Role of Service Sector in the Economy of Delhi NCT

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Abstract

Services play a very vital role in the economies of both developed and developing countries. Services sector form the backbone of the Delhi's economy. It has given Delhi the status of a mature economy, by not depending on the fancies of weather, or the industrial inconstancy to which other developed economies are periodically subject. Key service industries include trade, hotels & restaurants, construction, electricity, transport, storage, communication, banking and insurance, real estate, ownership of dwelling, public administration, and other services. The data collection was based on the secondary sources where the data was collected from the annual book of the Directorate of Economics & Statistics, Govt. of NCT of Delhi and website, various issues of the economic survey of Delhi and RBI's "Handbook of Statistics on the Indian States 2016-17". For explaining, time-series data have been used since 1993. Further the period of study was taken from 1993-94 and 2017-2018. The paper aims at analyzing the nature and growth along with the important determinants of service sector growth in the economy of Delhi NCT. The present study is expected to provide more meaningful, consistent and realistic results on the issues under study. Using A. Holub's methodology, the study finds that Delhi witnessed a structural transformation and have contributed positively to growth. Service sector has been playing a very important role in the growth as compared to the primary with least and the secondary sector with a satisfactory contribution. It has been found that service sector played a dominant role in the growth of the Delhi's economy. The service sector has the ability to maintain a high economic growth and can also encourage growth in other sectors of the economy of Delhi. Further, the study can be more helpful, if along with Delhi NCT, NCR like Gurugram, Faridabad, Noida, and Ghaziabad are also included. This extension can lead to much better results as the rise of these cities is also helping in the growth of Delhi NCT, esp

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Introduction

Services play a very vital role in the economies of both developed and developing countries. The sectorreport for over half of the gross domestic product of all developed economies and form a single largest sector in most developing economies. The services sector comprises trade, hotels & restaurants, construction, electricity, transport, storage, communication, banking and insurance, education & research, medical & health, ownership of dwellings, real estate & business services, and other services (business services, computer & related services, legal services, real estate activities, renting of machinery & types of equipment and social & personal services).

Delhi is counted as one of the most populated urban area in the world. The City has built up a world class

infrastructure and economic growth from the past many years. The city has undergone various changes in the past few years with improved and robust roads, flyovers and a superb metro service providing a comfortable and easy life to the people to travel smoothly within and around the city. Delhi's mixed culture attracts people of all communities and religions. Delhi's Industrial sector is providing employment to a large section of the society. Thereby increasing demand for consumer goods and services leading to a rise in the growth of the income of the state. Delhi has a small geographical area. Rural area under Delhi has been shrinking over the years because of growing urbanization.

As the agricultural land has been diverted to nonagricultural uses, primary sector may record further decline, and Delhi may soon become totally urban. Thereby, the primary sector never had a dominant

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position in Delhi's economy. The share of Secondary sector has been increasing over the decades but has also been consistently declining for some odd years. Industrial production in Delhi, both in terms of organised and unorganised sector, has been increasing. Construction is the other economic activity in this sector, which has recorded a high rate of growth with a significant contribution to the GSDP. Various kinds of development activities taking place in Delhi have given an extraordinary boost to this industry, which in turn has given a boost to the industrial production. However, service sector form the backbone of the Delhi's economy. This sector puts Delhi apart from the rest of the country. It has given Delhi the status of a mature economy, by not depending on the fancies of weather, or the industrial inconstancy to which other developed economies are periodically subject. Delhi being the National Capital, the public administration is contributing significantly to the GSDP & The other sub-sectors like Trade, Hotels & Restaurants, Tourism, Communication, Storage, Financial and Banking Services are also contributing significantly to the NSDP.

The present study is an attempt to explain the role of services sector in the economy of Delhi NCT in detail. The next sectiondescribes the contribution of service sector in the GDP of Delhi while the section that follows examines the structure of Delhi's economy using A.Holub's methodology; and the last section concludes the study.

Objectives of the Study

The present study aims at analyzing the important role played by service sector in Delhi's economic growth, over the period 1993-94 to 2017-2018, and finding out the major contributors in the growth process of the economy at the sectoral and sub-sectoral level, to determine the role of service sector.

The main objective of the study is to analyze:

- To review the theory and empirics on Service sector growth.
- To analyse the nature and growth of service sector.
- To determine the role of service sector.

Review of Literature

In order to develop the theoretical development of the role of service sector, a review of existing literature was conducted.

Subramanian(2006) critically evaluated the claim of the end of the 'lop sided' development during the regime of economic reforms in Kerala. Average annual growth rates, percentage shares, and weighted growth rates of the various sectors of the economy were used for the purpose of analysis. The study found that the producer services had a lower share than that of consumer services in the service sector; services were growing mainly due to remittance income which emerged as a fast growing diversified manufacturing industry. Foreign capital investment wasessential for sustainable service-led economic growth. Thimothy (2009) made an effort to understand the process of services growth in India. The study indicates that the major portion of the sector's employment in India is in minor services like trade and hotels, transport and personal services. The share of employment in highly paid jobs like public administration recorded a decline, whereas the employment potential of sub-sectors like IT services, banking, insurance, etc. remained low. A similar pattern emerged in services employment which demanded focus on the structure of employment generation in services, apart from its low share. The case of Kerala is not different in any way as there has been a more uniform relationship between income and employment in services, although the pattern of employment in the sector is not radically different from India. The share of workers employed in some of the service sub-sectors like communication and post, education and health is found to be relatively higher in the state; and this is connected to the inflow of payments and high human development. However, such linkages have failed to create a pattern of growth dominantly based on high end services. On the other hand, the greater share of services employment in the state has been due to the spread of low-paid jobs. Pattanaik and Nayak (2011), in their study, investigated the employment intensity of service sector growth in India, and examined the role of fundamental macroeconomic factors in determining the same. The results showed that over the years, although the output growth rate in service sector had increased, but there was a significant decline in the employment growth rate leading to a considerable decline in employment elasticity. Further, there was predominance of low productive and unskilled labour-based activities in service sector. The regression results based upon time-series data from 1960-61 to 2004-05 indicated that investment-friendly environment, better public expenditure management, effective labour policies and proper structural transformation were the key factors to achieve higher employment elasticity in service sector. Andres and Juan (2011), in their study, made an attempt to find the impact of tertiarization on overall productivity growth at the regional level. A sample of regions belonging to 16 European countries (EU-15 except Luxemburg, plus Norway and Switzerland) was taken to analyze the relationship between structural changes, tertiarization and productivity growth at this level. It was found that several service industries had shown dynamic productivity growth rates, contributing more than expected to productivity growth. Also, a data panel model was used to highlight certain additional aspects disaggregating by market and non-market services. Rodrik and McMillan (2011) studied the structural changes that took place in Africa and Latin America during the period 1990 onwards. Large gaps in labour productivity between the traditional and modern parts of the economy were found to be a fundamental reality of developing societies. The authors emphasize that labour flows from lowproductivity activities to high-productivity activities are a key driver of development. The study has identified three factors that help in determining whether structural change contributes to overall productivity growth. Reena (2011)studied the role of services sector in the Indian economy. The author found that growth in services sector had been less cyclical and more stable than growth in industry and agriculture. India's service sector witnessed tremendous growth during the last twenty years. But this growth had not been accompanied by a corresponding growth in employment in the services sector. It was found that the share of manufacturing sector in GDP also declined in 1990s. Growth in services seemed to be lopsided and jobless. Few sectors witnessed a double digit growth rate in the last decade such as communication and business services, while some had experienced a fall in their growth rates like railways The author also suggested that there was a need to develop 'service price indices' for selected service sectors, particularly in the national accounts framework as with the growing importance of the service sector. Urankar (2013) studied the sectoral and structural changes in the economy of Goa with special reference to its service sector. The study tried to find out the leading and lagging sectors and sub-sectors of the economy over the study period. The major finding of regression was that economic growth in Goa over the entire study period was mainly driven by the growth of hotels or tourism services, followed by industrial production, banking services, and export earnings. Singh and Kaur (2014), in their study, analyzed the role of services sector in the growth of the

Indian economy. The study explained trends and growth of services sector along with Holub's methodology to present the structure of the Indian economy since independence. VAR methodology was also applied to evaluate the determinants of growth of service sector in India by using time-series data from 2000-01 to 2012-13. According to the study, the main services sector attracting FDI in India were telecommunications, construction, and hotels and restaurants. The results of VAR analysis showed that growth of per capita GNP was the major factor of increasing share of services sector in Indian economy. The study also found that the effect of net FDI inflows was negative and insignificant. The negative effect might have been due to the increasing share of FDI inflows in manufacturing sector, which in turn reduce the share of services in the total proportion. Singh and Singh (2017), in their study, examined the dominant role played by the service sector in the economy of Punjab and Haryana states. The results showed that more than 50% GSDP was coming from the service sector. The study found that the trade, hotels and restaurants played a significant role in GSDP in both the states. Thind and Singh (2018) investigated the process of structural change and growth in 15 major states of India over the 30-year period from 1983-84 to 2014-15. The study aimed to discover whether structural changes contributed to economic growth of these 15 states or otherwise. The study found that in all the states under study structural changes contributed positively to their growth. The study also documented large labour productivity gaps that existed in the traditional and modern sectors of the economies of the 15 major states of India. Also, the states that had undergone high level of structural change like Orissa, Haryana, Kerala, Karnataka and Tamil Nadu, the contribution of structural change to the overall productivity growth was found to be lower than within the component. The contribution of structural changes within sector changes was found to be much more than structural change in all states except Maharashtra.

No doubt, a number of studies have been conducted in the states of Kerala, Gujarat, Punjab, West Bengal, Goa, U.P., etc. which aim to understand the structural changeoccurred in the state economy. Few of the studies have examined the determinants and importance of the service sector growth and its sustainability in the growth process of the state economy. But, no comprehensive research study has been conducted so far to assess the growth process and structural transformation in Delhi NCT since its inception. Based on the above review of

literature, the present study, therefore, fills the research gap, and attempts to find out which of the numerous views and models on service-led growth optimally fits to describe the growth and structural changes in the economy of Delhi NCT.

Research Methodology

The data collection was based on the secondary sources where the data was collected from the annual book of the Directorate of Economics & Statistics, Govt. of NCT of Delhi and website. For explaining, time-series data have been used since 1993. Data have been collected from various issues of the economic survey of Delhi and RBI's "Handbook of Statistics on the Indian States 2016-17". Further the period of study was taken from 1993-94 and 2017-2018.

Contribution of service sector in the GSDP of Delhi NCT

The service sector may be defined as the third tier of the three economic sectors of an economy. Services are also known as intangible goods because a service is a transaction in which no physical goods are transferred from the seller to the buyer. It has been analyzed that different sub-sectors of the services sector of Delhi has been significantly contributing to the GSDP of Delhi.

Growth Rate of GSDP in Delhi NCT

The table 1 given below examines the growth rate of GSDP in percentage under different sectors and sub-sectors at constant prices. The changing sectoral composition of GSDP is indicative of structural changes and the growing importance of the service sector in the economy of Delhi.

Transport, Storage &Commun. Real Est Gas & Water Supply Hotels 1993-94 -35% -45% 29% -20% 1% 22% 11% -2% 15% 11% 6% 3% 8% 12% 1995-96 -19% -23% 8% 1% 12% 6% 11% 27% 6% 9% 10% 3% 2% 7% 18% 12% 5% 16% 6% 10% 13% 14% 1997-98 13% 17% 28% 5% 10% 16% -6% 30% 7% 19% 9% 16% 1999-00 -11% 4% 0% -20% 2% 10% -10% -9% 22% 11% 7% 11% 5% 5% 41% 2% 21% 18% 4% 37% 1% 9% 2001-02 -2% 0% 6% -9% 12% 22% -7% -2% 39% -6% 7% 0% 6% 4% 13% 21% 4% 2002-03 -2% 4% 3% 9% -10% 37% 7% 7% 1% 7% 7% 2004-05 1% 11% 12% 24% 8% 19% 7% 2% 21% 10% 8% 2% 10% 22% 15% 34% -13% 12% 14% 10% -3% 8% -2% 5% -1% -3% 9% 13% 1% 24% 10% 16% 19% 13% 26% 12% 2007-08 -3% 11% 3% 1% 14% 11% 19% 13% 19% 17% 15% -12% 10% 11% -1% -3% -1% 14% 17% 14% 15% 87% 2009-10 27% 4% 17% 3% 1% 8% 4% 10% 16% 26% 6% -13% 18% 9% 14% 4% 12% 7% 15% 5% 14% 9% 1% 7% 2010-11 7% -3% 7% 9% -10% -8% 12% 4% 13% 8% 11% 13% 13% 9% 2012-13 -22% 17% 39% -2% 9% 10% 4% 7% 6% 10% 4% -15% 4% 7% 7% 22% 16% 7% 7% 2015-16 -8% 36% 22% 1% 16% 9% 2% 10% 12% 2% 7% 11% 5% 11% -4% 11% 12% 2016-17 16% 13% 5% 2% 26% -15% 7% 7% 8% 14% -10% 4% 10% 4% 7%

Table 1: Growth Rate in Percentage (At Constant Price 2011-12)

Source: Statistical Abstract of Delhi various issues

Table 1 reveals that the primary sector of Delhi has not been very influential sector in the growth of Delhi since 1993. The growth rate from agriculture and allied was registered to be -45 per cent in 1994-95. The negative performance can be attributed to the process of rapid urbanisation in Delhi. It recovered to a positive growth rate of 26 per cent in 1997-1998. But it declined sharply to a negative growth rate of -11 per cent in 1999-00. Thereafter, a positive but very low growth rate was registered. A high and positive growth rate of 27 per cent was again registered in 2009-10. In 2017-18 a positive growth rate of 7 per cent was registered. The Govt. of Delhi is now encouraging farmers to grow vegetables, floriculture production, mushroom cultivation etc. to keep agriculture and allied activities growth rate positive. As the main source of income of the population of Delhi is either secondary or the tertiary sector.

Mining and Quarrying is a minor economic activity in Delhi due to its topography. It was further curtailed by Court orders by way of imposing ban on quarrying of stone and extraction of Badarpur within the territories of Delhi. The data for the mining and quarrying sector was found to be inconsistent, so this sector has been excluded from the study.

The analysis of GSDP at constant prices revealed that contribution of Primary Sector in the economy of Delhi (viz. Agriculture & Allied) was not very significant.

Among the secondary sector, manufacturing sub-sector is one of the major contributor (roughly one tenth) in the economy of Delhi. The growth rate from manufacturing has been registered to be positive except for 1995-96, 1996-97, 2000-01, 2003-04, 2008-09, 2010-11, 2014-15, 2016-17 in which a negative growth rate has been registered. This slow pace of growth of manufacturing sector was mainly attributed to the stagnation that persisted on the industrial front. Manufacturing witnessed a high growth rate of 36 per cent in 2015-16 because of the favourable environment created by the government of Delhi for this sector. Construction is also one of the major contributor in the economy of Delhi and was contributing approximately one tenth of the total GSDP. Construction recorded a highest growth rate of 41 per cent in 2000-01 because of various projects initiated in the development of infrastructure of Delhi and several other developmental works undertaken by the then government of Delhi. Growth rate of construction sector reveals the growing importance of construction sector as compared to the other sub-sectors among the secondary

sector in the economy of Delhi. Electricity, gas & water supply services also recorded almost positive growth rates except for 1994-95 and 2005-06. Growth rate declined to 3 per cent in 2007-08. This decline was due to presence of enhanced Consumption of Fixed Capital during this year. During 2002 Delhi Vidyut Board was split into separate entities of Generation, Transmission and Distribution. From 1st July 2002, the distribution work of electricity was undertaken by private companies. As a result a significant improvement in the growth rate was registered in 2002 and the succeeding years. A 39 per cent growth rate was recorded in 2012-13 which showed a growing contribution of the sector in the GSDP of Delhi.

Tertiary Sector has been a prime mover of the economic growth in Delhi. Transport, storage and communication, financial services, all other services showed an accelerating tendency except for trade, hotels and restaurants which registered a negative growth rate of -1 per cent and -10 per cent in 2008-09 and 2011-12 respectively. A highest growth rate of 22 per cent and 16 per cent was registered for transport, storage & communication in 1994-95 and 2015-16 respectively. Transport, storage and communication recorded a highest growth rate of 34 per cent and 32 per cent in 2003-04 and 2014-15 respectively and a negative growth rate of -1 per cent in 2005-06. Railways sector also showed a positive growth rates in almost all the years except for 1994-95, 1999-00, 2001-02 and 2007-08 showing negative growth rates. A significant rise of 34 per cent and 30 per cent was recorded in 2005-06 and 2008-09 respectively. The storage sector showed insignificant growth rate as majority of the years recorded a negative growth rate. A positive and a significant growth rate is seen in the communications sector. A highest or 44 per cent and 40 per cent growth rate was recorded in 2003-04 and 2006-07 respectively. However, 2005-06, 2011-12, 2016-17 and 2017-18 registered a negative growth rates. But, the overall performance of communication sector was better than the storage. Growth rates remained positive in the banking and insurance sector except for 1998-99 and 2001-02. A significant increase of 38 per cent and 30 per cent growth rate was recorded in 1996-97 and 1997-98. Real Estate, Ownership of dwelling & Business services sector has been contributing significantly to the GSDP of Delhi as this sector recorded a positive growth rates in all the years. The public administration sector registered a negative growth rates in 1998-99, 2000-01, 2007-08, 2009-10, 2012-13 and 2013-14. A very significant and a positive growth rate of 87 per cent is recorded in the year 2008-09. The other services also

showed a significant and positive growth rate in all the years. Various reforms have been made in the education, infrastructure of government schools of Delhi, improvement and availability of health services at reasonable prices, sanitisation that led to an increase in the growth rate of other services. In the recent years transport, storage & communication sector, insurance sector and the all other services sector witnessed a significant growth as compared to other segments of the tertiary sector. As a result of the policies of the liberalization and privatization in the area of banking, and finance, many new business services like tele-banking, e-banking, event management and advertising (both print and media). A boom in the communications and housing are clearly reflected in these growth transitions.

However, a decline in trade, hotels and restaurants sectors does not conform to anecdotal evidence about the buoyancy in these sectors. Services sector has rendered the overall positive growth rate of the economy intact. Tertiary sector has been showing an enhancing

trend and the contribution of this sector has been increasing in the GSDP.

Structural Changes by A. Holub

The economic structure of an economy throws light on the changes in trade, income and employment and balance of output from different economic sectors — ranging from primary (agriculture and allied, fishing, mining, and quarrying, etc.), secondary (manufacturing, construction, and electricity, gas & water supply) to tertiary (hotels, trade & restaurants, transport, storage, communication, railways, banking & insurance, real estate, business services, etc.)

To show, the importance of the service sector in Delhi's economy, A. Holub analysis has been used. By using Holub's methodology, the typology of Delhi's production structure has been presented over the study period in the following table. Table 3 presents the sectoral composition of the Gross Domestic Product at constant prices.

Sectoral Composition (% Contribution in GSDP at Constant Prices)

Table 2: Delhi's Production Structure According to A. Holub (at Constant Prices)

Year	Primary Sector	Secondary Sector	Tertiary sector	Type of Structure
1993-94	3.85	25.2	70.95	S>I>A
1994-95	1.9	26.76	71.34	S>I>A
1995-96	1.49	22.15	76.36	S>I>A
1996-97	1.22	20.34	78.44	S>I>A
1997-98	1.32	20.78	77.9	S>I>A
1998-99	1.56	20.66	77.78	S>I>A
1999-00	1.33	18.85	79.82	S>I>A
2000-01	1.36	22.84	75.8	S>I>A
2001-02	1.28	21.45	77.27	S>I>A
2002-03	1.21	20.54	78.25	S>I>A
2003-04	1.08	19.5	79.42	S>I>A
2004-05	1.09	18.45	80.46	S>I>A
2005-06	0.95	17.69	81.36	S>I>A
2006-07	0.86	16.86	82.28	S>I>A
2007-08	0.75	15.93	83.32	S>I>A
2008-09	0.66	14.93	84.41	S>I>A
2009-10	0.77	14.43	84.8	S>I>A
2010-11	0.75	14.12	85.13	S>I>A
2011-12	3.49	13.09	83.42	S>I>A
2012-13	2.82	14.06	83.12	S>I>A
2013-14	3.1	13.99	82.91	S>I>A
2014-15	2.96	12.01	85.03	S>I>A
2015-16	2.8	13.41	83.79	S>I>A
2016-17	2.42	13.28	84.3	S>I>A
2017-18	2.36	13.37	84.27	S>I>A

Source: Author's own computation using excel

The share of agriculture and allied activities has declined from 3.85 per cent in GDP in 1993-94 to 2.36 per cent in 2017-18. Its percentage share in GDP declined over the time period from 1993-94 to 2017-18. The share of the secondary sector declined from 25.20 percent in 1993-94 from 13.37 percent in 2017-2018. So, the share of the agriculture sector and the Secondary Sector seems to be very low as compared to the services sector. The share of the services sector which includes 'electricity, gas & water supply', 'construction', 'trade, hotels transport & communication', 'finance and insurance, real estate &

business services', 'community, social & personal services' increased from 70.95 per cent in 1993-94 to 84.27 per cent in 2017-18. It shows the overall highest percentage of GDP among all other sectors 84.27 percent followed by primary and secondary sectors. Services sector started increasing from 1993-94 but showed a less percentage share in 2000-01. In the years 2001-02, it never saw behind and its growth increased with fast pace and till today it showed the highest percentage share (i.e. 84.27 percent) among all other sectors.

Figure 1: Delhi's Production Structure According to A. Holub (At Constant Prices)

Source: Author's own computation using excel

Figures 1 gives a clear view of the production structure of Delhi. The service sector has dominance over the primary and secondary sectors. According to Holub's methodology, Delhi has S>I>A type of production structure. This finding is consistent with the one produced by Singh and Kaur (2014) in their study.

Thus, it can be analyzed that the role of service sector has been significantly increasing in Delhi's economy. This sector has appeared as the largest contributor towards Gross State Domestic Product, followed by secondary and primary sectors. The decline in the share of the primary sector was the outcome of the declining rural and cultivable area as a result of the rapid pace of urbanization and alternative uses of the available agricultural and rural land which provides higher returns. The share of the secondary sector has declined due to the displacement of industrial units and the closure of polluting industrial units due to the strict enforcement of environmental

pollution standards. The closure of industrial units in the unapproved industrial areas has also contributed to the decline of contribution by the manufacturing sector to the economy of Delhi. On the other hand, improvements in civic infrastructure, and the transport, communication, trade, storage, health, education, and other sectors have helped to considerably promote the tertiary sector (Economic Survey of Delhi, 2012-13).

Conclusion

The overall conclusion that emerges from the present study is that Delhi has witnessed tremendous growth in the service sector and has contributed to the growth. There is strong evidence that the service sector in Delhi grew much faster than the primary and the secondary sector and is dominating the economic structure of the economy of the state. Trade, hotels and restaurants,

transport, storage, communication, railways, banking and insurance, business services, real estate, ownership of dwelling, public administration, and other services are the major determinants of growth in the economy of Delhi. The service sector has strong inter-sectoral linkages and it also has the potential to sustain long-run growth and stimulate growth in other sectors of the economy.

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