

SERVICES SECTOR LED SUSTAINABLE GROWTH: SOME INSIGHTS FROM 66TH ROUND OF NSSO

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Abstract: Most of the developed countries show a consistent pattern of growth with workforce and resources shifting from agricultural sector to industrial sector and finally to services sector at higher levels of development. The services sector is the largest contributor to employment and national product in all the developed countries. In many developing countries also services sector has emerged as the largest sector in terms of its share in domestic product at low levels of industrial development and per capita income. Thus it is now considered the key to economic growth and sustainable development for the emerging Asian economies. In India too, post liberalization, the services sector has grown at fast pace and has emerged as the biggest sector of the economy in terms of its contribution to the gross domestic product. However, its share in labor force lags far behind compared to its share in domestic product. Currently, more than 50 percent of the workforce is engaged in primary activities. This glaring disproportionality in the share of services sector in domestic product and labor force is very intriguing and raises questions about the sustainability of such a growth pattern. Sustainable economic growth in the long run needs to be accompanied by displacement of workforce from primary activities to manufacturing activities and finally maximum labor force being employed in services sector. But with the slow growth of industrial sector and its low labor absorption capacity, enhancing the employment potential in services sector seems to be the best possible solution and therefore should be the main focus of the policy makers. The objective of this paper is to explore the current state of employment in services sector and its various subsectors using the latest NSSO (66th round) data. This study also attempts to examine the heterogeneity in labor share of services sector across major Indian States. The analysis of data reveals that there are considerable variations, interstate as well as

intra-sector, in the share of services sector in labor force. In all the Indian states except Kerala, primary sector still continues to be the largest sector in terms of employment share. However, services sector is the second largest employer of labor force in most of the other states. Further, it is also observed that the wholesale and retail trade subsector of services sector employed maximum labor force, followed by transport and storage subsector. On the other hand financial services, health services and social services sub sectors have the least labor share across states.

Keywords: Employment, India, Interstate variations, NSSO, Services sector

INTRODUCTION

The experience of developed countries since second world war shows that the services sector led economic growth is sustainable. In the process of economic evolution most of the developed countries have followed a uniform pattern of economic growth, with workforce and resources shifting from primary sector to secondary sector and finally to the tertiary sector at higher levels of per capita incomes and industrial development. So the hypothesis of three stages of development emphasized by Fisher [1] and later supported by economists like Chenery [2], Kuznets [3] and others, turned out to be empirically true for most the developed countries. In fact by early 60s services sector had emerged as the largest sector in all the advanced countries. Today the services sector is the major contributor to gross domestic product and employment in the developed economies. In many developing countries also, it is now the largest sector in terms of its share in domestic product even at low levels of industrial development and per capita income. The services sector is therefore, now being hailed as the new engine of growth and sustainable development for the emerging economies. The question this paper seeks to explore is that can

services sector led economic growth be sustainable for India in the long run? In the post reform period, the services sector grew at a fast pace and emerged as the biggest sector of the economy in terms of its contribution to the gross domestic product; making economists very hopeful that services sector is probably the key to sustainable growth. However, one needs to take a more comprehensive look at the growth of services sector in the post liberalization period. The growth of any sector has two dimensions; its contribution to national income and its contribution to employment. The services sector has definitely emerged as the largest sector in terms of its contribution to national income but its share in labor force is seen lagging far behind. This is unlike the experience of developed countries where services sector's share in employment grew proportionately to its share in gross domestic product. This apparent disproportionality in share of services sector in domestic product and labor force raises doubts about the long run viability of such a development pattern. Sustainable economic growth in the long run needs to be accompanied by shifting of surplus labor from primary sector to industrial and services sectors. But given the slow growth of manufacturing sector, enhancing the employment potential in Services sector seems the most plausible and viable alternative for sustaining long run economic growth in India. In this paper we have brought out the current state of employment in Services Sector and its various subsectors using the latest labor force data and also examined the pattern of heterogeneity in labor share of services sector across major Indian states. But at the outset let's take a closer look at the development pattern of developed countries.

Services Sector in developed countries

The sequence of structural change accompanying economic growth or the Fisher –Clark hypothesis of three stages of development has been followed by most developed countries. Today, the Services Sector accounts for more than 70 percent of domestic product and employment in the leading developed countries. In fact in some of the very rich countries the share of services sector in employment exceeds its share in domestic product. The latest information on this from the World Development Indicators, 2011 is given in the table 1. This table clearly brings out the contribution of services sector to national income and employment in the leading advanced countries. The share of services sector in gross domestic product exceeds 70 percent in most of these countries, thus contributing maximum to the economy. It is also evident from this table that services sector in these countries employs maximum labor force. The share of services sector in employment and gross domestic product exactly

correspond to each other in most developed countries and in some the latter even exceeds the former. Further, we can see that in countries like U.S.A and U.K., 90 percent of the female workforce is employed in the services sector. This collaborates with the third stage of development, when maximum resources are concentrated in tertiary production at high levels of per capita incomes. The economic development witnessed in developed world thus substantiates all economic theories and therefore it qualifies for sustainable development. But the scenario in the developing countries is very different and needs to be examined.

Services sector growth in India: The Disproportionality thesis

The developing countries like India exhibit a different pattern of economic growth. The services sector has emerged as the largest contributor to gross domestic product at low levels of per capita income and industrialization in these countries. Contrary to all growth theories these economies have directly moved from agriculture dominated economies to services led economies; that is the second stage of industrial development has been bypassed and these countries have directly moved to the third stage of development at very low levels of per capita incomes. This is the reason economists are skeptical about the sustainability of such growth over a long period of time. In this paper we have tried to explore the India's experience with special focus on employment. The pattern of growth of services sector in the post liberalization period is described in table 2, which gives the share of services sector in employment and gross domestic product since early 90s. A careful perusal of table 2 clearly brings out the disproportionality in its share in domestic product and employment. In early 90s the share of services in gross domestic product was at 44.8% and it grew to 57.2% in 2010 and today it is largest sector of the economy in terms of gross domestic product (58.4%). But when we look at its share in employment, the lag is clearly evident. In 90s, its labor share was at 19.1% which increased to only 25.4% in 2010; the disproportionality in the two shares is clearly seen. The services sector's share in employment has remained less than half of its share in gross domestic product. The development pattern of services sector is thus lopsided; its share in labor force has not kept pace with its share in domestic product like in the case of developed countries. This questions the sustainability of the Indian growth pattern. Therefore, we now try to examine the pattern of current state of employment in services sector; intrasector as well as interstate and also try to draw inferences for services led economic growth.

Table 1: Services Sector share in Selected Developed Countries in GDP and Employment

Countries	Gross Domestic Product (2010)	Employment (2005-08)	
		Males	Females
U.K.	78.4	66	90
U.S.A.	78.2	68	90
France	78.1	61	86
Germany	72.5	56	83
Canada	70.2	65	88
Japan	70.0	59	77

Source: World Development Indicators, 2011.

Table 2: Share of Services Sector in gross domestic product and employment in India
(Post-reform period)

YEAR	GDP	EMPLOYMENT
1993-94	44.8%	20.5%
1999-00	49.9%	23.9%
2004-05	53.1%	24.8%
2009-10	57.2%	25.4%

Source: NSSO, Surveys on Employment and CSO, National Accounts Statistics

Table 3: Latest Indian employment story (2009-2010)

SECTOR	% PERSONS	% MALES
PRIMARY	53.2	47.1
SECONDARY	21.5	23.5
SERVICES	25.4	29.5

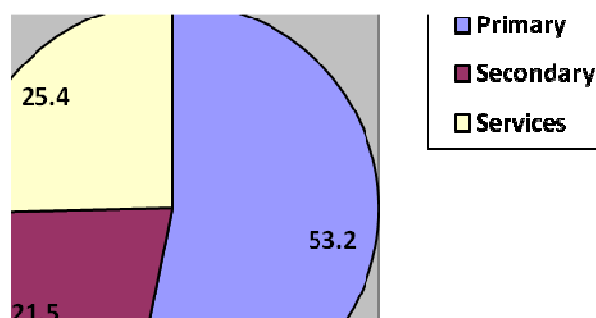
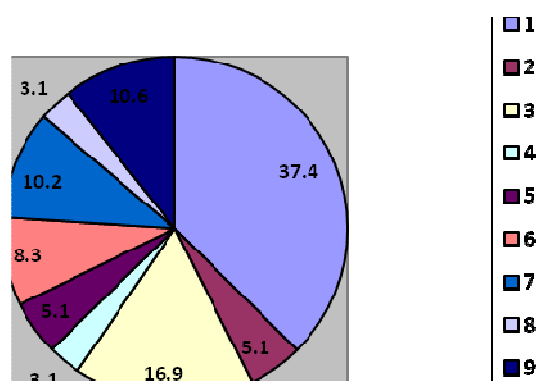
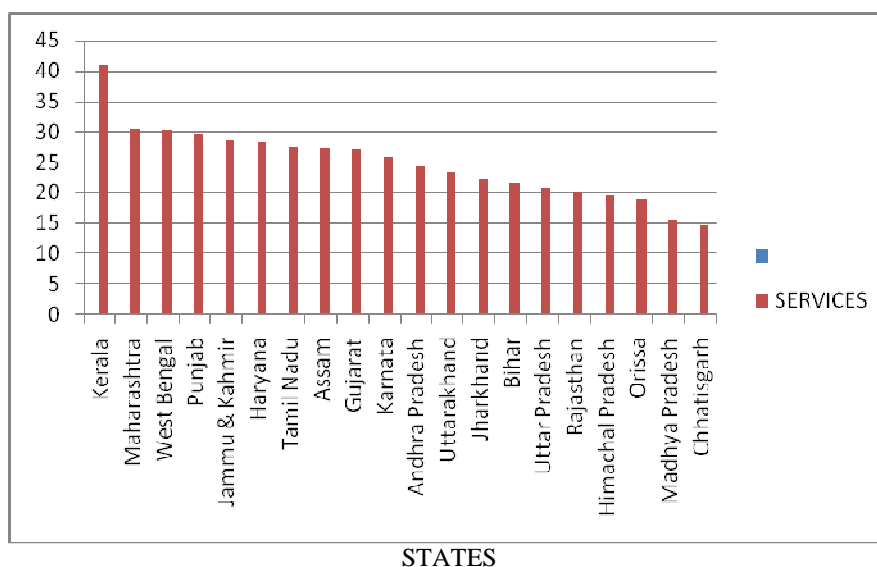
**Figure 1:** Composition of Labor force (persons employed) in India

Table 4: Structure of Services Sector Employment; 2009-2010

SUB SECTORS OF SERVICES SECTOR	PERSONS	MALES
1) Wholesale and Retail trade	37.4	40.0
2) Hotels and Restaurants	5.1	5.4
3) Transport storage and communications	16.9	20.0
4) Financial intermediation	3.1	3.4
5) Real estate , renting and business activities	5.1	5.4
6) Public administration and defence	8.3	8.5
7) Education	10.2	7.1
8) Health and Social work	3.1	2.0
9) Other community, social & personal services	10.6	8.1

Source: 66th round of NSSO

**Figure 2:** Labor Share in the Sub-Sector of Services Sector (serial nos. as in table4)**Figure 3:** Percent Share in Services Sector Employment

MATERIALS AND METHODOLOGY

In order to study the pattern of employment in services sector across its various subsectors and 20 major Indian states data from the latest 66th round of NSSO has been taken. National Sample Survey Organization (NSSO) regularly conducts Pan – India surveys on employment to collect micro level data. The services sector employment comprises of the total number of persons employed in following subsectors as per the descriptions of the sections of NIC 2004: wholesale and retail trade, hotels and restaurants, transport, storage and communications, financial intermediation, real estate, renting and business activities, public administration and defense, education, health and social work, and other services (in which we have clubbed other community, social and personal services, activities of private households as employers and extraterritorial organizations and bodies together). In order to describe and analyze the pattern of interstate variations in employment in services sector and its subsectors various statistical measures have been used. Further to bring out the regional pattern, regression analysis and dummies have been used for the two regionalization schemes that have been considered.

RESULTS AND DISCUSSION

The Employment Story: From 66th round of NSSO

The data given in table 3 and displayed in figure 1 unfolds the latest Indian employment story. In India 53.2% of the labor force (persons) is still employed in primary sector, followed by 25.4% in services sector and 21.5 % in secondary sector. The same pattern is seen in case of males employed in the three sectors. The largest proportion of the labor force is engaged in primary activities; although the share of the primary sector in gross domestic product has been steadily declining. The services sector led economic growth can be sustainable only if the surplus labor parked in agricultural sector is shifted to industrial and services sectors. Since the labor absorption capacity the manufacturing sector is low because of its increasing use of labor saving technology, therefore increasing employment in services sector is a more viable option for sustainable development as many of the services sector activities are labor intensive.

Employment pattern in subsectors of services sector

From the above information it is evident services sector is the second largest employer of labor force, both, in case of persons and males. Now we look into the structure of this sector. The services sector comprises of a large number of subsectors, but NSSO

data is available in terms of its divisions into nine major subsectors, as mentioned earlier, namely; wholesale and retail trade, hotels and restaurants, transport, storage and communications, financial intermediation, real estate, renting and business activities, public administration and defense, education, health and social work and other services. The heterogeneity in the pattern of employment across the 9 subsectors of services sector is clearly revealed in table 4 and figure 2. The maximum labor force is employed in wholesale and retail trade (37.4 % persons and 40% males) sub-sector of services sector, followed by transport, storage and communications sub-sector at 16.9% persons and 20% males and 10.2% of total persons are employed in services sector work in the education sub-sector. The least developed sub-sectors in terms of employment share are health and social work sub-sector and financial intermediation with both contributing only 3.1% (persons) to employment. The share of real estate, renting and business services is also quite low at only 5.1%. The structure of the services sector is clearly skewed in favor of sub-sectors which employ low quality and less skilled labor [4]. The financial services sub-sector, which is highly developed in developed countries, shows very low levels of employment in India. So looking at the structure of services sector considerable development potential lies in hotels and restaurants, financial intermediation, health and social services subsectors. The contribution of these subsectors gross domestic product is very high, so the development of employment opportunities in these subsectors should be the main focus of the economic policies aimed at sustainable development in coming years.

Labor share across 20 major Indian states: Exploring the heterogeneity

The pattern of employment in the services sector and across its various sub sectors in India as a whole has come out very clearly. But given the size and diversity of India it is very unlikely that the employment in services sector and its subsectors across the various states would exhibit a similar pattern. The states in India differ on account of topography, historical experience, size, location, per capita income levels etc. This heterogeneity across the states is bound to impact the role services sector in sustainable development; therefore needed to be explored. The interstate variations in the labor share of services sector in 20 major Indian states are clearly visible in the information displayed in figure 3. The interstate variations in the services sector development in terms of labor shares comes out more explicitly from the data given in table 5. Similar to the all India pattern, the services sector has emerged as the largest sector in terms of net state domestic product in all the major states but its share in

employment needs to be examined. In all the states, except Kerala, the share of primary sector in labor force is the largest. It is only in Kerala that services sector has emerged as the largest sector; out of the rest 19 states, in 14 states services sector is second in terms of employment share and in 5 states it is third in terms of employment share. In this table the states are arranged in descending order of their labor share in services sector. Kerala leads with 41% of its labor force employed in services sector; it is succeeded by Maharashtra at 30.5% and West Bengal at 30.4% respectively. Chhattisgarh has the smallest size of services sector, only 14.6% of labor force is employed in this sector. It is preceded by Madhya Pradesh (15.6%) and Orissa (19%). The interstate variations in the employment further become clear from the coefficient of variation; the co-efficient of variation is largest in case of services sector employment (48.4%) across the states compared to secondary and primary sectors. The interstate variations in the employment share of services sector is further highlighted by the fact that the labor share of services sector in Kerala is 2.8 times that of Chhattisgarh.. Even in the case of two leading states we find a difference of almost 10 percent points in labor share in services sector. Further it is also seen that equal number of states lie above and below the mean labor share of services sector. Thus heterogeneity across the states in terms of employment share of services sector is clearly visible; Kerala is the only state where the share of services sector in labor force and net state domestic product correspond.

EMPLOYMENT IN SERVICES SECTOR: IMPACT OF REGIONAL LOCATION AND LEVEL OF DEVELOPMENT

The heterogeneity in the employment share of services sector across the country was further explored to find out whether there is any regional pattern i.e. impact of location of state. For this purpose regionalization scheme used was: coastal states and non coastal states. Similarly, the impact of level of development was analyzed by dividing the states into; high income and low income states. For regression analysis coastal and per capital dummies were generated. The coastal states were given a value 1 and non coastal states value 0; similarly high per capita income states were given a value 1 and low per capita states value 0. The regression results are reported in Table 6 and show that the labor force employed in services sector is significantly higher in coastal states compared to non-coastal states [5]. The share of employment in services sector in coastal states is 5.59% higher than non coastal states on an average; as indicated by the differential intercept coefficient being significant at 1 % level. It is also found that in high per capita income states the differential intercept is significant at 5% level, which

indicates that states with higher per capita income have 5.2% larger employment in services sector compared to low income states on an average. So the location as well as high per capita income of the states leads to higher development of services sector employment, on an average.

Interstate variations in the employment in subsectors of services sector

Now we proceed further to study the structure of services sector in the states to explore the intra sector variations across the states in services sector employment. The heterogeneity in the employment in sub-sectors of services sector across the states is brought out clearly by the information given in table 7. From the mean shares of each sector across the states it is observed that the largest employer is the wholesale and retail trade sub-sector (37.4%), followed by transport and storage sector (16.5%) and education sub-sector (12%). The least employment across states was found in financial Services (2.9%) and health services (3.3%). The co-efficient of variation further reveals the extent of variations. The maximum variation were found in financial services (c.v.64.4%), real estate subsector (48%) and public administration and defence (46.7%); indicating high employment in some states and very low in others. The least variation were found in wholesale and retail sub-sector (c.v.13.3%) and transport and storage subsectors (19.3%). Incidentally these subsectors are also the ones which employ the maximum labor force across most states. It means these two subsectors of the services sector are uniformly developed across the states of India; probably because both employ labor force with low skill level.

CONCLUSIONS

From the above analysis the present state of employment in India has come out clearly. The share of employment in services sector lags considerably behind its share in gross domestic product. The same story is seen across the states. There are considerable interstate variations seen in labor share of this sector across the 20 major states and 9 main sub-sectors. The location as well as high per capita income of the states leads to higher development of services sector employment. Kerala is the only state where both the shares of this sector correspond. The wholesale and retail and transport, storage are the two subsectors of the services sector that are uniformly developed across the states of India; probably because both employ labor force with low skill level.

Sustainable development is simply the kind of development that goes on delivering its benefits indefinitely [6] or in other words sustainable development is the development of an economy which can be sustained over a long periods of time.

Table 5: Sectoral shares in employment: Major states (2009-2010)

States	Services	Primary	Secondary
Kerala	41.0	29.5	29.5
Maharashtra	30.5	52.4	17.1
West Bengal	30.4	43.8	25.9
Punjab	29.5	44.2	26.2
Jammu & Kashmir	28.6	50.1	21.4
Haryana	28.3	44.4	27.2
Tamil Nadu	27.6	44.6	27.9
Assam	27.2	64.2	8.7
Gujarat	27.0	53.4	19.5
Karnataka	25.9	55.8	18.3
Andhra Pradesh	24.4	54.8	20.7
Uttarakhand	23.4	56.4	20.3
Jharkhand	22.2	46.3	31.4
Bihar	21.6	61.9	16.6
Uttar Pradesh	20.9	56.1	23
Rajasthan	20.1	52.8	27.1
Himachal Pradesh	19.6	59.7	20.7
Orissa	19	60.8	20.1
Madhya Pradesh	15.6	68.8	15.5
Chhattisgarh	14.6	74.1	11.3
Mean	24.87	53.7	21.42
C.V.	48.4	18.8	27.8

Source: 66th round of NSSO

Table 6: Regional pattern in the employment in services sector: Regression Results

Dependent Variable: Persons employed in Services sector		
	Coastal Region (Coastal=1; Non-Coastal=0)	Per Capita Income (Low=0; High=1)
Intercept	22.633 (14.18) ^a	22.27 (12.57) ^a
Differential Intercept	5.59 (2.22) ^b	5.2 (2.08) ^b

- Note:
1. Figures in the parenthesis are t values.
 2. a and b indicates 1% and 5% level of significance respectively.
 3. No. observations =20
 4. Equation Used: $Y = a + bD + u$, where Y is the dependent variable and D is the dummy variable

Table 7: Intra sector variations in the services sector employment

States	Wholesale & retail	Hotels & trade	Transport & storage	Financial Intermediation	Real estate	Public adm & defense	Education	Health	Other services
Andhra Pradesh	35.2	6.1	19.3	3.7	0.0	5.7	9.8	2.9	12.7
Assam	40.8	2.6	12.9	1.1	1.5	9.9	12.1	1.5	17.6
Bihar	45.4	2.8	19.4	2.3	1.9	3.2	9.7	1.4	13.9
Chhattisgarh	37.7	2.7	12.3	1.4	4.1	9.6	18.5	4.8	8.9
Gujarat	36.7	3.7	20.0	3.7	4.8	6.3	7.8	4.1	13.0
Haryana	36.0	3.2	16.6	2.8	6.0	11.7	10.6	4.2	8.8
Himachal Pradesh	26.0	4.1	16.3	4.1	1.5	13.3	24.0	4.6	6.1
Jammu & Kashmir	33.2	3.5	12.9	2.4	3.5	22.4	12.9	3.8	5.2
Jharkhand	43.2	4.1	18.5	2.7	2.3	6.3	10.8	2.3	9.9
Karnataka	35.5	7.7	17.0	3.5	9.7	4.6	10.0	2.3	9.7
Kerala	30.2	6.3	19.0	5.6	6.6	6.1	10.5	5.6	10.0
Madhya Pradesh	42.9	3.2	12.2	2.6	2.6	12.8	10.9	3.2	9.6
Maharashtra	30.5	6.9	16.7	5.2	8.2	8.9	9.2	3.0	11.5
Orissa	38.9	5.3	19.5	2.1	1.1	8.9	13.7	3.2	7.4
Punjab	38.3	4.4	15.6	3.4	2.4	11.2	10.2	4.1	10.5
Rajasthan	39.3	4.5	17.4	2.0	3.5	7.0	14.9	2.5	9.0
Tamil Nadu	34.8	7.6	21.0	3.3	7.2	6.9	8.3	2.9	8.0
Uttarakhand	39.3	5.6	9.0	2.1	5.6	9.4	16.7	3.0	9.4
Uttar Pradesh	44.5	5.3	15.3	2.4	2.4	9.1	9.1	2.9	9.1
West Bengal	39.5	4.9	18.4	2.3	3.0	6.3	10.2	3.0	12.5
MEAN	37.4	4.7	16.5	2.9	4.1	9.0	12.0	3.3	10.1
CV	13.3	33.8	19.3	48	64.4	46.7	32.5	33.3	27.7

Source: 60th round of NSSO

Taking cues from the development experience of the developed countries, a development model that is sustainable and improves the quality of human life would be model where more employment opportunities are generated leading to better standard of living and reduction in poverty and disguised unemployment. Given the population size of our country, all the physical resources in the country are already overstretched. Further development of industry would aggravate the depletion of already strained resources. The growth of manufacturing sector is not only slow but also requires huge capital investments and resources. The development of employment opportunities in services sector is more cost effective as shown by the Kerala's development experience. In Kerala, services sector is the largest employer of labor force and the two shares of this sector exactly correspond to each other like in the case of developed countries. So the Kerala development model would be probably the most appropriate and a sustainable model of development for a country like India. As we achieve higher literacy rates, the quality

of labor force would also improve facilitating the development of those subsectors of services sector that require highly skilled labor like financial services. The development of employment in services sectors has interlinkages with industrial sector growth also, which will enhance industrial development further. Therefore, we can conclude that economic policies should now be aimed at development of employment in services sector with special focus on hotels and trade, financial services and health and social services subsectors.

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