Shift from Conventional to Tertiary Sector: Emerging Dimensions of Service Sector in India

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Most of the developing economies, in the last decade, have undergone a significant structural shift An underdeveloped economy is characterized by a predominant share of agriculture; with development the share of industry increases and that of agriculture declines. Correspondingly the share of manufacturing and service sectors increases with the share of the manufacturing sector growing at a faster pace than that of the service sector. After reaching a reasonably high level of development, the importance of the service sector increases, and it becomes a significant contributor of the economy. This pattern holds true across the different countries, which are at various levels of development (Papola, 2005). All countries, irrespective of the time embarked upon the modern economic growth, on average had a similar sequence of changes in their structure starting with a predominance of agriculture, shifting to industry, and then in favour of the service sector. India has been one exception where the shift has been directly from the primary to the tertiary sector.

Nature of Services

Services were traditionally thought as non-tradable and consequently the theories that developed for explaining goods did not pay explicit attention to services. However, in the past two decades trade in services has grown rapidly

Faculty, IILM College of Management Studies, Greater Noida and this has led to a vast literature and some of the fiercest debates on certain issues regarding trade in services.

The earliest attempt to define services was made by Hill(1977) who argued 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 goods that can be produced and then stored. This makes it essential for the user and the 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 that there exists a range of services which do permit a separation (in space as well as in time) of the location of production and consumption, so that service trade may take place either at the factor or at the product level. Bhagwati (1984) argues that services can be divided into two categories; first, those that necessarily require the physical proximity of the user and the provider; and second, those that do not essentially require this though it may be useful. Services that require essential physical proximity have been further categorized into three groups:

- mobile provider and immobile user, e.g. shifting labour to the construction site in other country
- mobile user and immobile provider, e.g. hospital services
- mobile user and mobile provider, e.g. lectures, haircuts, etc.

Bhagwati (1985) argues that services for which physical proximity is inessential, i.e. the long distance services, are on a rise owing to technical progress, e.g. banking and insurance. However, unlike in the case of goods where factor mobility and trade are distinct phenomena, in the case of services the distinction vanishes as factor mobility and trade in services are two integral aspects of service transaction. But, Stern and Hoekman (1988) point out that services can be: complementary to trade in goods; substitute for trade in goods; and unrelated to goods. All these characteristics have implications for how trade can occur.

For the purpose of classifying international transaction in services the most commonly used is provided by Sampson and Snape(1985) and modified by Sapir and Winter (1994). This classification, which is based on the constraints on physical location of producer and consumer in realizing the transaction, has been adopted by the World Trade Organization (WTO) under the General agreement on Trade in Services (GATS). The Agreement applies to four "modes of supply":

- Mode 1: cross-border supply of service (i.e. not requiring the physical movement of supplier or customer)
- · Mode 2: Provision implying movement of the consumer to the location of the supplier
- Mode 3: Services sold in the territory of a Member by (legal) entities that have established a presence there but originate in the territory of another Member

· Mode 4: provision of services requiring the temporary movement of natural persons.

Many studies adopt a broader and simpler definition of services that help in distinguishing services from goods. One such broad definition of services is: services form a diverse group of economic activities not directly associated with the manufacture of goods, mining or agriculture.

Literature Review

The basic characteristics of services on which most of the classifications are based are: *non-transferability* and *non-storability*. Other associated characteristics are that services are heterogeneous and flexible in production and imperfect competition is highly relevant for services. While Hill points out the differences in goods and services, many studies argue that these differences do not necessarily apply to trade (Hindley and Smith, 1984). Accordingly, in the absence of a developed 'theory' of trade in services, theories put forward to explain trade in goods such as the comparative cost theory and the new trade theory are often applied to services. Sapir and Winter (1994) in their survey of literature on service trade also conclude that, under perfect competition, the theory of comparative advantage applies to international trade in services as well as to trade in merchandise. But, some of the studies argue that the introduction of services do require a different approach, which necessitates a reinterpretation of the law of comparative advantage.

According to Melvin (1987) application of the comparative advantage and the Heckscher-Ohlin theorem to services requires different interpretations. In particular, the paper puts forward a theoretical model, which shows that if a mobile service is used intensively in the production of the mobile commodity, then the country that is well endowed with the *k*-factor will nevertheless import the *k*-intensive commodity. One reflection of the model is that a service-exporting country will have a merchandise trade deficit; this indicates a comparative advantage in the service sector. Hindley and Smith (1984) argue that the non-transportability of services affects the basic economic concepts. For one, unlike in the case of goods, for services it is unlikely that the integrated world market will lead to uniform prices in different national markets since it is not possible to reproduce the price-quality combination of the services produced in country A as in country B, which is possible in the case of goods. Thus, though in general theory of trade in goods has been applied to trade in services, the unique characteristics of services (e.g. non-transportability and intangibility) emphasise the need for a new theory of trade in services that would help in explaining the cross-country pattern of specialization in services.

In the work of Kuznets (1966), based on the historical experience of nations, the tertiary sector is seen to expand in relative terms only when development matures and there is a considerable rise in per capita income following rapid industrialization. However, in the context of developing countries, the phenomenon of a relatively large tertiary sector has been widespread (Gemmel, 1986). It is easy to rationalize this pattern of growth in the context of developed countries because, following the rapid progress of industrialization, the demand for several services grows faster, which in turn reduces the

share of the secondary sector in the total product of the economy. But in the case of developing countries, the dominance of the tertiary sector before the secondary sector's relative size could increase to a reasonably high level did invite concerns at least in the past. In reference to the rapid expansion of this sector in the first half of the nineteenth century, Rao (1954) argued that it could be an indication of economic progress in the case of countries that recorded a sharp rise in the per capita figures of national income at constant prices, but it was not equally a matter of satisfaction in the case of countries like India, which showed no change in per capita terms. Even in his later work, Rao (1986) expressed considerable concern over the growth of the tertiary sector in the post-independence era: 'There is a great deal of quality difference in the share of the service sector in the economic growth that is taking place in the industrially developed countries and in the industrially developing countries."

Bhattacharya and Mitra (1990) argue that a wide disparity arising between the growth of income from the services and commodity-producing sectors results in inflation and/or higher imports, leading to an adverse balance of trade. After three decades of sluggish growth rates since the mid-1980s, India has been experiencing reasonably high growth rates. Several studies suggest that the main contribution to this change has come from the tertiary sector in the absence of a sustained and persistent phase of industrial growth (Bhattacharya and Sakthivel, 2004; Kapila, 2004; Reserve Bank of India [RBI], 2006).

Mitra (1992) observed that the rapid growth of income from the tertiary sector did not necessarily reduce poverty, as it did not create new employment opportunities. In other words, the rise in income from the tertiary sector was seen to have resulted from a rise in income of those who were already engaged in the high-productivity segment rather than from the addition of income of new entrants to the job market. In sharp contrast to this view, factors like the increasing role of the government in implementing the objectives of growth, employment generation and poverty reduction, expansion of defence and public administration, the historical role of the urban middle class in wholesale trade and distribution, and demonstration effects in developing countries creating demand patterns similar to those of high-income countries have been highlighted to offer a rationale for the expansion of the tertiary sector (Panchamukhi, Nambiar, and Mehta, 1986). As the elasticities of service consumption with respect to total consumption are higher than unity even in countries with very low per capita consumption (Sabolo, 1975), the rapid growth of the tertiary sector has been further rationalized in terms of a strong demand base in the economy. Sub-sectors like transport, communication, and banking do contribute significantly to overall economic growth. Especially, the role of information technology (IT) and business process outsourcing services (BPOs) in enhancing economic growth has been noticed widely in the post-reform period in India (Gemmel, 1986; World Bank, 2004).

Datt (2002) points out that the tertiary sector's contribution to GDP has increased steadily over time, and it has established itself as the largest sector of the Indian economy. While he notes the importance of some of the sub-sectors like transport in the context of growth–and includes it in the secondary sector–he also shares the view that the growth of other sub-sectors like public administration and

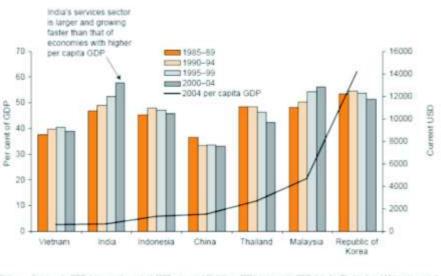
defence are neither necessarily related to the demands of the development process, nor are they related to the need for improvement in the overall efficiency in a developing economy. However, after making price adjustments, his recalculations of the series did not really show that the tertiary sector expanded much faster than the GDP growth at constant prices. The rise in the share of this sub-sector in GDP is a reflection of the rise of the cost of services, and hence it would be erroneous to suggest that this sub-sector is expanding very fast. Equally important as the effects of the sector on growth are the effects on the well-being of the population, especially the poor. Ravallion and Datt (1996) noted that the changing composition of growth in favour of the tertiary sector has been important for poverty reduction in India, as it has generated employment and simultaneously enhanced real income. The effects of the sectoral growth on poverty are strongly linked to human development. The skill requirement to participate in the new activities varies across different sub-sectors. Ravallion and Datt (2002) show that the elasticities of poverty to non-agricultural growth depend on the initial conditions. Similarly, Thorbecke and Hong-Sang (1996) show in the case of Indonesia that the low skills needed for agriculture and some services make these sectors more pro-poor than the usually skill-intensive manufacturing. Rao (1954) discounted it as an indicator of development in the context of a developing country. However, Bhattacharya and Mitra (1990) felt that the service-led growth could have serious implications for inflation, income distribution, and balance of payments since income (employment) might have grown faster than employment (income) in organized (un-organized) services. Besides, income from the service sector is growing much in excess of the demand generated for services by the commodity sector. Further the above study adds that a shift in value added mix towards industry and tertiary activities has caused a larger decline in the incidence of poverty in the 90s compared to that in the 80s. Ravallion and Datt (1996) also observed a significant role of sectoral composition of economic growth in reducing poverty in both urban and rural areas. While stressing on the tertiary sector growth in delivering gains to India's poor, they emphasize promoting growth in agriculture despite its declining share in value added. However, Datta (1989) has refuted the overgrowth of the service sector. Papola (2005) argued that, for the Indian population, income elasticity for industrial goods is also high besides income elasticity for service goods. As a result, the demand for industrial goods is bound to rise along the demand for services which can create macroeconomic imbalances leading to inflationary demand. The consumption basket of the Indian population still consists predominantly of commodities and only a small part of services.

Growth in Services

Whereas the East Asian economies' success has largely been built on the development of export-oriented manufacturing, India's recent growth has been led by the dynamism of its service sector – particularly high-end, knowledge-intensive services exports. Following the trade liberalization in 1991, the Indian economy embarked on a path of rapid growth of aggregate output. In particular, it witnessed a high growth rate of service sector output while that of industry was relatively muted. The service sector dominates the Indian economy today, contributing more than half of its national income. The sector has maintained a steady growth pattern since 1996-97. Trade, hotels, transport, and

communication witnessed the highest growth of level 10.8 per cent in 2004, followed by financial services (with the overall growth rate of 6.4 per cent) and social and personal services (5.9 per cent). The share of services in total GDP has grown phenomenally and the sector has been the highest contributor to the total GDP growth rate. Service providing industries such as IT services, IT enabled services, healthcare, tourism and hotels, communication, media and entertainment, trade and retail, banking financial services, and transportation and logistics form the mainstay of the Indian economy today. They now contribute to some 60 per cent of India's GDP, based on the WTO definition of services which includes construction. Manufacturing, by contrast, has maintained a stubbornly static share at around 20 per cent, while the share of agriculture – still by far the largest employer – has dwindled. Productivity growth in India, unlike virtually all other regions of the world, has been strongest in services (IMF, 2006).

Figure 1 : Services as a proportion of GDP (five year averages) and 2004 per capita GDP in selected Asian economies



Services to GDP data are at constact 1990 prices in US datase. 2004 services to GDP data for Trailerst and Militaria are not evaluate. Pre 1995–2000 services to GDP data for India are 1995–34 price data, which have been resided to evaluate 1993–2000 price data.

Sources: United Nations Statistics Division 2006 for services to GDP data; Indian CSO 2006 for 1999–2000 to 2004–25 services to GDP data on India, RMF Visit Economic Outcok Catabase 2006 for 2004 per septia GDP data.

The service sector in the last decade has grown on average by 7.9 per cent yearly, ahead of agriculture with growth of 3 per cent yearly and the manufacturing sector with annual growth of 5.2 per cent. In contrast, we find that in countries like Thailand, Indonesia, and China, the agriculture sector has grown at an average rate of 1.5 per cent, 1.9 per cent and 3.8 per cent while the manufacturing sector has grown at the rate of 7.2 per cent, 6.6 per cent and 12.2 per cent respectively. Corresponding

growth rates in the service sector has been 3.9 per cent, 4.5 per cent, and 8.9 per cent. Most of the developing countries have witnessed a lower growth rate in the service sector compared to the manufacturing sector. Higher growth rate in the service sector in India is, therefore, a unique feature.

A striking feature of India's growth performance is that, in the four decades, 1950 to 1990, agriculture's share in GDP has declined by about 25 percentage points, while industry and services have gained equally. The share of industry has stabilized since 1990 and consequently the entire subsequent decline in agriculture has been picked up by the service sector. During the 1990s, the contribution of the service sector to the growth rate of GDP was nearly 60 per cent in contrast to 54 per cent in middle income countries, 43 per cent in least developed countries, and 34 per cent in China. In other developing countries, decline in the agricultural sector's share has been followed by growth in the manufacturing sector's share and the shift towards the service sector has occurred only in the final stages of growth.

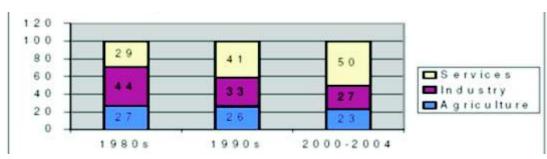


Figure 2: Average Sectoral Contribution to GDP

Source: National Accounts Statistics

Drivers of Services Sector

Strong growth in foreign demand; deregulation, liberalization of foreign investment and greater private sector participation since 1991; increased industry outsourcing; and high income elasticity of demand for services have been among the key factors driving high growth in India's service sector (Gordon and Gupta, 2004). Access to external markets and domestic reforms have played an important role in creating a dynamic service sector in India. This is directly owing to the development of sophistication in information technology. Technological developments have been the key enabler of the explosion in commercial services trade. Specifically, investment and rapid technological advancements in telecommunications and information technology are driving reductions in the cost of digitizing, transmitting, and processing information, thereby enabling an ever-increasing number of services to be undertaken remotely by specialist providers. India, with its large cohort of engineering graduates and widespread services, is less dependent on large scale investments, and so less subject to investment related regulatory hurdles. Compared to the manufacturing sector, gross product in the services sector (outside of community, social, and personal services) is more concentrated in the largely unregulated 'unorganized' sector. Transport infrastructure shortcomings also tend to have a

lesser bearing on most service sectors. The IT-ITES sector in particular has benefited from a supportive policy approach. A large, relatively low cost, and well-educated workforce, which contains more English-speakers than the United States and Great Britain combined, has enabled India to capitalize on burgeoning export opportunities in high end services.

Foreign investment and liberalization of foreign direct investment (FDI) regimes worldwide have enabled service providers to establish a commercial presence in host countries, which can be critical for the delivery of services (UNCTAD, 2004). Reflecting the strong international demand for services in which India enjoys a comparative advantage, FDI in India's services has grown strongly. The stock of FDI in India's service sector grew at a compound annual rate of 36 per cent between 1992–93 and 2001–2, compared with 20 per cent in other sectors (World Bank, 2004). Close to one-half of total FDI inflows between 2002–3 and 2005–6 were directed to services (RBI, 2006). Business and computer services and finance and insurance sectors have been the main targets. Not surprisingly these are sectors that either have not been subject to significant amounts of regulation or have been deregulated and opened to competition since 1991.

900 Computer services Finance, insurance, real estate 800 and business services Construction 700 ■ Transport Health and medical services Trade, hotels and restaurants 600 Other services 500 400 300 200 100 0 2002-03 2003-04 2004-05 2005-06

Figure 3: Industry breakdown of FDI inflows in Indian services, 2002-03 to 2005-06

Sources: RBI 2005d, Table 1.71; RBI 2006b, Table 1.76.

One of the major drivers of service sector growth in the post-globalization era in India has been the IT and ITES sector. Its success has come largely through rapid expansion of exports tapping into burgeoning world-wide demand, as investment and rapid advancements in telecommunications infrastructure and information technology has enabled an increasing array of activities to be performed remotely. Faced with relatively low levels of regulation, IT–ITES and other fast-growing high-end services such as telecommunications have now reached a size where they are significant

contributors to GDP growth. That is why NASSCOM (2005) reports that, "The IT and BPO industries can become major growth engines for India, as oil is for Saudi Arabia and electronics and engineering are for Taiwan. Saudi Arabia's oil exports accounted for 46 per cent of GDP in 2004; Taiwan's electronics and engineering exports accounted for 17 per cent of GDP in the same year. India's IT and BPO industries could account for 10-12 per cent of India's GDP by 2015." In addition, there is a huge potential for growth in the service sector because of increase in disposable income, increasing urbanization, growing middle class, a population bulge in the working age groups providing 'demographic window of opportunity,' and emergence of a wide array of unconventional /new services like IT, ITES, new financial services (ATMs, credit cards), tourism services (eco-tourism, health tourism), etc.

Though most of the growth in services has been in information technology, business process outsourcing (BPO) services, and knowledge-based activities, other sectors like telecommunications, financial services, community services, and hotels and restaurants have also grown considerably. Growth and improved efficiencies in other key areas such as financial services, transportation, and transport infrastructure are vital to facilitating expansion of other sectors of the economy. This could in turn help ensure that development is more broadly based across both regions and socio-economic groups – and therefore sustainable. Deregulation and foreign investment in such facilitating services drive improved performance within those sectors and bring significant competitiveness to the wider economy given their importance as inputs to other sectors. While reform is proceeding in these areas, much remains to be done. And other sectors which potentially have a critical role to play in improving overall productivity have lagged far behind the growth in the economy as a whole.

Pattern of Growth in India's Service Sector

The growth pattern in the service sector has not been uniform across all services in India. Some services have grown fast in terms of their share in GDP and also in terms of their share in trade and FDI (e.g. software and telecommunications services). But there are some services which have grown fast but have not been able to improve their share in international transactions (e.g. health and education) while there are some services that have in fact witnessed a negative growth and also have a low share international transactions (e.g. legal services).

Within the service sector, the share of trade, hotels, and restaurants increased from 12.52 per cent in 1990-91 to 15.68 per cent in 1998-99. The share of transport, storage, and communications has grown from 5.26 per cent to 7.61 per cent in the same period. The share of construction has remained nearly same while that of financing, insurance, real estate, and business services has risen from 10.22 per cent to 11.44 per cent.

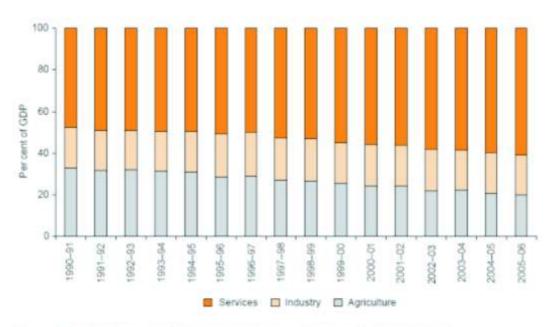


Figure 4: Sector shares in GDP (at factor cost and 1999-2000 prices)

Notes: Fre: 1995-2000 data are: 1993-94 price data, which have been melded to available 1999-2000 price data.

Sources: PIB 2006 for 2005-06 data, Indian CSO 2006 for 1999-2000 to 2004-05 data; RBI 2005e, Table 3 for pre-1999-2000 data.

A closer scrutiny of India's service sector reveals that, amongst services, business services have been one of the fastest growing services in the 1980s closely followed by banking and insurance. In the 1990s, we find that a similar trend continues for business services, which grew by almost 20 per cent. While growth in banking has increased, growth in the insurance sector has slowed down in the 1990s. The prime drivers of growth in services, apart from business services in the 1990s, are found to be communication services (with average growth of around 13.6 per cent) and hotels and restaurants (with average growth of around 9 per cent). However, there is a fall in the growth rates of railways, dwellings and real estate, legal services, and public administration and defense in the 1990s.

Table 1: Average Annual Growth Rates in Services

	1980s	1990s
Trade (wholesale and retail trade)	5.9	7.3
Hotels and Restaurants	6.5	9.3
Railways	4.5	3.6
Transport	6.3	6.9
Storage	2.7	2
Communications	6.1	13.6
Banking	11.9	12.7
Insurance	10.9	6.7
Dwellings, Real Estate	7.7	5
Business Services	13.5	19.8
Legal Services	8.6	5.8
Public Administration, Defence	7	6
Personal Services	2.4	5
Community Services	6.5	8.4
Other Services	5.3	7.1

Source: CSO

Lack of Employment Growth in the Service Sector

Growth in the share of the service sector in GDP is often followed by a corresponding growth in the share of the service sector in total employment in the economy. However, in India, we find that though there has been a phenomenal growth in the service sector, this growth has not been followed by a corresponding high growth in employment in the 1990s. This rise in the share of services in employment has been much slower than the decline in the share of agriculture and manufacturing in total employment. This shows that while output generation has shifted to services, employment generation in services has lagged far behind. In 1999 services contributed around 28.5 per cent of total employment in contrast to 30 per cent in middle income countries, 70 per cent in Singapore, and around 39 per cent in Indonesia. While the share of the service sector in total employment was around 28.5 per cent in 1999-2000, the share of employment differed for different services. In 1999-2000, the

share of different services in total employment in the service sector was as follows: share of trade, hotels and restaurant was 34 per cent, community, social, and personal services, around 31 per cent, construction, 16 per cent, and transport, storage, and communication services, 13 per cent.

This is a unique feature of the service-led growth of India. One explanation for the slow growth of employment in the service sector is that sectors that have large potential for generating employment are growing slowly. The fast growing service sectors also have recorded high labour productivity growth and employment potential is low in these sectors. Trade is positively affecting the growth in those services that do not have large potential for generating employment.

10 5 0 -5 1983-1994 1994-2000

Figure 5: Sectoral Growth of Employment in Organised Sector

- 1. Electricity, gas, and water supply
- 2. Construction
- 3. Trade, hotels, and restaurants
- 4. Transport, storage, and communication
- 5. Financial services
- 6. Community, social, and personal

Source: Planning Commission

The overall employment elasticity in the economy declined sharply from 0.41 in the 1980s to 0.15 in the 1990s. But it increased substantially in transport, storage, and communication sectors. However, there has been a fall in employment elasticity in sectors that are faster growing amongst services and have relatively higher contribution to GDP, e.g. community, social, and personal services and financial services. Trade, which provided maximum employment in the service sector, also witnessed a fall in its employment elasticity.

Table 2: Trends in Employment Elasticity

Sector	1983-84 to1993-94	1993-94 to 1999-2000
Agriculture	0.50	0.00
Mining and Quarrying	0.69	0.00
Manufacturing	0.33	0.26
Electricity, Gas and Water supply	0.33	0.26
Construction	1.00	1.0
Trade	0.63	0.55
Transport, storage and communication	0.49	0.69
Financial services	0.92	0.73
Community, social and personal services	0.50	0.07
Total	0.41	0.15

Source: Planning Commission

A report by Mckinsey & Co. (2001) estimates labour productivity in six segments of India's service sector-telecommunication, software, retail banking, housing construction, energy distribution (electricity), and retail distribution—and finds that India's software services have the highest productivity level amongst all segments, followed by telecommunication, banking, and construction. These are also services that are growing fast and have high shares in GDP and employment. There is a possibility that higher labour productivity in these segments may have led to slower growth in employment in the service sector. Gordon and Gupta (2004) attribute the slow rise in employment in services to the fact that growth in services is concentrated in those services where labour productivity has risen or which are skilled labour intensive. Technological improvements and efficiency gains have further reinforced this trend.

The boom in the service sector has been relatively "jobless". The rise in services' share in GDP is not accompanied by a proportionate increase in the sector's share of national employment. This jobless growth of India's service sector, with no corresponding growth in the share of the manufacturing sector, has raised doubts about its sustainability in the long run.

Contribution of the Tertiary Sector to the State Income

The relative size of the tertiary sector grew considerably across states over the period 1980–1981 through 1997–1998. By the turn of the last century (1997–1998), it accounted for nearly half of GDP in the states of Andhra Pradesh, Assam, Karnataka, Kerala, Maharashtra, Tamil Nadu, and West Bengal. However, inter-state variations in the share of the tertiary sector remained more or less same over the 1980s and 1990s, suggesting the possibility that this sector grew across all states. The share of the banking sector in total tertiary sector value added increased in most of the states during this period. In some of the states like Bihar, it accounted for a considerably small share in 1980–81 (around 5 per cent or so), which then more than doubled by 1997–98. In some of the industrialized states like Maharashtra and Gujarat, the relative size became as high as 34 per cent and 28 per cent respectively in 1997–98.

There have been variations in the pace and pattern of economic growth in different states. These differences are also evident in the case of the tertiary sector. The share of the service sector in net state domestic product was the highest in Tamil Nadu (40.5 per cent) followed by Jammu and Kashmir (40.1 per cent), Assam (39.9 per cent), West Bengal (39.8 per cent), and Maharashtra (38.5 per cent) in the early 1980s. The share of the service sector was the lowest in Madhya Pradesh (26.7 per cent), Haryana (28.5 per cent), Bihar (28.8 per cent), and Rajasthan (29.4 per cent). Punjab's share was 30.9 per cent for the same period. The mean share of the service sector in 17 major states was 33.9 per cent. The ranking of the states changed in the early 1990s with Jammu and Kashmir (45 per cent) followed by Assam (44.6 per cent), Maharashtra (45 per cent), and Tamil Nadu (44.6 per cent). The share of the service sector was the lowest in Punjab (28.5 per cent), Haryana (31.9 per cent), Madhya Pradesh (32.5 per cent), and Bihar (32.3 per cent). The service sector had emerged as the largest sector in terms of its contribution to NSDP in Gujarat, Maharashtra, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, West Bengal, Assam, and Jammu and Kashmir (Shergil, 2003).

Can India's Service Sector Sustain its Growth?

India holds a reputation of cultivating a large and dynamic service sector centered mostly on information and communications technology. For the reformist approach that has led to India's recent growth to be sustainable in the medium to long term, it must demonstrate benefits to all strata of society.

One of the critical issues that have been discussed is the role played by services in the growth process. Though, a forceful case is put forward that services can become the major driving force of economic growth, in the case of India the sustainability of a service-led growth has been questioned by many (Mitra 1988; Bhattacharya and Mitra, 1990; Arunachalam and Kumar, 2002).

It has been argued that income from the service sector is growing much in excess of the demand generated for services by the commodity sector and since income might grow faster than employment in organized services; therefore, service-led growth can have serious implications for inflation, income distribution, balance of payments, lack of social infrastructure, physical infrastructure, etc. (Joshi, 2008a). Besides, challenges in IT and ITES such as rising labour costs, rapid growth in demand for talented manpower/quality staff, high attrition rate, outsourcing backlash, etc. are other limiting factors (Joshi, 2008a). The growth of IT and ITES has social, economic, health, ethical, and environmental implications as well (Joshi, 2008a). The rapid growth of service sector employment simply reflects the outsourcing to service sector providers of activities previously conducted in-house by manufacturing firms; in other words, it is little more than a relabelling of existing employment than new jobs. Sustainability becomes a question as economic theories suggest that a decline in the share of agriculture and manufacturing sectors is a phenomenon that is generally associated with the growth process of a high-income economy and not of a developing country.

To test the issue of sustainability of service-led growth in India, Gordon and Gupta (2004) attempt to find out whether India is an outlier in this case by using cross-country data on sectoral shares in GDP

and fitting a trend line. They found that the share of the service sector in GDP was associated positively with per capita income, i.e. countries with higher per capita income also have a larger share of services in GDP. In the case of India, they found that, in 1990, the share of India's service sector in GDP was very close to the average share predicted by the linear relationship. However, as a result of rapid growth of services in the 1990s, India's share of services moved above the average share by as much as 5 percentage points. But in spite of this, they do not find India to be an outlier at present. However, they argue that if different sectors in India grow at the average growth rates experienced in 1996-2000, then by 2010 the share of services would increase to 58 per cent. This would bring the size of India's service sector, relative to GDP, closer to that of an upper middle income country, even though India would still belong to the low income group.

Services are becoming more and more crucial to the growth process of an economy. They can not only sustain their own growth process but can also improve the growth rate of the manufacturing sector by improving the efficiency of production. The extent to which India's growth path can be sustained - whether growth generated in what remains one relatively small sector of the economy will translate into reform and growth in other sectors; and in particular whether it can adequately address India's need to provide jobs for huge numbers of its unemployed and underemployed rural citizens - will have important implications not just for India itself but also for the world economy. The key imperative for Indian policy makers is to improve the situation of a huge and growing, but relatively low skilled, rural working class. This means creating vast numbers of appropriate jobs. But the main driver of growth in the economy since 1991 has been a knowledge-intensive sector, which is never likely to become a mass employer of low-skilled labour.

External and Domestic Constraints to India's Trade in Different Services

Trade in services can be restricted by external constraints as well as domestic constraints. External trade barriers are mainly in the form of limits on foreign equity participation, recognition and licensing of provisions, immigration and labour market regulations and discriminatory treatment with respect to taxes, subsidies, and other policies. Domestic constraints may result from infrastructure inadequacies, poor quality and standards, lack of clear-cut responsibilities between the centre and state governments, and other policy-related disincentives . Hoekman and Braga (1997) discuss some of the important barriers to trade in services. In the case of some services, trade is prohibited while in others restrictions are imposed. Prohibitions to trade occur in cases where foreign access to service markets is completely forbidden, e.g. in the case of transportation of goods within a country and basic telecommunication service providers. But restrictions to trade takes the following forms: quantity-based barriers; price-based barriers; barriers that impose physical or corporate presence in a domestic market; procedures of government procurement and subsidization; and barriers related to standards, certifications, and industry-specific regulations. Quantitative restrictions (QRs) are often used to restrict international trade in services, but unlike in the case of goods they are applied to providers of services rather than services per se. Along with QRs, price controls are also used to ensure that prices

are not set at either market clearing levels or at the monopoly level. Some of the services subject to price controls in many countries are financial services, telecommunications, and air transportation. Alternatively, tariffs are imposed to restrict trade in services that occurs via the cross-border movement of natural persons: visa fees, entry-exit taxes, port taxes, etc. But tariffs form a potential trade barrier for those services that are either embodied in goods (films, television programmes, etc.) or for goods that are necessary inputs into the production of services (computers, telecommunication equipment). Along with tariffs, service industries are also sometimes supported through explicit or implicit subsidies, especially in construction, communication, and transport, which make it difficult for trade to occur. Other important barriers to trade are standards, provision of licensing, and procurement. In the service context, standard-type restrictions include non-recognition of imported services or services procured abroad (e.g. diplomas or degrees obtained from a foreign country). Environmental standards may influence services related to transportation and tourism. Certification or licensing may required in the case of professional and certain business services. These licences are generally given by the government or professional business bodies and may limit entry into the industry. Government procurement policy may be designed to discriminate in favour of domestic service providers. Examples of such services are education, data processing, and non-medical professional services. Along with these barriers, regulations regarding marketing and distribution can also pose as an important trade barrier. For example, in insurance, regulations on advertisements limit the ability of foreign firms to compete. Also, in the case of branded products, distribution arrangements (e.g. establishment of a dealer network) may act as an important indirect barrier to market access. In order to examine the extent of external and domestic constraints to trade in India's service sector we classify services in terms of their external trade barriers, i.e. extent of liberalization, growth rates, and share in exports of services. The period considered for the extent of liberalization is post -1997 (see Table 3).

Table 3: Extent of Trade Liberalization and Growth

	Substantially Liberalised	Moderately Liberalised	Less than Moderately/ Restricted
High growth (10% and above)	Software services Telecommunication→	Banking →. Insurance → . Travel ↑. Health ↓. Education ↓	
Moderate Growth (5-9%)			Legal
Low growth (0-5%)	Transport (road)	Construction ↓, Air Transport →	Professional services ‡ tike Postal, Accountancy, etc. and Rail Transport ‡

Services that have witnessed substantial to moderate liberalization do not necessarily experience high growth rates. Software services, telecommunication services, and road transport have low external trade barriers but though software and telecommunications have experienced high growth rates, road transport has a low growth rate. Moderate liberalization has been experienced by services like banking, insurance, travel, health, education, construction, and air transport services. Though many of them experienced high growth rates, construction and air transport services experienced low growth

rates. However, services that face high trade barriers have mostly experienced low growth rates, especially professional services and rail transport that are still restricted services.

We also classify services according to their share in total exports of services. The arrows indicate the share of services in total exports of services. An interesting picture emerges from this classification. We find that not all services that have low external trade barriers and high growth rates have high share in exports. In particular, we find that health and education services have low external trade barriers and experience high growth rates but have low share in exports. This reflects high domestic constraints in these services. There exists high potential to trade in these services but domestic policies or infrastructure restricts trade. Further, we find that there are services that are less than moderately liberalized or are restricted with high external trade barriers and low growth, e.g. professional services like legal, accountancy, and rail transport. These services also have a low share in exports, which reflect both domestic and external constraints to their trade. Construction services are also found to have low growth and low share in exports though external trade barriers have been somewhat lowered for them. On the whole it can be said that infrastructure services in India (transport services and construction) are slow growing services and have low share in trade in spite of the efforts to lower external trade barriers in these services. This indicates that these services have high domestic constraints that impede their growth and trade. However, the financial infrastructure appears to be stronger and services like software, banking, insurance, and telecommunications show low external trade barriers and high growth rates with high to moderate share in total exports. But health and education services, though having high potential for trade, suffer from considerable domestic constraints that do not allow higher trade in these services. Professional services are restricted and have low growth and low share in trade.

Conclusion

This paper studies the growth of the service sector in India. It shows that, in common with the experience of many other countries, the service sector in India has grown faster than agriculture and industry. As a result, the share of services in GDP has increased over time. In the 1990s, services growth was particularly strong, and this has led to the services' share in output being relatively large in India compared with other countries at similar levels of development. What is also striking about India's growth experience is that the service sector does not appear to have created many jobs. Admittedly, the employment data suffer from limitations. Nonetheless, unlike the experience of many countries where productivity growth in the service sector has tended to lag behind that of other sectors, it appears that the Indian service sector has been characterized as experiencing increasing labour productivity.

The acceleration in growth of the service sector in India in the 1990s was owing to fast growth in communications, banking services, business services (IT), and community services (education and health). The remaining sectors grew at a constant or trend growth rate. It is shown that factors such as high income elasticity of demand and increased input usage of services by other sectors have played

an important part in elevating services' growth. Also important, at least in the 1990s, have been factors such as economic reforms and the growth in foreign demand for service exports. Significant productivity gains appear to have occurred in the faster growing sectors, leading to a decline in their relative prices. So there is considerable scope for further rapid growth in India's service economy. That Indian service exports have strong future growth prospects is well known, but we also find that there is considerable scope for further rapid growth in other segments provided that deregulation of the service sector continues. Nevertheless, it is imperative that industry and agriculture also grow rapidly. The relatively jobless nature of growth in India's service sector further underscores this need. A large tertiary sector, which has emerged in the Indian context much before the share of industry could dominate the value added composition, is not all that superfluous as it was often thought to be. It has the capacity to enhance economic growth, which contributes to poverty reduction. In other words, the tertiarization of economic growth seems to be pro-poor, though in India there has been relatively slow growth of jobs in the service sector. This is primarily because the rise in labour productivity in sectors such as information technology that is dependent on skilled labour. Growth of services such as hotels holds a large potential for employment generation. IT enabled services such as business process outsourcing have been growing rapidly in the recent past and will continue to rise. India is on the fast track of becoming an important economic force. As a result, the share of services in GDP has come to resemble that of a high income country while its per capita income still remains that of a low income country. No doubt, the dynamics of the service sector infuses new growth impulses stimulating investment, income, consumption, and employment.

It is heartening to note that India is called the service hub of the world. The traditional perception of India stands changed today from a land of beggars, snake charmers, and cyber –coolies of yesteryears to a land of knowledge workers - thanks to IT and ITES (Joshi, 2008b). The question for CEOs the world over is no longer "Should my company go to India?" but rather "Can my company afford not to be in India?" On the tourism front, it is Incredible India, but on the economic front, it is clearly Opportunity India.

References

Arunachalam R. and Kumar, N.K. (2002), "Inter-Temporal Comparison of Inter-Industrial Linkages in the Indian Economy (1968-69 to 1983-83)," *Reserve Bank of India Occasional Papers*, 15 (1), 1-30.

Bhagwati, Jagdish N. (1984), "Splintering and Disembodiment of Services and Developing Nations," *World Economy*, 7, 133-43.

Bhagwati, Jagdish N. (1985), "Why are Services Cheaper in the Poor Countries?" in Grossman, Gene (ed.), *Wealth and Poverty, Essays in Development Economics Series*, Vol. 1. Cambridge: MIT Press, and Oxford: Blackwell, 82-91.

Bhattacharya, B.B. and Mitra, A. (1989), "Industry-Agriculture Growth Rates: Widening Disparities: An Explanation," *Economic and Political Weekly*, August 26.

Bhattacharya, B. B. and Mitra, A. (1990), "Excess Growth of Tertiary Sector: Issues and Implications," *Economic and Political Weekly*, 25(4), 2445-50.

Bhattacharya, B.B. and Sakthivel, S. (2004), "Economic Reforms and Jobless Growth in India in the 1990s" in Sinha, A.K. (ed), *India Towards Economic Superpower: A Journey of Economic Reforms*. New Delhi: Deep and Deep Publications

Datt, Ruddar, (2002), "Economic Liberalization and its Implications for Employment in India," in Mathur, Ashok and Raikhy, P.S. (ed.), *Economic Liberalization and its Implications for Employment in India*. New Delhi: Deep and Deep Publications.

Datta, M. (1989), "Tertiary Sector and Net Material Product: Indian Economy, 1950-51 to 1983-84," *Economic and Political Weekly*, September 23.

Gemmell, Norman (1986), *Structural Change and Economic Development: The Role of the Service Sector*. Houndmills, Basingstoke: Macmillan.

Gordon, J. and Gupta, Poonam (2004), "Understanding India's Services Revolution," IMF Working Paper WP/04/171, September.

Hansda, Sanjay K. (2002), "Services Sector in the Indian Economy: A Status Report," *RBI Staff Studies*, September.

Hansda, Sanjay, K. (2001), "Sustainability of Services-led Growth: An Input-Output Analysis of Indian Economy," *RBI Occasional Working Paper*, 22, (1-3).

Hill, T.P. (1977), "On Goods and Services," Review of Income and Wealth, 23(4), 315-38.

Hindley, Brian and Smith, Alasdair (1984), "Comparative Advantage and Trade in Services," World Economy, 7(4), 369-89.

Hoekman, Bernard and Braga, Carlos Primo (1997), "Protection and Trade in Services: A Survey," *C.E.P.R. Discussion Papers*, 1705.

IMF Statistics Department, Balance of Payments External Debt Division (1993), *Balance of Payments Statistics Yearbook*, Volume 44, parts 1 and 2. Washington, D.C.: International Monetary Fund.

Joshi, Seema (2004), "Tertiary Sector- Driven Growth in India: Impact on Employment and Poverty," *Economic and Political Weekly*, 39 (37), 4175-78.

——(2006a) "Impact of Economic Reforms on Social Sector Expenditure in India," *Economic and Political Weekly*, 41 (4), January 28-February 3.

——(2006b), "From Conventional to New Services: Broadened Scope of Tertiary Sector," *Indian Journal of Labour Economics*, 49(2), 321-35.

——(2008a), Growth and Structure of Tertiary Sector in Developing Economies. New Delhi : Academic Foundation.

—(2008b) "Who will be the 'Services Hub' of the World: India or China?" paper presented at the 9th Annual Sir Arthur Lewis Conference, University of West Indies, Kingston (West Indies), March 26-28.

Kapila, Uma (2004), *Indian Economy since Independence*. New Delhi : Academic Foundation, 765-70

Kochhar, K.; Kumar, U.; Rajan, R.; Subramanian, A.; and Tokatlidis, I., 2006, "India's Pattern of Development: What Happened, What Follows," International Monetary Fund Working Paper WP/06/22.

Kuznets, S. (1966), *Modern Economic Growth: Rate, Structure and Spread*, New Haven: Yale University Press.

McKinsey & Co. (2001), "India- the Growth Imperative: Understanding the Barriers to Rapid Growth and Employment Creation."

Melvin, J.R. (1987), "Services: Dimensionality and Intermediation in Economic Analysis," Institute for Research in Public Policy Discussion Paper.

Mitra, A. (1988), "Disproportionality and the Services Sector: A Note," Social Scientist, April 3-8, 37.

NASSCOM-McKinsey (2005), Extending India's Leadership of the Global IT and BPO Industries, 137 – 50.

Panchamukhi, V. R.; Nambiar, R.G. and Mehta, R. (1986), "Structural Changes and Economic Growth in Developing Countries," paper presented at the eighth World Economic Congress of International Economic Association, Theme 4, New Delhi, December 1.

Papola, T.S. (2005), "Emerging Structure of Indian Economy: Implications of Growing Inter-Sectoral Imbalances," presidential address at the 88th Annual Conference of Indian Economic Association, Vishakhapatnam, December 27-29.

Rao, V.K.R.V. (1954), "Changes in India's National Income: A Static Economy in Progress," *Capital*, December 16.

Rao, V.K.R.V. (1986), "Balance Between Agriculture and Industry in Economic Development," inaugural address at the eighth World Economic Congress of International Economic Association, New Delhi, December 1.

Ravallion, Martin and Datt, Gaurav (1996), "How Important to India's Poor is the Sectoral Composition of Economic Growth?" *World Bank Economic Review*, 10(1), 24-30.

Reserve Bank of India (RBI) (2006), "Invisibles in India's Balance of Payments," *Reserve Bank of India Bulletin*, November. www.rbi.org.in; accessed in November 2006.

Sabolo, Y. (1975), Indian Service Industries. Geneva: ILO.

Sampson, Gary, P; and Snape, Richard, H (1985), "Identifying the Issues in Trade in Services," *World Economy*, 8(2), 171-82.

Sapir, A. and Winter, C. (1994), "Services Trade," in Greenaway, D. and Winters, L. (eds.), *Surveys in International Trade, Blackwell Economic Theory and the Role of Government in East Asian Industrialization.* Princeton: Princeton University Press.

Shergill, G. S. (2003), "Does Industry Matter? The Evidence from a New Zealand Study," Working Paper Series, Department of Commerce, Massey University, Auckland.

Stern, Robert and Hoekman, Bernard (1988), "The Service Sector in Economic Structure and in International Transactions" in Castle, Leslie V. and Findlay, Christopher (eds.), *Pacific Trade in Services*. Sydney: Allen & Unwin.

Thorbecke, E and Hong-Sang, J. (1996), "A Multiplier Decomposition Method to Analyse Poverty Alleviation," *Journal of Development Economics*, 48 (2).

UNCTAD (2004), World Investment Report 2004: The Shift Towards Services. New York: United Nations.

World Bank (2004), "Measuring Trade in Services Liberalization and its Impact on Economic Growth: An Illustration," World Bank Group Working Paper.

World Investment Report (2004), The Shift Towards Services. http://econ.worldbank.org/files/2373 wps 2655.pdf, New York: United Nations.