals has some common features, especially due to the influence of the pharmaceutical and medical equipment companies coupled with the policies of multilateral organisations and pro-market thinking of limited scholars. The extent and nature of privatisation, however, varies across countries, and is influenced by the specific socio-political context (Baru, 2006).

While India did have a private hospital sector at the time of Independence, it is only recently that it has grown and diversified over the years. For instance, out of the total share, the share of private hospitals increased from as low as 18.5 per cent in 1974 to as high as 75 per cent in 2000. The share of private hospital beds increased to 51 per cent in 2013 from 21.4 per cent in 1974. The share of private medical institutions increased to 54.3 per cent in 2014 from a meagre share of 3.6 per cent in 1950. Approximately, an estimated 54.3 per cent of the medical institutions, 75 per cent of the hospitals, 51 per cent of the hospital beds, 75 per cent of the dispensaries and 80 per cent of all qualified doctors are in the private sector (Sehgal and Hooda, 2015; Chanda, 2010). This reflects the dominant presence of private sector in the Indian healthcare market. Due to its strong presence, the private medical sector provides around 60 per cent of inpatient and 80 per cent of outpatients care (Sehgal and Hooda, 2015). This again indicates that the healthcare market is highly privatized in India. Till the year 2000, one of the biggest problem with the healthcare sector was that the small and informal private sector alone served the majority (80 to 85 per cent) of the Indian population in providing both inpatient and outpatient care (Baru *et al.*, 2010). The share of informal medical practitioners, however, has decreased over the period and that of the bigger and formal sector practitioners/enterprises (having workers between 10–19, 20–49 and more than 50 workers) rose between 2001–02 and 2006–07 (Sehgal and Hooda, 2015). This means that the increasing corporatization of the healthcare market in the country is proving beneficial for the healthcare providers.

The emerging private sector has access to various sources of finance for the purpose of making investments in healthcare services. Funds are generally gathered through domestic private investments, non-government funds, external borrowing and aid, foreign direct investment (FDI), private equity investment, capital market funds, etc. Foreign direct investment, along with domestic private investment, is considered a potential source of finance not only to raise funds, but also to promote foreign sector involvement in hospital sector in order to provide world-class healthcare services to all and to create employment opportunities. In the year 2000, as a policy initiative, up to 100 per cent foreign direct investment was permitted under automatic route for the hospital sector in India. Following this, relaxation of import duty on medical equipment and technology in the year 2000, granting of long-term and cheaper loans for private healthcare institutions, according industry status to the hospital sector in 2003–04 Union budget, and later the introduction of social health insurance for accessing private healthcare services were some other measures that were taken to promote privatisation of the Indian healthcare market (Shah and Mohanty, 2010). Coupled with these policy initiatives, population dynamics, public awareness and change in treatment-seeking behaviour, double burden of disease, changing nature of lifestyle diseases, global integration, and medical tourism are other possible demand-side factors that encourage private domestic and foreign providers/enterprises to exploit the Indian hospital services market.

Understanding the nature of corporatisation of the healthcare market, and particularly the trends in and pattern of foreign investment, is essential; it will help determine the extent of foreign investments in the Indian hospital sector. It is important to note that the status of foreign investment is not only determined by the extent of liberalisation of the sector, demographic advancements, people's perception and demand-side factors, but also by the regulatory framework, technological advancements, country risk, availability of quality inputs, ownership and locational advantages, supporting infrastructure, sector-specific business environment issues, and the socio-political environment of the country also play a major role. In this context, quantifying foreign direct investments in hospital sector and highlighting the associated implications assume importance.

As far as is known, no study has attempted to estimate the actual level of FDI in hospital sector in India except one, but on a small scale. The study by Chanda (2010) has attempted to quantify the level of FDI in the Indian hospital sector based on the approved FDI projects in hospitals and diagnostic centres. According to the findings of the study, there is possibility of a huge difference in the amount of FDI approved and the actual amount received by a country. Further, India generally attracts FDI equity inflows to the hospital sector via three different routes, namely i) under SIA/FIPB (other than acquisition), ii) acquisition of existing shares, and, iii) RBI's automatic route. Using information on approved FDI equity inflow under automatic routes provided by the Department of Industrial Policy and Promotion (DIPP), Government of India, it shows under-representation or inadequate representation of FDI equity inflow in the sector.

Thus, their analysis was grossly unable to shed much light on the trends in FDI as well as on the actual amount of FDI equity inflows to the hospital sector and its implications. Considering the limitations of the existing study, this study examines the trends in and pattern of foreign direct investment between 2000 and 2014—the liberalised foreign direct investment policy regime—and highlights the emerging issues with special reference to the corporatisation of the hospital sector in India. Given the dual burden of disease and high demand for inpatient/outpatient care in different regions of the country, it has become increasingly important to shed light on foreign investments made by big business groups, corporate houses and individuals in hospital sector by bed capacity in different services/cares/treatments, multi-super-speciality hospitals and its regional spread since 2000. This study specifically analyses the foreign direct investment (FDI) equity inflow to the hospital sector that comprises hospitals and diagnostic centres.

## 2. Data and Methods

In general, as mentioned earlier, India attracts FDI equity inflows to hospitals and diagnostic centres through SIA/FIPB (other than acquisition), acquisition of existing shares, and RBI's automatic routes. In order to understand the extent of FDI equity inflow to hospitals and diagnostic centres, a list of approved FDI projects was obtained from the Department for Industrial Policy and Promotion (DIPP), Government of India, across all three aforementioned routes for the period beginning April 2000 to October 2014. The data on actual FDI equity inflow received is quite extensive; it provides information on 1378 items/projects listed since 2000 across all the routes which consist of FDI equity inflow on 50, 162 and 1166 different joint venture projects under SIA/FIPB<sup>1</sup> route, acquisition of existing shares, and RBI's automatic routes respectively. It provides information on FDI equity inflow received across different regions/states of India through joint ventures between Indian and foreign companies in terms of Rupees and US Dollars.

The data on actual FDI equity inflow received, however, does not provide information on foreign equity share in joint venture projects and other information that would have allowed us to argue in the ongoing debate on greenfield or brownfield FDI. In order to discuss these issues, two other data sets covering the period from January 2000 to September 2013 have been used: (i) Detailed break-up of approved FDI projects between April 2000 and March 2014 provided by the Department of Industrial Policy and Promotion (DIPP), Government of India, and (ii) Detailed break-up of foreign and

---

<sup>1</sup> Foreign Investment Promotion Board (FIPB) is responsible for expeditious clearance of FDI proposals and review of the implementation of cleared proposals. It also undertakes investment promotion activities and issues and reviews general and sectoral policy guidelines. The Secretariat for Industrial Assistance (SIA) is a gateway to industrial investment in India and assists entrepreneurs and investors in setting up projects. SIA also liaisons with other government bodies to ensure necessary clearances.

private investments in hospital industry projects that have been completed—compiled from projecttoday, a large data set on new projects initiated in India by corporate groups, companies and individuals. The data on approved FDI projects includes information on 95 projects/items, while those from projecttoday include information on about 258 projects/items. The detailed break-up of these data sources is provided in *Box 1*.

**Box 1: Details of Data Sources**

<i>FDI Equity Inflows Received # under FIPB/SIA (other than acquisition), Acquisition of existing share, and RBI automatic routes April 2000–October 2014</i>	<i>FDI Approved # April 2000–March 2014</i>	<i>Foreign &amp; Domestic## investment: completed projects January 2000–September 2013</i>
Name of Indian company	Name of Indian company	Promoter: Name of company
Name of foreign collaborator	Name of foreign collaborator	Ownership: Indian, Foreign & Government
Name of country	Name of country	--
RBI regional office	Name of state	Name of state and district
Item of manufacturing	Item of manufacturing	Project name: item of manufacturing
Amount of FDI inflows (₹ & US\$)	Foreign equity (in ₹ & US\$)	Amount of cost (in ₹)
--	Foreign equity (in %)	--
--	--	Project type: new unit or capacity expansion
--	--	Project capacity: number of beds
No. of project items: 1378	No. of project items: 95	No. of project items: 258

*Note and Source:* # Detail break-up of actual FDI equity inflow received and FDI approved provided by Department of Industrial Policy and Promotion (DIPP), Government of India;

## Detail break-up of foreign and private investment on completed project on hospital industry compiled from projecttoday, a large data set on new projects initiated in India by corporate groups, companies and individuals.

Under the item/project head of FDI inflows in the manufacturing sector, information is classified according to the types of services offered, which includes health and medical services rendered by organisations and individuals such as hospitals, dispensaries, sanatorium, nursing homes, maternal and child welfare clinics by allopathic/ayurvedic, unani, and homoeopathic practitioners. The projecttoday data provides information on investments made to increase the bed capacity in multi-super-speciality hospitals, hospitals for specific diseases like cancer, trauma centres, and other lifestyle diseases hospitals. In the present exercise, a detailed analysis of FDI is provided based on types of services offered in districts/regions/states/country and by leading corporations.

It is important to highlight that as per the notification, no government approval is required as long as the Indian company/investor notifies the regional office of the RBI within 30 days of receiving inward remittances and files the required documents within 30 days of issuing shares to the non-resident investors. A controlling stake is also

permitted in hospitals for foreign investors. Earlier, FDI was subject to discretionary approval by the Foreign Investment Promotion Board (FIPB) (Chanda, 2010). However, it may be noted that FDI in activities not covered under the automatic route require prior approval of the Government which are considered by the Foreign Investment Promotion Board (FIPB), Department of Economic Affairs, Ministry of Finance, Government of India. The Indian company having received FDI either under the automatic route or the Government route is required to comply with provisions of the FDI policy, including the reporting of the FDI inflow to the Reserve Bank of India. With regard to the acquisition of shares in existing company, the current regulations permit various forms of capital mobilisation to be treated as FDI. For instance, subject to certain specified conditions, Indian companies can raise up to 49 per cent foreign currency resources abroad through special depository receipts under automatic route. Such investments are treated as FDI. Private equity stake of over 10 per cent owned by any individual investor also counts as FDI. The major feature of the 10 per cent stake is that the investors are granted management and voting rights if the level of ownership is greater than or equal to 10 per cent of ordinary shares. The ownership of shares amounting to less than the stated amount is termed “portfolio investment,” and not categorized as FDI (RBI, 2007).

The regulatory mechanism for other forms of foreign funding is also quite liberal in India. For instance, Foreign Institutional Investors (FIIs) and Private Equity (PE) firms can individually purchase up to 10 per cent and collectively up to 24 per cent of the paid-up share capital of the company through open offers or private placement or through the stock exchange to expand or set up hospital business/operations in India. Proprietary trading firms, foreign individuals and foreign corporates can register as a “sub-account” and invest through FIIs, subject to limits of 10 per cent and five per cent respectively. Foreign venture capital investments (FVCI) are also permitted (Chanda, 2010).

This liberalised regulatory framework provides considerable scope for foreign direct investment in India's healthcare sector, i.e. in hospitals and diagnostic centres, through various modes of financing. Specifically, these liberal policies permit international investments in Indian hospitals through FDI, foreign institutional investment (FII), venture capital (VC) funds, private equity (PE) funds, initial placement offers (IPOs) subscribed to by foreign players and non-resident Indians (NRI). It was held that FDI provides the much-needed resources to accelerate capital formation, facilitates transfer of technology, knowledge skills and organisational and managerial capabilities, provides access to international market networks, and so on. Given the liberal framework, how much foreign investment has actually flown into the Indian hospital sector is presented in the following sections.

### **3. Foreign Investment Inflow into Indian Hospital Sector: Status and Trends**

Foreign Direct Investment (FDI) is perceived as a magic wand that will transform India into an advanced nation with modern infrastructure. In the process of liberalisation and globalisation, the government has introduced various policy changes in order to attract FDI in different sectors. FDI can have different forms, namely equity capital, re-investment of earnings from the host country and provision of long- and short-term intra company loans. It involves a long-term relationship between two economies, with the objective of establishing a lasting interest in the investee country.

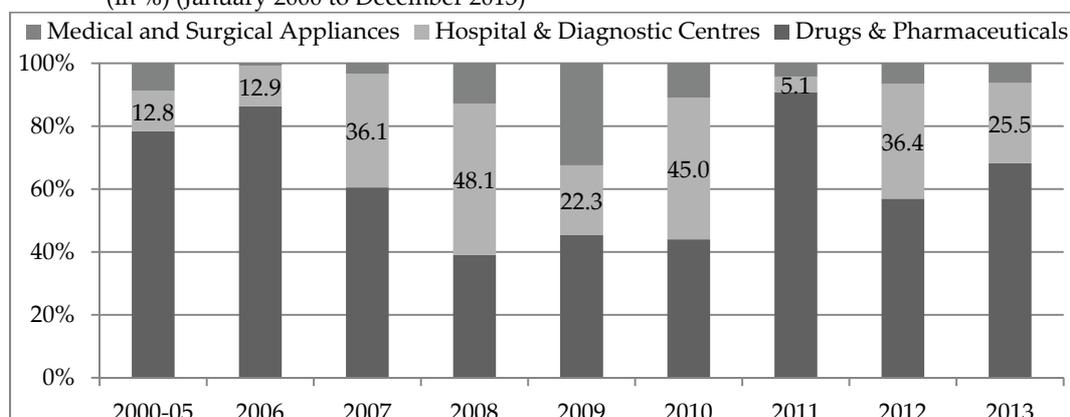
In spite of the high demand for healthcare services, India's healthcare sector falls well below international benchmarks in terms of physical infrastructure and manpower, and even below standards in comparable developing countries. In order to meet the growing demand for healthcare services, which requires huge investment, contributions from the private (foreign and domestic) sector were envisaged. It was also realised that there is growing interest among foreign players and non-residents Indian (NRIs), domestic and international financial institutions, private equity firms, venture capital firms and banks to explore investment opportunities in the Indian healthcare market. In order to promote foreign players, the Government of India raised the FDI cap in the hospital sector to 100 per cent under automatic route in January 2000. With this liberalised rule, since the last one and a half decade, the government has been actively engaged in building a positive economic climate for the healthcare industry. Measures taken include reduction in direct taxes, permitting higher rate of depreciation of medical equipment, income tax exemptions for five years for rural hospitals, custom duty exemptions for imported lifesaving equipment, income tax exemption for health insurance, and active engagement through publicly financed health insurance, which now covers almost 27 per cent of the population (NHP, 2015, p. 9, draft report). Further forms of assistance are preferential and subsidised allocation of land that has been acquired under Land Acquisition Act of 1894, and, subsidised education for medical, nursing and other paramedical professionals graduating from government institutions who constitute a significant proportion of the private sector "human resource". This liberalised and subsidised framework opens up opportunities for foreign investments in the Indian hospital sector.

An analysis of the total FDI equity inflow into the hospital sector (hospitals and diagnostic centres) out of total FDI inflow into the healthcare sector (that comprises of three sectors like drugs and pharmaceuticals; hospitals and diagnostic centres; medical and surgical appliances) shows that it constitutes a small share (around 21 per cent) of the total share during the period from January 2000 to December 2013 (*Figure 1*). Medical and surgical appliances constitute only seven per cent of the total share. It is the drugs and pharmaceuticals sector that predominates with a share of 71 per cent during the same period. However, it is important to note that the share of FDI equity inflow to hospital sector shows increasing trends over the period. Its share increased from 13 per

cent during 2000–2005 to around 25.5 per cent in 2013, though subject to year-to-year fluctuations. This reflects that owing to the liberalised foreign investment framework, a significant number of multinational players (discussed below) have been focusing on the Indian hospital sector and have enlarged their presence through partnerships and investments in joint venture projects. In addition, the interests of these players is driven by various factors such as the demand-supply mismatch and huge infrastructure requirement, economic growth and rising income levels, consumers’ willingness to pay for quality healthcare and approach towards institutional providers. The comparably lower establishment costs in India as well as the healthcare packages offered by companies also attract foreign investors to the Indian hospital sector (Chanda, 2010).

**Figure 1: Distribution of FDI Equity Inflows in Health Sector**

(in %) (January 2000 to December 2013)



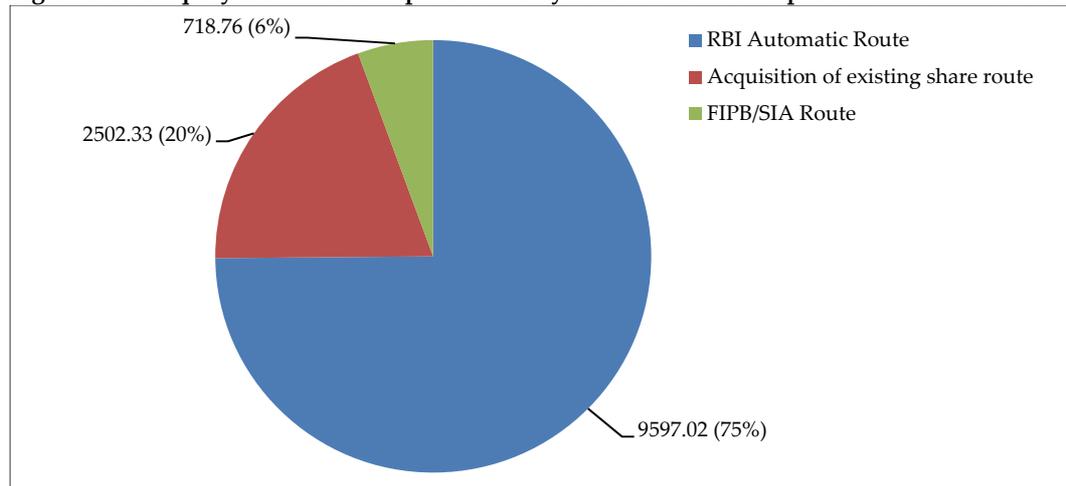
Source: Department for Industrial Policy and Promotion (DIPP), Government of India.

Alongside liberalisation rules, the regulatory framework allows FDI inflow into the hospital sector via three different routes *viz* SIA/FIPB, acquisition of existing shares, and RBI’s automatic route, making the sector more liberal for foreign investment. *Figure 2* shows that between April 2000 and October 2014, hospitals and diagnostic centres attracted a total FDI equity inflow of US\$ 2514.13 million. The breakup of FDI across different routes shows that a FDI deals worth ₹9,597.02 crore (US\$1865.10 million) were received under RBI’s automatic route. Under SIA/FIPB (other than acquisition) route, it amounts to ₹718.76 crore (US\$ 159.67 million) and ₹2,502.33 crore (US\$ 489.36 million) under the acquisition of existing shares. In terms of composition, RBI’s automatic route constitutes around 3/4 share of the total FDI equity inflow, followed by 20 per cent through acquisition share and a meagre six per cent through FIPB route.

FDI has been considered as a major source of capital inflow into the country. Its likely impacts, however, depend on whether FDI has been received through greenfield mode or brownfield mode. In general, greenfield FDI refers to investments that create new activities/facilities in the host country (e.g., starting a new plant/activity), while brownfield FDI refers to cross-border mergers and acquisitions (UNCTAD, 2005). These

two entry modes have different implications for the host country's market competition, consumer surplus, service delivery, social welfare, etc. For a company, the choice of FDI entry mode generally depends on various factors like (relative) magnitude of market demand, firms' marginal cost, fixed plant setup cost, number of firms in the market, and government's FDI policy. The analysis shows that only six per cent of FDI which has flown through FIPB route (other than acquisition) is greenfield investment, while 20 per cent FDI which has been received through acquisition of existing shares is brownfield investment. The remaining (75 per cent) FDI equity inflow amounts to a total of around US\$ 1865.10 million, which was received under RBI's automatic route mostly through joint ventures between Indian and foreign companies (*Figure 2*). From April 2000 to October 2014, FDI was received through 1166 joint venture projects through SIA/FIPB, acquisition of existing shares and RBI's automatic routes. These routes comprise both brownfield and greenfield FDI. In order to work out the total brownfield and greenfield FDI, one will have to study all of these joint venture projects. This, however, is beyond the scope of the present study; otherwise it could have provided a better understanding of the nature of foreign investment in the country and its associated implications.

**Figure 2: FDI Equity Inflows in Hospital Sector by Different Routes: April 2000 to October 2014**

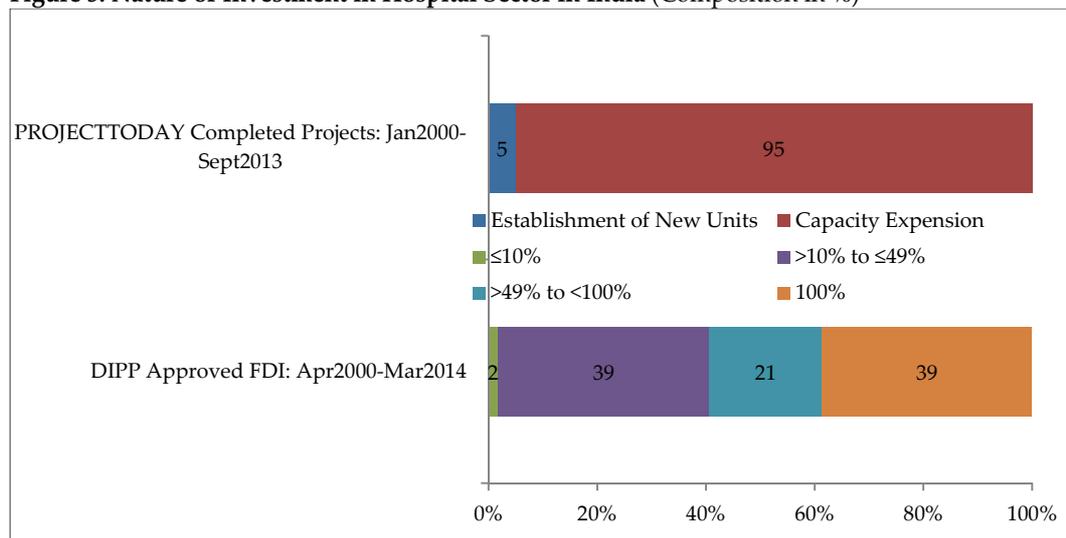


*Source:* Detail break-up for FDI equity inflow received during April 2000 to October 2014 in hospital and diagnostic centre under different routes provided by DIPP.

However, as discussed, to understand brownfield and greenfield investments, the study has utilised the projecttoday data set for both foreign and domestic private investments in the hospital sector for the period beginning January 2000 to September 2013. Data shows that around 95 per cent investment incurred during the period was towards establishing new hospital units, while a meagre five per cent was invested in expanding the capacity (*Figure 3*). This reflects that most of the private (foreign and domestic) investments were greenfield investments—an indication of the country's health system infrastructure development.

As mentioned earlier, the ownership of shares amounting more than or equal to 10 per cent is termed “FDI,” while those amounting to less than 10 per cent are known as “portfolio investments” (note that, in the FDI inflow data, the information on equity share is not available). Thus, in order to provide a bumpy picture of the nature of FDI inflow with this classification, data giving a detailed break-up of the FDI projects approved between April 2000 and March 2014 was used, which contains a list of 95 approved FDI joint venture projects. This list provides the amount as well as the share of foreign equity (in US\$ million) of all of the approved joint venture projects. However, there may be huge difference in the amount of FDI approved and the actual inflow received. This list, therefore, will give us a rough idea of the nature of FDI of the above classification. As reflected from *Figure 3*, most of the approved joint venture projects (98 per cent) have more than 10 per cent stake, indicating that most of the projects are approved foreign investment projects, and not portfolio investments.

**Figure 3: Nature of Investment in Hospital Sector in India (Composition in %)**



Source: projecttoday data on completed hospital projects and DIPP data on detailed break-up for FDI approved in hospital and diagnostic centre.

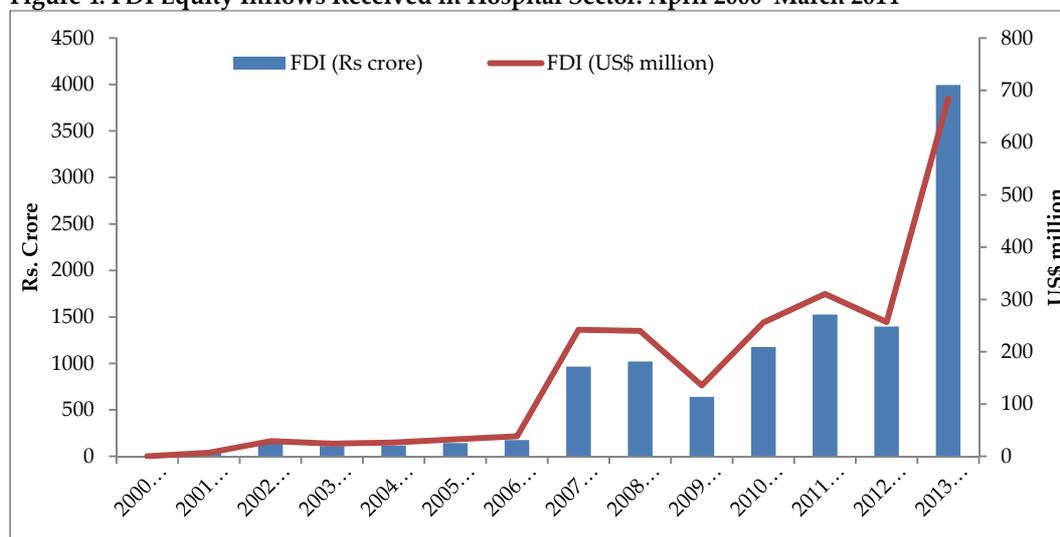
Secondly, under the regulatory framework, since Indian companies can raise up to 49 per cent foreign currency resources abroad through special depository receipts under the automatic route subject to specified conditions (such investments are also treated as FDI), one can see from the available list that around 60 per cent of the total FDI approved is greater than the 49 per cent stake. Around 39 per cent of FDI approval was with 100 per cent stake (*Figure 3*). This analysis confirms that foreign collaborators are more interested in management, ownership or at the least in gaining voting rights in the Indian hospital sector. This may be because foreign investors consider the hospital sector as a profitable business in India. Estimates have highlighted that the healthcare sector in India is emerging as one of the fast-growing service sector. It has grown at a rate of 13 per cent

per annum and is expected to grow at 15 per cent per year over the medium term (FICCI Ernst & Young, 2007) owing to the rising income levels, change in lifestyle diseases, public awareness and preference of treatment-seeking behaviour, among other things.

During the liberalised foreign investment regime from 2000 to 2014, FDI inflow (through all existing routes) to the hospital sector increased hundredfold. It increased from US\$ 6.93 million in 2001–02 to US\$ 684.58 million in 2013–14, though fluctuating from year-to-year (*Figure 4*). In Rupee terms, FDI equity inflow to hospitals and diagnostic centres increased to ₹3,995 crore in 2013–14 from as low as ₹31 crore in 2001–02. According to the International Finance Corporation and the World Bank, the Indian private healthcare industry is the second most popular destination for global investments in healthcare (NHP, 2015, p. 9).

The share of FDI equity inflow to the hospital sector is increasing in absolute terms as well as in per capita terms and as percentage of Gross Domestic Product (GDP). The FDI inflow as a share of GDP increased from 0.00145 per cent in 2001–02 to 0.01488 per cent in 2013–14 (*Figure 5*). In per capita terms, the FDI inflow translates to about ₹32.4 per capita at current price in 2013–14. The total cumulative FDI inflow from 2000–01 to 2013–14 to the hospital sector translates to about ₹92.7 per capita at current market price. If one looks at the projecttoday data on private (foreign and domestic) investment made for establishing large hospitals/medical institutions, it reveals that the total private (foreign and domestic) investment in major hospitals as a share of GDP increased from 0.0037 (₹450 crore) per cent in 2000–01 to 0.0153 per cent (₹1,433 crore) in 2012–13. The trends in private investment, however, vary considerably over the period (*Figure 5*).

**Figure 4: FDI Equity Inflows Received in Hospital Sector: April 2000–March 2014**

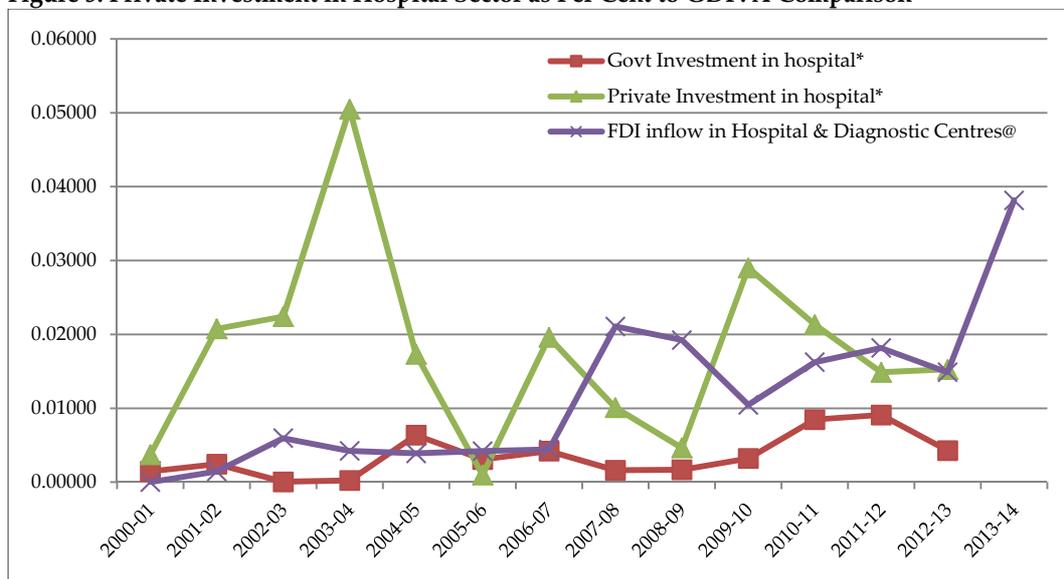


*Note:* Amount includes the Inflows received through SIA/FIPB, acquisition of existing shares and RBI's automatic routes in hospital and diagnostic centre.

*Source:* Department for Industrial Policy and Promotion (DIPP), Government of India.

When one compares the share of international investments (FDI) in hospital sector to government spending on healthcare, it is observed that share of international investments has remained marginal. For instance, government expenditure on healthcare in India is around 1.04 per cent of GDP in 2012–13, which translates to about ₹957 per capita at current market price, while the cumulative amount of total FDI inflow from 2000–01 to 2013–14 is around ₹92.7 per capita at current market price. This cumulative FDI inflow to the hospital sector is only about 10 per cent of government spending on health care sector in one year (₹957 per capita at current price), reflecting that the share of international investment in hospital sector constitutes a relatively small share when compared with government spending on healthcare.

**Figure 5: Private Investment in Hospital Sector as Per Cent to GDP: A Comparison**



*Note and Source:* \*- government and private investment in hospital is worked out from projecttoday data set on completed projects of hospital industry. The investment in private hospital also includes the investment made by foreign companies; @- FDI equity inflows received in hospital & diagnostic centre through SIA/FIPB route, acquisition of existing shares and RBI's automatic routes. The data is obtained from Department for Industrial Policy and Promotion (DIPP), Government of India.

Table 1 shows the major sources of financing for 10 leading corporate hospitals in India. The data shows that international investments constitute a small share of total financing (for instance, international borrowing constitutes around 12 per cent of total financing). Domestic financing, particularly domestic borrowing, plays a predominant role in total financing. This reflects that although the sector offers lots of opportunities to international financial institutions, its role is found to be limited. A similar argument is made by Chanda (2010).

**Table 1: Structure of Selected Sources of Funds of Leading Corporate Hospitals in India**

<i>Major Source of Funds</i>	<i>Share (%)</i>
Funds generated from operations	17.7
Issue of fresh capital	25.7
Borrowings	38.4
Foreign borrowings	11.6
Bank and fin inst borrowings	5.3
Debentures & bonds	10.4
Borrowings from corporate bodies	8.8
Loan from promoters and directors	0.2
Other borrowings	2.1
Gross fixed assets	0.9
Capital work-in-progress	4.8
Investments by group cos	6.2
Loans & advances from group & associate cos	6.3

*Note and Source:* Source of funds of 10 leading corporate hospitals compiled from company balance sheets accessed from Centre for Monitoring the Indian Economy, PROWESS database (March 2009–March 2014).

#### **4. Investment Inflow by Country Routes and Regional Spread**

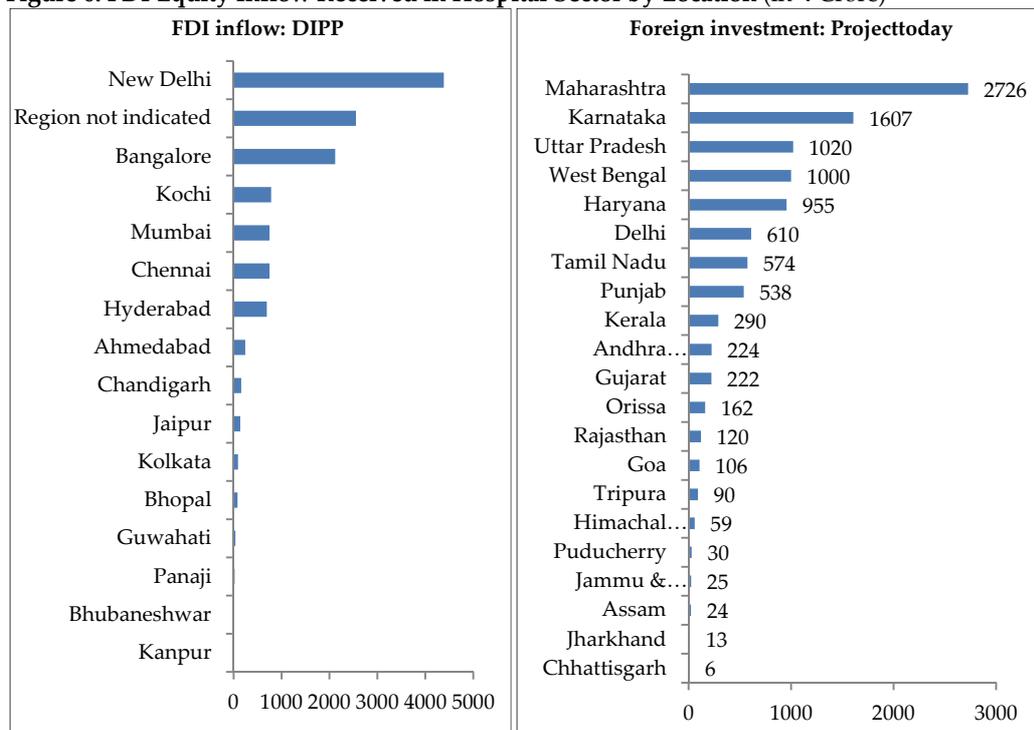
The DIPP provides information on FDI equity inflow to different regions/states of India, channelized through investors from different countries. According to regulations, prior approval from the RBI is required to determine the destination region. Data analysis shows that private domestic and foreign investments in the hospital sector are spread across the Indian states. A major proportion of FDI equity inflow was received during the period from April 2000 to October 2014 in Delhi-NCR region of the country (*Figure 6*). The RBI Bangalore region ranks second in terms of attracting FDI inflow into the hospital sector, followed by RBI regions of Kochi, Mumbai, Chennai and Hyderabad.

The projecttoday data that captures both foreign and domestic private investment reveals that the state of Maharashtra attracted the highest amount of private investments in hospital sector during the liberalisation period from January 2000 to September 2013, followed by Karnataka, Uttar Pradesh, West Bengal, Haryana, Delhi, Tamil Nadu and Punjab (*Figure 6*). From the available FDI inflow and private investment data information, one can infer that a major proportion of investment of private (foreign and domestic) corporations is concentrated in high income states and in the urban (Tire-I) cities of these states. That is, the growth in private investment in most of the states has largely remained an urban phenomenon. This reflects that income—based on peoples' ability to pay—serves as a major magnet for attracting investments in hospital sector from corporate players.

The FDI in hospital sector through Mauritius route accounts for the highest FDI inflow, i.e. 55 per cent (*Figure 7*). A closer examination of FDI inflow data reveals that a significant number of investors from various countries are channelizing their investments

through Mauritius in joint venture projects with Indian companies. It may be because Mauritius has been a tax haven for investors since long. This is to say that routing FDI through another country is significantly related to Double Taxation Avoidance Agreement/treaties (DTAA) between countries.

**Figure 6: FDI Equity Inflow Received in Hospital Sector by Location (in ₹ Crore)**



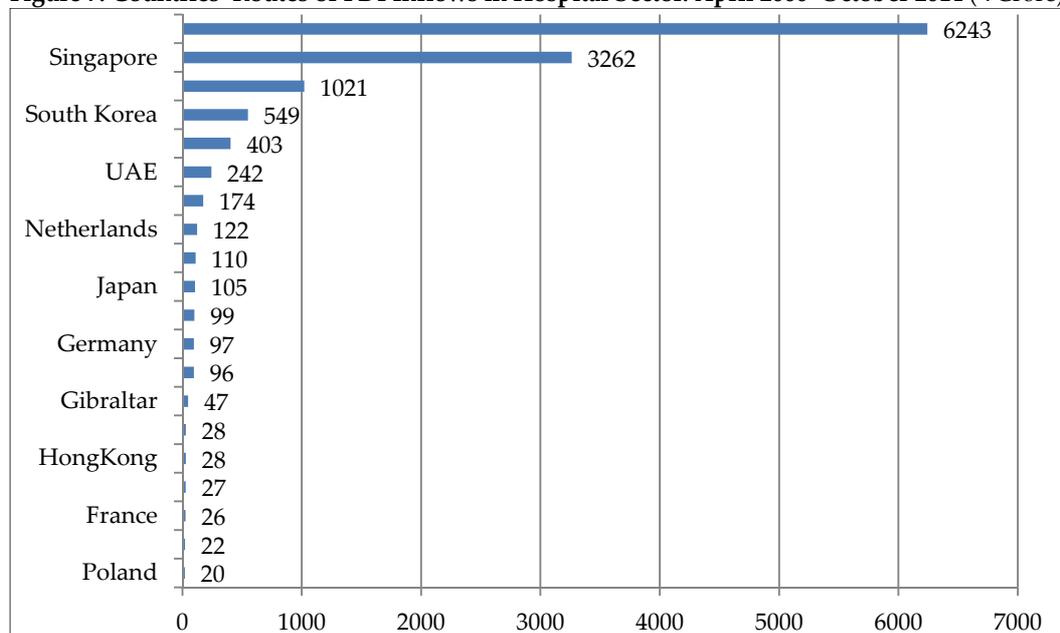
*Note and Source:* DIPP data on FDI equity inflow received on FIPB, acquisition, and automatic routes April 2000 to October 2014. Projecttoday data by ownership that include foreign and domestic private corporation investment in hospital industry from January 2000 to September 2013.

For instance, India signed DTAA with Mauritius in 1982, almost 32 years ago, particularly for strengthening the flow of investments to and from Mauritius. As per the treaty, there are agreed rates of tax and jurisdiction on specified types of income arising in a country to a tax resident of another country<sup>2</sup>. According to this tax treaty, capital gains can only be taxed (up to 3 per cent) in Mauritius. Given the existing regulatory framework, geographical proximity, cultural affinities and long historical ties with India, Mauritius is the most attractive conduit for investments into India. In this case, it can be argued that India needs to speed up its efforts towards making its avoidance of double

<sup>2</sup> The Income Tax Act, 1961 of India (Sections 90 and 91) provides specific relief to taxpayers to save them from double taxation. Section 90 is for taxpayers who have paid the tax to a country with which India has signed DTAA and Section 91 provides relief to tax payers who have paid tax to a country with which India has not signed a DTAA. India gives relief to both kinds of taxpayers.

taxation treaties with different nations more effective. No doubt, such treaties have helped attract a significant flow of foreign investments to India through Mauritius over the years; however, a major concern in recent years has been the suspected misuse of this pact for round-tripping of funds and laundering of illicit money by Indian entities through this Indian Ocean island nation. Though India may have lost some tax revenues due to this treaty, at the same time one should note that perhaps these investments would not have been channelled to India without the treaty.

**Figure 7: Countries' Routes of FDI Inflows in Hospital Sector: April 2000–October 2014 (₹ Crore)**



*Note:* FDI inflow for the amount of less than the ₹20 crore has not been shown in the figure. In the DIPP data set, FDI equity inflow received has also been reported from the following countries (in ascending order): Turkey, Finland, Chile, Norway, Nigeria, Philippines, Canada, Saudi Arabia, Australia, Luxembourg, Oman, Denmark, Thailand, British Virginia, South Africa, Virgin Islands(US), Ireland, Belgium, Sweden, Malaysia, Malta and New Zealand.

*Source:* DIPP, GOI.

With foreign investments accounting for 29 per cent of the total FDI in hospital sector, Singapore occupies the second position in India. This is because India has a similar DTAA with Singapore. The DTAA with Singapore incorporates limit-of-benefit (LoB) clause, which has provided comfort to foreign investors based there. The LoB clause in India-Singapore treaty justifies the substance in Singaporean entities, bringing certainty and avoiding the possibility of litigation. A similar treaty also exists with 16 other countries.

## 5. Investments in Hospital Sector from Leading Corporate Groups

Most of the foreign companies/individuals entered India through joint ventures. A closer examination of FDI inflow data reveals that Fortis Global Healthcare Infrastructure Pvt Ltd has received the highest FDI inflow in hospital sector in India (*Table 2*). The Fortis Global Healthcare Infrastructure Pvt Ltd has not only entered into joint ventures with its Indian subsidiaries like Fortis Health Management Ltd and Fortis Hospital Ltd, but also with Kanishka Healthcare Ltd, Escorts Heart and Super-specialty Hospital and Escorts Hospital and Research Centre Ltd, Max Healthcare Institute Ltd, Rockland Hospital Ltd, Apollo Hospitals Enterprises Ltd. These hospitals not only receive money from various foreign players/companies, but also attract large funds from the International Finance Corporation (IFC).

Among others, Max Health Care Institute Ltd, Fortis Hospital Ltd, Apollo Hospitals Enterprises Ltd, Colombia Asia Hospital Pvt Ltd, DM Healthcare Pvt Ltd, Kanishka Healthcare Ltd, and Narayana Hrudayalaya P. Ltd attracted the highest FDI equity inflow (each at least more than the US\$ 100 million) in hospital sector between March 2000 and October 2014. In addition to the aforementioned, Sevenhills Healthcare Ltd, Nova Medical Centres Pvt Ltd, Vasan Health Care Pvt Ltd, Escorts Heart & Super Speciality Institute Ltd, International Hospital Ltd, Quality Care India Ltd and Thyrocare Technologies Ltd also attracted high FDI inflows into India. Most of the FDI inflow to these major corporations located in five metropolitan cities, namely New Delhi, Chennai, Bangalore, Hyderabad and Mumbai, are routed via Mauritius, Singapore and the USA (*Table 2*).

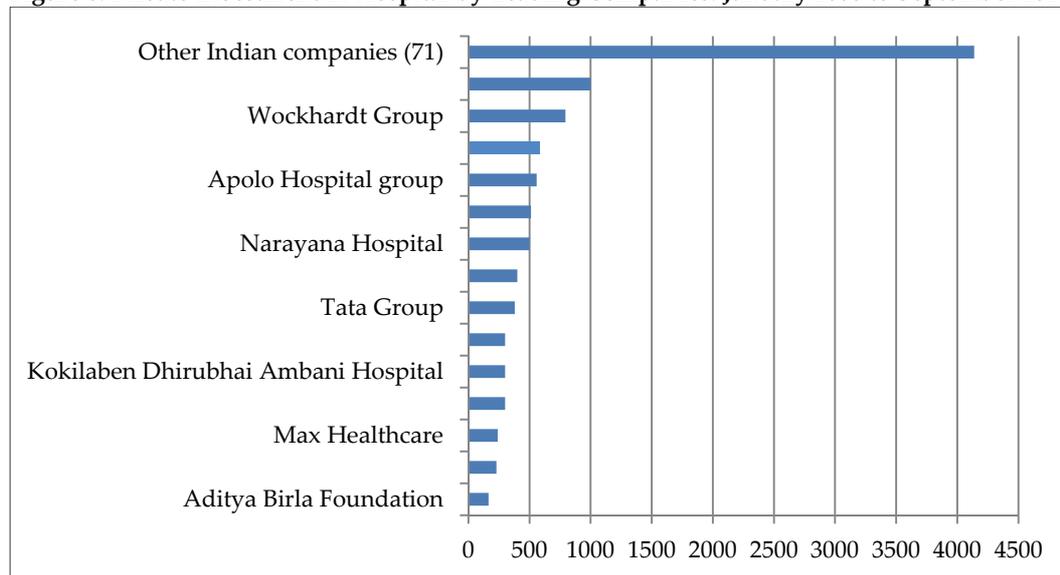
The project today data reveals that major private players, namely Sevenhills Healthcare, Wockhardt Group (A Pharmaceutical Industry), Apollo Hospital, Fortis Healthcare, Narayana Hospital, Sahara India Medical Institute, Tata Group, Rockland Hospital, Kokilaben Dhirubhi Ambani Hospital, Global Hospitals, Max Healthcare, Escort Group, Adita Biral Foundation, including other individual foreign players, have made huge investments in the hospital sector in India during the period from January 2000 to September 2013 (*Figure 8*). Besides these, other private investors that invested more than 150 crore in the hospital sector are: Artemis Medicare Services Pvt. Ltd, Asia Heart Foundation, B.P.S. Mahila Vishwavidyalaya, Crosslay Remedies Ltd, GPT Healthcare Pvt. Ltd, Kovai Medical Center & Hospital Ltd, MIOT Hospitals, Sathya Sai Baba Trust, and Yashoda Group. In addition, over 70 other companies invested in private hospitals in India. Amongst the foreign players, the leading investors were: Apollo Gleneagles Hospitals Ltd, Contemporary Health Care, Dabhol Power Co., Great India Healthcare Management Ltd, Lake Shore Hospital & Research Centre, and Malabar Institute of Medical Sciences (*Figure 8*).

**Table 2: List of Leading Corporate Hospital Groups that Received FDI Equity Inflow from April 2000 to October 2014: Analysis by Foreign Collaborator, Country and Regions**

Indian Company	FDI Equity Inflow Received		Country Route	Regions/States	Major Foreign Collaborator
	₹ Crore	US \$mm			
Radiant Life Care Pvt Ltd (Ear: Ihhs)	104.98	17.47	0.99 Singapore	New Delhi	Infrastructure Healthcare Pte Ltd
Takshasila Hospital Operating Pvt Ltd	105.00	18.74	1.07 Japan	Bangalore	Secom Medical System Co. Ltd, Toyota Tsusho Corporation
Moolchand Healthcare Pvt Ltd	100.00	19.99	1.14 Mauritius	New Delhi	Sci Growth Investment-Ii
Manipal Health Enterprises Pvt Ltd	110.00	24.22	1.38 Mauritius	Bangalore	Kotak India Private Equity Fund, Manipal Health Systems International
Peoples General Hospital Ltd	112.90	24.92	1.42 UAE, Gibraltar, NRI	Bhopal, Bangalore, Ahmadabad	Alliance Industries Ltd
Fortis Healthcare Ltd	124.69	27.94	1.59 Mauritius, UK	New Delhi	Fortis Global Healthcare Infrastructure Pvt Ltd
Metropolis Healthcare Ltd	163.01	35.07	2.00 Mauritius	Mumbai	Foxcree Investment Ltd
Fresenius Kabi Oncology Limited	228.31	36.78	2.09 Singapore		Fresenius Kabi(Singapore) Pvt Ltd
Famy Care Ltd	175.00	37.36	2.13 Mauritius	Mumbai	Orizaba Tld
Integrated Health & Health Care Serv.(I)	180.77	38.87	2.21 Mauritius	New Delhi	Integraed Hospital And Health Care Serv
Prestige Health Administrators Ltd	166.17	40.71	2.32		Swiss R Einsurance Company
Manipal Health Systems P. Ltd.	211.29	47.38	2.70 Mauritius	Bangalore	Memg International Ltd
Thyrocare Technologies Ltd	284.50	58.07	3.31 Mauritius	Mumbai	Norwest Venture Partners Vii-A, Agalia Pvt Ltd
Quality Care India Ltd	345.49	62.83	3.58 Cyprus		Dxelco Ltd, Yecla Ltd
International Hospital Limited	377.10	63.09	3.59 USA	Mumbai	Fortis Global Healthcare Infrastructure
Escorts Heart, Super Speciality And Rese	372.87	68.51	3.90 Singapore	New Delhi	Fortis Global Healthcare Infrastructure, Fortis Healthcare India Holdings Pte
Vasan Health Care Pvt Ltd	357.72	73.71	4.20 Mauritius, Singapore		Lathe Investment Pvt Ltd

Indian Company	FDI Equity Inflow Received		Country Route	Regions/States	Major Foreign Collaborator
	₹ Crore	US \$ mn			
Nova Medical Centers Pvt Ltd	425.79	79.17	4.51	Mauritius, Bahamas, USA	Bangalore Nea Fvci Ltd, C.S.Heal Holdings Ltd
Sevenhills Healthcare Ltd	460.00	82.56	4.70	Mauritius	Airro Holding Ltd
Narayana Hrudayalaya P. Ltd.	400.00	99.94	5.69	Mauritius	JP Morgan Mauritius Holding Ltd., Ashok Investement Holdings Ltd.
Kanishka Healthcare Ltd	632.47	109.66	6.25	Singapore	Fortis Global Healthcare Infrastructure
Dm Healthcare Pvt Ltd	567.20	113.31	6.45	Mauritius, UAE, Malta	M/S. OLYMPUS CAPITAL ASIA INVESTMENTS PV
Colombia Asia Hospital Pvt Ltd	546.53	122.59	6.98	Mauritius, USA	International Asia Hospitals, International Columbia
Apollo Hospitals Enterprises Ltd	553.88	123.41	7.03	Mauritius	Apax Mauritius Fdi One Ltd
Fortis Hospotel Ltd	870.40	160.07	9.12	Singapore	Fortis Global Healthcare Infrastructure Pvt Ltd
Max Health Care Institute Ltd	861.50	169.59	9.66	Mauritius, South Korea, USA	International Finance Corp., Tedo Beleggings 163 Proprietary Ltd
All above (26 companies)	8837.57	1755.96	69.8		
Grand Total (516 companies)	12818.11	2514.07			

Note and Source: Joint ventures more than ₹100 crore are reported here; DIPP, Government of India.

**Figure 8: Private Investment in Hospital by Leading Companies: January 2000 to September 2013**

*Note and Source:* projecttoday data on completed projected, search for hospital industry.

## 6. Investment by Care/Treatment/Service Classification

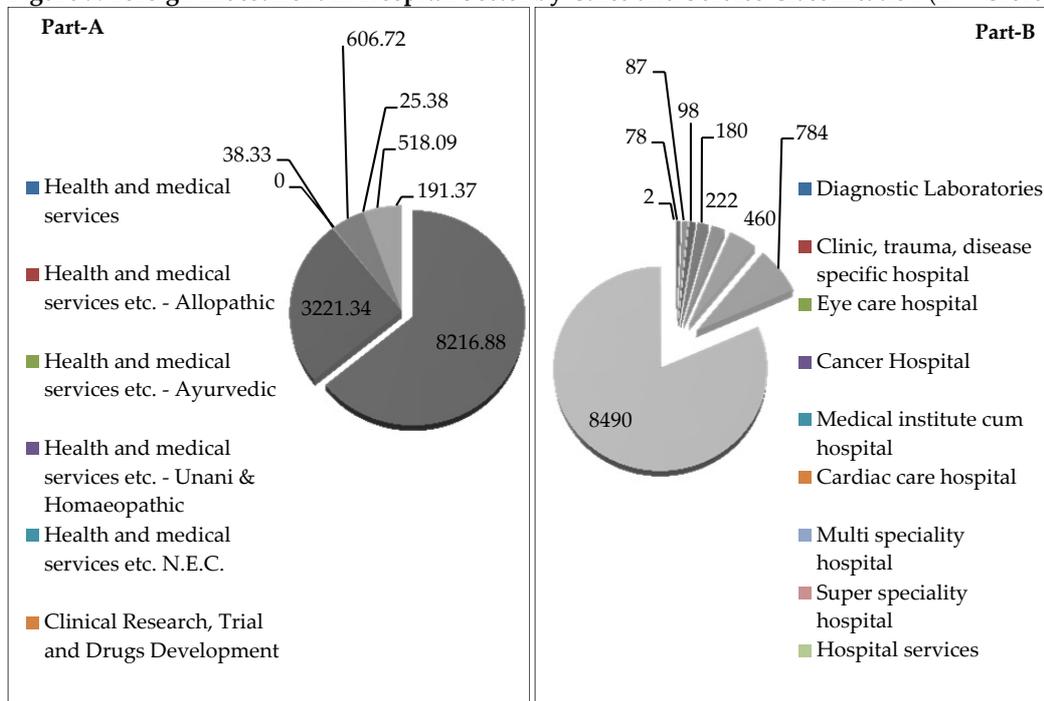
The National Industry Classification (NIC) for Service Sector provides a health services classification code (under 93). This includes health and medical services rendered by organisations and individuals such as in hospitals, dispensaries, sanatoria, nursing homes, maternal and child welfare clinics, by allopathic/ayurvedic, unani, and homeopathic practitioners (NIC 930). There are separate classification codes for health and medical services like Allopathy, Ayurved, Unani, Homoeopathy and N.E.C. The N.E.C. includes testing services rendered by medical laboratories (e.g., blood testing), dental services, medical analysis and other healthcare services, clinical trials and research, drug development, diagnostic services and so on. While a detailed and a separate classification of most of the FDI components are not provided under the DIPP data set, an analysis of the available services is shown in *Figure 9*. The analysis shows that the expenditure on clinical research, drug development and diagnostic services is very marginal, while a major portion of the foreign investments are used for providing allopathic services.

The projecttoday data set, however, provides a detailed classification of the investments in various services. *Figure 9* (Part-B) shows that except for medical services, the multi-speciality and super-speciality hospitals attracted the maximum private investments in the country. Hospitals for specific diseases/medical conditions like cancer, ophthalmology, cardiology, and trauma, too, attracted huge foreign investments. This may be because of the changing nature of lifestyle diseases, health education and public awareness and change in treatment-seeking behaviour. The detailed specification of all of

the projects, however, is not available for most of the investment amount, otherwise it could have had provided a better explanation for the pattern of investment in disease-specific hospitals in the country.

Further, an assessment of the hospital bed capacity provides a valid interpretation of whether or not the existing hospitals have super speciality services. An analysis of hospitals with varying beds capacities shows that a large percentage of the investments have been made in hospitals having more than 100 beds. The investment is almost equally distributed among big hospitals with either 100 beds or 1000 beds. This reflects that big corporate hospitals have been emerging in the country since 2000.

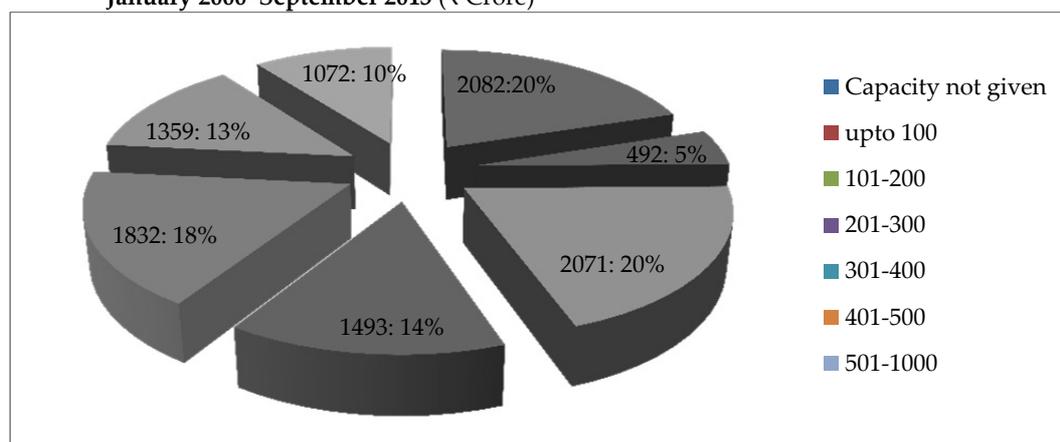
**Figure 9: Foreign Investment in Hospital Sector by Cares and Service Classification (in ₹ Crore)**



Note: N. E.C. includes services provided by medical laboratory, blood, transplant organ, dental testing services, medical analysis and testing services and other human health services.

Source: Part-A is FDI equity inflow in hospital and diagnostic centre from April 2000 to October 2014, DIPP, GOI and Part-B is the private (foreign and domestic) investment on completed projects in hospital sector between January 2000 to September 2013, Projecttoday data set.

**Figure 10: Private Investment in Hospital by BedsCapacity:  
January 2000–September 2013 (₹ Crore)**



Source: projecttoday data on completed hospital projects

## 7. Conclusion

Understanding the extent, nature/pattern and associated implications of private investment is of great significance in the Indian context, simply because the low government spending on healthcare sector has been a generic problem in India. Government expenditure on healthcare in India hovers around one per cent of GDP, while private expenditure accounts for over 75 per cent of the total healthcare expenditure, which is one of the highest in the world.

The private healthcare market is reported to be highly fragmented, comprising informal practitioners, clinics, small and large nursing homes, corporate hospitals, diagnostic centres and pharmacies. The informal practitioners constitute the largest group in terms of numbers and are spread across rural and urban areas. In 2001, over 90 per cent of the healthcare services were rendered by small-scale informal (having 1–3 workers) establishments/enterprises numbering 13 lakh (Sehgal and Hooda, 2015). Over 60 per cent of these informal service enterprises are located in rural areas and the rest 40 per cent in urban areas. As per the Medical Council of India (MCI), every private (formal or informal) practitioner should be registered under the Medical Practitioner Act (MPA). However, in the year 2005–06, it was noticed that around 40 per cent of the informal practitioners were without formal medical education/qualification, and as many as 52 per cent of healthcare enterprises (67 per cent rural enterprises) were not registered under MPA. A majority of these are small institutions or informal practitioners, with over 85 per cent having less than 25 beds (Baru *et al.*, 2010). The secondary level consists of small and large nursing homes that are mostly owned by physician entrepreneurs and provide outpatient and inpatient services. Tertiary specialty and super-specialty private institutions comprise only one to two per cent of the beds (Baru *et al.*, 2010). As reported in the study by Chanda (2010), around two to three per cent of the hospitals have over

200 beds, some six to seven per cent have 100–200 beds, while the majority (80 per cent) of the private sector hospitals are very small, with less than 30 beds. The secondary, tertiary and specialist hospitals are mostly promoted by big business groups and managed as corporate entities. These facilities are largely skewed towards urban areas and developed states (Baru, 2006). The distribution of private sector facilities between states and regions is even more “unequal” than in public sector (Baru, 2006; Baru *et al.*, 2010). All these private entities together provide around 60 per cent inpatient and 80 per cent outpatient care to the Indian population, indicating the presence of a highly privatized healthcare market in India. Interestingly, it has been observed that the formal sector—particularly the secondary, tertiary and speciality care providers—has gained much attention of late (Sehgal and Hooda, 2015), indicating that the formal private sector will play a bigger role in meeting healthcare needs over the coming years. In order to understand the corporatisation of private hospitals, this study has examined the extent and pattern of private (foreign and domestic) investments in hospital sector in India and its associated implications.

In spite of high healthcare demand, India's healthcare sector falls well below the international benchmarks in terms of physical infrastructure and manpower, and even below standards in comparable developing countries. In order to meet the growing demand, a huge amount of investment is needed in the healthcare sector. Also, there has been growing interest among foreign players and non-residents Indians (NRIs), domestic and international financial institutions, private equity firms, venture capital firms and banks to explore investment opportunities in the Indian healthcare market. All these factors have forced the government to allow private investment in the domestic healthcare sector. As a part of liberalisation and globalisation processes, the Government of India has introduced various policy changes to encourage FDI in health/hospital sector. In the year 2000, the FDI cap was raised to 100 per cent under automatic route for the hospital sector. The overall FDI regime for hospital sector has been very liberal in India since 2000. However, FDI in activities that are not covered under the automatic route requires prior approval of the government—considered by the Foreign Investment Promotion Board (FIPB), Department of Economic Affairs, Ministry of Finance, Government of India. Any Indian company having received FDI either under the automatic route or government route is required to comply with provisions of the FDI policy, including reporting the FDI to the Reserve Bank of India. The FDI can also be attracted through acquisition share of existing company.

India attracts FDI equity inflows to hospitals and diagnostic centres through SIA/FIPB route, acquisition of existing shares and RBI's automatic routes. The regulatory mechanism for such types of funds has also been liberal in India. The data analysis shows that between April 2000 and October 2014, the FDI equity inflow into 50, 162 and 1166 joint venture projects was received through SIA/FIPB route, acquisition of existing shares route and RBI's automatic route respectively. During the same period, total FDI equity inflow worth US\$ 2514.13 million was received in hospitals and diagnostic

centres. The breakup of FDI across different routes shows that a FDI deals worth ₹9,597.02 crore (US\$1865.10 million) through RBI's automatic route, ₹718.76 crore (US\$ 159.67 million) through SIA/FIPB (other than acquisition) route, and ₹2,502.33 crore (US\$ 489.36 million) through the acquisition of existing shares route were received. In terms of composition, the RBI automatic route constitutes around 3/4 share of the total FDI equity inflow.

The FDI in healthcare sector has been classified into three sections: FDI equity inflow to Drugs and Pharmaceuticals, Hospitals and Diagnostic Centres, and, Medical and Surgical Appliances. Of these, Drugs and Pharmaceuticals sector constitutes the largest share (about 71 per cent), followed by Hospitals and Diagnostic Centres (about 21 per cent), and Medical and Surgical Appliances (about seven per cent) during the period from January 2000 to December 2013. The share of FDI equity inflow into the Hospitals and Diagnostic Centres sector, however, increased during this period. Its share increased from 13 per cent between 2000 and 2005 to around 25.5 per cent in 2013 with considerable variation throughout the study period.

The FDI inflow (through all routes) to hospitals and diagnostic centre increased between 2000–01 and 2013–14. It increased from US\$ 6.93 million in 2001–02 to US\$ 684.58 million in 2013–14, though subject to year-to-year fluctuations. In Rupee terms, FDI equity inflow to hospitals and diagnostic centres increased to ₹3,995 crore in 2013–14 from as low as ₹31 crore in 2001–02. Though, international investment (FDI inflow) for hospital sector increased from 0.00145 per cent in 2001–02 to 0.01488 per cent in 2013–14, it constitutes a small amount when compared with government spending on healthcare. Government expenditure on healthcare was 1.04 per cent of GDP in 2012, which translates to about ₹957 per capita at current market prices. In 2013, the FDI equity inflow constitutes only 1.43 per cent of the government healthcare spending, which translates to about ₹32.4 per capita at current price. Even the total cumulative FDI inflow from 2000–01 to 2013–14 to hospitals and diagnostic centres translated to only about ₹92.7 per capita at current market price and 10 per cent of government spending on health care sector in one year (₹957 per capita at current price).

As per DIPP data, a large number of foreign players (around 1378 in number) are looking to invest in hospital and diagnostic centres in India. Probably, their interest is driven by demand-supply mismatch and huge infrastructure requirement, economic and rising income levels, consumers' willingness to pay for quality healthcare and approach towards institutional providers. The comparably lower establishment costs in India and the healthcare packages offered by companies also attract foreign investors to the Indian hospital sector. While a small number of players (around six per cent) are interested in entering on their own, the majority (the rest 94 per cent players) prefers to enter through joint ventures (either financial collaboration or technical collaboration).

The private domestic and foreign investments in hospital sector are spread across Indian states. A major proportion of FDI equity inflow went to Delhi (NCR regions), followed by

Bangalore, Kochi, Mumbai, Chennai and Hyderabad. The projecttoday data set reveals that Maharashtra has attracted the highest amount of private investments in hospital sector during the liberalisation period from January 2000 to September 2013, followed by Karnataka, Uttar Pradesh, West Bengal, Haryana, Delhi, Tamil Nadu and Punjab. A major proportion of the investments are concentrated in high income states. The growth in private investment in most of the states has largely remained an urban phenomenon. This reflects that income—based on peoples' ability to pay—serves as a major magnet for attracting investments in hospital sector from corporate players (foreign and domestic).

From 2000 onward, India received the maximum (55 per cent) FDI in the hospital sector from Mauritius. Majority of the FDI from Mauritius is in the form of joint venture capital. Thus, the significant development can be attributed to investors (from various countries) who are channelizing their investments through Mauritius in joint venture projects with Indian companies, and for whom Mauritius has been a tax haven since long. Routing high amount of FDI via Mauritius to India is simply because of Double Taxation Avoidance Agreement/treaties (DTAA) between the countries. Further, with foreign investments accounting for 29 per cent of the total FDI in hospital sector, Singapore occupies the second position in India. This is because India has a similar DTAA with Singapore. The DTAA with Singapore incorporates limit-of-benefit (LoB) clause, which has provided comfort to foreign investors based there. The LoB clause in India-Singapore treaty justifies the substance in Singaporean entities, bringing certainty and avoiding change of litigations. A similar treaty also exists with 16 other countries.

Most of the foreign companies/individuals entered India through joint venture collaborations. A closer examination of FDI inflow data reveals that Fortis Global Healthcare Infrastructure Pvt. Ltd has received the highest FDI inflow in hospital sector India. The Fortis Global Healthcare Infrastructure Pvt. Ltd has not only entered into joint ventures with its Indian subsidiaries like Fortis Health Management Ltd and Fortis Hospital Ltd, but also with Kanishka Healthcare Ltd, Escorts Heart and Super-specialty Hospital and Escorts Hospital and Research Centre Ltd. Max Healthcare Institute Ltd., Rockland Hospital Ltd, and Apollo Hospitals Enterprises Ltd. These hospitals receive money from various foreign players/companies, and also attract large funds from the International Finance Corporation (IFC).

Among others, Max Health Care Institute Ltd, Fortis Hospital Ltd, Apollo Hospitals Enterprises Ltd, Colombia Asia Hospital Pvt. Ltd, DM Healthcare Pvt. Ltd, Kanishka Healthcare Ltd, Narayana Hrudayalaya P. Ltd attracted the highest FDI equity inflow (about more than the US\$ 100 million) in hospital sector between March 2000 and October 2014. In addition to the aforementioned, Sevenhills Healthcare Ltd, Nova Medical Centers Pvt. Ltd, Vasan Health Care Pvt. Ltd, Escorts Heart Super Speciality and research, International Hospital Limited, Quality Care India Ltd, and Thyrocare Technologies Ltd also attracted high FDI inflows into India. Most of the FDI inflow to these major corporations located in five metropolitan cities, namely New Delhi, Chennai, Bangalore, Hyderabad and Mumbai are routed *via* Mauritius, Singapore and the USA

While a major portion of the FDI is used for providing the allopathic services, the expenditure on clinical research, drug development, and diagnostic services is very marginal. The projecttoday data shows that except for medical services, the multi-speciality and super-speciality hospitals attracted of the maximum private investments in the country. Hospitals for specific diseases/medical conditions like cancer, ophthalmology, cardiology, and trauma, too, attracted huge foreign investments. This may be because of the changing nature of lifestyle disease, health education, public awareness, and the change in treatment-seeking behaviour. One interesting observation is that a large percentage of FDI is equally distributed among big hospitals with either 100 beds or 1000 beds. This reflects that big corporate hospitals have been emerging in the country since 2000, may be to achieve economies of scale and to provide speciality services. However, it is important to mention that countries should take a step back and first think through the risks and benefits of commercialization of their healthcare sector, rather than being side-tracked into considering the level of foreign investment (Smith, 2004).

## References

- Bajpai, N. and J.D. Sachs (2000), 'Foreign Direct Investment in India: Issues and problems,' Columbia University Academic Commons.
- Baru, R., A. Acharya, S. Acharya, A.K. Shiva and K. Nagaraj (2010), 'Inequalities in Access to Health Services in India: Caste, Class and Region,' *Economic & Political Weekly*, Vol XLV, No 38, September 18.
- Baru, V.R. (2006), 'Privatisation of Health Care in India: A Comparative Analysis of Orissa, Karnataka and Maharashtra States,' United Nation Development Programme (UNDP).
- Bhat, R. (2006), 'Financial Health of Private Sector Hospitals in India,' IIMA Working Paper, WP2006-01-01, Research and Publication Department, IIM Ahmadabad.
- CMIE, Centre for Monitoring Indian Economy (CMIE) PROWESS digital data set, CMIE (undated).
- Chanda, R. (2009), 'Foreign Investment in Hospitals in India: Status and Implications,' in collaboration with WHO India Country Office New Delhi and WTO Cell, Ministry of Health and Family Welfare, Government of India.
- \_\_\_\_\_ (2010), 'Constraints to Foreign Direct Investment in Indian Hospitals,' *Journal of International Commerce, Economics and Policy*, Vol. 1, No. 1, Pp. 121-143, April.
- CRISIL (2007), Healthcare in India – Emerging Market Report, by PWC.
- Ernst and Young Analysis along with FICCI (2007). Available at: <http://www.ficci.com/media-room/speeches-presentations/2007/jan07/ExecutiveSummaryReport.pdf>
- Government of India (2015), National Health Policy (NHP) 2015, Ministry of Health and Family Welfare, Government of India.
- Government of India (undated), FDI Statistics and Newsletter, Department of Industrial Promotion & Policy (DIPP), Government of India. Available at: <http://dipp.nic.in/English/default.aspx>.
- Hooda, S.K. (2013a), 'Changing pattern of health expenditure on India: Issues and Challenges,' Institute for Studies in Industrial Development, ISID-PHFI collaborative Research Programme, Working Paper No. 01, March.
- Jain, B. (2006), 'Financial Performance of Private Sector Hospitals in India: Some further evidence,' Research and Publications, IIM Ahmadabad.
- Lefebvre, B. (2010), 'Hospital Chains in India: The Coming of Age?' India/South Asia Programme – Centre Asie/ifri, January.
- RBI (2007), RBI Bulletin, Reserve Bank of India, Government of India.
- Smith, R.D. (2004), 'Foreign direct investment and trade in health services: A review of the literature,' *Social Science & Medicine*, Vol. 59, Iss. 11, Pp. 2313-2323.
- Sehgal, S. and S. Hooda (2015), 'Emerging Role of Private Sector in Indian Health Care Delivery Market: Trends, Pattern and Implications,' Intern report, Institute for Studies in Industrial Development (ISID), New Delhi.
- Shah, U. and R. Mohanty (2010), 'Private Sector in Indian Healthcare Delivery: Consumer Perspective and Government Policies to Promote Private Sector,' *Information Management and Business Review*, Vol. 1, No. 2, Pp. 79-87, December.
- UNCTAD (2005), World Investment Report 2005, Geneva, United Nations.

## List of ISID Working Papers

- 180 India: Trade in Healthcare Services, *T.P. Bhat*, March 2015
- 179 Clinical trials industry in India: A Systematic Review, *Swadhin Mondal & Dinesh Abrol*, March 2015
- 178 Seaports, Dry ports, Development Corridors: Implications for Regional Development in Globalizing India, *Atiya Habeeb Kidwai & Gloria Kuzur*, February 2015
- 177 Determinants of Public Expenditure on Health in India: The Panel Data Estimates, *Shailender Kumar Hooda*, January 2015
- 176 Manufacturing Strategy in a Changing Context, *Nilmadhab Mohanty*, December 2014
- 175 Freight logistics & Intermodal Transport: Implications for Competitiveness, *Aroind Kumar*, December 2014
- 174 Industrial Policy: Its Relevance and Currency, *Biswajit Dhar*, December 2014
- 173 INDIA: Structural Changes in the Manufacturing Sector and Growth Prospect, *T.P. Bhat*, December 2014
- 172 Post-Fordism, Global Production Networks and Implications for Labour: Some Case Studies from National Capital Region, India, *Praveen Jha and Amit Chakraborty*, November 2014
- 171 From the Phased Manufacturing Programme to Frugal Engineering: Some Initial Propositions, *Nasir Tyabji*, November 2014
- 170 Intellectual Property Rights and Innovation: MNCs in Pharmaceutical Industry in India after TRIPS, *Sudip Chaudhuri*, November 2014
- 169 Role of Private Sector in Medical Education and Human Resource Development for Health in India, *ISID-PHFI Collaborative Research Programme, Pradeep Kumar Choudhury*, October 2014
- 168 Towards Employment Augmenting Manufacturing Growth, *Satyaki Roy*, September 2014
- 167 Import Intensity and Its Impact on Exports, Output and Employment, *Mahua Paul*, March 2014
- 166 Challenge of In-vitro Diagnostics for Resource Poor Settings: An Assessment, *ISID-PHFI Collaborative Research Programme, Nidhi Singh and Dinesh Abrol*, March 2014
- 165 Out-of-pocket Expenditure on Health and Households well-being in India: Examining the Role of Health Policy Interventions, *ISID-PHFI Collaborative Research Programme, Shailender Kumar Hooda*, March 2014
- 164 Labour Processes and the Dynamics of Global Value Chain: A Developing Country Perspective, *Satyaki Roy*, March 2014
- 163 Health Policy Changes and their Impact on Equity in Health Financing in India, *ISID-PHFI Collaborative Research Programme, Swadhin Mondal*, March 2014
- 162 Technological Upgrading, Manufacturing and Innovation: Lessons from Indian Pharmaceuticals, *Dinesh Abrol*, February 2014

---

\* Most of the working papers are downloadable from the institute's website: <http://isidev.nic.in/> or <http://isid.org.in/>



## About the Institute

The Institute for Studies in Industrial Development (ISID), successor to the Corporate Studies Group (CSG), is a national-level policy research organization in the public domain and is affiliated to the Indian Council of Social Science Research (ICSSR). Developing on the initial strength of studying India's industrial regulations, ISID has gained varied expertise in the analysis of the issues thrown up by the changing policy environment. The Institute's research and academic activities are organized under the following broad thematic areas:

**Industrialization:** Land acquisition, special economic zones, encroachment of agricultural land, manufacturing sector, changing organized-unorganised sector relationship, rise of service economy in India, training and skill formation etc.;

**Corporate Sector:** With special emphasis on liberalization-induced changes in the structures of the sector, corporate governance, individual firms/groups, emerging patterns of internationalization, and of business-state interaction;

**Trade, Investment and Technology:** Trends and patterns of cross-border capital flows of goods and services, mergers & acquisitions, inward and outward FDI etc. and their implications for India's position in the international division of labour;

**Regulatory Mechanism:** Study of regulatory authorities in the light of India's own and international experience, competition issues;

**Employment:** Trends and patterns in employment growth, non-farm employment, distributional issues, problems of migrant labour and the changes in workforce induced by economic and technological changes;

**Public Health:** Issues relating to healthcare financing, structure of health expenditure across states, corporatisation of health services, pharmaceutical industry, occupational health, environment, health communication;

**Media Studies:** Use of modern multimedia techniques for effective, wider and focused dissemination of social science research to promote public debates;

**Other Issues:** Educational policy and planning, role of civil societies in development processes etc.

ISID has developed databases on various aspects of the Indian economy, particularly concerning industry and the corporate sector. It has created On-line Indexes of 210 Indian Social Science Journals (OLI) and 18 daily English Newspapers. More than one million scanned images of Press Clippings on diverse social science subjects are available online to scholars and researchers. These databases have been widely acclaimed as valuable sources of information for researchers studying India's socio-economic development.

**ISID**

Institute for Studies in Industrial Development

4, Institutional Area Phase II, Vasant Kunj, New Delhi - 110 070

Phone: +91 11 2676 4600 / 2689 1111; Fax: +91 11 2612 2448

E-mail: [info@isid.org.in](mailto:info@isid.org.in); Website: <http://isid.org.in>