



Role of services as input of manufacturing

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Abstract

India is a vast country. Indian economy is classified in three sectors: Agriculture and allied services, Industrial sector and Services sector. India is the 2nd fastest growing economy after China. India is the 3rd largest economy on the basis of Purchasing Power Parity (PPP) and India is the 7th largest economy as per nominal GDP. Services sector has become important for many economies in the world and very important particularly in India. The services sector 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 and economic modernization. As an input to the production process, services are playing an increasing important role in manufacturing industries, world over. At world level, manufacturing sector as a whole has grown moderately in production and employment since last decade. This sector has added steam to its growth parameters and it is predicted that this growth rate will accelerate in the coming years, thus resulting in high demand of Indian professionals in both national as well as international markets. The present paper shows GDP by manufacturing sector (at current prices), employment provided by manufacturing and services sector, correlation coefficient in GDP between manufacturing and services sector and correlation coefficient between employment in manufacturing and services sector. The study takes time period of 62 years i.e. from 1950-51 to 2011-12. This paper aims to show that the increasing use of services in manufacturing has a favorable effect on industrial production.

Keywords: services sector, GDP by manufacturing sector, Indian economy, correlation coefficient in employment

Introduction

India is a vast country. Indian economy is classified in three sectors- Agriculture and allied, Industry and Services. Agriculture sector includes Agriculture (Agriculture proper and Livestock), Forestry and Logging, Fishing and related activities. Industry includes Mining and Quarrying, Manufacturing (Registered and Unregistered), Electricity, Gas, Water Supply, and Construction. Services sector includes Trade, Hotels, Transport, Communication and services related to broadcasting, Financial, Real Estate and Prof Servs, Public Administration, Defence and other services. Services sector is the largest sector in India. Gross Value Added (GVA) at current prices for agriculture & allied services, industry and services sector is estimated at 2,093,081 Crore, 2,633,188 Crore, and 7,553,140 Crore respectively in 2015-16. The share of agriculture & allied services, industry and services sector in Gross Value Added (GVA) is 17.05 per cent, 21.44 per cent, and 61.51 per cent respectively at current prices in 2015-16.

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 agriculture sector in National Income and Employment, which is typically high in the early stages of development, begins to decline and that of non-agriculture sector 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.

India is the 2nd fastest growing economy after China. India is the 3rd largest economy on the basis of Purchasing Power

Parity (PPP). India is the 7th largest economy as per nominal GDP. Services sector has become important for many economies in the world and very important particularly in 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. The rising demand in both domestic and external markets was a major contributory factor but the impressive performance of manufacturing was due in no small measure to the cumulative effect of industrial and fiscal policy changes carried out since the economic reforms of 1990-91. The competitive environment created by the reduction of external barriers to trade finally started to bear fruit. Manufactures exports of India registered 73.07 per cent (percentage of merchandise exports) in 2016. Since 1991, the economy is being increasingly liberalized and its combination to the global economy is deepening. These developments have provided opportunity for growth and expansion of industry; not only is domestic manufacturing facing stiff competition from free imports but has to renew its efforts capabilities. Globally, it moves towards a free trade regime, products are being sourced from regions or countries enjoying competitive advantages. This could be due to natural resource endowments such as cheap and easy supply of raw material, large pool of skilled labour, knowledge, modernism or new technologies.

Growth in the manufacturing sector has to promote much of the Indian population above the poverty line by shifting the part of the workforce out of low-wage agriculture. This would

start a good circle of higher production, incomes, savings and investment, and a more constant and prosperous India will in turn attract more business and higher growth opportunities. Economic growth has been associated with increasing share of services in GDP, investment and employment (Fisher, 1935; Clark, 1940; Kuznets, 1957; Chenery, 1960; Fuch, 1968). Different explanations have been put forward to explain this phenomenon. These include high-income elasticity of demand for final product services, slower productivity growth in services and structural changes, which make contracting out services more efficient than producing them in the firm or household (Banga & Goldar, 2007).

The contribution of the service sector was particularly striking in the 1990s, which not only show rapid growth, but also a higher contribution over 60 per cent from services. This growth trajectory, which has been termed “services-led” industrialization, or even a “services revolution” (Gordon and Gupta, 2004) ^[19] seems to stand out from the previous experience of economic development, which followed the traditional path from agriculture to manufacturing, with services becoming important at a later stage. In India, in contrast, there was a sharp increase in the share of services in GDP, from 42.83 per cent in 1980-81 to 62.37 per cent in 2012-13, while the share of manufacturing declined from 17.36 per cent in 1980-81 to 15.59 per cent in 2012-13.

The skill content of labour employed in both manufacturing and in services is increasing and shows tendencies towards convergence. It is not as if manufacturing employs only low-skilled labour while modern services employ only high-skilled labour. Both sectors are moving towards the employment of skilled labour; the skilled-unskilled mix of labour in the two sectors is becoming increasingly alike (Eichengreen and Gupta, 2010).

Currently the manufacturing sector contributes 15.59 per cent to India’s GDP. The total workforce engaged by the industry is 10.69 lakh persons in manufacturing sector.

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. According to the reports of NASSCOM, the growth rate of IT sector is estimated at a rate of 12-14% for the year 2015-16 in constant currency terms and it is expected triple in the year 2025 with US\$ 350 Billion. The overall Indian IT and ITeS revenue has grown to USD 129.5 Billion in the year 2015-16 that is rose up to 9% as compared to last year which was USD 118.8 Billion (2014-15), and its exports have grown from USD 68.8 Billion in 2011-12 to USD 107.8 Billion in 2015-16. IT and BPO sectors has led to employment generation. Estimated employment for the year 2015-16 is to touch 3.688 Billion.

The automotive sector has been one of India’s largest and fastest- growing manufacturing industries. The automotive manufacturing industry comprises the production of commercial vehicles, passenger cars, and three & two-wheelers. Two-wheelers are by far the most popular form of vehicle in India, taking an 80 per cent share in 2015-16. 17 million automobiles produced in 2012-13. Total production volume grew at annual compound growth rate (ACGR) of

5.56 per cent in 2012-17. Over 67 per cent of export volumes comprised of two-wheelers, followed by 22 per cent for passenger cars.

At world level, manufacturing sector as a whole has grown moderately in production and employment since last decade. The manufacturing sector has added steam to its growth parameters and it is predicted that this growth rate will accelerate in the coming years, thus resulting in high demand of Indian Professionals in both national as well as in international market. Manufacturing is expected to grow between 17-18 per cent over the next few years with a two track strategy involving a ‘high-tech production & services’ economy and in parallel a jobs-creation driven ‘mass production’ agenda that includes on food processing and distribution.

On top of these poor numbers, the employment in India’s manufacturing sector is actually showing a declining trend, despite the high GDP growth rate of the recent past. Employment trend in the period 2005-2012 has been entirely in services and in the construction industry. An estimated of 10.69 lakh persons employed in manufacturing sector in 2012, while 147.11 lakh persons employed in services sector in same time period.

Review of literature

Ganga and Goldar (2004) ^[23] estimated the increased usage of services by manufacturing sector for 1980s and 1990s. For this purpose, they empirically estimate the contribution of services as an input to manufacturing (organized) output growth and productivity in Indian manufacturing using the KLEMS (capital labour-energy-materials-services) production function. They use panel data for 148 three digit level industries for 18 years, 1980-81 to 1997-98, and estimate the production function, which has services used by the industry as one of the inputs. The results of the analysis bring out that the growing use of services has a significant favorable effect on growth of output in Indian manufacturing in the 1990s. The coefficient of services is found to be positive and statistically significant. The contribution of service input to output growth in manufacturing was about one percent in the 1980s, and it increased to about 25% in the 1990s.

Banga and Goldar (2004) use multiple regression analysis and show that trade reforms carried out in the 1990s explain to large extent the rapid growth of use of services in manufacturing. Lower tariff (adjusted for changes in real effective exchange rate) and lower non-tariff barriers (in terms of import coverage ratio) were also found to have led to an increase in the usage of services in manufacturing sector. The process appears to have been aided by other reforms undertaken in this decade. Thus, the studies show that growth of India’s services sector can be attributed to:

1. Structural changes that have led to increase in usage of services by other sectors.
2. Lower tariff and non-tariff barriers to trade
3. Other reforms.

Banga (2005a) undertakes a selective review of both theoretical and empirical studies with respect to some of the conceptual issues regarding the role of services in the growth process of developing countries in the context of rising share

of services in total output and employment in the global economy. She identifies the factors that lead to higher use of services in the growth process of developing countries, viz. higher income elasticity of demand for services, structural changes and trade liberalisation along with other reforms and improved technology.

Dasgupta and Singh (2005) discuss the role of manufacturing industry and the informal sector in India's economic development in the light of the following facts:

1. A faster growth of services than that of manufacturing in many developing countries.
2. The emergence of "de-industrialization" in several developing countries at low levels of per capita income.
3. Jobless growth in the formal sector even in fast growing countries such as India.
4. A large expansion of the informal sector in both fast growing and slow growing developing countries.

Dasgupta and Singh (2006) In the process of economic growth Kaldor (1967) suggested that it is the manufacturing sector which plays the role of engine of growth, as the potential for productivity growth is the highest in this sector. He, in fact, provided the theoretical rationale for the patterns of structural change that Kuznets (1955) had observed in the case of the advanced countries during the process of their economic development.

Virmani and Hashim (2009) evaluate the manufacturing sector in India is crucial for two main reasons: It has significant potential to provide modern employment to a growing labour force, especially that of less skilled type; and, second, by its own healthy growth stimulate and provide a foundation for organic growth in other sectors of the economy. On both these counts, however, the manufacturing sector has so far not performed to its potential. They make an attempt:

1. To find out the determinants of employment.
2. To determine the sources of output growth including productivity.
3. To econometrically examine whether the high growth in output of manufacturing sector is sustainable.

Jay Kandampully (2009) the service sector will play an important role in economic growth in developing countries like India. However, he said that as income levels increase people will be able to afford more services while they will be

spending this additional income on quality services such as education, health, travel etc. On the other hand, small-scale entrepreneurs can step in to meet this need of the people for more and more services with growth in income levels and lifestyle changes while the service sector will provide more employment opportunities than manufacturing sector. Moreover, 80% of the employment opportunities in the U.S. are in the service sector whereas the 3 factors crucial to success for entrepreneurs in the service industry are customer focus, reliability and consistency of services.

Objectives of the study

1. To study the role of services as input of manufacturing in India.

Hypothesis

The study put forward the following hypothesis:

1. 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.
2. The increasing use of services in manufacturing had a favorable effect on industrial productivity.

Sources and data collection

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 Organization (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.

Manufacturing and Services sector

Manufacturing sector has been divided into two sub-sectors, i.e. registered manufacturing and unregistered manufacturing. Table 1 and Fig 1 show the percentage share of registered and unregistered manufacturing sector from 1950-51 to 2012-13.

Table 1: Gross Domestic Product by Manufacturing Sector (at Current Prices) (Rs. Crore)

Year	Registered	Unregistered	Total
1950-51	462 (43.79)	648 (61.42)	1055 (100)
1951-52	511 (43.67)	722 (61.70)	1,170 (100)
1952-53	465 (42.19)	700 (63.52)	1,102 (100)
1953-54	509 (40.98)	808 (65.05)	1,242 (100)
1954-55	549 (42.62)	812 (63.04)	1,288 (100)
1955-56	589 (44.48)	803 (60.64)	1,324 (100)
1956-57	722 (45.81)	930 (59.01)	1,576 (100)
1957-58	776 (46.21)	982 (58.48)	1,679 (100)
1958-59	812 (45.31)	1,069 (59.65)	1,792 (100)
1959-60	936 (46.63)	1,163 (57.94)	2,007 (100)
1960-61	1,123 (48.05)	1,306 (55.88)	2,337 (100)
1961-62	1,234 (47.86)	1,447 (56.12)	2,578 (100)
1962-63	1,411 (49.30)	1,554 (54.29)	2,862 (100)

1963-64	1,648 (50.49)	1,725 (52.84)	3,264 (100)
1964-65	1,836 (51.14)	1,865 (51.94)	3,590 (100)
1965-66	1,998 (52.22)	1,937 (50.62)	3,826 (100)
1966-67	2,194 (52.42)	2,107 (50.34)	4,185 (100)
1967-68	2,284 (51.08)	2,328 (52.06)	4,471 (100)
1968-69	2,471 (51.06)	2,521 (52.09)	4,839 (100)
1969-70	2,996 (53.75)	2,713 (48.68)	5,573 (100)
1970-71	3,218 (52.90)	3,019 (49.63)	6,083 (100)
1971-72	3,499 (51.85)	3,439 (50.96)	6,748 (100)
1972-73	3,873 (51.65)	3,839 (51.20)	7,498 (100)
1973-74	4,631 (51.03)	4,716 (51.97)	9,074 (100)
1974-75	6,009 (51.53)	5,989 (51.35)	11,661 (100)
1975-76	6,280 (51.77)	6,193 (51.05)	12,129 (100)
1976-77	7,146 (53.24)	6,604 (49.20)	13,421(100)
1977-78	7,871 (52.35)	7,565 (50.32)	15,033 (100)
1978-79	9,093 (52.52)	8,674 (50.10)	17,312 (100)
1979-80	10,437 (52.64)	10,379 (52.35)	19,824 (100)
1980-81	11,602 (52.40)	11,129 (50.26)	22,141 (100)
1981-82	13,659 (52.45)	13,072 (50.19)	26,040 (100)
1982-83	15,640 (55.01)	13,385 (47.07)	28,431 (100)
1983-84	19,202 (56.96)	15,066 (44.69)	33,708 (100)
1984-85	22,105 (58.37)	16,274 (42.97)	37,867 (100)
1985-86	24,527 (58.42)	18,018 (42.91)	41,983 (100)
1986-87	26,755 (57.64)	20,359 (43.86)	46,413 (100)
1987-88	30,643 (58.12)	22,812 (43.27)	52,715 (100)
1988-89	36,802 (59.23)	26,050 (41.92)	62,131 (100)
1989-90	45,429 (60.62)	30,142 (40.22)	74,932 (100)
1990-91	52,337 (60.90)	34,278 (39.88)	85,934 (100)
1991-92	57,568 (61.70)	36,310 (38.91)	93,301 (100)
1992-93	65,181 (60.30)	43,911 (40.62)	108,092, (100)
1993-94	76,700 (61.21)	49,506 (39.51)	125,298 (100)
1994-95	96,606 (62.40)	58,924 (38.06)	154,814 (100)
1995-96	120,808 (62.41)	73,654 (38.05)	193,570 (100)
1996-97	139,406 (63.20)	81,800 (37.08)	220,575 (100)
1997-98	140,014 (61.03)	91,142 (39.72)	229,404 (100)
1998-99	151,900 (60.66)	100,586 (40.17)	250,373 (100)
1999-2k	158,535 (58.44)	112,719 (41.55)	271,255 (100)
2000-01	183,593 (59.94)	122,704 (40.06)	306,296 (100)
2001-02	197,541 (62.02)	120,955 (37.98)	318,496 (100)
2002-03	219,408 (62.95)	129,126 (37.05)	348,534 (100)
2003-04	248,238 (63.45)	142,953 (36.56)	391,190 (100)
2004-05	292,344 (64.50)	160,881 (35.50)	453,225 (100)
2005-06	345,443 (66.22)	176,226 (33.78)	521,669 (100)
2006-07	427,075 (67.27)	207,753 (32.73)	634,828 (100)
2007-08	492,758 (67.25)	239,962 (32.75)	732,730 (100)
2008-09	561,460 (68.61)	256,862 (31.39)	818,322 (100)
2009-10	643,538 (69.79)	278,613 (30.21)	922,151 (100)
2010-11	754,553 (69.82)	317,936 (29.41)	1,080,750 (100)
2011-12	885,547 (73.67)	350,635 (29.17)	1,202,086 (100)
2012-13	948,913 (74.14)	371,994 (29.06)	1,279,966 (100)

Source: National Account Statistics – Back Series 2011.

Note: Figures in parentheses are percentage.

It is clear from the table 1 and Fig 1 that, registered manufacturing has been fluctuating and increased from 43.79 per cent in 1950-51 to 74.14 per cent in 2012-13. Unregistered

manufacturing has also been fluctuating and declined from 61.42 per cent in 1950-51 to 29.06 per cent in 2012-13.

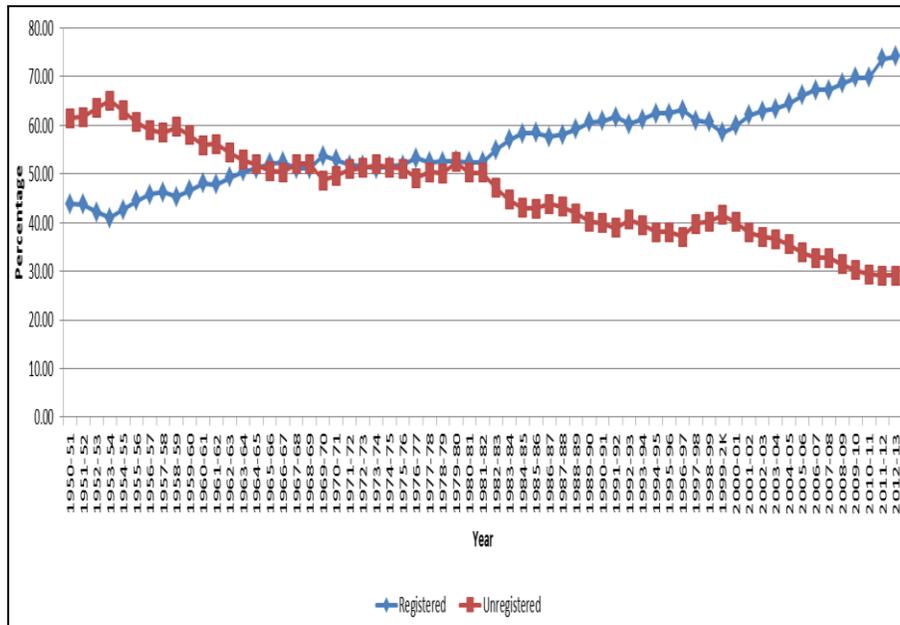


Fig 1: GDP by manufacturing sector (at Current Prices)

Manufacturing and services sector are the major sector in providing the employment in the economy. Table 2 shows the data of employment provided by manufacturing and services sector in public and private sector.

Table 2: Employment Provided by Manufacturing and Services Sector (Per cent)

Year	Manufacturing Sector			Services Sector		
	Public Sector	Private Sector	Public & Private Sector	Public Sector	Private Sector	Public & Private Sector
1961-65	6.28	59.59	27.63	89.47	16.80	60.20
1966-70	7.37	57.15	27.30	88.39	23.22	62.27
1971-75	7.91	59.86	26.84	85.97	24.53	63.53
1976-80	9.21	61.08	26.40	82.69	24.84	63.61
1981-85	10.00	61.12	25.84	81.64	26.02	64.40
1986-90	10.17	59.45	24.44	81.58	27.77	66.00
1991-95	9.44	58.25	23.61	82.49	29.04	66.96
1996-2000	8.35	59.56	24.14	84.04	28.96	67.06
2001-05	6.85	55.91	22.23	85.47	32.43	68.83
2006-12	6.06	49.41	22.07	84.85	40.10	68.35

Source: Author’s calculation from Various Issues of Economic Survey.

It is clear from the table that from 1961-65 to 2006-12, services sector exceed the manufacturing sector in providing employment in the economy. Though, the contribution of manufacturing sector decreased from 27.63 per cent in 1961-65 to 22.07 per cent in 2006-12 but contribution of services sector increased from 60.20 per cent in 1961-65 to 68.35 per cent in 2006-12. In manufacturing sector, private sector plays significant role, but it is reverse in case of services sector.

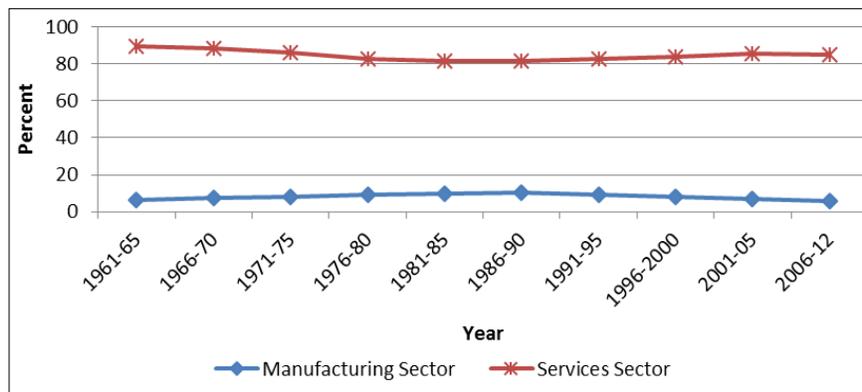


Fig 2: Employment provided by public sector

We can conclude from the Fig 2 that employment provided by manufacturing in public sector is less than the employment provided by services in public sector. Though, the contribution of both (manufacturing and services) in public

sector has fluctuated and decreased from 6.28 per cent in 1961-65 to 6.06 per cent in 2006-12 and 89.47 per cent in 1961-65 to 84.85 per cent in 2006-12 respectively.

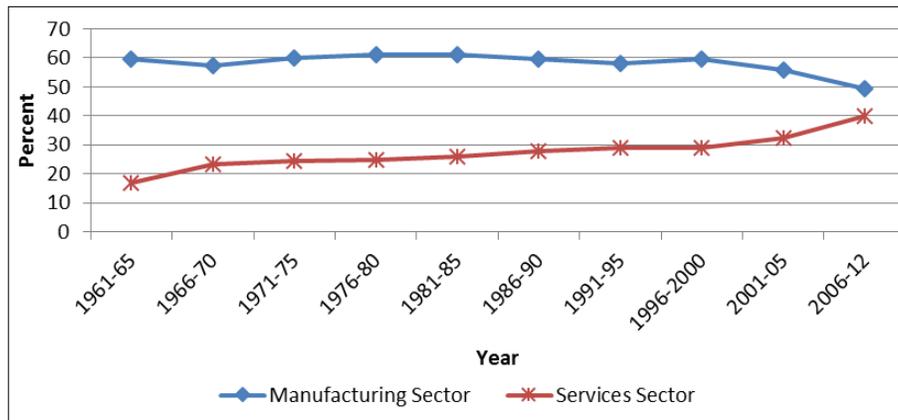


Fig 3: Employment Provided by Private Sector

It is clear from the Fig 3 that in manufacturing sector, private sector plays significant role, but it is reverse in case of services sector. Employment provided by manufacturing in private sector is greater than the employment provided by services in private sector. Though, the contribution of manufacturing sector decreased from 59.59 per cent in 1961-65 to 49.41 per cent in 2006-12 but contribution of services sector increased from 16.80 per cent in 1961-65 to 40.10 per

cent in 2006-12. It can be concluded from the Fig 4 that the contribution of services sector is more than manufacturing sector in providing employment in both i.e. public and private sector. Though, the contribution of manufacturing sector decreased from 27.63 per cent in 1961-65 to 22.07 per cent in 2006-12 but contribution of services sector increased from 60.20 per cent in 1961-65 to 68.35 per cent in 2006-12.

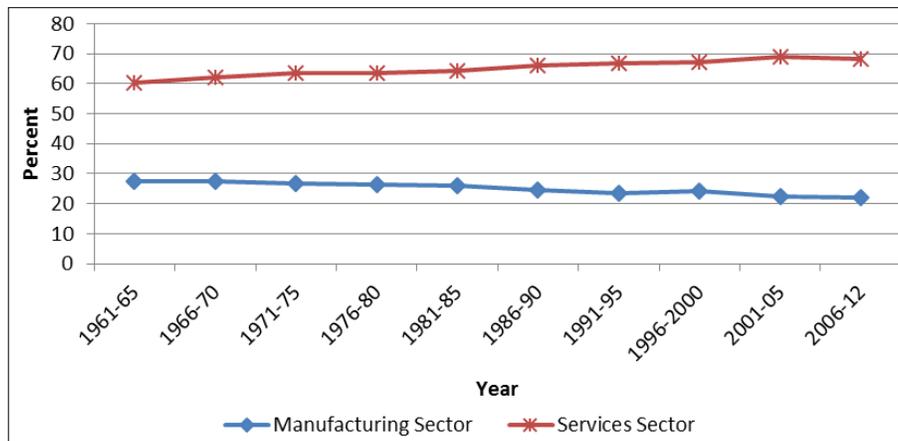


Fig 4: Employment Provided by Public and Private Sector

Table 3 shows annual compound growth rate (ACGR) of growth domestic product (GDP) of manufacturing sector at

current prices from 1950-51 to 2012-13.

Table 3: Annual Compound Growth Rate of Manufacturing Sector (at Current Prices) (Per cent)

Year	Registered	Unregistered	Total Manufacturing
1950-51 to 1960-61	9.29	7.26	8.28
1960-61 to 1970-71	11.10	8.74	10.04
1970-71 to 1980-81	13.68	13.94	13.79
1980-81 to 1990-91	16.26	11.91	14.52
1990-91 to 2000-01	13.37	13.60	13.55
2000-01 to 2012-13	14.67	9.68	12.66

It is found from the table that from 1961-62 to 2012-13, the

annual compound growth rate (ACGR) of GDP by

manufacturing sector remained over 10 per cent. The ACGR of registered manufacturing was highest during 1980-81 to

1990-91 and of unregistered manufacturing was highest during 1970-71 to 1980-81.

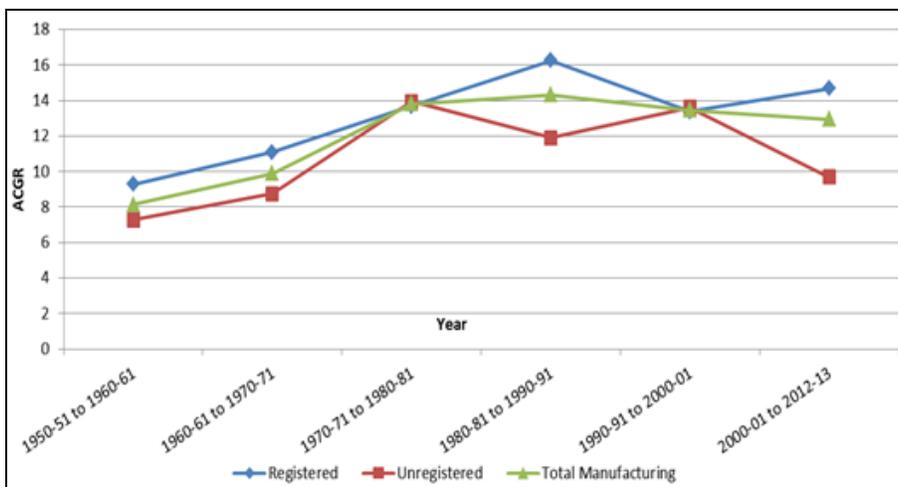


Fig 5: Annual compound growth rate of manufacturing sector (at Current Prices)

We can conclude from the above graph that the ACGR of registered manufacturing was highest during 1980-81 to 1990-91 and of unregistered manufacturing was highest during 1970-71 to 1980-81. The ACGR of total manufacturing was highest during 1980-81 to 1990-91.

Correlation between manufacturing and services sector

The performance of the capital goods industry was positive feature in view of the implication it has about the increasing investment in manufacturing. The production of basic metals, metal products and machinery and non-metallic products showing a good response to the worldwide buoyancy. Although paper and printing showed good overall growth. Chemical products were lifted by the accelerating growth in the export of pharmaceutical products. Another major industry that seems to be on a high growth path is automobiles and auto products, in which both do domestic and international demand have been picking up. The three areas that showed negative growth are textile products, leather & fur products and wood & wood products.

Skills and knowledge are the powerful force of the economic growth of India. Development of skills and knowledge is basic to attractive employment opportunities. A skill deficit in practically all areas of manufacturing has emerged as one of the major impediments to growth in manufacturing. All areas of manufacturing are affected but the more dynamic areas such as pharmaceuticals, automobiles and auto parts, textiles and clothing, leather and leather manufactures are affected more severely.

India’s telecommunications industry comprises two distinct sectors: manufacturing of telecom equipment and distribution of telecom services. The industry is a vital contributor to India’s ICT industry and has important linkage effects with the rest of the economy. It is also very employment-intensive. In other words, about 80 per cent of those employed in the ICT sector is to found in the distribution of telecom services industry.

One of the major employment areas for Indian Professionals is the materials manufacturing industry, including semiconductors, magnetic materials, printing, photography and optics. This area also includes many steel and chemical companies as well. Other important employment areas include electronics, communications and measurement which emphasizes the design and construction of optical and medical instruments.

We have tried to correlate two significant contributors of the Indian economy on the basis of Gross Domestic Product (GDP) by both sectors. To estimate the correlation, we rely on the Karl Pearson’s coefficient of correlation. It is found that the correlation coefficient is 0.995 which is significant at the 0.01 level (2-tailed). As is clear from Table 4, both sectors (manufacturing sector and services sector) are significantly correlated to each other.

Table 5 explains the correlation between manufacturing and services sector on the basis of employment provided by both the sectors. For this purpose, the data on employment have been taken for the years 1961 to 2012. The result shows that again both the sectors have a significant positive correlation.

Table 4: Correlation coefficient in GDP between manufacturing and services sector

		Correlation			
		Registered Manufacturing	Unregistered Manufacturing	Total Manufacturing	Total Services
Registered Manufacturing	Pearson Correlation	1.000			
	Sig. (2- tailed)				
	N	63			
Unregistered Manufacturing	Pearson Correlation	0.988	1.000		
	Sig. (2- tailed)	0.000			

	N	63	63		
Total Manufacturing	Pearson Correlation	0.998	0.995	1.000	
	Sig. (2- tailed)	0.000	0.000		
	N	63	63	63	
Total Services	Pearson Correlation	0.998	0.983	0.995	1.000
	Sig. (2- tailed)	0.000	0.000	0.000	
	N	63	63	63	63

Table 5: Correlation coefficient between employment in manufacturing and services sector

Correlation			
		Manufacturing	Services
Manufacturing	Pearson Correlation	1.00	0.931**
	Sig. (2- tailed)		0.00
	N	52	52
Services	Pearson Correlation	0.931**	1.00
	Sig. (2- tailed)	0.00	
	N	52	52

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