Services Sector

10 CHAPTER

The services sector has been a major and vital force steadily driving growth in the Indian economy for more than a decade. The economy has successfully navigated the turbulent years of the recent global economic crisis because of the vitality of this sector in the domestic economy and its prominent role in India's external economic interactions.

10.2 The services sector covers a wide range of activities from the most sophisticated information technology (IT) to simple services provided by the unorganized sector, such as the services of the barber and plumber. National Accounts classification of the services sector incorporates trade, hotels, and restaurants; transport, storage, and communication; financing, insurance, real estate, and business services; and community, social, and personal services. In World Trade Organization (WTO) and Reserve Bank of India (RBI) classifications, construction is also included.

Services Sector: International Comparison

10.3 Conventional wisdom suggests that during the early development phase of any country, expansion of output in manufactured goods precedes growth in the services sector. As a country progresses further manufacturing often takes a back seat, giving way to the services sector in terms of both output and employment, and manufacturing firms themselves become increasingly service-centric in order to remain competitive. Some have argued that the decline in manufacturing and corresponding shift to services is unsupportable in the long run as services depend critically on manufacturing for their demand. Although this argument may be applicable for certain services such as retailing and transportation, it does not entirely hold for many other services. IT in particular has been a major force behind recent expansion in manufacturing rather than the other way round. While internationally, the conventional wisdom of development holds good, in the case of the Indian economy, it seems to have been turned upside down, with the services sector taking a substantial lead over manufacturing. In India's case, there are positive spillovers from services growth to manufacturing, through income, demand, technology, and organizational learning.

Services GDP: International Comparison

10.4 In 2010, the share of services in the US$63 trillion world gross domestic product (GDP) was nearly 68 per cent, as in 2001. India's performance in terms of this indicator is not only above that of other emerging developing economies, but also very close to that of the top developed countries. Among the top 12 countries with highest overall GDP in 2010, India ranks 8 and 11 in overall GDP and services GDP respectively. While countries like the UK, USA, and France have the highest share of services in GDP at above 78 per cent, India's share of 57 per cent is much above that of China at 41.8 per cent. In 2010 compared to 2001, India is the topmost country in terms of increase in its services share in GDP (7 percentage points) followed by Spain and Canada (5.3 percentage points each), the UK (4.5 percentage points), and Italy (3.2 percentage points). In terms of compound annual growth rate (CAGR) for the period 2001-10, China at 11.3 per cent and India at 9.4 per cent show

very high services sector growth. Russia at 5.5 per cent and Brazil at 4.0 per cent are a distant third and fourth respectively. While India's growth rate of the services sector at 10.1 per cent in 2009 was higher than that of China at 9.6 per cent, in 2010 it has decelerated to 7.7 per cent while China's has remained constant (Table 10.1). All this highlights the prominence of the services sector for India. Despite the higher share of services in India's GDP and China's dominance in manufacturing over services, the hard fact, however, is that in terms of absolute value of services GDP and also in terms of growth of services, China is still ahead of India in 2010.

International Trade in Services

10.5 Global trade in services has more or less mirrored the trend in merchandise trade, and, by corollary, international demand. World exports of services have shown consistent rise in the 2000s decade with a healthy average annual growth of around 9.5 per cent, except in 2001 and 2009—periods of global slowdown and economic crisis. After having increased by 13 per cent in 2008 (as per WTO data), world exports of services fell sharply with negative growth of 12 per cent in 2009, only to bounce back in 2010 with 9 per cent growth. In 2010 the value of services exports was US$3,695 billion, slightly below the 2008 pre-crisis peak of US$ 3,842 billion. While world trade in services is dominated by the developed countries, emerging economies like China and India are now playing an increasing role. India is the most dynamic exporter of services and ranked seventh in the world in both exports and imports of services in 2010 (see Chapter 7 for details).

Foreign Direct Investment (FDI) in the Services Sector

10.6 The global economic and financial crisis had a dampening effect on overall FDI flows. FDI in services, which accounted for the bulk of the decline in FDI flows due to the crisis, continued on its downward path in 2010. FDI in all main service industries (business services, finance, transport and communications, and utilities) fell, although at different rates. Overall, FDI projects in the services

Table 10.1 : Performance in Services : International comparision

Country		Rank		Overall GDP (US$ billion)		Share of Services (% of GDP)			Services Growth Rate (%)			
		Overall GDP	Services GDP	At Current Prices 2010	At Constant Prices 2010	2001	2009	2010	2001	2009	2010	CAGR 2001-10
1	US	1	1	14447.1	13017.0	77.0	79.0	78.2	2.9	-1.4	1.2	1.8
2	Japan	2	2	5458.9	4578.5	69.8	71.7	70.0	2.0	-4.8	2.9	0.6
3	China	3	3	5739.4	3883.5	39.8	42.1	41.8	10.3	9.6	9.6	11.3
4	Germany	4	4	3280.3	2945.8	69.7	73.7	72.5	2.1	-1.6	2.3	1.4
5	France	6	5	2559.8	2208.6	76.5	78.9	78.1	1.7	-1.1	0.2	1.4
6	UK	5	6	2253.6	2330.0	73.9	78.8	78.4	3.5	-3.2	1.1	2.0
7	Italy	7	7	2051.3	1744.0	70.1	73.6	73.3	2.3	-2.9	1.2	0.6
8	Brazil	11	8	2089.0	1092.6	65.3	67.6	66.8	1.8	3.0	4.8	4.0
9	Spain	10	10	1407.3	1180.7	65.7	70.5	71.0	3.4	-1.0	0.7	2.7
10	Canada	9	9	1577.0	1203.9	64.9	70.7	70.2	3.6	0.1	2.5	2.8
11	India	8	11	1722.3	1251.6	50.0	56.5	57.0	7.5	10.1	7.7	9.4
12	Russia	12	12	1479.8	905.2	63.3	62.0	61.5	3.2	-5.6	2.9	5.5
	World			**63064.0**	**51040.5**	**68.1**	**68.7**	**67.8**	**2.9**	**-0.9**	**2.5**	**2.6**

Source **: Computed from UN National Accounts Statistics accessed on 8 February 2012.**

Note **: Rank is based on current prices.**
Share is based on constant prices (US$).
Growth rates are based on constant prices (US$).
CAGR is estimated for 2001-2010.
Construction sector is excluded in services GDP.

sector declined from US$ 392 billion in 2009 to US$ 338 billion in 2010, resulting in its share in sectoral FDI declining from 33 per cent to 30 per cent in this period. Business services declined by 8 per cent compared to pre-crisis levels as multinational companies, who are outsourcing a growing share of their business support functions to external providers, downsized their operations due to economic slowdown. Transportation and telecommunication services also suffered equally in 2010 as the industry's restructuring was more or less complete after the round of large mergers and acquisition deals before the crisis, particularly in developed countries. FDI in the financial industry experienced the sharpest decline and is expected to remain sluggish in the medium term. Over the past decade, its expansion was instrumental in integrating emerging economies into the global financial system, bringing substantial benefits to host countries' financial systems in terms of efficiency and stability. Utilities were also strongly affected by the crisis as some investors were forced to reduce investment or even divest due to lower demand and accumulated losses.

India's Services Sector

10.7 Different indicators like share in national and states' GDP, FDI, employment, and exports indicate the importance of the services sector for the Indian economy.

Services GDP

10.8 The share of services in India's GDP at factor cost (at current prices) increased from 33.5 per cent in 1950-1 to 55.1 per cent in 2010-11 and to 56.3 per cent in 2011-12 as per Advance Estimates (AE). If construction is also included, the service sector's share increases to 63.3 per cent in 2010-11 and 64.4 per cent in 2011-12. With a 16.9 per cent share, trade, hotels, and restaurants as a group is the largest contributor to GDP among the various services' sub-sectors, followed by financing, insurance, real estate, and business services with a 16.4 per cent share. Community, social, and personal services with a share of 14.3 per cent is in third place. Construction, a borderline service inclusion, is at fourth place with an 8.2 per cent share (Table 10.2).

Table 10.2 : Share of different services categories in GDP at factor cost (current prices)

(per cent)

	2006-07	2007-08	2008-09	2009-10@	2010-11*	2011-12**
Trade, hotels, & restaurants	**17.1**	**17.1**	**16.9**	**16.6**	**16.9**	**25.2 #**
Trade	15.4	15.4	15.3	15.1	15.4	
Hotels & restaurants	1.7	1.7	1.5	1.4	1.5	
Transport, storage, & communication	**8.2**	**8.0**	**7.8**	**7.8**	**7.7**	
Railways	0.9	1.0	0.9	1.0	0.8	
Transport by other means	5.7	5.6	5.5	5.3	5.4	
Storage	0.1	0.1	0.1	0.1	0.1	
Communication	1.5	1.4	1.4	1.5	1.4	
Financing, insurance, real estate, & business services	**14.8**	**15.1**	**15.9**	**15.8**	**16.4**	**16.9**
Banking & insurance	5.5	5.5	5.6	5.4	5.8	
Real estate, ownership of dwellings, & business services	9.3	9.6	10.3	10.4	10.6	
Community, social, & personal services	**12.8**	**12.5**	**13.3**	**14.5**	**14.3**	**14.2**
Public administration & defence	5.2	5.1	5.8	6.7	6.3	
Other services	7.6	7.4	7.5	7.9	7.9	
Construction	**8.2**	**8.5**	**8.5**	**8.2**	**8.2**	**8.1**
Total services (excluding construction)	**52.9**	**52.7**	**53.9**	**54.7**	**55.1**	**56.3**
Total services (including construction)	**61.0**	**61.2**	**62.4**	**63.0**	**63.3**	**64.4**

Source **: Computed from Central Statistical Office (CSO) data.**

Notes **: @ Provisional Estimates (PE) * Quick Estimates (QE) ** Advance Estimates (AE)**

 # Includes the share of both Trade, Hotels, & Restaurants and Transport, Storage & Communication for 2011-12 .

Figure 10.1 Growth rate of GDP and services sector GDP



***Source*: Based on CSO data.**
***Notes* : @ PE, * QE, **AE**

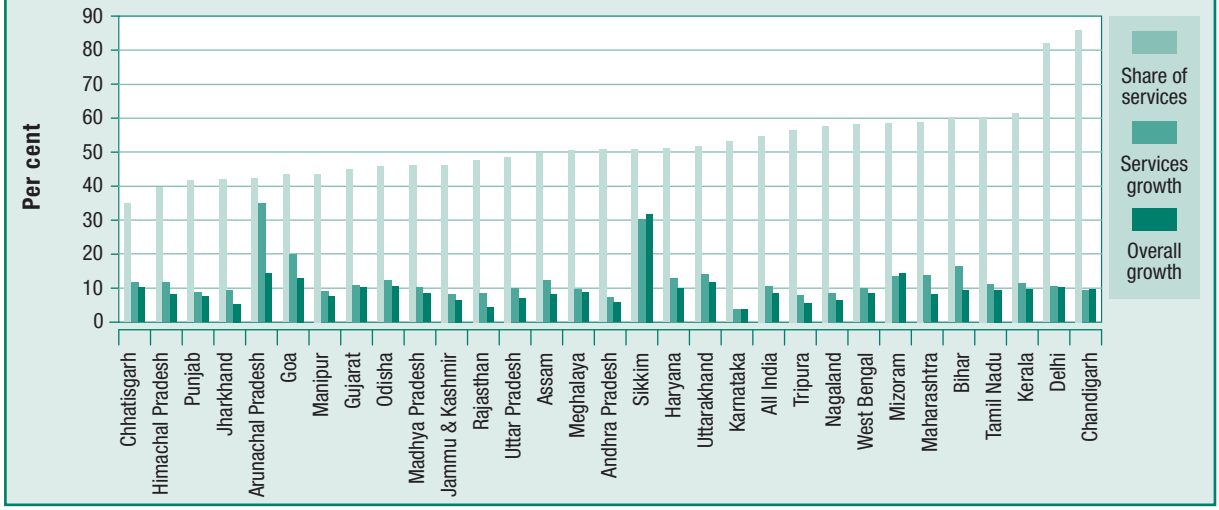
10.9 The service sector growth rate at constant prices has always been above overall GDP growth rate since 1996-7 except for 2003-4 when the two converged. Thus for the last 15 years, this sector with growth much above overall GDP growth of the economy has been pushing up the growth of the economy with a great amount of stability (Figure 10.1).

10.10 The CAGR of the services sector at 10.2 per cent for the period 2004-5 to 2010-11 has been higher than the 8.6 per cent CAGR of GDP during the same period, clearly indicating that the services sector has outgrown both the industry and agriculture sectors. In the years 2009-10 and 2010 11, the services sector has grown at 10.5 per cent and 9.3 per cent respectively. In 2011-12, the growth rate of services is 9.4 per cent (AE).

State-wise Comparison of Services

10.11 A comparison of the share of services in the gross state domestic product (GSDP) of different states and union territories (UTs) in 2009-10 shows that the services sector is the dominant sector in most states of India (Figure 10.2). States and UTs such as Tripura, Nagaland, West Bengal, Mizoram,

Figure 10.2 Share and growth of services sector in 2009-10



***Source* : CSO.**
***Notes* : Data in the case of Nagaland are for 2008-09.**
Shares at current prices, growth rate at constant (2004-5) prices.

Maharashtra, Bihar, Tamil Nadu, Kerala, Delhi, and Chandigarh have higher than all-India shares. Chandigarh with an 86 per cent share and Delhi with 81.8 per cent top the list. Other than Chhattisgarh (34.8 per cent) and Himachal Pradesh (39.6 per cent), services in all other states individually hold a share of more than 40 per cent in the GSDP. Thus the services revolution in India seems to be becoming more broad-based, with even the hitherto backward states piggy-backing on the good performance of this sector to go up the escalator of progress.

10.12 The highest growth rates of the services sector are in the north-eastern states of Arunachal Pradesh (34.9 per cent) and Sikkim (30.1 per cent). Among the other states, Goa with 20.1 per cent and Bihar with 16.6 per cent growth top the list. This is over and above their very high growth rates in 2008-9. Other states with higher than national average growth in the sector are Kerala, Tamil Nadu, Maharashtra, and Mizoram.

FDI in the Services Sector

10.13 FDI plays a major role in the dynamic growth of the services sector though the ambiguity in classifying various activities under the services sector poses difficulty in the measurement of FDI inflows into this sector. The combined FDI share of financial and non-financial services, computer hardware and software, telecommunications, and housing and real estate can be taken as a rough estimate of FDI share of services, though it could include some non-service elements. This share is 41.9 per cent of the cumulative FDI equity inflows during the period April 2000-December 2011. With the inclusion of the construction sector (6.5 per cent), the share of services in FDI inflows increases to 48.4 per cent. If the shares of some other services or service-related sectors like hotels and tourism (2.02 per cent), trading (1.94 per cent), information and broadcasting (1.60 per cent), consultancy services (1.21 per cent), ports (1.04 per cent), agriculture services (0.91 per cent), hospital and diagnostic centres (0.72 per cent), education (0.30 per cent), air transport including air freight (0.27 per cent), and retail trading (0.03 per cent) are included then the total share of cumulative FDI inflows to the services sector would be 58.4 per cent. Following the general trend in FDI inflows, FDI inflows to the services sector (top five sectors including construction) have also slowed down in 2009-10 and 2010-11, with negative growths of -7.5 per cent and -42.5 per cent respectively in rupee terms. In 2011-12 (April-December), again following the trend of overall FDI inflows, which increased by 50.8 per cent to reach US$ 24.19 billion, FDI inflows to the top five service sectors (including construction) also increased by 36.8 per cent to US$ 9.3 billion Services (financial and non-financial), telecommunications, and construction, are the leading sectors in FDI inflows to the services sector in 2011-12 (April-December). The inflows to the other two service sectors are comparatively low (Table 10.3).

Table 10.3 : Services Attracting Highest FDI Equity Inflows

₹ crore

Ranks	Sector	2009-10	2010-11	2011-12 (Apr.-Dec.)	Comulative inflows (Apr. 2000-Dec. 2011)	Percentage to total (in US $ terms)
1	**Services sector** (financial & non-financial)	19945 **(4176)**	15053 **(3296)**	21431 **(4575)**	142539 **(31710)**	20.1
2	**Telecommunications** (radio paging, cellular mobile, basic telephone services)	12270 **(2539)**	7542 **(1665)**	8969 **(1989)**	57035 **(12544)**	7.9
3	**Computer software & hardware**	4127 **(872)**	3551 **(780)**	2626 **(564)**	48940 **(10973)**	6.9
4	**Housing & real estate**	14027 **(2935)**	5600 **(1227)**	2544 **(551)**	48819 **(10933)**	6.9
5	**Construction activities** (including roads & highways)	13469 **(2852)**	4979 **(1103)**	7635 **(1602)**	46216 **(10239)**	6.5

Source **: Based on Department of Industrial Policy & Promotion data.**
Note **: Figures in parentheses are US$ million.**

10.14 The five service sectors are also the sectors attracting the highest cumulative FDI inflows to the economy with financial and non-financial services topping the list at US$ 31.7 billion during the period April 2000-December 2011. This is followed by other service sectors – telecommunication, computer software & hardware and housing & real estate. The top five source countries for FDI inflows into India in the financial and non-financial services sector (for which break-up data are available) during April 2000 to December 2011 are Mauritius, which alone accounts for 39.7 per cent of FDI inflows in the service sector, followed by Singapore (15.4 per cent), the UK (8.6 per cent), USA (7.1 per cent) and Japan (4.5 per cent). This is more or less similar to the general sourcing pattern of total FDI with the top five countries remaining the same in the same order of ranking. The shares of the financial and non-financial services sector in total FDI inflows from these sourcing countries are – Mauritius 20.1 per cent, Singapore 30.6 per cent, UK 29.5 per cent, USA 21.9 per cent and Japan 11.9 per cent.

India's Services Trade

10.15 As per balance of payments (BoP) data of the RBI, India's services exports grew at a CAGR of 20.6 per cent during the period 2004-5 to 2010-11, compared to the 19.7 per cent CAGR of merchandise exports in the same period. Within the services sector, CAGRs of financial services (52.8 per cent) and business services (29.2 per cent) were higher, while that of software at 21 per cent was low. In terms of size, software is a major services export category, accounting for 41.7 per cent of total services exports in 2010-11. The CAGR for import of services was 20.2 per cent compared to the CAGR of merchandise imports at 21.4 per cent. Among services imports, nonsoftware services (22.6 per cent) and transportation (20.5 per cent) had high CAGRs. The overall openness of the economy reflected by total trade including services as a percentage of GDP showed a higher degree of openness at 50.3 per cent in 2010-11 compared to 25.4 per cent in 1997-8. Openness indicator based only on merchandise trade is at 37.5 per cent in 2010-11 compared to 21.2 per cent in 1997-8 (also see Chapter 7).

Services employment in India

10.16 While agriculture continues to be the primary employment-providing sector, the services sector (including construction) is in second place. As per the National Sample Survey Organization's (NSSO) report on Employment and Unemployment Situation in India 2009-10, on the basis of usually working persons in the principal status and subsidiary status, for every 1000 people employed in rural and urban India, 679 and 75 people are employed in the agriculture sector, 241 and 683 in services sector (including construction), and 80 and 242 in the industrial sector, respectively.

10.17 State-wise, there are wide differences in the share in employment of different sectors in rural India. While some north-eastern states like Sikkim, Tripura, and Manipur have a high share of employment in the services sector, city states like Chandigarh and Delhi also have very high shares of 826 and 879 out of 1000 employed people. Among the major states, Kerala has a high share of employment in the services sector at 511 persons per 1000. Construction; trade, hotels, and restaurants; and public administration, education, and community services are the three major employment-providing services sectors in different states. In urban India the shares of employment in services is very high in most of the states (Table 10.4).

India's Services Data

10.18 In last year's Economic Survey, the weaknesses related to availability and quality of services data were highlighted. To reiterate, these are difficulties in compilation of an index of services sector production, non-representation of many service sectors in the calculation of the wholesale price index, limited availability of published data on pricing of services, and limited data on trade in services. Even where data are available, they suffer from deficiencies related to definition, method of collection, suitability for pricing, and construction of indices. The recent efforts in streamlining data in the services sector (Box 10.1), though welcome, need to be accelerated in a coordinated manner with the help of experts in the field.

Performance of Services Sub-sectors

10.19 India's services sector excluding construction and including construction grew by 9.3 and 9.2 per cent respectively in 2010-11 and by 9.4 and 8.8 per cent respectively in 2011-12, as per the CSO's AE. This is nearly 2 percentage points higher than the overall growth rate in 2011-12. Broad category-wise, the 'trade, hotels & restaurants, transport, storage and communications' category had the highest growth at 11.2 per cent, followed by

Table 10.4 : State-wise Employment in Different Sectors in Rural and Urban India in 2009-10

(per 1000 employed people)

State/UT	Agriculture and allied		Industry		Services with construction		Services without construction	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Andhra Pradesh	687	53	97	241	217	705	150	583
Arunachal Pradesh	757	140	32	41	213	817	158	722
Assam	725	27	38	137	257	833	222	757
Bihar	669	146	53	121	279	732	174	609
Chhattisgarh	849	53	39	282	112	666	83	553
Delhi	0	1	120	285	879	712	542	682
Goa	239	14	365	289	397	696	353	552
Gujarat	783	53	62	306	156	641	112	576
Haryana	598	53	98	319	304	627	195	511
Himachal Pradesh	629	85	53	149	320	767	167	676
Jammu &Kashmir	597	110	84	227	316	662	218	552
Jharkhand	548	52	92	160	361	787	145	602
Karnataka	757	94	67	221	176	686	132	558
Kerala	357	110	132	178	511	711	357	570
Madhya Pradesh	824	98	48	203	128	700	62	569
Maharashtra	794	47	52	236	154	716	116	638
Manipur	534	205	90	118	377	677	240	604
Meghalaya	707	58	56	65	236	877	178	780
Mizoram	806	360	14	53	180	587	128	499
Nagaland	741	219	17	35	241	745	200	684
Odisha	676	103	84	215	240	683	144	549
Punjab	618	83	81	249	298	669	168	552
Rajasthan	633	70	54	186	312	743	110	595
Sikkim	539	0	48	99	414	901	282	874
Tamil Nadu	637	136	117	276	246	586	146	482
Tripura	306	21	63	89	633	891	244	716
Uttarakhand	695	54	41	199	263	747	131	629
Uttar Pradesh	669	91	76	257	257	653	134	551
West Bengal	563	36	173	279	265	683	206	621
A & N Islands	430	30	91	98	477	873	330	766
Chandigarh	31	22	145	122	826	856	629	778
Dadra & Nagar Haveli	591	38	160	632	251	332	155	315
Daman & Diu	548	394	340	177	110	430	106	398
Lakshadweep	452	277	57	164	491	558	361	483
Pondicherry	461	29	144	201	396	770	238	647
All India	**679**	**75**	**80**	**242**	**241**	**683**	**147**	**582**

Source **: Compiled from NSSO report No 537 : Employment and Unemployment Situation in India 2009-10.**
Note: **In Industry, 'Construction' is not included.**

'financing, insurance, real estate, and business services' at 9.1 per cent in 2011-12. 'Trade' and 'Real estate, ownership of dwellings, and business services' are two major sub-sectors with shares of 15.4 per cent and 10.6 per cent of GDP respectively in 2010-11. The shares of the two sectors have been more or less stable over the years. In 2010-11, the growth of the former has been good at 9.1 per cent and the latter moderate at 6.9 per cent. Communications followed by banking and insurance are the fastest growing sub-sectors over the years with 27.2 per cent and 14.5 per cent growth respectively in 2010-11 (Table 10.5). Among 'other services' which have a share of around 8 per cent in India's GDP, education, medical and health, and personal services are the major items. Interestingly some items have high growth rates with small shares which are rising. These include coaching centres

Box 10.1 : An update of Recent Efforts at Collection of Service Data in India

Index of services production (ISP): The CSO, Ministry of Statistics and Programme Implementation (MOSPI) with the guidance of a Technical Advisory Committee (TAC) has developed a methodology for compilation of the ISP. The TAC advised compilation of the ISP for different sub-sectors of the economy in a phased manner, with priority given to some sub-sectors like railways, air transport, postal services, banking, telecommunication, etc. that are more organized in terms of availability of data. The ISP is a volume index at constant prices. More precisely, it is defined as the ratio of the volume of output produced by the services industries in a given time period to the volume produced by the same industries in the specified base period. In the absence of regular surveys, the ISP is likely to serve as a short-term measure of assessing the growth of the services sector. Experimental monthly/quarterly/annual ISP for the sub-sectors of railways and air transport with base year 2004-5, covering the period from 2005-6 till 2010-11, have been finalized and uploaded on the website of the Ministry. The annual average values of the indices for rail transport show a rising trend over the years with the growth rate in 2010-11 at 6.4 per cent. The annual average values of the air transport indices also show a rising trend over the years with the growth rate at 18.2 per cent in 2010-11.

Services price index (SPI): Ten sectors have been identified in the initial phase for development of an experimental SPI and methodologies for developing the SPI have been finalized for seven sectors. Concept papers on banking services, rail transport, postal services, and telecommunications have been prepared and uploaded on the official website for comments. The experimental indices for railways and banking sectors are under progress in consultation with the Railway Board and RBI respectively.

Trade in services data: In the current system, the data on international trade in services are not available country-wise, at disaggregated level and as per W-120 classification needed for the General Agreement on Trade in Services (GATS) negotiations. The RBI has stated releasing data on trade in services with a lag of 45 days from April 2011. While the RBI has been providing data on services at a more disaggregated level in recent years, it has also started releasing disaggregated quarterly data on trade in services beginning the first quarter of 2010-11. Data availability in trade of some major services is as follows. Data related to transportation services are derived from authorized dealers (AD) reporting under the Foreign Exchange Transaction through Electronic Reporting System (FETERS) purpose code. Currently, freight and passengers are not segregated but are clubbed together and shown according to the modes of transport in BoP statistics. Data related to travel are also derived in the same way with data on the receipts side being deficient while on the payments side they are adequate. The travel receipts for BoP are based on the Ministry of Tourism's data on tourist arrivals. In India's BoP, the telecommunication, computer, and information services category is presented separately under the heads communication, software, and news agency. Data on credits and debits under each category are also captured through FETERS. With regard to computer services, data are presented as software services and credit data are sourced from NASSCOM due to deficiencies in FETERS data. Data on the debit side of software services are from FETERS. The Survey on 'Foreign Collaboration in India conducted and published by the RBI contains foreign affiliated statistics (FATS). FATS measure turnover, export and import of goods and services, value added, and employment of resident (inward) and non-resident (outward) affiliates of multinational enterprises. At present, under the guidance of an Expert Group on Strengthening of Institutional Mechanism for Regular Collection and Compilation of Data on International Trade in Services set up by MOSPI, two pilot surveys in international trade in services have been initiated—one for the health sector and another for education. The Expert Group will submit its final report after completion of these pilot surveys.

with above 18 per cent growth in the last five years and share in 'other services' rising from 4.9 per cent in 2005-6 to 8.4 per cent in 2010-11; recreation and entertainment services with a steady 9 per cent growth in the last five years and share in 'other services' increasing from 5.4 per cent in 2005-6 to 6.1 per cent in 2010-11; and custom tailoring with a steady 13 per cent growth in the last five years and share in 'others services' increasing from 3 per cent in 2005-6 to 4.1 per cent in 2010-11.

10.20 The performance of the different services based on the different indicators shows that sectors like telecom, tourism, and railways have done well in 2011-12 (Table 10.6). The performance and outlook for the services sector based on limited firm-level data, though sketchy and based on estimates and forecasts, show a mixed picture for this and the coming year (Box 10.2).

Performance of Some Major Services

Trade

10.21 Trade is an important activity providing interface between the producer and consumer. The value of trade (inclusive of wholesale and retail in the organized and unorganized sectors) in India's GDP at constant prices has grown from ₹ 433,967 crore in 2004-5 to ₹ 742,621 crore in 2010-11, at a CAGR

Table 10.5 : Annual Growth in India's Services GDP at Factor Cost (in constant prices)

(per cent)

	2005-06	2006-07	2007-08	2008-09	2009-10@	2010-11*	2011-12**
Trade, hotels, & restaurants	**12.2**	**11.1**	**10.1**	**5.7**	**7.8**	**9.0**	**11.2#**
Trade	11.6	10.8	9.8	6.7	8.3	9.1	
Hotels & restaurants	17.4	14.4	13.0	-3.3	2.8	7.7	
Transport, storage, & communication	**11.8**	**12.6**	**12.5**	**10.8**	**14.8**	**14.7**	
Railways	7.5	11.1	9.8	7.7	9.4	6.8	
Transport by other means	9.3	9.0	8.7	5.3	7.2	8.4	
Storage	4.7	10.9	3.4	14.1	8.7	7.9	
Communication	23.5	24.3	24.1	25.1	31.7	27.2	
Financing, insurance, real estate, & business services	**12.6**	**14.0**	**12.0**	**12.0**	**9.4**	**10.4**	**9.1**
Banking & insurance	15.8	20.6	16.7	14.0	11.3	14.5	
Real estate, ownership of dwellings, & business services	10.6	9.5	8.4	10.4	7.8	6.9	
Community, social, & personal services	**7.1**	**2.8**	**6.9**	**12.5**	**12.0**	**4.5**	**5.9**
Public administration & defence	4.3	1.9	7.6	19.8	18.2	1.3	
Other services	9.1	3.5	6.3	7.4	7.2	7.3	
Construction	**12.8**	**10.3**	**10.8**	**5.3**	**7.0**	**8.0**	**4.8**
Total services (excluding construction)	**10.9**	**10.1**	**10.3**	**10.0**	**10.5**	**9.3**	**9.4**
Total services (including construction)	**11.1**	**10.1**	**10.3**	**9.4**	**10.0**	**9.2**	**8.8**
Total GDP	**9.5**	**9.6**	**9.3**	**6.7**	**8.4**	**8.4**	**6.9**

***Source* : Computed from CSO data.**

***Notes* : @ PE * QE ** AE**

 # Includes the share of both trade, hotels, & restaurants and transport, storage, & communication for 2011-12.

of 9.4 per cent. As per the CSO's QE, the growth rate in 2010-11 was 9.1 per cent. The share of trade in GDP has been slightly above 15 per cent in the last six years (15.4 per cent in 2010-11). With a high GDP growth in the last five years, and high growth in consuming population, the retail business is of late being hailed as one of the sunrise sectors in the economy. A. T. Kearney, an international management consultancy firm, has identified India as one of the topmost retail destinations. Since 2006, India has been allowing FDI in single brand retail to the extent of 51 per cent. In January 2012, the government removed restrictions on FDI in the single-brand retail sector, allowing 100 per cent FDI.

10.22 Allowing FDI in multi-brand retail is one of the major issues in this sector. This could begin in a phased manner in the metros, with the cap at a lower level coupled with incentivizing the existing 'mom and pop' stores (kirana shops) to modernize and compete effectively with the retail shops, foreign or domestic. While agricultural marketing could improve immensely with the growth of modern retail trade, the revenue to the government could also increase, as at present the retail sector is largely unorganized and has low tax compliance. The Inter-Ministerial Group (IMG) on Inflation of the Government of India has also recommended leveraging FDI in multi-brand retail as one of the means for addressing issues relating to high rates of food inflation and low prices realized by Indian farmers, developing a 'farm-to-fork' retail supply system, and addressing the investment gaps in post harvest infrastructure for agricultural produce.

Tourism, including hotels and restaurants

10.23 Tourism is not only a growth engine but also an export growth engine and employment generator. The sector has capacity to create large-scale employment both direct and indirect, for diverse sections in society, from the most specialized to unskilled workforce. It provides 6-7 per cent of the world's total jobs directly and millions more indirectly

Box 10.2 : Performance of Services Firms: A Sectoral Analysis

The Centre for Monitoring Indian Economy's (CMIE) analysis of the sector-wise performance of services activities based on firm-level data is given here. The data for 2011-12 and 2012-13 are based on estimates and forecasts.

Transport logistics: The sales of the transport logistics services industry are estimated to have grown by a healthy 17.5 per cent during 2010-11. This growth is likely to have been achieved by a combination of higher cargo volumes and better realizations. In 2011-12 as a whole, the sales of this sector are expected to grow by 9.6 per cent and profit after tax (PAT) at 17.8 per cent. In 2012-13 sales are expected to grow at 9.9 per cent and PAT 11.1 per cent.

Shipping: The shipping sector's sales had fallen by 4.8 per cent in 2010-11. In the year 2011-12 as a whole, the shipping sector is likely to grow at a modest 2.9 per cent. Exchange rate fluctuations and port and offshore operations are expected to contribute substantially and provide a support level for the sector's total sales during the year. However, the industry's PAT is likely to decline by a phenomenal 75.7 per cent, mainly due to a sharp surge in interest expenses in the light of a weaker Indian rupee. During 2012-13, sales are expected to grow by 5.7 per cent and PAT by 49.2 per cent.

Aviation: During 2010-11, sales had grown by 24.2 per cent. In the year 2011-12 as a whole, the aviation sector's sales are expected to grow by 10.5 per cent, driven by higher passenger volumes. However, a weaker rupee is likely to result in a rise in operating expenses. Fuel expenses are expected to rise by 40.2 per cent. Wages and other operating expenses are expected to rise by 14-15 per cent each. During 2012-13 sales are expected to grow by 13.5 per cent.

Retail sector: Retail trading companies have witnessed a decline in sales growth in 2010-11 by 12 per cent and so far in 2011-12 by 9.4 per cent. A sharp rise in prices of branded apparels, due to the imposition of 10.3 per cent excise duty as well as a rise in prices of yarn and fabrics, led to lower consumer spending and this has hit the sales volumes of garment retailing companies. However, during 2012-13 sales are expected to grow by 15.7 per cent. PAT during 2011-12 is expected to show an impressive growth of 53.1 per cent and during 2012-13 is expected to grow by 34.4 per cent.

Health Services: During 2010-11, sales of the industry had grown by 25.4 per cent. During 2011-12 and 2012-13, sales are expected to grow by a healthy 18.6 per cent and 20.5 per cent respectively on the back of higher occupancy levels in hospitals and revenues per occupied bed. However, major cost components like salaries and wages and other operating expenses are expected to grow at a faster rate of 21.7 per cent and 21.1 per cent respectively. The PAT of the sector is expected to fall by 24 per cent in 2011-12 and grow by17 per cent in 2012-13.

Hotel: The hotel industry had reported sales growth of 14.3 per cent during 2010-11 and is expected to maintain this level in 2011-12 and 2012-13. PAT is expected to grow at 36.2 per cent in 2011-12 and 26.4 per cent by 2012-13. The growth in tourist inflows in 2012-13 and 2013-14 is likely to be driven by tourists from regions other than North America and Western Europe. This includes Asian regions like South Asia, East Asia, and South East Asia. The shares of tourists from these countries have been rising in recent years, as per the data released by the Ministry of Tourism, and are expected to rise in the coming years as well.

Telecom: After rising to 10.5 per cent during 2010-11, sales growth of the telecom industry is expected to be 8.7 per cent in 2011-12 and 10.6 per cent in 2012-13. PAT during 2011-12 is expected to fall by 84.7 per cent, mainly on account of the sharp rise in the industry's interest outgo and higher depreciation charges due to the heavy borrowings for acquiring 3G licences and rolling out 3G services.

Software: During 2010-11, sales had increased by 17.1 per cent and PAT by 15 per cent. For the year ending March 2012, the industry's sales are expected to grow by 20.5 per cent and further to increase by 18.5 per cent during 2012-13. Growth in sales will be mainly driven by an increase in volumes of IT companies. PAT is expected to grow by 13.1 per cent in 2011-12 and 14.2 per cent in 2012-13. In spite of a healthy growth in sales, the industry's margins are expected to remain under pressure due to higher wage bill and increased tax provisioning.

Construction and allied activities: After a 14.2 per cent growth in 2010-11, the industry's sales are expected to grow by 16.1 per cent during 2011-12. However, the same cannot be said about the industry's profit performance. PAT had declined by 9.1 per cent during 2010-11 and is expected to decline by 10.4 per cent during 2011-12. This will be on account of rising construction costs and higher interest outgo. Prices of key inputs like steel and cement are expected to rise by 7.2 per cent and 5.5 per cent respectively during the year. Interest expenses are also likely to rise by a sharp 46.7 per cent in 2011-12 due to rise in interest rates and higher borrowings. During 2012-13, sales and PAT are expected to grow by 18.6 per cent and 17.4 per cent respectively.

Source **: Compiled by EXIM Bank of India based on CMIE Industry Analysis.**

through the multiplier effect as per the UN's World Tourism Organization. Since tourism does not fall under a single heading in India's National Accounts Statistics, its contribution has to be estimated. Its contribution to GDP and employment in 2007-8 was 5.92 and 9.24 per cent respectively as per Tourist Satellite Account Data.

10.24 In India, the tourism sector has witnessed significant growth in recent years. During the period 2006 to 2011, the CAGRs of foreign tourist arrivals (FTA) and foreign exchange earnings (FEE) from tourism (in rupee terms) were 7.2 per cent and 14.7 per cent respectively. FTAs in India during 2010 were 5.78 million compared to 5.17 million during 2009,

Table 10.6 : Performance of India's Services Sector: Some Indicators

Sector	Indicators	Unit	Period			
			2008-09	2009-10	2010-11	2011-12
Aviation	Airline passengers (domestic and international)	Million	49.5 (a)	54.5 (a)	64.5 (a)	59.3 (a)
Telecom	Telecom connections (wireline and wireless)	lakh	4297.25	6212.8	8463.2	9265.3 (b)
Tourism	Foreign tourist arrivals	Million	5.28 (a)	5.17 (a)	5.78 (a)	6.29 (a)
	Foreign exchange earnings from tourist arrivals	US $ million	11832	11394(e)	14193 (e)	16564 (e)
Shipping	Gross tonnage of Indian shipping	Million GT	9.28	9.69	10.45	11.06(d)
	No. of ships	Numbers	925	1003	1071	1122(d)
Ports	Port traffic	Million tonnes	530.53	561.09	570.03	488.8 (c)
Railways	Freight traffic by railways	Million tonnes	833.31	887.99	832.75	704.81 (b)
	Net tonne kilometres of railways	Million	538226	584760	444515	466968 (b)
Storage	Storage capacity	Lakh MT	105.25	105.98	102.47	99.81(b)
	No. of warehouses	Numbers	499	487	479	469 (b)

Sources **: Directorate General of Civil Aviation, Telecom Regulatory Authority of India, Ministry of Tourism, Ministry of Shipping, Ministry of Railways and Central Warehousing Corporation (compiled by EXIM Bank of India).**

Notes **: GT is gross tonnage.**
(a) calendar years, for example 2007-8 for 2007. (b) April - December. (c) April – January.
(d) As on 1 January, 2012. (e) Advance estimates by the Ministry of Tourism

posting a growth of 11.8 per cent, much higher than the growth of 6.5 per cent for the world in 2010. FEEs from tourism in rupee terms during 2010 were ₹ 64,889 crore compared to ₹ 54,960 crore during 2009 with a growth rate of 18.1 per cent. Despite the slowdown and recessionary trends in the economies of Europe and America, FTAs during 2011 were 6.29 million with a growth of 8.9 per cent over 2010 and FEEs in 2011 were ₹ 77,591 crore with a growth of 19.6 per cent. In the case of outbound tourism, the number of Indian nationals' departures from India during 2010 was 12.99 million with a growth of 17.4 per cent for the year. Domestic tourism has also emerged as an important contributor to the sector providing much needed resilience. Domestic tourist visits during 2010 are estimated at 740.2 million, with a growth of 10.7 per cent.

10.25 Hotels and restaurants is an important component of the tourism sector. As on 31 December 2011, there were 2,895 classified hotels having a capacity of 1,29,606 rooms in the country. Availability of good quality and affordable hotel rooms plays an important role in boosting the growth of tourism in the country. The share of the hotel and restaurant sector in overall economy increased from 1.46 per cent in 2004-5 to 1.53 per cent in 2008-9 and then decreased to 1.46 per cent in 2010–11. However, if the contribution of this sector only in the service sector is considered, its share decreased from 2.75 per cent in 2004-5 to 2.64 per cent in 2010–11 as other service sectors grew faster than this sector. Its CAGR was 8.44 per cent during 2004–5 to 2009–10 and the growth rate in 2010–11 was 7.7 per cent. Health tourism, the new entrant in the sector, is a niche area where India has good potential (Box 10.3).

10.26 As is natural, with the growth of this sector, components like air travel and hotel stay have been included under service tax. The Economic Survey 2010-11 has listed the major policy decisions taken in recent years. However, a lot more needs to be done to make India a major tourist destination. Some of the problem areas in this sector include the following. States impose luxury tax ranging from 5 per cent to 12.5 per cent. In some cases, the luxury tax is applicable on printed room rates whereas actual hotel rates offered to guests are much lower. With a view to rationalizing luxury tax on hotels, the Government of India has requested the states to work towards rationality and uniformity of taxes so as to make their destinations more competitive. They have been also requested to exempt room tariff below ₹ 2,500 from luxury tax and charge luxury tax at a uniform rate of 4 per cent on actual tariff. Construction of hotels is primarily a private-sector activity which is capital intensive and has a long gestation period. A major constraint being faced by the hotel industry in addition to the high cost and limited availability of land is the procurement of multiple clearances / approvals required from central

Box 10.3 : Wellness Tourism in the World: Advantage India

Several studies have estimated the global market for medical tourism ranging from US$ 100 billion to US$ 150 billion. The Asian medical tourism market is being bolstered by initiatives taken by the national governments, as also rising quality standards. According to a study by the Organization for Economic Cooperation and Development (OECD), Thailand, India, Singapore, Malaysia, Hungary, Poland, and Malta are promoting their comparative advantage as medical tourist destinations. Singapore Medicine has been established under government-industry partnership to promote Singapore as a destination for advanced medical care. Malaysia has established the Malaysia Healthcare Travel Council to develop and promote the health-care and travel industry. Philippines has launched the Philippines Medical Tourism Programme and included medical tourism in the Investment Policies Plan. Thailand has been leveraging elements such as spas and alternative therapies in its promotional strategies for several decades, coupled more recently with state-of-the-art hospitals and skilled professionals.

Several features like cost-effective health-care solutions, availability of skilled health-care professionals, reputation for treatment in advanced health-care segments, increasing popularity of India's traditional wellness systems, and strengths in IT have positioned India as an ideal health-care destination. India, while strengthening its capabilities in modern health-care systems is also leveraging its inherent strengths in traditional health-care systems such as ayurveda, siddha, yoga, naturopathy, and faith healing/spiritualism. It also holds an edge over competitor countries with its mastery over techniques of concentration and mind control and its natural resources and cultural diversity.

Source : **Compiled by EXIM Bank of India.**

and state government agencies for hotel projects. Varying from state to state, in some cases as many as 65 clearances/approvals are required for hotel projects. A Hospitality Development and Promotion Board has been set up at central level. The main function of the Board will be to monitor and facilitate clearances / approvals for hotel projects both at central and state government levels. The Board will be a single window for receiving applications for various clearances, approving / clearing hotel projects in a time-bound manner, and reviewing hotel project policies to encourage the growth of hotel / hospitality infrastructure in the country. State governments have also been requested to set up similar boards under the Chairmanship of their Chief Secretaries. So far Mizoram, Manipur, and Maharashtra have set such boards. Other measures in this sector could include rationalizing the fees for entry to monuments and using the fees for their maintenance; focusing on safety of tourists; and promoting wellness tourism.

Some Transport Related Services

Shipping

10.27 Shipping is an important indicator of both commodity and services trade of any country. It plays an important role in the Indian economy with around 95 per cent of the country's trade by volume and 68 per cent in terms of value being transported by sea. As on 1 January 2012, India had a fleet strength of 1,122 ships with Gross Tonnage (GT) of 11.06 million, the public-sector Shipping Corporation of India having the largest share of 36.17 per cent. Of this, 372 ships with10.01 million GT cater to India's overseas trade and the rest to coastal trade. The gross foreign exchange earnings/savings of Indian ships in 2010-11 were ₹ 10,666.45 crore. Leaving aside the flag of convenience countries, the country with the highest dead weight tonnage (DWT) is Hong Kong. Though India has one of the largest merchant shipping fleets among developing countries, it is ranked eighteenth in the world in terms of DWT with a share of only 1.09 per cent as on 1 January 2011. In comparison, China is ranked ninth with a share of 3.78 per cent (Table 10.7). Indian vessels are also relatively older than the international average. As on December 2011,

Table 10.7 : Share of Merchant Fleets by Flags of Registration as on 1 January 2011

Rank	Flag of Registration	DWT (In '000)	Share (%)
1	Panama	306032	21.93
2	Liberia	166246	11.91
3	Marshall Islands	98757	7.08
4	Hong Kong	91733	6.57
5	Greece	71420	5.12
6	Bahamas	67465	4.83
7	Singapore	67287	4.82
8	Malta	61294	4.39
9	China	52741	3.78
10	Cyprus	32321	2.32
11	Japan	22201	1.59
12	Republic of Korea	20155	1.44
13	Italy	19440	1.39
14	Isle of Man	19422	1.39
15	Norway	18065	1.29
16	Germany	17566	1.26
17	UK	16999	1.22
18	India	15278	1.09

Source : **Based on United Nations Conference on Trade and Development (UNCTAD), Review of Maritime Transport, 2011.**

44 per cent of the fleet was over 20 years of age and 12 per cent in the age group of 16-20 years.

10.28 According to preliminary estimates by UNCTAD, at 8.94 million Twentyfoot Equivalent Units of Container (TEUs) in 2010, India was ranked eighth among developing countries in terms of container ship operation with a world share of 0.32 per cent. UNCTAD further classifies India (ranked 17th) as one of the top 20 economies for shipbuilding based on deliveries in the year 2010 (37 vessels of 136,000 DWT), though its share is only 0.11 per cent in the world. India is also one of the major nations undertaking ship-breaking service. In 2010, with a world share of 32.43 per cent, it topped the list of ship-scrapping nations, scrapping 451 ships with 9.28 million DWT. India is also one of the major countries supplying seafarers. At third rank and with a 7.5 per cent share in 2010, it supplied 46,497 officers to the global shipping industry. However, India is ranked 22nd in 2011 according to the UNCTAD liner shipping index, down from 21st position in 2004.

10.29 The global shipping industry has been experiencing turbulent waters in the year 2011 due to the economic slowdown. Indian shipping companies faced problems of restricted cash inflows in 2011-12 due to very low charter hire and freight rates in all segments of shipping. These difficult economic conditions have been prevailing since 2008 with small windows of relief in 2011-12. Most Indian shipping companies that have been able to better manage their businesses have been those with a diversified presence across shipping segments or businesses. While the bulkers and tankers segments have seen a downturn, the off-shore segment with jack ups and sub-sea vessels has ensured cash visibility for companies.

10.30 Further, the incidence of piracy has been of great concern to the government. The government has deployed naval vessels for assistance to merchant vessels in the piracy-affected areas. As on 17th February 2012, 27 Indian seafarers are in the custody of somalian pirates. The government has been raising the issue of piracy and the need for more concerted international action at the meetings of the United Nations and the International Maritime Organization (IMO).

10.31 In order to provide the shipping industry a partial level playing field and make it competitive at international level, the government implemented certain policies in 2011 like giving a minimum depreciation of 3.34 per cent (assuming life of 30 years) to drilling rigs; granting exemption on 29 July 2011 to ships falling under Chapter 8901 from additional customs duty and excise duty provided a general license under section 406 of the Merchant Shipping Act 1958 is granted by the Director General shipping; and exemption from import duty for spares and capital goods required by ship owners in Budget 2011-12.

10.32 While India's overseas seaborne trade has been growing substantially over the years, from 224.62 million tonnes in 1999-2000 to 570 million tonnes in 2010-11, there has been sharp decline in the share of Indian ships in the carriage of India's overseas trade. From about 40 per cent in the late 1980s, this share has declined to 9 per cent in 2010-11 with an 18 per cent share in India's oil imports in 2009-10. Given the relatively low participation of Indian ships in India's trade and given the fact that Indian ships are ageing, with the average age of the Indian fleet increasing from 15 years in 1999 to 18.37 years in 2012, there is urgent need to increase the shipping fleet so that it is at least enough to meet India's trade volumes. Higher asset size of Indian shipping will not only lead to higher growth of the economy but also higher employment and high foreign exchange earnings/savings. The estimated freight bill of India in 2011-12, based on 7.5 per cent of the value of seaborne trade, total US$ 57 billion and estimates show that a 5 per cent increase in tonnage could lead to a US$ 6.3 billion saving/earning of foreign exchange. Strengthening the Indian fleets with adequate and cheap finance is important given the fact that ship prices which had peaked in the middle of 2007-8 are nearer to the lows seen in December 2009. Rationalizing the multiple levies in the shipping sector could also help.

Port Services

10.33 Ports are the vital link in the trade between nations. Continuous modernization of ports and upgradation of port infrastructure are important to increase the productivity and efficiency of ports. The total capacity of Indian ports has reached approximately 1,160 million tonnes as on 1 January 2012. During 2009-10 and 2010-11, traffic at major ports attained a growth of 5.67 per cent and 1.59 per cent respectively over the previous year. The American Association of Port Authorities, ranks Shanghai at the top with regard to total cargo volume handled in 2009 relegating Singapore from its first position of 2008 to second position. Madras Port and the Jawaharlal Nehru Port Trust (JNPT) are

Table 10.8 : Some Performance Indicators for Major Ports in India

Year	Average Turnaround Time (days)	Average pre-Berthing Time (in hours)	Average Output per Ship Berth day (in tonnes)
2004-05	3.41	6.03	9371
2005-06	3.63	8.77	9543
2006-07	3.81	10.05	10010
2007-08	3.98	11.40	9440
2008-09	4.20	9.55	9669
2009-10	4.42	11.67	9215
2010-11	4.64	12.00	12429
2011-12 (Apr.-Dec.)	4.66	12.12	10752

Source **: Update on Indian Port Sector (September 2011), Ministry of Shipping, Government of India.**

ranked 55th and 56th in 2009 in terms of total cargo volume, up from 70th and 71st positions in 2008. As per the Shipping Statistics December 2011 of the Institute of Shipping Economics and Logistics, (Germany), Shanghai is at the top in terms of container traffic in 2010 followed by Singapore while the JNPT is ranked 25th. The average turnaround time at major Indian ports worsened to 4.66 days during April-December 2011, from 3.41 days in 2004-05, and was relatively higher in some ports like Paradip, Kolkata, Vizag, Tuticorin, Murmugoa, Mumbai, and Kandla. The average output per ship-berth-day was 10752 tonnes for all major ports, with 25782 tonnes per ship-berth-day for the JNPT, and 2765 tonnes for Kolkata port. With the average turnaround time in India already relatively high by international standards, the turnaround time of Singapore port being less than a day, what is cause for worry is the further rise in average turnaround time and average pre-berthing time though average output per ship-berth-day has increased in 2010-11 and April-September 2011 (Table 10.8).

10.34 Union Budget 2011-12 has increased the allocation of funds for infrastructure and enhanced the limit of tax free bonds for the ports sector up to ₹ 50 billion. The government is also making all round efforts to increase port capacity in the country through the development of additional berths at the major ports, mechanization, deepening of channels and harbours to receive bigger vessels, improved rail and road connectivity and by facilitating similar development at the non-major ports promoted by state governments. The biggest public-private partnership (PPP) project in the ports sector has been awarded recently in the JNPT, Mumbai; the biggest dredging project is also being taken up there. More trans-shipment of Indian EXIM containers is expected to take place at Indian ports, especially at the new International Container Transhipment Terminal at Cochin. Establishing one additional major port in each of the maritime states that is interested in providing support for such development is under consideration and a technical committee is evaluating proposals for new major ports received from the states of Andhra Pradesh, Gujarat, Karnataka, and Kerala. The government has successfully implemented the Port Community System as part of a paperless regime for transaction of business at ports.

10.35 However, there is need to further strengthen this major artery of Indian trade. Better infrastructure is needed particularly for handling crude oil. Other issues include upgrading the facilities at existing ports with regard to cargo handling, stevedoring, pilotage services, bunker services, and warehousing facilities; increasing the drafts to facilitate trans-shipment of Indian cargo which otherwise takes place outside the country; and rationalizing the different port charges to make them comparable with best practice levels.

Storage Services

10.36 Warehousing services are an integral part of both inbound and outbound logistics, as goods produced have to be stored in different geographical locations before shipping/dispatch as per demand/order flows. In India, the most important component of warehousing is agricultural storage for agri-produce, foodgrains, fertilizers, manure, etc. Other components include industrial warehousing for industrial goods, import cargo, and excisable cargo; inland container depots (ICDs)/container freight stations (CFSs) for facilitating import/export trade; and special warehouses for cold and temperature-controlled storage. The warehousing sector also provides many ancillary services. The Central Warehousing Corporation (CWC) along with 17 State Warehousing Corporations (SWCs) provides scientific storage facilities for agricultural produce and implements and other notified commodities. Its commercial outreach coupled with social objectives has resulted in the CWC operating a large warehousing network across the country. As on 31 December 2011, it was operating 469 warehouses, with total storage capacity of 99.81 lakh MT and

average utilization of 89 per cent. The number of warehouses are lower than the 479 as on 31 March, 2011 due to de-hiring of capacity. The CWC made an entry into operation of public-bonded warehouses in the late 1970s, when the Central Board of Excise and Customs identified it as a custodian for dutiable goods. The CWC has also diversified its business into CFSs/ICDs and also started container rail transportation from Loni (UP) to the JNPT. In 2010-11, it added capacity of 1.45 lakh MT with total capital outlay of ₹ 65 crore. At state level, 17 SWCs were operating a network of 1,624 warehouses with aggregate storage capacity of 230.10 lakh MT as on 1 December 2011.

10.37 Major policy initiatives taken recently by the government include construction of godowns under the seven-year/10-year guarantee scheme of the Government of India; permission of up to 100 per cent FDI in the construction of warehousing infrastructure; construction of warehouses under the Grameen Bhandaran Yojana of the National Bank for Agriculture and Rural Development (NABARD) and the Rastriya Krishi Vikas Yojana; making the warehouse receipt fully negotiable; and construction of godowns under its Private Entrepreneurs Godown (PEG) scheme. The CWC has constructed godowns with 1.45 lakh MT capacity during the year 2010-11 and plans to construct additional capacity of 2.09 lakh MT during 2011-12. There is, however, need to further increase high quality storage capacity and the number of trained samplers/graders.

Communication Services

Telecom and Related Services

10.38 Indian telecom has proved to be an international success story with the sector witnessing commendable growth over the past few years. The Indian telecom network is ranked as the second largest in the world, next only to China. The total number of telephones has increased from 206.83 million on 31 March 2007 to 926.53 million as on 31 December 2011. The growth in wireless connections has been phenomenal, reaching 893.84 million connections at the end of December 2011, taking their share to over 96 per cent of total telephones in the country. Tele-density, which is an important indicator of telecom penetration, has increased from 18.31 per cent in March 2007 to 76.86 per cent in December 2011. While urban tele-density as of December 2011 has reached a high level of 167.85 per cent, at 37.48 per cent rural tele-density is low, signifying the potential for further growth in rural areas. The liberal policy regime facilitated the growth of the sector and lowered the costs for consumers, though the recent court cases related to the telecom sector have dampened the mood. The sentiments in this sector could be lifted by further reforms which could include rationalization of the multiple levies and taxes and using mobile services in the delivery of different social welfare schemes which can increase its rural penetration. The draft National Telecom Policy 2011 has similar objectives.

10.39 Since the announcement of the Broadband Policy in 2004, several measures have been taken to promote broadband penetration in the country. As a result, there are 13.30 million broadband subscribers as on 31 December 2011 and 19.69 million internet subscribers at the end of March 2011. However, broadband has lagged behind the growth of telephones in India. Special efforts are being made to increase the penetration of broadband, especially in rural and remote areas. The upcoming decade is likely to usher in an information era through Mobile Value Added Services (MVAS) and Broadband for All. The successfully concluded auction of the Broadband Wireless Access (BWA)/ 3G spectrum and National Optical Fiber Network will enhance wireless broadband penetration and help connect the remotest locations across India (For further details, see Chapter 11).

Posts

10.40 India Post has the largest postal network in the world with 154,866 post offices across the length and breadth of the country as of 31 March 2011. On an average, each post office serves 7,814 persons with coverage of approximately 21.23 sq. km. As many as 139,040 post offices are in rural areas, while 15,826 are in urban areas. In addition to its own network, the Department of Posts also serves through 1155 franchisee outlets in areas where it is not possible to open post offices.

10.41 Government has launched Project Arrow in 2008 to transform the existing India Post infrastructure across the country by upgrading key postal operations such as mail delivery, remittance, and banking services. India Post is emerging as a one-stop shop for retail products and offers a single window facility for banking, money remittances, and other financial products. In addition, India Post has been given the responsibility of disbursing wages to beneficiaries of the Mahatama Gandhi National Rural Employment Guarantee Act (MGNREGA) through 96,895 post offices. The postal network is also being

used by other government departments/agencies to collect data like the rural consumer price index. The postal sector needs to keep pace with changing times as many of its services have become redundant with growth in technology and takeover by other players. Quick decisions and actions to stay abreast of the times including switching over to new activities and downsizing could release a lot of resources from this sector for use elsewhere.

Real Estate Services

10.42 Housing is a basic need and provides economic and social security to the people. It is also an 'asset' that can have significant leveraging effect to support and supplement other means of income generation and poverty alleviation. It is an important employment-intensive sector. A host of vocations and professions like construction workers, builders, developers, engineers, valuers, property consultants, interior decorators, consultants, and plumbers derive their livelihood from housing either directly or indirectly. Estimates show that for every rupee that is invested in housing and construction, ₹ 0.78 gets added to GDP. Housing ranks fourth in terms of the multiplier effect on the economy and third amongst 14 major industries in terms of total linkage effect. The real estate industry has significant linkages (both direct and indirect) with nearly 300 sectors like cement, steel, paints, and building hardware which not only contribute to capital formation and generation of employment and income opportunities, but also catalyse and stimulate economic growth. Therefore, investment in housing and real estate activities can be considered a barometer of growth of the entire economy.

10.43 The GDP share of the real estate sector (including ownership of dwellings) along with business services was 10.6 per cent in 2010-11. After growing at 10.4 per cent in 2008-9, the rate of growth of this sector has decelerated to 7.8 per cent in 2009-10 and further to 6.9 per cent in 2010-11. Currently, about 5 per cent of India's GDP is contributed by the housing sector. With institutional credit for housing investment growing at a CAGR of about 18 to 20 per cent per annum in the next three-five years, the housing sector's contribution to GDP is likely to increase to 6 per cent. While India is among the top countries in terms of housing and work space needs, it ranks 181st in construction permission processes according to the World Bank's Doing Business 2012 report. There are 34 procedures and the average time taken is 227 days. Some of the issues related to this sector include the hardening of interest rates and possible defaults; challenges associated with land acquisitions; high stamp duty; formalities and costs related to registration and mutation, some of which are unnecessary and superfluous; the Urban Land Ceiling Regulations Act (ULCRA) and existing lower floor area ratio in cities; and absence of a single window clearance system with standardization of bye-laws and processes. Recently, some of the urban local bodies (ULBs)/development authorities, like the Municipal Corporations of Delhi and Indore have introduced online sanction for building plans and for issuing completion certificates, which is likely to reduce the approval time. Similar measures by other development authorities are needed.

Some Business Services

IT and ITeS

10.44 The IT and IT enabled services (ITeS) sector are giving India the image of a young and resilient global knowledge power. The IT-ITeS industry has four major sub-components: IT services, business process outsourcing (BPO), engineering services and research and development (R&D), and software products. As per the estimates of NASSCOM, India's IT and BPO sector (excluding hardware) revenues were US$ 87.6 billion in 2011-12, generating direct employment for nearly 2.8 million persons and indirect employment of around 8.9 million. As a proportion of national GDP, IT and ITeS sector revenues have grown from 1.2 per cent in 1997-8 to an estimated 7.5 per cent in 2011-12.

10.45 Software exports in 2011-12 are estimated at US$69 billion compared to US$59 billion in 2010-11. While exports continue to dominate the IT-ITeS industry and constitute about 78.4 per cent of total industry revenue, the CAGR of the domestic sector has also been high at 12.8 per cent compared to the 14.2 per cent for exports during the Eleventh Five Year Plan period. The growth rate of the domestic sector in 2010-11 was 20.6 per cent as compared to 18.8 per cent for the export sector; in 2011-12 it was 9.7 per cent for domestic sector and 16.4 per cent for export sector. In 2012-13, as per NASSCOM estimates, export revenues are expected to grow by 11-14 per cent and domestic revenues by 13-16 per cent. These estimates are a pointer to the possibilities of making further forays into the untapped domestic sector for IT and ITeS (Table 10.9).

10.46 Consistent demand from the US, which increased its share in total exports of India's IT and ITeS services from 61.5 per cent to 62 per cent, characterized 2011-12. Emerging markets of Asia

Table 10.9 Overall Growth Performance of the IT-ITeS Sector

Year	Value (US$ billion)					Growth rate (%) 2011-12	CAGR (%) 11th Five Year Plan
	2007-08	2008-09	2009-10	2010-11 (E)	2011-12 (P)		
Total IT BPO Services Revenue	52.1	59.9	64.0	76.3	87.6	14.8	13.9
Exports	40.4	47.1	49.7	59.0	68.7	16.4	14.2
Domestic	11.7	12.8	14.3	17.3	19.0	9.7	12.8

Source **: NASSCOM.**
Notes **: P = Provisional; E = Estimated.**

Pacific and the rest of the world also contributed to overall growth. While the industry's vertical market mix is well balanced across several mature and emerging sectors, there was broad-based demand not only across traditional segments such as banking, financial services, and insurance (BFSI), but also new emerging verticals of retail, health care, media, and utilities. Sub-sector-wise in 2011-12, as per the provisional estimates of NASSCOM, in the export sector, IT services were the major component with a 58 per cent share and CAGR of 15.7 per cent for the Eleventh Plan period; followed by BPO with a 23.1 per cent share and 12.5 per cent CAGR; and software products / engineering with a 18.9 per cent share and 11.8 per cent CAGR. Indian IT service offerings have evolved from application development and maintenance to emerge as full service players providing testing and infrastructure services, consulting, and system integration. The year also witnessed the next phase of BPO-sector evolution, characterized by greater breadth and depth of services, process re-engineering across the value chain, increased delivery of analytics and knowledge-based services through platforms, strong domestic market focus, and Small and Medium-sized Business (SMB) centric delivery models. In the engineering design and products development segments, there was increasing use of electronics, adoption of fuel efficiency norms, convergence of local markets, and use of localized products. Increasing confidence between customers and service providers successfully executing a variety of activities across low-medium-high complexity projects has led to increasingly larger sizes of projects being sourced from India. In the domestic sector, the major component is IT services with 64.2 per cent share, followed by software products/ engineering with 19.6 per cent share and BPO with 16.2 per cent share. The CAGRs of these sectors were 11.5 per cent, 13.6 per cent, and 18.1 per cent respectively. Strong economic growth, rapid advancement in technology infrastructure, increasingly competitive Indian organizations, enhanced focus by the government and emergence of business models that help provide IT to new customer segments are the key drivers for increased technology adoption in India. The IT and ITeS sector is also a generator of skilled employment with direct employment expected to reach 2.8 million in 2011-12 compared to 2.5 million in 2010-11.

10.47 Some of the challenges faced by the IT and ITeS sector include increasing competition from other countries with incentivized low costs, rising costs in India with wage-push inflation, increasing costs of relevant talent and skilled personnel, infrastructure constraints with over 90 per cent of total revenue generated from seven Tier-1 locations, risks like currency fluctuations and security, both physical and data related, and rising protectionist sentiments in key markets. Government has taken various initiatives to promote the growth of the IT-ITeS industry and has been a key catalyst for increased IT adoption--through sectors reforms that encourage IT acceptance, National e-Governance Plan (NeGP), and the Unique Identification Development Authority of India (UIDAI) programme that creates large-scale IT infrastructure and promotes corporate participation. The Draft National Policy on Information Technology 2011 focuses on deployment of information communication technology (ICT) in all sectors of the economy and providing IT solutions to the world. The Policy emphasizes adoption of technology-enabled approaches to overcome developmental challenges in education, health, skill development, financial inclusion, employment generation, and governance so as to enhance efficiency across the board in the economy. It seeks to bring ICT within the reach of the whole of India while at the same time harnessing the immense human resource potential

in the country to enable it to emerge as the global hub and destination for IT-ITeS Services by 2020. The NeGP was approved by the Government of India in May 2006 to make all government services accessible to the common man in his locality, through common service delivery outlets at affordable costs. The NeGP comprises mission mode projects (MMPs) and core e-infrastructure. Significant progress has been made in laying down core e-infrastructure and in most of the MMPs. More than 97,000 common service centres (CSCs) have been established across the country as web-enabled service access points for making public services available to citizens on anytime, anywhere basis. Initiatives under the NeGP also include online services related to income tax, Ministry of Corporate Affairs (MCA) 21, passports, and central excise. The government has also initiated new e-Governance projects for education, health, public distribution system and postal services. This will ensure the common man access to quality education, cost efficient and quality health care and postal services at affordable costs. The number of public services available to citizens in electronic mode will be expanded through the Electronic Delivery of Services (EDS) Bill, approved by the union cabinet on 20 December 2011. In order to leverage the rapid growth in penetration of mobile technology and connectivity and also to ensure accessibility to all services to the common man, public services under all e-Governance projects will be delivered through mobile devices like mobile phones and Aakash tablets. Further, basic banking services, i.e. cash withdrawal, cash deposit, balance inquiry, and transfer of money from one account to another, will be extended to every panchayat through the CSCs and money transfer facility to every village by December 2013, leveraging ICT and mobile technology. This will help make financial inclusion a reality with the help of IT.

Accounting and Auditing Services

10.48 As per the WTO data, in the US$ 28.5 billion other business services exports by India in 2009, the share of legal, accounting, management, and public relations services was 16.2 per cent and in the US$ 21.03 billion imports, their share was 26.2 per cent. Indian accounting firms are increasingly getting integrated and are providing associated services such as management consultancy, corporate finance, and advisory services in addition to their core business of accounting, auditing, and tax services. The accounting profession is structured in India as partnership with few partners or proprietorship concerns and mainly comprises small and medium enterprises (SMEs). The existing regulations require firms practising chartered accountancy to be registered with the Institute of Chartered Accountants of India (ICAI).

10.49 Out of 48,000 chartered accountancy firms in India, there are only 2,043 that have five or more partners. The remaining are practising as proprietary firms or in their individual names. The chartered accountancy profession in India has globally benchmarked its qualification and training standards and has entered into qualification-recognition arrangements with accounting bodies in the UK, Australia, Canada, and Ireland. The export potential of India in accounting services could be tapped by such mutual recognition of qualifications. Tie-ups to overcome the weakness of small size of domestic accountancy firms could also help India's accountancy sector grow manifold.

R&D Services

10.50 According to *Battelle R&D magazine*, gross expenditure on R&D (GERD) by India for 2012 was projected to be US$ 41 billion in purchasing power parity terms, which works out to 0.8 per cent of GDP. This is low both in absolute terms and as a proportion of GDP compared to other countries. This is partly because the size of the R&D base and absorption capacity are not commensurate with requirements (Table 10.10).

10.51 As per estimates in 2010-11, the sectors which attracted largest R&D expenditures were pharmaceuticals, electrical and non-electrical

Table 10.10 : Global R&D Spending Forecast

Region/ Country	2012	
	GERD in PPP terms (US$ Billion)	R&D as per cent of GDP
USA	436.0	2.3
Asia	514.4	1.9
Japan	*157.6*	*3.5*
China	*198.9*	*1.6*
India	*41.3*	*0.8*
Europe	338.1	2.0
World	**1402.6**	**2.0**

Source **: Battelle R&D magazine, December 2011.**

machinery, transport equipment, electronics, and plastics. R&D intensity for the pharmaceuticals sector was much higher than that for other sectors. Although there have been substantial increases in growth rates of patents filed in India during the last decade, the share of patents filed for work in India through indigenous research is less than 20 per cent of the total. Policy readjustments to increase the number of full time equivalents (FTE) of R&D personnel are a key requirement for growth in R&D intensity. The FTE of R&D manpower is estimated at 14.23 lakh for China and 2.29 lakh for South Korea, as compared to 1.54 lakh for India. Expansion of FTEs to at least 2.50 lakh by the end of the Twelfth Plan could enable the country to reach the top six ranks in the global R&D landscape.

10.52 Though developed nations remain the leaders in innovation, there has been an increasing shift in R&D activities from developed to developing nations. Developing Asian nations, particularly China and India, are driving the growth of global R&D. Factors such as low cost, access to new markets, availability of knowledge-oriented manpower, favourable regulatory environment, and fiscal benefits play a major role in driving R&D investments towards these countries. MNCs from developed nations look to expanding their R&D activities in these countries through collaborative projects in areas such as electronics and telecommunications, software development, hardware and product design, and drug development. A White Paper on R&D prepared by consultancy firm Deloitte in July 2011 estimates that more than 300 MNCs have set up R&D centres in India. Service providers have outsourced R&D valued at about US$ 3.5 billion, and MNC subsidiaries have offshored R&D valued at about US$ 6.5 billion to India in 2009. As per the Global Competitiveness Report 2011-12 of the World Economic Forum, among BRICS nations India is ranked below China and Brazil in terms of capacity for innovation but above China in terms of the quality of scientific and research institutions and availability of scientists and engineers. But India lags China in terms of company spending in R&D, university–industry collaboration on R&D, and utility patents granted per million population (Table 10.11). This is because the share of the private sector in R&D is still low at 0.25 per cent of GDP compared to 1.2 to 2 per cent in many developed and emerging economies. For GERD to increase significantly, private-sector investment in R&D must be stepped up significantly over the Twelfth Plan period. Budget 2011-12 enhanced the weighted deduction on payments made to National laboratories/universities and institutes of technology for scientific research from 175 per cent to 200 per cent.

Legal Services

10.53 India has an estimated 600,000 legal practitioners and is next only to the USA in terms of numbers. The service providers are individual lawyers and small or family-based firms. In India, the practice of law is governed by the Advocates Act of 1961. Under this Act, foreign law firms are not allowed to engage in practice of law in India. Many foreign legal firms have set up liaison offices (currently permitted

Table 10.11 : R&D Indicators of India and other Select Countries

Country	Capacity for innovation		Quality of scientific research institutions		Company spending on R&D		University – Industry collaboration on R&D		Availability of scientists and engineers		Utility patents granted/ million population	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Value	Rank
India	3.6	35	4.5	34	3.7	33	3.8	50	4.9	21	0.9	59
China	4.2	23	4.3	38	4.2	23	4.5	29	4.6	33	2.0	46
South Africa	3.5	46	4.7	30	3.6	36	4.6	26	3.4	111	2.3	42
Brazil	3.8	31	4.1	42	3.8	30	4.2	38	3.8	91	0.9	60
Russia	3.5	38	3.8	60	3.1	61	3.5	75	4.0	72	1.9	47
South Korea	4.3	20	4.8	25	4.8	11	4.7	25	4.9	23	240.6	5
USA	5.2	7	5.8	7	5.3	6	5.7	3	5.5	4	339.4	3
UK	4.8	13	6.1	3	4.7	12	5.8	2	5.1	14	69.5	20

Source **: Global Competitiveness Report 2011-12, World Economic Forum**

under the law), while a few have established referral relationships with Indian firms.

10.54 India is ranked 51, with a score of 4.3, in terms of judicial independence by the Global Competitiveness Report 2011-12. As regards efficiency of the legal framework in settling disputes, India is ranked 64, with a score of 3.7. India is ranked at 51st position when it comes to the efficiency of the legal framework in challenging regulations, with a score of 3.9. This shows that India needs to improve its ranking through legal and judicial reforms and speed up disposal of cases.

10.55 Global recession has been putting pressure on companies to reduce costs and they are trying out various methods of outsourcing their non-core functions to low cost destinations. Outsourcing of legal services to low cost destinations like India is one such measure being taken by legal firms in developed countries, especially the USA and UK. The legal systems in India, the USA, and UK are rooted in British common law, thus making Indian lawyers competent, without much additional training, to undertake standard legal work such as vetting of contracts, patent registrations, or reviewing of documents. Besides offshoring legal work to India saves about 80 per cent of the cost that may be incurred in a developed country like the USA. Some of the recent measures taken by the government are the following. Legal education is being imparted by 913 colleges (a large number privately administrated) and 14 National Law Schools / Universities established under state acts. The major challenges in the field of legal education are curriculum, skills, attitudes and ethics required of legally trained persons, and dearth of quality law teachers. The National Knowledge Commission recommended establishing a separate body to regulate legal education and setting up Centres for Advanced Legal Studies and Research. The proposal for instituting an independent body, the National Council of Legal Education and Research, is under process. The proposal for setting up four Regional Centres for Advanced Legal Studies and Research to promote advanced research on various aspects of law and academic excellence through continuing legal education is also under process. The National Litigation Policy was launched on 23 June 2010 to achieve the goal of the National Legal Mission to reduce average pendency time—from 15 to three years—and delays in courts. The state governments have also been urged to take appropriate steps to frame a State Litigation Policy. The National Legal Services Authority (NALSA) has been constituted under the Legal Services Authorities Act 1987 to monitor and evaluate implementation of legal aid programmes and lay down policies and principles for making legal services available under the Act. In every state, a State Legal Services Authority, and in every High Court, a High Court Legal Services Committee, have been constituted. District Legal Services Authorities and Taluk Legal Services Committees have been constituted in 596 Districts and 2,037 taluks in order to give effect to the policies and directions of NALSA, provide free legal services to the people, and conduct lok adalats in the states. From 1 April 2011 to 30 September 2011 more than 6,95,000 persons have availed of legal aid services in the country. More than 25,000 of the beneficiaries were scheduled castes, about 11,500 scheduled tribes, 24,600 women, and 1,628 children. During this period 53,508 lok adalats were organized. These lok adalats settled more than 13,75,000 cases. In about 39,900 motor vehicle claim cases, compensation to the tune of ₹ 420.12 crore has been awarded. There is need to quickly implement proposals related to commercial disputes and amendments in the Arbitration and Conciliation Act 1996 to make India a favourable destination for international arbitration. Union Budget 2011-12 has expanded the scope of legal services for service tax to include services provided by business entities to individuals as well as representational and arbitration services by individuals to business entities. However, no tax is levied on services provided by individuals to other individuals.

Consultancy Services

10.56 Consultancy services are emerging as one of the main business areas in India. The volume of revenue in the Indian consulting industry on conservative basis has been estimated at around US$ 8.24 billion in 2010-11. Presently, it contributes to about 0.47 per cent of the GDP. The growth rates of the industry over the last few years have been extremely promising and revenue is projected to increase to US$ 9.89 billion by 2012 at a growth rate of 20 per cent. Consulting service providers in India may be classified into five categories: individual consultants, consulting firms, R&D organizations, academic institutes, and professional bodies. The client sectors to which consulting services are provided at present include agriculture and rural development, banking and financial services, construction, education, energy, environment, governance and public administration, health and

demography, infrastructure, information technology, law and regulation, life sciences, manufacturing, management, science and technology, telecommunications, tourism, transport, urban development, and water management.

10.57 The consultancy services market can be broadly categorized into engineering and management consultancy. The Indian management consultancy market is still in its nascent stage, with high growth and large entry of players. The revenue size of the Indian management consultancy market on conservative basis was estimated at around US$ 2.5 billion to US$ 3 billion in 2010-11. Although it is still relatively small in revenue size as compared to the global management consultancy market, the Indian management consultancy industry has witnessed high growth partly due to the low base from which it picked up. As per the estimates available for 2006-7, it comprised around 2,500 individuals and 22,300 firms. The Indian engineering consultancy market which is a more developed market as compared to the management consultancy market is experiencing a boom, with many large-scale development projects driving its growth. The revenue size of the Indian engineering consultancy market on conservative basis was estimated to be around US$ 5.5 billion to US$ 6 billion in 2010-11. Although it is still relatively small as compared to the global engineering consultancy market, the Indian engineering consultancy industry has shown steady growth over the last few years. As per estimates available for 2006-7, it comprised around 7,000 individuals and 25,600 firms. India's emergence as one of the fastest growing consultancy markets in the world has been facilitated by the liberalization of FDI policy, entry of many new players, high growth in most key sectors, and India being a low cost sourcing destination.

10.58 Though the growth of the Indian consulting industry has been robust in the last few years, there is need to address certain issues to position it on the world map as well as to increase its global market share. These include availability of experienced consulting professionals, improvement in quality, proper training and development, international experience for Indian consultants on consulting assignments, and market intelligence on consulting opportunities abroad. The government has taken certain initiatives to address these issues. These include the Marketing Development Assistance and Market Access Initiative Schemes by the Department of Commerce, Guidelines for Selection of Consultants by Ministry of Finance, and certain export-promotion initiatives taken by the Federation of Indian Export Organizations.

Construction Services

10.59 The construction industry in India is an important indicator of growth and development as it creates investment opportunities and increases production capacity across various related sectors. With a share of around 8.2 per cent, the construction industry has contributed an estimated ₹ 670,778 crore (at current prices) to national GDP at factor cost in 2011-12. While its growth rate (at constant prices) in 2010-11 was 8.0 per cent, in 2011-12 it decelerated to 4.8 per cent due to both external and domestic factors like the imminent recession in Europe, hardening of interest rates in India, and challenges associated with land acquisition in some places. The sector is labour intensive and, including indirect jobs, provides employment to around 33 million people. It is estimated that about 70 per cent of these are employed in the infrastructure segment and the remaining 30 per cent in the real estate segment. According to industry estimates, the industry is expected to generate additional employment of 47 million, with the total number of persons employed in the sector reaching 83 million persons by 2022. The sector is critical for enhancing the productive capacity of the overall economy as on average it accounts for more than half the investment required for setting up critical infrastructure like power projects, ports, railways, roads, and bridges.

10.60 Since the sector was given industry status in 2000, there have been more initiatives by the government to undertake projects on PPP basis. These initiatives have resulted in more private ownership of build-operate-transfer (BOT), build-operate-own-transfer (BOOT), and build-operate-lease-transfer (BOLT) projects. FDI up to 100 per cent under the automatic route is allowed in townships, housing, built-up infrastructure, and construction of development projects (which include housing, commercial premises, educational institutions, and recreational facilities). The construction sector is not handled by a single nodal government department. By their very nature, infrastructure construction projects are supervised by respective ministries at union and state levels while the real estate sector comes under not only the Ministry of Urban Development but also by urban development departments at state level and municipal

authorities further down. The Planning Commission has taken initiatives in creating model engineering-procurement-construction (EPC) and PPP contract documents. The Draft Public Procurement Bill 2011 is in the public domain for comments and discussion. The Bill aims at creating uniformity and introducing transparency in the bidding process. Union Budget 2011-12, allocated 23.3 per cent more funding to this sector. Meanwhile, authorities involved in infrastructure development have been allowed to issue tax-free bonds and restrictions on foreign institutions and investors wishing to purchase infrastructure-related bonds have been relaxed. To augment flow of funds into this sector, the government has also increased the FII limit for investment in corporate long-term infra bonds, created Infrastructure Debt Funds (IDFs), and introduced a take-out financing and credit enhancement scheme by the India Infrastructure Finance Company Limited (IIFCL). Recently the Government of India has decided to fast track clearances for eight mega infrastructure projects, including some in the crucial power sector, to arrest slowdown in growth and uplift business sentiment.

10.61 The construction sector is fragmented, with a handful of major companies involved in construction activities across all segments; medium-sized companies specializing in niche activities; and small and medium contractors who actually work on subcontract basis and carry out the work in the field. The sector has major linkages with the building materials industry since they account for sizeable share of construction costs (approximately 40 per cent to 50 per cent). With plans to enhance infrastructure investment to US $ 1 trillion in the Twelfth Plan, the construction sector is all set to become one of the growth engines of the Indian economy in the foreseeable future. Government's initiative to develop mass rapid transport systems (MRTS) in cities with 20 lakh population will also boost the demand for construction activities. The potential of the construction sector is very high in urban infrastructure, particularly MRTS and water management. Starting of new projects like dedicated freight corridors in railways and construction of airports in Tier II and Tier III cities, clearing pending projects in ports, and development of real estate in urban infrastructure will also generate sizeable opportunities for the construction sector. Some other issues in this sector that need to be resolved include the need for setting up consortiums to bid effectively for international projects, credit- related issues, and the issue of precondition in most of the overseas tenders floated by clients wherein equipment to be supplied by the contracting company has necessarily to be sourced from an approved list of suppliers from developed countries.

Some Social Services

Sports

10.62 Apart from being a means of entertainment, physical fitness, and development of human personality, sports have also played an important role in national identity, community bonding and international bonding. Sports being highly competitive, the use of modern infrastructure and equipment and advanced scientific support has changed the scenario at international level. In view of this, the Government of India has taken several initiatives to help sportspersons with scientific and equipment support as well as providing them training and exposure in international competitions. The first National Sports Policy was unveiled in 1984 with the objective of developing an organized and systematic framework for the development and promotion of sports in the country. In 2001 another version of the Sports Policy, with the twin planks of 'broad-basing' of sports and 'achieving excellence' at national and international levels was introduced.

10.63 Though sports is a state subject under the Seventh Schedule of the Constitution of India, the central government supplements the efforts of states in the task of promotion and development of sports. Several schemes have been announced by the Government of India aiming at promotion of drug-free sports, sports infrastructure development separately for urban and rural India, promotion of excellence in sports, incentives to sportspersons, assistance to sports-support institutions, and promotion of sports among persons with disabilities. Indian athletes put up a commendable and impressive performance at the Commonwealth Games 2010 and Asian Games 2010. With a view to preparing athletes and teams for the London Olympics 2012, the government has launched Operation Excellence for London Olympics 2012 (OPEX 2012). OPEX 2012 identifies core areas for providing comprehensive and intensive training, both within the country and abroad, as well as competition exposure in international sports events. Funds for preparation of athletes for the London Olympics are being provided at Commonwealth Games 2010 scales, with up-scaling in certain areas such as lodging, nutrition, scientific support, and daily allowance. The budget for OPEX London 2012

is at ₹ 258.39 crore. There is need to step up allocation for youth affairs and sports as at present it is less than 0.50 per cent of state Plan and between 0.16 and 0.72 per cent of central Plan allocations.

Cultural services

10.64 This section includes 'recreation and entertrainment' and 'radio and TV broadcasting' (National Accounts classification) besides other related cultural services. Cultural activities are becoming increasingly important in the modern post-industrial knowledge-based economy. World over, they have been recognized as an important component of growth and job creation as well as a vehicle of cultural identity. Cultural life has become an economically viable private and public service activity as well as social integrator. There is growing positive correlation between culture and employment. A large number of people are getting viable employment by engaging in cultural activities as writers, publishers, librarians, photographers, sculptors, painters, musicians, singers, choreographers, dancers, and actors. Cultural activities also support other economic activities, cultural tourism being one such example. A major chunk of tourism in India, national and international, can be classified as cultural tourism because it is geared to monuments, museums, archaeological sites, and cultural heritage including traditional fairs and festivals.

10.65 To meet the objective of preserving and promoting all forms of art and culture, a variety of activities are being undertaken by the Government of India, ranging from protecting and encouraging cultural endeavours at grassroots level to promoting cultural exchanges internationally; from programmess to preserve India's ancient heritage to encouraging an array of contemporary creative arts. A network of 41 organizations is functioning under the Ministry of Culture, for protection, development, and promotion of tangible heritage, intangible heritage, and knowledge heritage. There are also a large number of schemes and programmes to extend financial support to individuals, group of individuals, and cultural organizations engaged in performing, visual, and literary arts. A total allocation of ₹ 3,555 crore was made to this sector in the Eleventh Plan period.

10.66 Creative industry includes cultural heritage; printed matter and literature; music and performing arts; visual arts; audio-visual media including cinema, television, radio and photography, and socio-cultural activities; museum and archives. Trade in creative industry can be broadly classified into goods and services. According to UNCTAD (UNCTADSTAT on Creative Economy – web-based browser), world exports of creative industry goods in 2010 are estimated at US $ 383 billion, growing at a CAGR of 8.6 per cent since 2002. India is ranked eighth largest exporter of creative goods, with a 3.6 per cent share of world creative goods exports. In absolute terms, India exported US$ 13.8 billion worth of creative goods in 2010, with a CAGR of 17.7 per cent, much higher than the world average. UNCTAD estimated world exports of creative services in 2010 at US$ 176 billion, growing at a CAGR of 15.4 per cent. India is ranked 13th with a 2.3 per cent share in world exports of creative services. India exported US$ 4 billion worth of creative services in 2010, at a CAGR of 26 per cent.

10.67 According to a report by Ernst & Young, the Indian media and entertainment industry is valued at US$ 16.3 billion in 2010 and is projected to grow at a CAGR of 12 per cent in the next four years (2011-14) to reach a value of US$ 26 billion. The Indian media and entertainment services industry comprises visual entertainment services (broadcasting and cable television, films) printing (newspapers, books, periodicals), and audio entertainment services (radio, music). In addition, internet services also deliver such content through networks. The rapid convergence of networks, devices, and content is expected to dramatically alter the dynamics of the Indian media and entertainment industry. India is estimated to have more than 700 television channels and 100 million pay-TV households. The television distribution sub-segment is dominated by highly fragmented analog cable which includes about 60,000 local cable operators and 100 multi-system operators. The Cable Television Networks (Regulation) Amendment Act 2011 has put in place a legal framework to facilitate digitalization. Four metros will go digital in cable television by 30 June 2012, with the rest of the country following suit by 31 December 2014. The digitalization will redefine broadcasting and bring benefits to all stakeholders. For the regulation of content in case of general entertainment channels, a self-regulating mechanism has been put in place by the broadcasters in consultation with the Government of India and a Broadcast Content Complaints Council has been made operational from 1 July 2011. There are 245 private FM radio stations, along with the government-controlled All India Radio, operating in 237 radio stations. FM Radio was opened to private sector in

1999, with the announcement of FM Phase-I policy. Phase-II was announced in 2005. So far 86 cities of India are covered under private FM stations. In the third phase, the Government has taken a decision to e-auction 839 FM channels spread over 245 cities across the country. This would usher in a new era of infotainment for people besides introducing new vistas of opportunities for employment and income for the people. In the music sub-segment, film music accounts for two-third of sales across India. The large mobile subscription base of India is also contributing to the growth opportunities of the music and radio sub-segment.

10.68 With the production of over 1,000 films a year, in over 20 languages, the Indian film industry is the largest in the world. The film industry is also contributing to outsourcing of services such as animation, visual effects, conversion of 3D, and post-production services, to the ICT sector, thus contributing to its growth. The Indian film industry is also generating additional revenue through collaboration with the ICT sector, such as DVDs, music CDs, mobile downloads, and online gaming. High rates of entertainment tax and lack of uniformity in tax structure across states are major factors inhibiting growth of the film industry. Adoption of the goods and services tax (GST), subsuming service tax and entertainment tax, could promote growth of the film industry. Piracy is another challenge for the Indian film sector. To make it relevant to present day requirements and to check piracy, the Ministry of Information and Broadcasting is in the process of amending the Cinematograph Act 1952. India has also signed co-production agreements with six countries with a view to pooling their creative, artistic, technical, financial, and marketing resources for co-production of films and television programmes. During 2011-12, the Ministry has accorded 20 foreign production houses shooting permission. Given the potential of this sunrise sector in India's growth and trade in services, efforts are needed to relocate the business of the Indian film Industry from foreign countries to India by addressing issues like tax credit which can increase activities in India and also generate employment.

10.69 In the publishing sub-segment, India has about 77,384 newspapers/magazines (registered) in circulation in 23 scheduled languages (including English) and several other non scheduled languages. The low readership penetration (around 30 per cent) as compared to a literacy level of over 75 per cent underscores the potential for growth. About 42 per cent of advertising money spent in the country is through the print media. The penetration of internet services is also contributing to online news consumption in India. In the print media sector, foreign investment up to 100 per cent is allowed in the non-news, i.e. the specialty/ technical / scientific sector of the print media, whereas up to 26 per cent is allowed in the Indian entities publishing newspapers and periodicals dealing with news and current affairs. Foreign investment up to 100 per cent is allowed in case of foreign publishing houses bringing out facsimile editions of their own newspapers through wholly owned subsidiary.

Challenges And Outlook

Outlook

10.70 India's services sector has been resilient even during the tumultuous years of the global economic crisis maintaining a steady growth of around 10 per cent. This happened even when overall GDP growth dipped sharply to 6.7 per cent in 2008-9. A dissection of the growth rates of different services shows that this resilience was, to some degree, due to the government's policies of higher social expenditure and commitments for pay arrears under the new revised scale for government employees resulting in very high growth rates of 12.5 per cent and 12.0 per cent in community, social, and personal services in 2008-9 and 2009-10. Public administration and defence grew at a spectacular 19.8 per cent and 18.2 per cent in these two years compared to 1.9 per cent and 7.6 per cent in 2006-7 and 2007-8 respectively. The impact of the global crisis was, however, evident in the trade, hotels, and restaurants and construction categories and with lagged effect in real estate / ownership of dwellings and business services in 2008-9 and 2009-10; and to some extent in banking and insurance in 2009-10.

10.71 Moving forward in 2011-12, though there is slight moderation in services growth to 9.4 per cent (as also in 2010-11), there is no cause for worry, as it is due to the steep fall in growth of public administration and defence services reflecting fiscal consolidation of the government. In fact growth in 'trade, hotels & restaurants, transport, storage and communication' is more robust at 11.2 per cent and retail-sector growth is expected to be more robust in 2012-13. With hardening of interest rates, the real worry would be with the real estate/ ownership of dwellings and business services segment, the growth of which has started decelerating and construction services with growth falling by nearly half. The outlook

of the services sector in the domestic economy is linked to the prospects of the sector externally. While software service exports have continued to be steady, the unfolding events in the euro area could lead to some sluggishness in this sector. The fair-weather business services exports which have already shown signs of deceleration may not get better. Among the other two major services, transportation has already been affected with the Baltic Dry Index at an all-time low, although this may be a passing phenomenon. While travel and tourism could also be affected when the pockets of euro zone tourists are affected, it could also lead to a shift in tourist inflow pattern with increased inflow of holiday backpackers searching for cheaper destinations like India. Rise in tourists from South Asia, East Asia, and South East Asia could further help this sector. While the net effect of the trade sector on GDP has always been negative for India, it could go down further if less cushion is provided by net services trade to GDP. However, the domestic economy is more dominant in the case of services and any changes in government spending in community, social, and personal services within the fiscal space available or newly created fiscal space could strengthen the growth prospects of the services sector with ripple effects in related sectors.

Challenges

10.72 This dominant sector in terms of both shares and growth is a growth engine not only for the national economy but also for many states. It is second only to agriculture in terms of employment both in the national economy and in the majority of states. Unlike the unskilled or semi-skilled nature of jobs in the agriculture sector, this sector provides myriad job opportunities ranging from highly skilled to unskilled in a variety of activities, Hence, services along with a revival in manufacturing activity, can be major drivers of overall employment. Unlike the merchandise sector, the services sector is a net foreign exchange earner with exports of some services growing exponentially. It is also the major FDI-attracting sector with the five services topping the list of sectors attracting FDI to the country. Thus India's services sector is like an uncharted sea with plenty of opportunities and also new challenges.

10.73 The first challenge is to not only maintain the present growth tempo in the service sector but also to accelerate it. This task, though difficult, is not impossible as we have tapped only some service sectors like software and telecom that too only partially. In fact, every important service sector is a storehouse of opportunity. Even in software and telecom, there is a lot of untapped potential in the domestic economy. The software-telecom combination can be a high growth propelling force for many more years to come with positive spillovers to other sectors and can give a cutting edge in these sectors while facing international competition. This combination along with retail trade can change the very face of the rural economy. The tourism sector which is an industry in itself is another mine of opportunity for India. While there has been a lot of hype about the potential of this sector, efforts are needed to make it a reality. Shipping is another major service which can step up growth by tapping the opportunities provided by India's own merchandise trade. At present Indian ships cater to only 9 per cent of India's overseas trade which is abysmally low by any standards. Huge investment and modernization are needed in this sector to capture at least a substantial portion of India's present, if not potential, trade. Port services where countries like Sri Lanka plan on the basis of future cargo from other countries like India is another area needing urgent attention. Business services which consists of many dynamic services is a sunrise sector. Financial services, health care, and education are other niche areas with both external potential and internal opportunities which can be tailor-made to serve the objective of more inclusive development (also see chapter 13).

10.74 The second challenge is to make some of the fair-weather services like business and financial services more stable and less vulnerable to external shocks. While these sectors cannot be fully insulated from external shocks in this highly globalized world, efforts are needed to make them at least as stable as software and telecom services. This can be done by both piggybacking on the progress of the software and telecom sectors and also making inroads in the domestic economy where opportunities are aplenty. This brings us to the third challenge of domestic regulations in most of these sectors. While in the WTO, India has been at the forefront of negotiations for removal of such regulations in other countries, we also have to take a lead in making regulatory improvements domestically as such regulations could come in the way of further growth of the services sector. Addressing data problems in the services sector is another area where there is need for early consolidation of isolated efforts. Addressing the challenges of the diverse sub-sectors of the services sector by better and coordinated strategies can lead to exponential gains for the economy.