Chapter-1

Introduction

India is a vast country, so the sectors contribution to the country’s GDP also big in numbers. Agriculture is the pre-dominant occupation in India, employing more than 50 per cent of the population. The economy of India is the ninth largest in the world by nominal GDP and the fourth largest by purchasing power parity. Structural changes are taking place in the Indian Economy.

“Structural change permits viable growth to occur and growth provides the material for subsequent structural change” (Uphoff and Ilchman, 1972). According to structuralists (Fisher, 1935; Clark, 1960; Kuznets, 1966, 1969, 1972; Chenery and Syrquin, 1970), as the process of economic development proceeds, the share of agricultural sector in national income and employment, which is typically high in the early stages of development, begins to decline and that of non-agricultural sectors experience a rise. This has become almost a universal phenomenon and holds true in case of all the countries which experienced or are experiencing economic development.

Behind China, India is the second fastest growing economy. India is likely to become the third largest economy on the basis of purchasing power parity by the end of 2011. India has the potential to become the third largest economy as per nominal GDP in two decades. Services sector has become important for many economies in the world and very important particularly for India. The service industry forms a backbone of social and economic development of a region. It is a large and most dynamic part of the Indian economy both in terms of employment potential and contribution to national income. Growth of the services sector is also an important aspect of economic development and is strongly associated with income growth and economic modernization.

A principal goal of the Twelfth Five Year Plan is to increase the pace of inclusion of much larger numbers of people in the process of growth through the creation of more jobs and more enterprises. The Services sector is the principal generator of employment in India. Much attention has been paid to the growth of the IT enabled services (ITES)
sector in this context. However, ITES, though important, is only a small component of the employment enhancement in services. GDP in ITES has grown rapidly.

Services sector in India has emerged as the largest and the fastest growing sector. The services sector has been the key driver of growth of the Indian economy in the past decade, during which India has ranked among ten fastest growing economies in the world, with average economic growth at over 7 per cent a year, and over 8 per cent in the last five years. During the 1990s, India’s services sector grew at an average annual rate of growth 9 per cent, well ahead of the growth of industry at 5.8 per cent per annum and that of agriculture at 3.1 per cent per annum.

The most important services in the Indian economy have been health and education. They are one of the largest and most challenging sectors and hold a key to the country’s overall progress. Industries and Services have acted as twin engines propelling overall growth in an economy. They are attracting large inflow of capital and foreign investments into the country from all over the world. These sectors are the largest generator of employment opportunities in the country and a facilitator of trade and commerce with other countries. In other words, besides agriculture, they are the basis of almost all major policy initiatives, incentives and schemes as well as programmes and plans, both at the National and the State level.

India’s export of IT and BPO services fall in three broad categories, IT services, BPO and software products and engineering services. Trade in Technology and Information Technology enabled services (IT and BPO services) has been the main driven force of growth in India’s trade in services in recent years. The overall Indian IT and ITeS revenue has grown to US $ 637 billion in 2009-10, and its exports have grown from US $ 17.7 billion in 2004-05 to US $ 49.7 billion in 2009-10. IT and BPO sectors has led to employment generation. Direct employment in the IT services and BPO segment was 2.3 million in 2009-10.

The share of services sector in Net Domestic Product at factor cost income by industry of origin has increased from 54.87 per cent in 2004-05 to 57.32 per cent in 2009-10. Regarding sub-sectors of services sector, the share of trade, hotels and restaurants have been more than 17.5 per cent since 2004-05. The next largest sub-sector of services
sector is that of finances, insurance, real estate and business services whose share was 15.01 per cent in 2004-05 and 17.21 per cent in 2009-10. Third largest sub-sector is the community, social and personal services whose share increased from 14.06 per cent in 2004-05 to 14.74 per cent in 2009-10. The share of Transport, storage and communications are significantly declined from 8.25 per cent in 2004-05 to 7.67 per cent in 2009-10. The share of constriction has also increased from 8.24 per cent in 2004-05 to 8.67 per cent in 2009-10.

India which moved in world import services from the 15th position in 2004 to 10th position in 2005 was in the 12th position in 2006 with 2.7 per cent share. The growth rate of India’s imports of services at 40 per cent in 2006 was the highest among the top 30 importers with Luxembourg at second place with 23 per cent. Imports of Commercial services have become important in recent years reaching US $ 52 billion in 2008-09 and US $ 60 billion in 2009-10, but it had low growth rate of 1.1 per cent in 2008-09 and moderate growth rate of 15.3 per cent in 2009-10.

Business services have declined by negative 7.5 per cent in 2008-09 picked up by 17.8 per cent in 2009-10. There is a sharp fall in the growth rate of business services imports (as in the case of business rate of business exports) mainly due to the fall in imports architectural, engineering and other technical.

India with a services sector share of 52 per cent in national GDP in 2009 and 55.2 per cent in 2009-10 compares well even with the developed countries in the top 12 countries with the highest overall GDP. China’s share of services in its national GDP at 39.2 per cent is relatively low, though it is ahead of India in absolute terms. In terms of services growth rate, China (10.5 per cent) followed by India (8.9 per cent) are the two fastest growing economies in the top 12 countries. In the global crisis year of 2009, when most of the top 12 countries registered negative growth in services, only China (9.4 per cent), and India (6.8 per cent) registered positive growth. India’s world ranking in overall GDP at current prices in 2009 was 11 and in services GDP it was 12. Except for the Russian Federation moving to 11th position and India moving to 12th in services, there is no major change in rank in terms of overall GDP and services GDP (Govt. of India, 2010-11).
The growth rate of the services sector in GDP of India has risen due to several reasons and services sector has also given a major boost to the Indian economy. The contribution of the services sector has increased very rapidly in India because of foreign consumers has shown interest in the country’s service exports. This is due to the fact that India has a large pool of highly skilled, low cost, and educated workers in the country. This has made sure that the services that are available in the country are the best quality. The foreign companies started outsourcing their work to India especially in the area of business services which includes business process outsourcing and information technology services. This has given a major boost to the services sector in India, which in its turn has made the sectoral contribution more to the Indian GDP. The services sector has high potential. All the three segments of the GDP namely agriculture, forestry and fishing, industry and services sector were seen to post growth of 1.6 per cent, 3.8 per cent and 9.6 per cent respectively in 2008-09 against the growth of 4.9 per cent, 8 per cent and 10.8 per cent, respectively, in 2007-08. GDP growth for 2008-09 was estimated at 6.7 per cent as compared to the growth of 9.0 per cent in the previous year. In India, the growth rates of services in 2004-05, 2005-06 and 2006-07 were 9.6 per cent, 9.8 per cent and 11.0 per cent, respectively, and are expected to grow at 9.9 per cent in the 11\textsuperscript{th} Five year plan.

Tourism plays an important role in the country’s foreign exchange earnings. Its share in India’s exports of services accounted for 13 per cent of the total export of services in 2009-10. The share of hotels and restaurants sectors in the overall economy increased from 1.46 per cent in 2004-05 to 1.69 per cent in 2008-09, and then declined to 1.53 per cent 1.45 in 2009-10.

\textbf{Classification of services sector}

The physiocratic school of thought consisting of a group of French philosophers of 18\textsuperscript{th} century is generally measured to score the beginning of economics as a systematic field of study. According to this school of thought, agriculture alone was productive because it yielded net income and all other non-agricultural occupations were ‘sterile’ as they just recouped the cost incurred on them.
Adam Smith criticized the physiocrate for describing manufacturing trade and transportation as altogether barren and non-productive occupations and he himself included most of them in the category of productive labour. He stated that these other branches of material goods production were just as capable of returning a net income to producers as was agriculture. He drew a line of distinction between productive and unproductive labour.

Jean Baptiste Say defined productive activities as those “which have enjoy utility and give satisfaction to the consumers.”

Alfred Marshal argued that, “there was no scientific foundation for making a distinction between the activities of the cabinet maker and the furniture dealer, the railway carrying coal above ground and the miner carrying it underground, the fisherman and fishmonger; all produce utilities. In other words, all activities are providing services to satisfy wants” (Joshi, 2008).

Table 1.1 gives a summary of historical views on services.

### Table 1.1
**Historical Definitions of service**

<table>
<thead>
<tr>
<th></th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Physiocrats (1750)</td>
<td>All activities other than agricultural production.</td>
</tr>
<tr>
<td>Adam Smith (1723-1790)</td>
<td>All activities that do not end in tangible products.</td>
</tr>
<tr>
<td>J.B.Say (1767-1832)</td>
<td>All non-manufacturing activities that add utility to goods.</td>
</tr>
<tr>
<td>Alfred Marshall</td>
<td>Goods (services) that pass out of existence at the moment of creation.</td>
</tr>
<tr>
<td>Western Countries (1925-1960)</td>
<td>Services do not lead to a change in the form of a good.</td>
</tr>
<tr>
<td>Contemporary</td>
<td>An activity that does not lead to a change in the form of a good.</td>
</tr>
</tbody>
</table>


Gershuny and Miles (1983) have offered an alternative classification of the service sector in which they have divided service industry into four categories: distribution, producer, social and personal services. They renamed the conventional primary and secondary sectors as ‘extractive’ and ‘transformative’. Table 1.2 shows the Browning–Singlemann classification of services.
Table 1.2
Browning-Singlemann classification of the services sector

<table>
<thead>
<tr>
<th>1) Distributive Service</th>
<th>2) Producer Services</th>
<th>3) Social Services</th>
<th>4) Personal Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Transportation and Storage</td>
<td>• Banking, Credit, and Other Financial Services</td>
<td>• Medical and Health Services</td>
<td>• Domestic Services</td>
</tr>
<tr>
<td>• Communication</td>
<td>• Insurance</td>
<td>• Hospitals</td>
<td>• Hostels and Lodging Places</td>
</tr>
<tr>
<td>• Wholesale Trade</td>
<td>• Real Estate</td>
<td>• Education</td>
<td>• Eating and Drinking Places</td>
</tr>
<tr>
<td>• Retail Trade (except eating and drinking places)</td>
<td>• Engineering and Architectural Services</td>
<td>• Welfare and Religious Services</td>
<td>• Repair Services</td>
</tr>
<tr>
<td></td>
<td>• Accounting and Book Keeping</td>
<td>• Non-Profit Organisations</td>
<td>• Laundry and Dry Cleaning</td>
</tr>
<tr>
<td></td>
<td>• Miscellaneous Business Services</td>
<td>• Postal Services</td>
<td>• Barber and Beauty Shops</td>
</tr>
<tr>
<td></td>
<td>• Legal Services</td>
<td>• Government</td>
<td>• Entertainment and Recreational Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Miscellaneous Personal Services</td>
</tr>
</tbody>
</table>

Source: Gershuny and Miles, 1983.

The earliest attempt to define services was made by Hill (1977) who argues that “goods and services belong in different logical categories”. He focused on the fact that producers cannot accumulate stock or inventory of services, stressing that services must be consumed as they are produced unlike the goods that can be produced and then stored. This makes it essential for the user and provider of the service to interact. But subsequent to this conceptualization there have been many studies that point out that hill’s definition simply relates to contact services and exists a range of services which do permit a
separation of the location of production and consumption, so that service trade may take place either at the factor or at the product level.

Some writers defined services in terms of their characteristics (Hill, 1977), some in the form of transaction involved (Sampson and Snape, 1985) and some others like Bhagwati (Giarini, 1987) categorized them into groups. Robert Inman’s (1985) classification of services is given in (Table 1.3).

### Table 1.3
Robert Inman’s Classification of Services

<table>
<thead>
<tr>
<th>Classification of Services</th>
<th>Characteristics</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>❖ <strong>Stagnant Personal Services</strong></td>
<td>High quality, correlation with the labour time spent</td>
<td>Haircutting, teaching, live artistic performance</td>
</tr>
</tbody>
</table>
| ❖ **Progressive Impersonal Services** | 1) Immense dependence on electronic technology  
2) No contract between the producers and consumers  
3) High technology and productivity growth | Telecommunication and multimedia               |
| ❖ **Asymptomatically Impersonal Services** | Productivity growth self-extinguishing                                           | Broadcasting, computation and R& D             |


Bhattacharya and Mitra (1997), in their study relating to composition of tertiary sector in 48 developing and industrialized countries pointed out that the workers in a particular industry division do not carry out a single type of activity. Therefore, they decomposed tertiary sector workers into four occupational categories depending upon the nature of activities they perform. They divided occupational classes into four major groups’ viz., bureaucratic services, distributive services, consumer services and producer services (Table 1.4).
Table 1.4
Bhattacharya and Mitra (B-M) Classification of Teritary Sector Workers

<table>
<thead>
<tr>
<th>Sector</th>
<th>Subcategories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bureaucratic services</strong></td>
<td>a) Professionals</td>
</tr>
<tr>
<td></td>
<td>b) Technical and Related Workers</td>
</tr>
<tr>
<td></td>
<td>c) Administrative and Managerial Workers</td>
</tr>
<tr>
<td></td>
<td>d) Clerical and Related Workers</td>
</tr>
<tr>
<td><strong>Distributive services</strong></td>
<td>a) All Sales Workers</td>
</tr>
<tr>
<td><strong>Consumer services</strong></td>
<td>a) Service Workers</td>
</tr>
<tr>
<td><strong>Producer services</strong></td>
<td>a) Workers Engaged in Agriculture, Animal Husbandry and Forestry</td>
</tr>
<tr>
<td></td>
<td>b) Fisher Men and Hunters</td>
</tr>
<tr>
<td></td>
<td>c) Production and Related Workers</td>
</tr>
<tr>
<td></td>
<td>d) Transport Equipment Operators and Labourers in the Tertiary Sector</td>
</tr>
</tbody>
</table>


In WTO classification, services have been classified into the following 12 sectors (Table 1.5).

Table 1.5
Classification of Services sector under WTO

<table>
<thead>
<tr>
<th>Sector</th>
<th>Subcategories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Business (including professional and computer) services</td>
<td>6. Environmental services</td>
</tr>
<tr>
<td>2. Communication services</td>
<td>7. Financial (insurance and banking) services</td>
</tr>
<tr>
<td>3. Construction and engineering services</td>
<td>8. Health services</td>
</tr>
<tr>
<td>4. Distributive services</td>
<td>9. Tourism and travel services</td>
</tr>
<tr>
<td>5. Educational services</td>
<td>10. Recreational, cultural and sporting services</td>
</tr>
<tr>
<td></td>
<td>11. Transport services</td>
</tr>
<tr>
<td></td>
<td>12. Other services not included elsewhere;</td>
</tr>
</tbody>
</table>


These 12 sectors have been further divided into 155 subsectors.
United Nations’ International Standard Industrial Classification (ISIC) used the broad categories of services in this classification include electricity, gas and water; construction; wholesale and retail trade; hotels and restaurants; transport, storage and warehousing; post and telecommunication; financial institutions; insurance; real estate; business services; machinery and equipment rental and leasing; public administration and defense; sanitary and social services; social and related community services (including education, research and scientific institutions, medical, professional and labour associations, radio and television broadcasting, entertainment services); and personal and household services.

Services can be divided into two classes:

i) Those that require physical proximity of the user and provider;

ii) And those that do not.

Services that require physical proximity can be further divided into three groups:

i) Mobile provider and immobile users, e.g., transportation labour to a construction site;

ii) Mobile user and immobile provider, e.g., a patient going to a hospital;

iii) Mobile user and mobile provider, e.g., students and professors meeting in a university for lectures.

Services for which physical proximity is inessential, i.e., the long distance services, are on a rise due to technical progress, e.g., banking and insurance.

The objectives of the present study are following:

I. To study the patterns of growth in services sector in India

II. to study the role of service as input of manufacturing in India

III. to examine the growth patterns of employment in services sector in India and the sustainability of services sector’s growth.

In doing so, we put forward the following hypotheses:

a. The share of services in GDP is associated positively with per capita income, i.e., countries with higher per capita income also have a larger share of services in their GDP.
b. Those sectors which receive higher FDI in services, i.e. telecommunications, financial and consultancy services are also the fastest growing services sectors in the economy.

c. Growth in the share of services sector in GDP often followed by a corresponding growth in the share of services sector in total employment in the economy. However, in India through there has been a phenomenal growth in the services sector, this growth has not been followed by a corresponding high growth in employment.

d. Services sector is more growth inducting as compared to other sectors in terms of backward and forward linkages. Growth in services sector will induce growth in other sectors.

e. The trade liberalization undertaken in the 1990s, which increased competition in the domestic market, is responsible to a certain extent for the increase in the intensity of use of services in the manufacturing sector.

f. The increasing use of services in manufacturing in the post-reforms period had a favourable effect on industrial productivity.

**Sub-Sector of Services Sector**

![Diagram of Sub-Sectors of Services Sector](image-url)
➢ Construction

Construction of building, Civil engineering, Specialised construction activities.

➢ Electricity, Gas and Water Supply

Electricity, gas steam and air conditioning supply, Water collection, Treatment and supply, Sewerage, Waste collection, Treatment and disposal activities; materials recovery, Remediation activities and other waste management services

➢ Trade (distribution services), Hotels & Restaurants

Wholesale and retail trade in commodities both produced at home (including exports) and imported, purchase and selling agents, brokers and auctioneers, Services rendered by hotels and other lodging places, restaurants, cafes and other eating and drinking places.

➢ Transport, Storage and Communication

Railways transport by other means; Road, water, air transport, services incidental to transport, Storage communication; Postal, money orders, telegrams, telephones, overseas communication services, miscellaneous.

➢ Financing, insurance, real estate and business services:

Banks, banking department of RBI, post office, saving bank, non-bank financial institution, co-operative credit societies, employees provident fund, Life insurance, Postal life insurance, Non-life insurance, Dwellings, real estate, Business services, Legal services.

➢ Community, Social and Personal services:

Public administration, Defence personal services; Domestic, Laundry, Barber, Beauty shops, Tailoring, others, Community services; Education, Research, Scientific, Medical, Health, Religious and other community, Recreation, Entertainment, Radio, TV broadcast, Sanitary services.
Sources and Collection of Data

The present study is based on secondary data. In present study direct method of collecting data is not possible, thus study used secondary data which were collected from various published issues. The data of Gross Domestic Product (GDP), employment in services sector and manufacturing sector were collected from various issues Central Statistical Organisation (CSO), Reserve Bank of India (RBI) Nation Income Statistics, Centre for Monitoring Indian Economy (CMIE), RBI Annual Reports, Ministry of Labour and Employment, Director General of Employment and Training (DGE&T), National Accounts Statistics, National Accounts Statistics. Back Series 2007 (1950-51 to 1999-2000) EPW Research Foundation and Economic Survey.

Data Analysis

The study employs simple descriptive as well as some econometric techniques. Gross Domestic Product (GDP) and Employment uses the Average Compound Growth Rate (ACGR) and simple ordinary least square techniques.

The average compound growth rate is computed by employing formula:

\[ Y = ab^t \]

By using logarithm, it may be written as:

\[ \log y = \log a + t \log b \]

\[ Y^* = a^* + t.b^* \quad (\text{where } \log y = y^*, \log a = a^* \text{ and } \log b = b^*) \]

The value of \( b^* \) is computed by using OLS Method. Further, the value of ACGR can be calculated by followed method:

\[ \text{ACGR} = (\text{Antilog } b^* - 1) \times 100 \]

We use average percent per five years for the purpose of employment of manufacturing and services sector. Divided the amount five- five years and sum of the five- five years percentage divided by the number of year.
If two quantities vary in such a way that movements in one are accompanied by movements in the other, these quantities are correlated. The correlation analysis refers to the techniques used in measuring the closeness of the relationship between the variables.

We use Pearson correlation for the purpose of solution. The several mathematical methods are used measuring correlation. The Karl Pearson’s method, popularly known as Pearson’s coefficient of correlation, is widely used in practice. The Pearson coefficient of correlation is denoted by the symbol “r”. The formula for computing Pearson “r” is:

\[ r = \frac{\sum xy}{N \sigma_x \sigma_y} \]

Here:
\[ x = (X - \bar{X}); \quad y = (Y - \bar{Y}) \]
\[ \sigma_x = \text{Standard deviation of series X} \]
\[ \sigma_y = \text{Standard deviation of series Y} \]
\[ N = \text{Number of pairs of observations} \]
\[ r = \text{Pearson’s correlation coefficient} \]

The coefficient of correlation has two characteristics.

The value of “r” range between −1 and +1.

The sign of the coefficient can be +1 and -1.

We calculate the correlation coefficient between manufacturing and services sector. Total manufacturing is further divided into two parts: registered and unregistered manufacturing.

**Significance of the study**

The significance of the present study lies in the fact that services sector has become an engine of growth in India, i.e., India is having a services-led growth.
Chapter Outlook

Chapter 1

Introduces the present work.

Chapter 2

Review of literature.

Chapter 3

This chapter is divided into three sections. Section 3.1 deals with the introduction. Section 3.2 deals with the patterns of the GDP in India. Section 3.3 deals with the Annual compound growth rate of GDP in India.

Chapter 4

This chapter is divided into three sections. Section 4.1 deals with the introduction. Section 4.2 deals with the demand side factor and section 4.3 deals with the supply side factor.

Chapter 5

This chapter is divided into three sections. Section 5.1 deals with the introduction, and section 5.2 deals with the services sector and manufacturing in India. Section 5.3 deals with the correlation between GDP in manufacturing and services sector, and employment provided by manufacturing and services sector.

Chapter 6

This chapter is divided into three sections. Section 6.1 deals with the introduction. Section 6.2 deals with the growth of employment by industry in India. Section 6.3 deals with the Annual compound growth rate of employment in India.

Chapter 7

Conclusion.