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WORKING PAPER NO. 171

CRITICAL ISSUES IN INDIA'S SERVICE-LED GROWTH

Rashmi Banga

OCTOBER 2005



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*Rashmi Banga**

OCTOBER 2005

The views expressed in the ICRIER Working Paper Series are those of the author(s) and do not necessarily reflect those of the Indian Council for Research on International Economic Relations (ICRIER).

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Foreword

Most of the developing economies, in the last decade, have undergone a significant structural shift. The share of agriculture in total value added has significantly declined, correspondingly the share of manufacturing and services sector has increased with the share of manufacturing sector growing at a faster pace than that of services sector. However, India is a unique case in this respect. Most of decline in the agricultural sector in India has been picked up by the services sector and it now accounts for more than 50 per cent of the gross domestic product.

Given the growing significance of the services sector, the paper identifies some of the critical issues in India's service-led growth and provides policy insights with respect to them. The critical issues identified are: what explains growth of service sector in India; what are the reasons for lack of corresponding growth in employment in the service sector; can service sector sustain its growth; and what are the external and domestic constraints to trade in different services. An assessment of performance of services at the aggregated as well as the disaggregated level is undertaken in terms of their shares in GDP, employment, trade and FDI. In order to identify external and domestic constraints to trade, services have been categorised according to their extent of liberalisation, growth and share in trade. The paper discusses the policy directions that emerge from the analysis.

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Arvind Virmani
Director & Chief Executive
ICRIER

October 2005

1. Introduction

Service sector has emerged as the largest and fastest-growing sector in the global economy in the last two decades, providing more than 60 per cent of global output and, in many countries, an even larger share of employment. The growth in services has also been accompanied by the rising share of services in world transactions. Testimony to the rise in international supply of services is the fact that trade in services has grown as fast as trade in goods in the period 1990-2003 (i.e., 6% per annum). Along with this, worldwide there has been a marked shift of FDI away from manufacturing sector towards services sector. The share of services in total FDI stock has now increased to around 60% since 2002 as compared to less than half in 1990 and only one quarter in 1970s¹.

In line with the global trend, service sector in India has also grown rapidly in the last decade. Its growth has in fact been higher than the growth in agriculture and manufacturing sector. It now contributes around 51 percent of GDP. In the trade mode, services trade has also grown at the same rate as goods trade over the 1990s (i.e., about 6.5 per cent) and its share in total trade has reached around 24 per cent. Growth of trade in services has also been accompanied by growth in the share of services in total inward FDI. FDI (approvals) into service sector constituted around 30 percent of total FDI approvals in 2003. Interestingly, outward FDI from India has also grown rapidly and in 2003 outward FDI stock in services constituted around 25 % of total outbound FDI stock.

However, though the growth of service sector in India is in line with the global trends, there are two unique characteristics of India's service sector growth. First, the entire decline in the share of agriculture sector in GDP, i.e., from 32 % in 1990 to 22 % in 2003, has been picked up by the service sector while manufacturing sector's share has remained more or less the same. In general, such a trend is mainly experienced by high-income countries and not by developing countries. And second, in spite of the rising share of services in GDP and trade, there has not been a corresponding rise in the share of services in total employment. This jobless growth of India's service sector, with no corresponding growth in the share of manufacturing sector, has raised doubts about its sustainability in the long run.

¹ World Investment Report 2004.

Further, it is found that 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 a low share in international transactions (e.g., legal services).

One of the probable reasons for this lopsided growth in services is the fact that reforms in India at the sectoral level have evolved in an ad-hoc way rather than as part of a coherent overall strategy. Though there exists an overall industrial policy and agricultural policy in India, there is no integrated service policy. Consequently, the pace of reforms and their impact lacks uniformity across sectors. Moreover, most of the services have for a long time been in the public domain and they suffer from both external constraints in terms of high barriers to trade, as well as domestic constraints in terms of being highly regulated services with state monopolies. These services consequently suffer from inefficiencies and low growth.

The main objectives of this paper is to identify and discuss critical issues with respect to growth of India's service sector and provide policy insights thereof. An assessment of performance of services at the aggregated as well as the disaggregated level is undertaken in terms of their shares in GDP, employment, trade and FDI and accordingly different services have been categorized in order to identify crucial constraints on their growth.

The Critical issues that have been identified are:

- I. What is the pattern of growth in India's service-sector, i.e., how do different services compare in terms of their growth rates and shares in GDP, employment, trade and FDI?
- II. What explains growth in India's service sector?
- III. What explains the lack of employment growth in the services sector?
- IV. Can India's service sector sustain its growth?
- V. What are the important external and internal barriers to trade in different services in India?

The paper is structured as follows: Section 2 examines the performance of aggregate service sector and disaggregated services in terms of growth rates, share in GDP, trade and FDI. Section 3 reviews the studies that explain growth of services in India. Section 4 discusses the issue of jobless growth in service sector. Section 5 examines the issue of sustainability of growth

of India's services sector. Section 6 briefly reviews the literature on trade in services and discusses the external and domestic constraints to trade in different services. Finally section 7 concludes the paper with highlights specific policy directions.

2. What is the Pattern of Growth in Services?

Before we examine the pattern of growth in India's service sector, it is important to first conceptualise services and discuss in what respect do they differ from goods.

2.1 Conceptualisation of Services

The earliest attempt to define services was made by Hill (1977 pp336) who argues that "goods and services belong in different logical categories." He focussed on the fact that producers cannot accumulate stock or inventory of services, stressing that services must be consumed as they are produced unlike the goods that can be produced and then stored. This makes it essential for the user and the provider of the service to *interact*. But subsequent to this conceptualisation there have been many studies² 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 categorised into three groups that are:

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

Further, Bhagwati (1985) argues that services for which physical proximity is inessential, i.e., the long distance services, are on a rise due to technical progress, e.g., banking and insurance. 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

² For example, Melvin (1987), Bhagwati (1984)

be: (1) complementary to trade in goods; (2) substitute for trade in goods; (3) 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 classification is provided by Sampson and Snape (1985) and modified by Sapir and Winter (1994). This classification, which is based on the constraints on the physical location of producer and consumer in realising the transaction, has been adopted by World Trade Organisation (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; and

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

Alternatively, 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’. Thus, studies have put forward alternative definitions and classification schemes depending on the purpose of their study. However, the basic characteristics of services on which most of the classifications are based are: *non-transferability and non-storability*. Other associated characteristics of services that need to be noted are *services are heterogeneous and flexible in production* and *imperfect competition* is highly relevant for services.

For the purpose of our study we broadly use the United Nations’ International Standard Industrial Classification (ISIC).³ The broad categories of services in this classification include electricity, gas and water; construction; wholesale and retail trade; hotels and restaurants; transport, storage and warehousing; post and telecommunication; financial institutions; insurance; real estate; business services; machinery and equipment rental and leasing; public administration and defense; sanitary and social services; social and related community services (including education, research and scientific institutions, medical, professional and labour associations, radio and television broadcasting, entertainment services); and personal and household services.

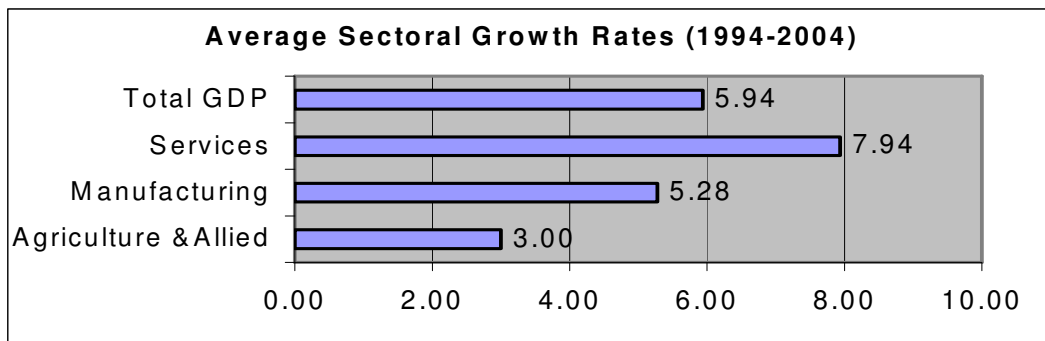
³ Alternatively, United Nations has also developed the Central Product Classification (CPC) for identification of services. This classification is based on products and identifies more than 600 service products.

2.2 Growth in Services

The emergence of India as one of the fastest growing economies in the world in the 1990s can be attributed, to a large extent, on the rapid growth of its service sector. The growth of output in the service sector in the 1990s has been much higher than the growth of output in agriculture or industry. Consequently, contribution of services to GDP in the period 2001-2004, has been more than 60 per cent per annum. However, this growth in the service sector has not been uniform. In order to arrive at some policy direction it is imperative to examine the performance of different services and assess the economy's potentials and constraints in these services. We examine the performance of aggregate as well as disaggregated services in terms of their growth rates; share in GDP, employment, trade and FDI.

We find that the service sector in India witnessed a phenomenal growth in the decade of 1990s. During 1980s, its output grew at the rate of 6.6 per cent per annum, while during 1990s the growth rate increased to 7.5 per cent per annum. In the last ten years (1994-2004), the service sector has grown on an average by 7.9 per cent per annum, ahead of agriculture with growth of 3 per cent per annum and manufacturing sector with growth of 5.2 per cent per annum [as seen in figure 1]. In contrast to this, we find that in the same period in countries like Thailand, Indonesia and China, agriculture sector has grown at an average rate of 1.5 %, 1.9% and 3.8% while manufacturing sector has grown at the rate of 7.2%, 6.6% and 12.2% respectively. Corresponding growth rates in service sector has been 3.9%, 4.5% and 8.9%. Most of the developing countries witness a lower growth rate in the service sector as compared to the manufacturing sector. Higher growth rate in the service sector is therefore a unique feature witnessed by India.

Figure 1



Source Author's estimates using CSO

A closer scrutiny of India's service sector reveals that amongst services, business services has been one of the fastest growing services in the 1980s closely followed by banking and insurance (as seen in **Table 1**). In the 1990s, we find that a similar trend continues for business services, which grows by almost 20 percent, but while the growth in banking has increased growth in 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 %) and hotels and restaurants (with average growth of around 9 %). 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 trade 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, defense	7	6
personal services	2.4	5
Community services	6.5	8.4
other services	5.3	7.1

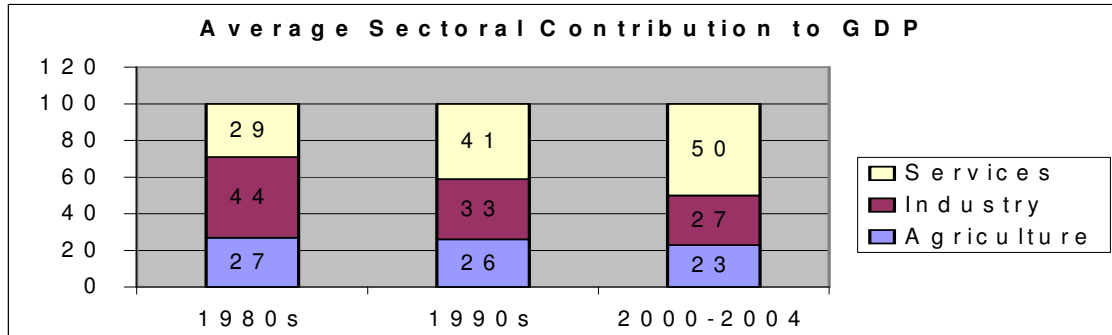
Source: CSO

2.3 *Share in GDP*

A striking feature of India's growth performance is that in the four decade period, 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 stabilised since 1990 and consequently the entire subsequent decline in agriculture has been picked up by the services sector (figure 2). During the 1990s, the contribution of 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. High share of services in GDP is a unique feature of the Indian economy as in other developing countries decline in agricultural sector's share has been

followed by growth in manufacturing sector's share and the shift towards services sector has occurred only in the final stages of growth.

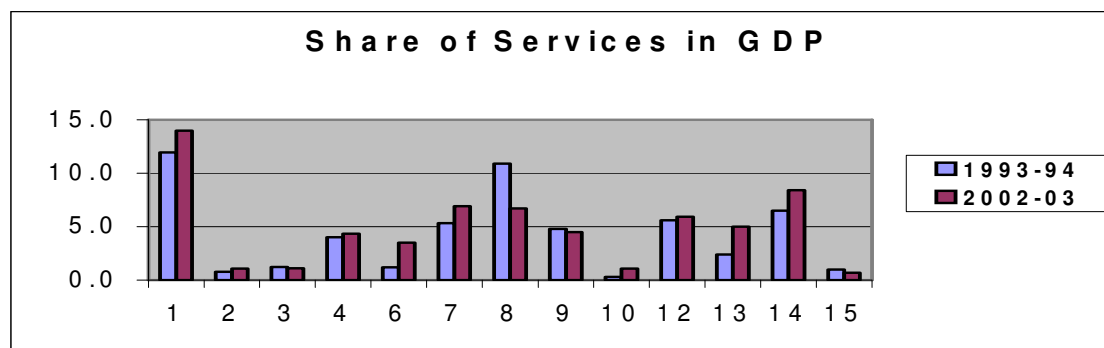
Figure 2



Source: National Accounts Statistics

Further we find that increase in the share of services in GDP has not been the same across the board for different services in India [as seen in Figure 3]. Figure 3 compares share of different sectors in GDP in the last ten years, i.e., 1993-94 and 2002-03. The most important services in terms of their share in GDP in early 1990s were trade (12%), insurance (11%), community services (6.5%), but in 2002-03 we find that the sectoral contributions have changed. Share of trade has increased to 14% and community services to 8.4%. But share of insurance has declined to 7%. Other services that have witnessed a fall in their shares in 2002-03 are railways, real estate and dwellings.

Figure 3



Source: Author's estimates based on Economic Survey and CSO.

Note: Services with share less than one percent has not been shown.

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

3. **Railways**
4. **Transport by other means** (roads, water, air transport, services incidental to transport)
5. **Storage**
6. **Communications**
7. **Banking** (banks, banking departments of RBI, post office⁴ saving bank, non-bank financial institution, cooperative credit societies, employees provident fund)
8. **Insurance** (life, postal life, non life)
9. **Dwellings, real estate**
10. **Business services**
11. **Legal services**
12. **Public administration, defense**
13. **Personal services** (domestic, laundry, barber, beauty shops, tailoring, others)
14. **Community services** (education, research, scientific, medical, health, religious and other community)
15. **Other services** (recreation, entertainment, radio, TV broadcast, sanitary services).

What emerges from the above trends is that, services sector has grown in importance as compared to other sectors in terms of its contribution to GDP and also its growth rates since 1990s. But this growth in share of GDP differs for different services. The most important service in terms of its share in GDP in the last decade has been wholesale and retail trade. But in terms of growth, we find that business services and communications have experienced the maximum growth in the 1990s, but their share in GDP is still quite low. Community services (which include education and health) on the other hand, have improved their share in GDP and also their growth rates in the 1990s.

2.4 Share in International Transactions

The growth in services sector worldwide has also been accompanied by the rising share of services in world transactions. With respect to the Indian economy, we find that similar to the world trend, growth in the services sector has also been accompanied by a substantial growth in international transactions in services. In fact, India's exports of services displayed one of the fastest growth rates in the world, i.e., over 17 % per annum in the 1990s (the world average being 5.6 per cent). Correspondingly, both inward and outward foreign direct investment (FDI) in India's services sector has also grown substantially in the same period.

2.4.1 Share in Trade

Due to the phenomenal rise in India's export of services in the 1990s, India's share in total world exports of services has increased overtime (see **Table 2**). We find that services exports have always been higher than services imports in India.

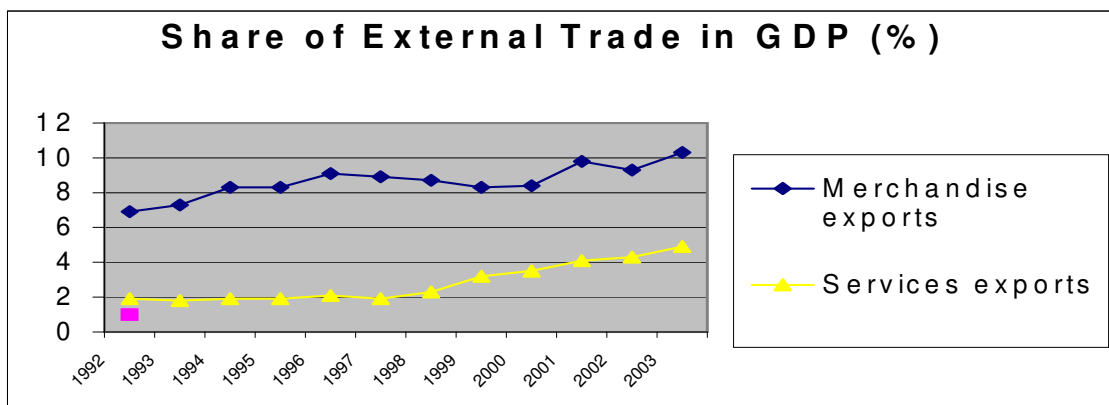
Table 2: India's Share in World Services Exports

Year	Exports of India's Services in (USD bn)	Imports of India's Services in (USD bn)	India's Share in World Exports of Services
1998-99	13.20	11.02	0.99
1999-2000	17.60	11.64	1.20
2000-01	20.40	16.39	1.40
2001-02	20.70	16.08	1.30

Source: WTO, Reserve Bank of India (2003)

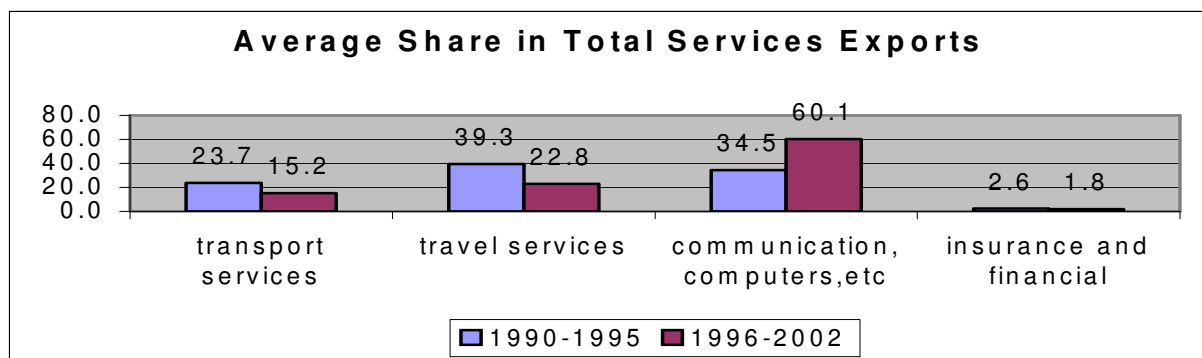
Compared to merchandise exports, we find that the percentage share of exports of services in GDP has steadily risen since 1998 (see figure 4). The share of services in total trade increased to from 19.3 % in 1995 to 24.9% in 1998.

Figure 4



Source: RBI

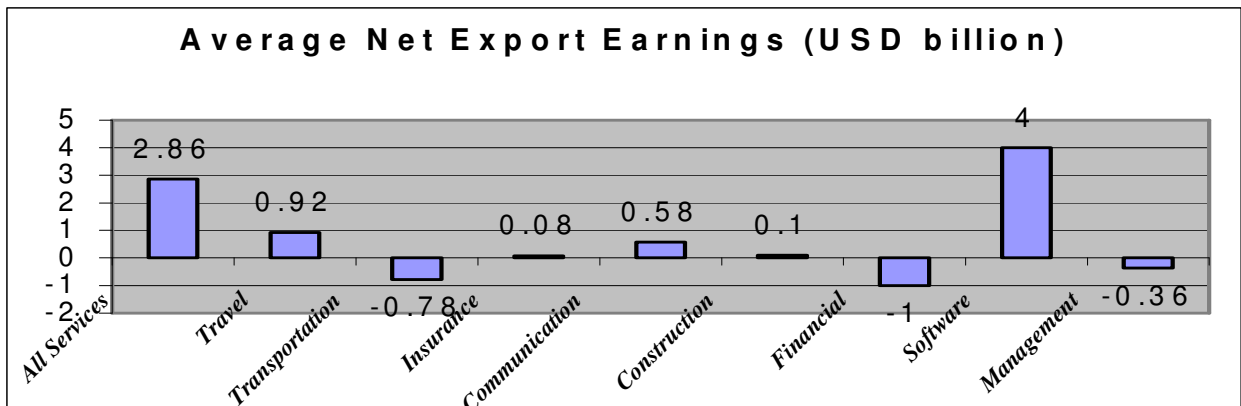
Figure 5



Source: World Development indicators (2004)

However, the composition of India's exports of services has changed over the years [as seen in Figure 5]. In the period 1990-95 to 1996-2002, we find that the relative shares in total exports of travel has fallen from 39 % to 23 %, while that of transportation services has fallen from 24 % to 15 %. On the other hand, there has been a substantial rise in the share of software services from 34 % to 60 %. In fact, India has become a net foreign exchange earner in total services after 1997-98. Services that are net foreign exchange earners are mainly travel, communication and software services while India is a net importer in services like transport, management and financial services (as seen in Figure 6).

Figure 6



Source: Reserve Bank of India.
Average for the period (1998-99 to 2002-03)

According to World Bank (2004), India exhibits a strong revealed comparative advantage (RCA) in services as compared to goods. Between 1996 and 2000, the RCA index for services increased by 74 percent while that for goods declined by 15 percent. This increase in RCA of services was mainly on account of “other business services” which include software exports (IT and BPO), finance, communication, management, consultancy and telecommunication sectors.

2.4.2 Share in FDI

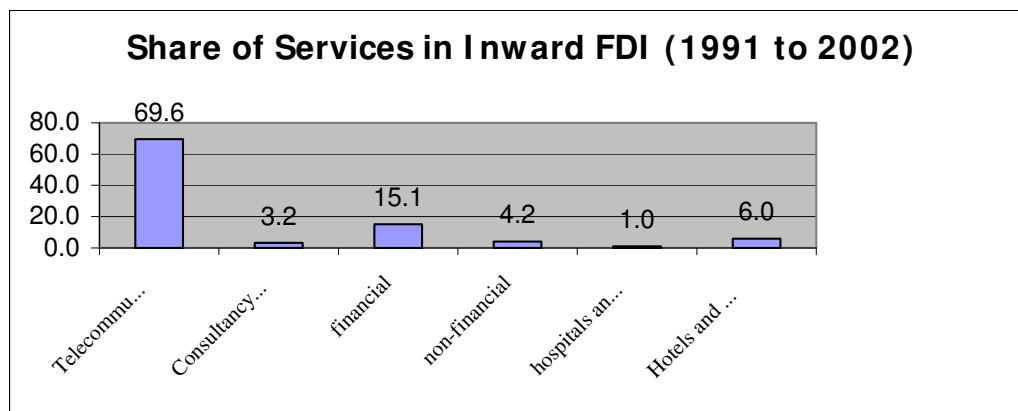
Along with trade, there has been a large inflow of FDI into India since 1990s onwards. India has been ranked in top ten FDI destinations in the World Investment Report (2004). However, this Increase in FDI inflows has been accompanied by a change in the structure of FDI. Following the international trend, FDI inflows into India are also shifting increasingly away from manufacturing sector, towards services sector. The average share of services in total FDI in the

period 1990-94 increased from 10.5 per cent to 28.3 per cent in the period 1995-1999 (World Investment Report 2004).

But, the inflow of FDI into services sector has been biased towards few of the services sectors (see figure 7). Sectors that have received largest approvals are telecommunications and financial services. Within telecommunication, the largest recipient is cellular mobiles. One of the striking features of India's FDI flows is the growing proportion of outward FDI from the services sector. The share of services in total FDI outflow increased to around 45 percent in the period 1999-2003, in which non-financial services constitute around 36%, trade is around 5% and the rest was from financial and other services. It is interesting to note that the sectors that received higher FDI in services, i.e., telecommunications, financial and consultancy services are also the fastest growing services sectors in the economy.

Though the above analysis of performance of different services sectors does point out that trade and FDI in services sectors are also accompanied by growth in the sector, the impact of trade and FDI on the growth of services sectors has not yet been empirically examined. One of the main reasons for this is the lack of data on disaggregated services, both with respect to actual FDI and output of services. However, an important impact of FDI on services that has been studied is the impact on India's exports of back office services (McKinsey & Co. 2003). According to NASSCOM estimates foreign affiliates accounted for around 58% of exports in 2002-2003 of offshore using operations in India.

Figure 7



Source: SIA Newsletter 06/2002. Based on FDI Approvals

On the whole, the above pattern of growth in services brings out an interesting picture. Service sector in India has been the fastest growing sector in the last decade. Within the service sector, we find that the fastest growing services in the 1990s have been trade, communications, financial services, business services and community services like health and education. However, out of these services, we find that it is only communication services that have witnessed growth in their share in exports and FDI during this period. The question that arises is what explains this lopsided growth in India's services sector and can this growth be sustained?

3. What explains Growth in India's Service Sector?

The literature on growth in service sector primarily argues that when an economy grows, both demand side and supply side factors operate that lead to higher growth in the service sector as compared to the other sectors and also lead to a larger share of service sector in total employment. These factors are:

A. Demand-Side Factors

- a) High-income elasticity of demand for final product services,
- b) Slower productivity growth in services that leads to higher employment potential and
- c) Structural changes within the manufacturing sector, which make contracting out services more efficient than producing them in the firm or household.

B. Supply-Side Factors: Trade Liberalisation and Reforms

- a) Increased trade
- b) Higher foreign direct investments in services and
- c) Improved technology

A) Demand-Side Factors

a) High-Income Elasticity of Demand for Final Product Services

High-income elasticity of demand for final product services implies that at any relative price of services the quantity absorbed rises more than the quantity of commodities as real income per capita increases. This explanation for increasing share of services in output and employment in the growth process has been tested by many studies⁴. But the results are ambiguous. We find that this hypothesis, i.e., 'demand for services is income-elastic' tended to find support in early empirical work in the 1980s but in the 1990s studies with better methodologies and better international data found results contrary to this. For example, Falvey and Gemmell (1996) used dis-aggregated data set covering sixty countries in 1980 and re-

⁴ For example, Kravis et al 1983

estimated income elasticity of demand for services. They rejected the above hypothesis for overall services though confirmed it for different types of services.

2. Slower Productivity Growth in Services

It has been long argued that productivity growth in services is slower than that in manufacturing sector. Different explanations have been put forward for it. Following Verdoon's Law⁵, Kaldor (1966) argued that there will be a negative relationship between labour productivity growth in the economy as a whole and the productivity growth in the non-manufacturing sector because most activity outside the manufacturing sector particularly land-based activities such as agriculture and many service activities are subject to diminishing returns. Further, the unbalanced growth models by Baumol (1967) helped in popularising the notion that because of their labour-intensive nature, service-sector activities cannot be made more efficient through capital accumulation, innovation, or economies of scale.

It has also been argued that in the creation of new ways of satisfying wants, technological changes are as important in service sectors (such as health care) as in commodity sectors, but when it comes to cost reduction for existing products or services, technological change is more frequent and more powerful in its effects in the commodity sector. Therefore, productivity of service sector relative to productivity of commodity sector may vary inversely with income level of the country⁶. In other words, between poor and rich countries the productivity differential in services is found to be lower than that in commodities.

However, more recently, two alternative arguments for lower productivity in services have been put forward. These are (a) greater investment has been done in new technology (especially IT) in services sector and this may take time to lead to productivity enhancement and (b) low productivity of services is a product of mis-measurement of output in services since an increasing portion of output is not captured in the basic statistics. A key problem in measuring productivity relates to obtaining a suitable measure of output of services over time. The problems pointed out in the literature that leads to mis-measurement of productivity in services are:

⁵ the growth of productivity in manufacturing is an endogenous result of the growth of output

⁶ For example, Kuznets (1950), Bhagwati (1984), Kravis et al (1983)

- (a) Market prices are not available for publicly provided services;
- (b) It is difficult to identify precisely what constitutes the service activity in a particular industry and to account correctly for the quality changes in services and this is further complicated due to inappropriate deflators that are not able to distinguish quality improvements;
- (c) The “quantity” of services is difficult to capture, as it often represents a process by which a user (consumer) or the user’s good is changed (Hill 1977);
- (d) Compared to goods many services are characterised by a greater degree of heterogeneity (even uniqueness) so it is difficult to aggregate them;
- (e) Poor qualities of data on services further complicate the problems.

3. *Structural Changes*

Along with the notion of services being generally unprogressive there are arguments about structural changes that take place with growth in the economy⁷. Greenfield (1966) and Francois (1990) argue that demand for producer services in total intermediate demand by manufacturing firms grow with development because higher specialisation is now more profitable. This expansion is linked to growth in more roundabout process of production and the associated conversion of local markets into national markets. With technological progress and development, services also become more crucial to co-ordinate production processes; to create and absorb new innovations and to increase the benefit-extracting capacity in production and consumption. All these lead to higher use of services in the growth process.

Alternatively, Bhagwati (1984) in his seminal work has put forward different ways in which technical and structural changes define a continuous process during which services splinter-off-goods and goods-splinter-off services. He argues that services that splinter off from goods are technically progressive and possibly capital-intensive, but services that are left behind after goods-from-services splintering process are mostly technically unprogressive and labour intensive. The reason for expecting these services to be technically progressive is the fact that these services arise due to specialisation, which reflects economies of scale. But in case the goods that splinter-off from services, for example records being produced, the musical services left behind are unprogressive and technically stagnant.

B. Supply Side Factors: *Trade Liberalisation and Reforms*

Along with demand side factors, there are also some supply side factors that lead to higher use of services as growth takes place in an economy. Three supply side factors that leads to higher supply of services are increased trade, higher FDI and improved technology. But there

⁷ See Fisher (1935), Kuznets (1957) and Fuchs (1980)

are two distinguishing features of trade liberalisation of services: a) “imports” of services must be locally produced and b) liberalisation of services leads to enhanced competition, which is both domestic and foreign. Greater foreign factor and increased competition together imply a large scale of activity, and hence greater scope for generating the special-growth enhancing effects. In fact, if foreign participation merely substitutes for domestic factors and the sector does not expand, i.e., the degree of competition remains the same, then there cannot be a positive growth impact on account of scale effect. On the other hand, even without scale effects and even if service sector does not possess endogenous growth attributes, import of foreign factors that characterise services sector liberalisation can still have positive effects because they are likely to bring with them the source of endogenous growth, namely, technology.

With respect to the Indian economy there exist two studies that empirically estimate the reasons for growth of India’s service sector. These are by Gordon and Gupta (2004) and Banga and Goldar (2004). Gordon and Gupta show that on the demand side high growth of services output in the 1990s was mostly due to factors such as, increasing input usage of services by other sectors i.e., higher domestic demand, higher foreign demand for services and higher income elasticity for final demand for services. They measure the increasing usage of services in other sectors through changes in the input-output coefficients. The matrices for different years show that the use of services sector input to industry increased by about 40 percent between 1979-80 to 1993-94. But the role of elastic final demand for services was found to be difficult to measure since it is difficult to split the growth in private final consumption expenditure into expenditure on goods and that on services. Nonetheless, they use a rough estimate and conclude that there is a sharp growth in the final demand services in the 1990s.

Alternatively, the increased usage of services by manufacturing sector has been estimated by Banga and Goldar (2004) for 1980s and 1990s. For this purpose, they empirically estimate the contribution of services as an input to manufacturing (organized) output growth and productivity in Indian manufacturing using the KLEMS (capital-labor-energy-materials-services) production function. They use panel data for 148 three-digit level industries for 18 years, 1980-81 to 1997-98, and estimate the production function, which has services used by the industry as one of the inputs⁸. The results of the analysis bring out that the growing use of services has a significant

⁸ These services are mainly: transport services, storage and warehousing, communication services, trade (wholesale and retail), banking & insurance, hotels and restaurants and other professional services like legal, accountancy, etc.

favorable effect on growth of output in Indian manufacturing in the 1990s, The coefficient of services is found to be positive and statistically significant. The contribution of service input to output growth in manufacturing was about one per cent in the 1980s, and it increased to about 25 per cent in the 1990s.

Apart from growing demand for producer services, another important reason for growth of service sector, as highlighted by these studies, is the impact of trade liberalisation and reforms on growth of services. Gordon and Gupta use panel data regression for trade, hotels, rail transport, transport by other means, storage, communications, insurance and other services for the period 1970-2000. Using sector-specific liberalisation dummies they find that sectors that were open for FDI, external trade, or private ownership, etc. were the ones which experienced faster growth. Alternatively, Banga and Goldar use multiple regression analysis and show that trade reforms carried out in the 1990s explain to a large extent the rapid growth of use of services in manufacturing. Lower tariff (adjusted for changes in real effective exchange rate) and lower non-tariff barriers (in terms of import coverage ratio) were also found to have led to an increase in the usage of services in manufacturing sector. The process appears to have been aided by other reforms undertaken in this decade. Thus, the studies show that growth of India's services sector can be attributed to:

- a) Structural Changes that have led to increase in usage of services by other sectors;
- b) Lower tariff and non-tariff barriers to trade; and
- c) Other reforms carried out in the 1990s.

4. Reasons for Slow Growth of Employment in India's Service sector

Growth in the share of service sector in GDP is often followed by a corresponding growth in the share of 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. And 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 (as seen in **Table 3**). This shows that while output generation has shifted to services, employment generation in services has lagged far behind. In the year 1999 services contributed around 28.5 % of total employment in contrast to 30 % in middle income countries, 70 % in Singapore and around 39 % in Indonesia.

Table 3: Industrial Distribution of Total Workforce in India

	1951	1961	1972-73	1977-78	1983	1987-88	1993-94	1999-2000
Agriculture	74.6	76.2	73.9	71	68.6	65	64.7	59.9
Mining & Quarrying	0.4	0.5	0.4	0.4	0.6	0.7	0.7	0.6
Manufacturing	8.2	8.6	8.8	10.2	10.7	11.1	10.5	11
Services	16.8	14.7	16.9	18.4	20.1	23.2	24.1	28.5
Elect, Gas and Water	0.4	0.3	0.2	0.3	0.3	0.3	0.4	0.3
Construction	1.1	1.3	1.9	1.7	2.2	3.8	3.2	4.4
Trade	5.2	4.1	5.1	6.1	6.2	7.2	7.4	9.4
Transport & Storage	1.5	1.6	1.8	2.1	2.5	2.6	2.8	3.7
Others	8.5	7.4	7.9	8.1	8.9	9.3	10.3	10.8

Source: Virmani (2004): Figures obtained from the Author.

While the share of service sector in total employment was around 28.5 % in the period 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%, followed by the community, social and personal services (around 31 %) and then by construction (16%) and transport, storage and communication services (13%).

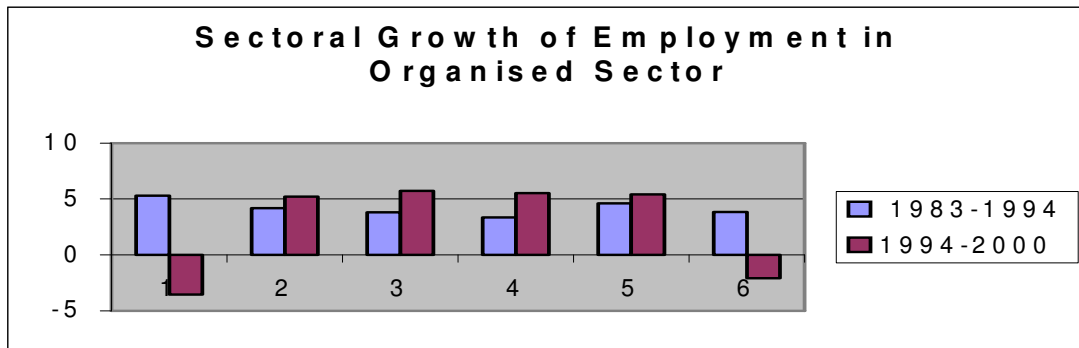
Though this is a unique feature of the service-led growth of India, we find that nonme of the empirical studies exist that explain this. Some of the plausible explanations for the slow growth of employment in the service sector can be:

- a) Sectors that have large potential for generating employment are growing slowly?
- b) The fast growing services sectors also witness high labour productivity growth as a result the employment potential is lower in these sector?
- c) Trade is positively affecting the growth in those services that do not have large potential for generating employment?

To test the above propositions we examine the trends in employment in dis-aggregated services. A close scrutiny of contribution of different services to employment reveals that the percentage growth of employment differs significantly across services in the period 1994-2000 as compared to the period 1983-1994 (as seen in figure 8). There is a fall in the growth of employment in community, social and personal services from 3.85 % annual growth rate in the period 1983-1994 to -2.08% in the latter period. Fall in employment in this sector has important implications for employment potential of the entire services sector, as this sector witnessed a rise in its growth in this period (i.e. it grew by around 7.9 % on an average in the period 1994-2004).

Another sector that has experienced a fall in its annual employment growth rate is electricity, gas and water supply. To analyse this further we look at the employment elasticities in these sectors.

Figure 8



Source: Planning Commission

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

Trends in employment elasticity of different services are reported in **Table 4**. The trends show that 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 sector. However, there has been a fall in employment elasticity in sectors that are faster growing sectors amongst the 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 4: Trends in Employment Elasticity

Sector	1983-84 to 1993-94	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 probable reason for fall in employment in faster growing services can be improvements in their labour productivity. But very few studies have estimated productivity growth in services because of the reasons highlighted above. Of the few studies, a report by Mckinsey & Co. (2001) estimates labour productivity in six segments of India's services sector-telecommunication, software, retail banking, housing construction, energy distribution (electricity) and retail distribution. It finds that India's software services have the highest productivity levels amongst all segments, followed by telecommunication, banking and construction. These are also the services that are growing faster and have high shares in GDP and employment. There is a possibility that higher labour productivity in these segments may have lead to slower growth in employment in the services sector. Gordon and Gupta (2004) also attribute the slow rise in employment in services to the fact that growth in services has concentrated in those services where labour productivity has risen or are skilled labour intensive. Technological improvements and efficiency gains have further reinforced this trend

To test the proposition whether trade has led to growth in those services, which have lower potential for employment we refer to figure 5. We find that there has been a growth in the share of communication services in total service exports in the period 1996 to 2002. However the share of services that have large potential for employment like trade, hotels and restaurant, community, social and personal services, construction services and transport, storage and communication services have not witnessed a rise in their exports. Trade therefore has not improved the growth of services that have high employment elasticities.

5. Can India's Service Sector Sustain its Growth?

One of the critical issues that have been discussed in the literature 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 case of India the sustainability of a service-led growth has been questioned by many (e.g., Mitra 1988, Bhattacharya and Mitra 1990 and 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 the organised services, therefore service-led growth can have serious implications for inflation, income distribution and balance of payments. In short, it is argued that this growth is not sustainable in the long run. This argument becomes stronger since economic theory suggests that a decline in the share of agriculture sector and

manufacturing sector is a phenomenon that is generally associated with the growth process of a high-income economy and not a developing country.

To test the issue of sustainability of service-led growth in India, Gordon and Gupta (2004) attempts 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 find that the share of service sector in GDP is associated positively with per capita income, i.e., the countries with higher per capita income also have a larger share of services in GDP. In case of India, they find that in 1990, 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 1990s, by 2001, 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 percent. This would bring size of India's services sector, relative to GDP, closer to that of an upper middle income country, even though India would still belong to the low income group.

Hansda (2001) addresses the issue of sustainability of service-led growth of India in terms of inter-sectoral linkages as emanating from input-output tables for 1993-94 for 115 activities at the disaggregated level. The results indicate that while services and agriculture do not share much inter-dependence, industry is found to be most service-intensive with 70% of its activities being direct services-intensive. The inter-sectoral linkages are explored further by estimating Rasmussen indices of backward and forward linkages. The indices show that service sector is more growth-inducing as compared to other sectors in terms of backward and forward linkages. He therefore argues that growth in service sector will induce growth in other sectors.

The issue of sustainability of services growth, i.e., whether the lack of rise in the share of manufacturing sector and the corresponding shift to services is sustainable or not is further examined by Banga and Goldar (2004). In this regard, the study estimates the impact of higher use of services input on productivity growth of manufacturing sector. They construct a multilateral total factor productivity index for 41 major industry groups for the period 1980-81 to 1999-00. Regressing the total factor productivity index on a set of explanatory variables including the ratio of services input to employment, the study finds a positive relationship between use of

services input and industrial productivity. Their results show that the increase in use of services in manufacturing in the 1990s has favorably affected productivity in the manufacturing sector. In the light of this result, the study argues that India's service sector will be successful in creating its own demand since higher use of services in the manufacturing sector has not only lead to higher output growth in manufacturing sector but also improved productivity in the manufacturing sector.

From the current studies it can therefore be said that India's experience with respect to service-led growth may be unique but it cannot be regarded as an outlier as yet. Growth in services is found to be growth inducing and has led to higher productivity in the manufacturing sector in the 1990s and therefore it is possible for the service sector to sustain its growth. However, more research is required in this field to reach to any firm conclusions.

In short, the current literature emphasises that the 'service economy' is structurally different from economic system from the previous era of mass industrial production. But, it is crucial to note that the structural change does not necessarily imply that services become more important in final consumption. Rather, services become ever more crucial to co-ordinate and control production processes of differentiated consumer products that are subject to economies of scale. Increased expenditure on producer services also enhances the efficiency of production by allowing higher level of specialisation in production. Thus, from the literature it can be derived that 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 manufacturing sector by improving the efficiency of production. We now turn to the issue of trade in services and particularly to what explains trade in services.

6. What are the External and Domestic Constraints to Trade in Services in India?

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 and this has led to a vast literature and some of the fiercest debates on certain issues regarding trade in services. One of the foremost issues discussed is: what is the appropriate theory of trade in services and what are the external and domestic constraints to trade in different services.

6.1 *Theory of Trade in 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, the theories put forward to explain trade in goods, [that are the *comparative cost theory*⁹ and the ‘*new trade theory*’¹⁰] 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 (1989) when principle of comparative advantage and the H-O theorem are applied on services, they require different interpretation. In particular, the study puts forward a theoretical model, which shows that if the 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 (1990) argues 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 case of goods. Thus, though in general theory of trade in goods has been applied to trade in services, but 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 specialisation in services.

6.2 *Barriers to Trade in Services*

Since services trade often requires (temporary) movement of provider or consumer, restrictions on services mostly arises from regulations and discriminating requirements regarding

⁹ which is based on the central concept of opportunity cost

¹⁰ which explains trade between countries that do not differ in terms of their comparative costs in producing goods but have competitive advantages of specialising, which causes trade

this movement. Therefore barriers to trade in services are particularly difficult to identify. Also, most of these barriers do not occur “at the border”. Most service industries are highly regulated by national governments so that non-tariff barriers may be inadvertent and also specifically designed to exclude foreign competition. Alternatively, foreign suppliers may have to pay an “entry fee” or may be subject to market share restrictions. Policy instruments that restrict trade in services may include measures such as quotas, local content restrictions, prohibitions, subsidies, tariffs, taxes, technical standards, licensing and procurement.

Hoekman and Braga (1997) discuss some of the important barriers to trade in services. In case of some services, trade is prohibited while in others there are important restrictions imposed. Prohibitions to trade occur in case where foreign access to service markets is completely forbidden, e.g., in case of transportation of goods within a country and basic telecommunication service providers. But restrictions to trade takes the following forms:

- (a) Quantity -based barriers.
- (b) Price-based barriers.
- (c) Barriers that impose physical or corporate presence in a domestic market.
- (d) Procedures of government procurement and subsidisation
- (e) 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, e.g., visa fees, entry-exit taxes, or port taxes etc. But tariffs form a potential trade barrier for those services that are either embodied in goods e.g., films, television programs, etc. or for goods that are necessary inputs into the production of services, e.g., computers, telecommunication equipment, etc. 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 foreign country). Environmental standards may influence services related to transportation and tourism

Certification or licensing may be required in case of professional and certain business services. These licensees are generally accorded by the government or professional business bodies and may limit entry into the industry. The government procurement policy may also be designed to discriminate in favour of domestic service providers. Examples of such services are education, data processing and non-medical professional services¹¹.

Along with these barriers it has also been found that 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 case of branded products distribution arrangements (e.g., establishment of a dealer network) may act as an important indirect barrier to market access.

6.3 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. While domestic constraints may result from infrastructure inadequacies, poor quality and standards, lack of clear-cut responsibilities between center and state governments and other policy-related disincentives. In order to examine the extent of external and domestic constraints to trade in India's services sector we classify services in terms of their external trade barriers i.e., extent of liberalisation, growth rates and share in exports of services (Table 5). The extent of liberalisation of services is captured by the FDI cap and restrictions on trade in Mode 4 (Table 1 in Appendix). The period considered for extent of liberalisation is post 1997, as many services were liberalised since and average share in exports is estimated for the period 1997-2003.

¹¹ Francois, Nelson and Palmetier (1997) find that in case of U.S. the government procurement regulations have maximum impact on these services.

Table 5: Categorisation of Services: Extent of Trade Liberalisation 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 [↓] like Postal, Accountancy, etc. and Rail Transport [↓]

Note: See Table I (Appendix) for the extent of liberalisation

↑ High share in exports of services (10% and above)

→ Moderate share in exports of services (5-9%)

↓ Low share in exports of services (less than 5%)

Table 5 shows that the services that have witnessed substantial to moderate liberalisation 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 low growth rate. Moderate liberalisation has been experienced by services like banking, insurance, travel, health, education, construction and air transport services. But 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 in **Table 5** 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 exist 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 liberalised 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 low share in exports, which reflect both domestic as well as 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 (e.g., 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, financial infrastructure of India 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 have 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.

We now review some of the specialised studies that examine external and domestic constraints in greater detail in some of the services categorised above. These studies are examined for services under the following categories:

- (I) Liberalised with High Growth and High Share in Exports: Telecommunication, Financial Services, Software Services and Travel
 - (II) Liberalised with High Growth but Low Share in Exports: Health and Education
 - (III) Liberalised with Low Growth and Low Share in Exports: Construction Services and Road Transport
 - (IV) Restricted Liberalisation with Low Growth and Low Share in Exports: Legal, Accountancy and Postal services and Rail Transport
- (I) **Substantially liberalised with High Growth and High Share in Exports: Telecommunications, Financial Services, Software Services and Travel**

These services constitute mainly the financial infrastructure of India. A large number of reforms have taken place in these services and these sectors have grown rapidly in terms of their share in GDP, exports and FDI. India's comparative advantage in these services stems from its endowment of skilled and low cost labour resources. Given the nature of opportunities in these sectors, it is evident that cross-border supply, commercial presence, and movement of natural persons play an important role in exports of these services. Some of the specialised studies on trade in these services are Kathuria 2004 (for telecommunication services), Chanda 2004 (for financial services) and Ahuja 2002 (for insurance services). These studies examine both external as well domestic constraints on trade in these services. We tabulate the major external and domestic constraints to trade in these services as follows:

<i>Sector</i>	<i>External Constraints</i>	<i>Domestic Constraints</i>
<i>Telecommunications</i>	Fully owned foreign firms allowed in some segments, though voice telephone services continue to have 49% FDI limit. No restrictions on number of providers.	Some policy uncertainty on tariff, inter-connected regimes, USOs remain. Regulator is gradually establishing credibility.
<i>Financial services (Insurance)</i>	Somewhat restrictive, with foreign equity limit of 26% in most segments.	Minimum capitalization norms; Funds of policy holders to be retained within the country; Compulsory exposure to rural and social sectors and backward classes; Penetration remains low.
<i>Financial services (banking)</i>	Private domestic equity limited to 49% and foreign equity limited to 74% with 10% voting rights. FDI and portfolio investment in nationalized banks subject to overall statutory limits of 20%.	Mandatory priority sector lending and rural branch requirements for domestic banks; High operational costs and low profitability in public sector banks; slow privatisation process; insufficient convergence of financial products and services; problems with the legal and regulatory framework, especially with regard to debt recovery and market misconduct.

(II) Moderately Liberalised with High Growth but Low Share in Exports: *Health and Education*

These services have experienced moderate liberalisation, have high growth but low share in exports. This suggests that there are substantial domestic constraints to trade in these services, but there is also a high potential to trade in these services. Chanda (2001) has examined the trade in health services, while Deodhar (2001) has examined the trade potential in educational services in India.

At present India's trade in health services occurs mainly from mode 4, that is movement of health personnel and mode 2, i.e., inflows of foreign patients for treatment in India from developed and developing countries. The exports of health services based on mode 4 is due to the recognition of Indian medical personnel around the world for their skills and training. India's exports of health services also take the form of consultancy presence and establishments overseas. But trade via cross-border is at present very limited, due to mainly technological and infrastructure constraints. On the import side there is as yet no large-scale foreign commercial presence in India's health service sector. The constraints identified by the studies are as follows:

<i>Sector</i>	<i>External Constraints</i>	<i>Domestic Constraints</i>
<i>Health & Education Services</i>	No explicit barriers on commercial presence of foreign firms, but restrictions on foreign service providers under Mode 4.	Responsibilities divided between the Centre and States; Absence of a Standardized accreditation system; regulations concerning accreditation and licensing requirements for foreign health service providers; economic and local market needs tests and manpower planning tests

India has potential to expand trade in both health and education services under all four modes of supply, provided some of the major constraints are removed. Telecommunication reforms, including reduced connectivity costs and lower tariffs will expand the scope for cross-border supply for these services. However, one should keep in mind that for a developing country, particularly India, increase in outflow of medical personnel could exacerbate the ‘brain drain’ problem in this sector with adverse implications on the availability and quality of services available. There is a need to ensure that export earnings from this mode are realised and those who go abroad also return. There is also a concern that opening health center may increase the cost of treatment which would in turn have an adverse impact on the poor. Thus, liberalisation should be preceded by the establishment of adequate standards, a quality assurance system, and strengthening of public health care system.

(III) Liberalised with Low Growth and Low Share in Exports: *Construction Services and Road Transport*

Construction services and road transport constitute a significant share of GDP in many countries. In India, these are important sectors in terms of their employment generation and share in GDP. However, growth in these sectors has been very low and they have low share in trade. Global trade in these services is largely dominated by developed countries, e.g., Europe and Japan given their technological capabilities and financial strength. Developing countries have a negligible presence, except for South Korea. Mukherjee (2001) has examined the trade in construction and consultancy services and identified the following constraints:

<i>Sector</i>	<i>External Constraints</i>	<i>Domestic Constraints</i>
<i>Construction and related Engineering Services</i>	100% FDI allowed in all segments except real estate where no FDI is permitted.	Price preference to PSUs, as well as a large number of barriers that are external to the sectors: land ceiling; unclear land titles; minimum area restrictions; minimum capitalization norm; restriction on repatriation; lack of capital; low investments in R&D.
<i>Transport</i>	Restrictions vary significantly across segments. 100% FDI in maritime and road transport but significant restrictions in air and rail transport.	Restrictions on inter state movement of goods; Overlapping responsibilities and coordination issues between government departments (e.g, multi-modal transport).

The main source of comparative advantage for India in construction services are the availability of low cost unskilled and semi-skilled labour and supply of cheap and competent professionals with good command of English. But to exploit these advantages India needs to upgrade the skills and technology in these areas, strengthen financial base of Indian companies and remove barriers to migration flows. One of the major constraints faced by Indian construction is lack of finance. Most of the international companies invest heavily in research and development and this in turn increases their competitive edge. On the other hand, Indian companies have to depend heavily on import of technology. On the import side, there is considerable scope for expanding India's imports of construction and ancillary services. Commercial presence via joint ventures can have a beneficial impact on the technology and skills in the domestic construction services sector.

(IV) Restricted Liberalisation with Low Growth and Low Share in Exports: Legal, Accountancy and Postal services and Rail Transport

These services are characterised by restricted liberalisation with low growth and low share in exports. Trade in these services is limited by high domestic as well as external constraints. One of the common features in these services is that they are under public domain and have limited exposure to both domestic and external competition. Very few studies have examined the constraints to trade in these services. We provide the constraints identified by Mitra and Zutshi (1999) for trade in legal services; Anant and Zutshi (1999) for trade in accountancy services; and Mukherjee and Sachdeva (2004) for trade in land transport services (Railways)

<i>Sector</i>	<i>External Constraints</i>	<i>Domestic Constraints</i>
<i>Legal Services</i>	Highly restricted. Restrictions on foreign service providers under Mode 4. Prohibitions on partnerships with enrolled professionals of foreign countries.	No effective regulation on non-litigating lawyers; limitations on size and liabilities of legal firms.
<i>Accountancy</i>	Foreign service providers not allowed to undertake statutory audits.	Only partnership firms allowed with number of partners limited to 20.
<i>Postal Services</i>	FDI regime open for courier services and closed for postal services.	Price preferences to state postal operators; No functional demarcation between regulator and service provider; Imprecise definition of USO.
<i>Transport (Railways)</i>	significant restrictions in air and rail transport; limited cross country movement of passengers and freight; restrictions on Mode 4.	Public monopoly; Inadequate resources; overstaffing; technological backwardness in freight traffic; high freight charges; high custom duties on rolling stocks.

India's trade in legal and accountancy services is negligible at present but the prospects of trade are promising. Trade in legal services can expand in many ways. National firms may increasingly employ foreign lawyers. But more importantly, India's legal services exports via mode 4 can expand considerably given its advantage as a country with British legal culture, lawyers with good command over English, adversarial legal procedures followed by the Indian Bar and the Bench. There is scope for exports of legal services via mode 1, i.e., via internet. Legal transcriptions, transmission of legal documents via telecommunication devices, and growth in electronic commerce will make possible electronic delivery of many legal services.

7. Conclusion and Specific Policy Directions

India's services sector has witnessed tremendous growth in the last ten years. But this growth has not been accompanied by a corresponding growth in employment in the service sector. The share of manufacturing sector in GDP has also declined in the 1990s. This has led to a policy dilemma and doubts have been cast on the sustainability of service-led growth.

The paper attempts to resolve some of these issues. It is found that growth in service sector has been lopsided and jobless. Some sectors have witnessed a double digit growth rate in the last decade, e.g., communication and business services, while some have experienced a fall in their growth rates, e.g., railways, real estate and dwellings. The sectors that have witnessed negative growth rates and those that have experienced slow growth rates are also the sectors that have

large potential for generating employment, e.g., construction, transport and professional services. Rising labour productivity in the faster growing sectors has further reduced the scope for increasing employment in these sectors.

It is also argued that in terms of its service-led growth India is not an outlier. Growth in services has led to higher use of services in manufacturing sector. This has in turn led to higher output and productivity growth in the manufacturing sector, which implies that the service sector will be able to generate its own demand in the future. Studies also show that the growing dynamism of India's service sector is, to a large extent, due to growing external markets for services and the gradual, though partial liberalisation of domestic economy. Most of the studies on the Indian economy support the view that domestic reforms and higher liberalisation, in terms of lowering of barriers to trade and allowing FDI, have improved growth in the corresponding services. This increased external demand may also play an important role in sustaining the dynamism of services.

To resolve the problem of lack of employment growth in services, there is a need to achieve uniformity in the growth of different services. This becomes even more important if we consider the interdependency of different services. An important aspect of services is the ability to generate sizable external economies or diseconomies that are not reflected in the price signals. Also, closely linked is the problem of linkages, both backward and forward, with the rest of the economy and with its growth rate. Inefficiencies in services therefore can exert a multiplying effect on the economy as a whole and efficiency in providing services can make a considerable difference to the sectoral growth rates (e.g., for achieving higher efficiency in financial services like banking and insurance, we need efficient IT-related services).

One of the probable reasons for lopsided growth in services is the fact that reforms in India at the sectoral level have evolved in an ad-hoc way. There has been no coherent overall policy for services in line with the industrial policy and agricultural policy. Consequently, the depth and pace of reforms lack uniformity across sectors. Along with the national and international efforts to liberalise trade, India also needs to undertake some domestic reforms, e.g., institutional and regulatory reforms, so as to maximise the benefits of higher trade and FDI in services. In particular, the paper points to the following directions in the policy with respect to services:

- I. Given the large externalities of services, it is important for an economy to provide services as efficiently as possible. Hansda (2001) estimates the Rasmussen index of backward and forward linkage for 115 activities in different sectors and find that the services that have maximum forward as well as backward linkages are trade, transport and construction. These sectors are found to have high domestic constraints and therefore require immediate policy reforms. Adequate infrastructure facilities will not only enhance the country's attractiveness to foreign investment but will also improve competitiveness of domestic investment. Since these sectors have large potential for generating employment, growth in these sectors will also help in resolving the dilemma of jobless growth in the services sector. Most of these services still have considerable restrictions on FDI limits and Mode 4. Emphasis should be now laid in improving growth of these services by reducing external as well as domestic constraints, which have been identified by the specialised studies.
- II. Assessment of performance of India's different services shows that there exists some services which have low external barriers and high growth rate but these services have not been able to enjoy a suitable share in India's exports of services. In particular, we find that health and education sectors have high potential for trade since they have low external barriers and high growth rates. This indicates substantial domestic constraints in these services. Given the large potential to trade in these services, there is a need to undertake the following policy directions, as outlined by the specialised studies:
- Given the low cost quality treatment available in India, there is a large scope for health tourism in India. India also has a competitive advantage in the practice of alternative medicine. These areas should be developed and exploited for trade opportunities.
 - An important domestic constraint identified in the health sector is that since health sector is on the concurrent list, i.e., both state and central governments have jurisdiction over this sector, a number of regulations are imposed by the state governments. There are also state-specific regulations of the town and planning departments on the design and construction of healthcare infrastructure, which form important domestic constraints to trade in health services. Thus, even though there is no cap on FDI in health services, we still find low share of health services in total trade and FDI (only 0.4 percent of total FDI approvals in health). There is therefore a need to have a clear-cut demarcation of responsibilities of Center and the State in this respect.

- Regarding trade in education services, there is a need to study the system of regulation and accreditation of educational institutions in foreign countries and accordingly develop own accreditation system. To compete successfully with the existing reputed educational testing services such as GRE, GMAT and TOFEL, our reputed testing services such as CAT, GATE, JEE and others must upgrade and modernise. There is also a need to improve on educational database regarding number of educational institutions, their enrolments (domestic and foreign), faculty strength, financial sources and quality and accreditations.

III. With respect to slow growing services, which have low share in exports, e.g., professional services, like legal, postal, accountancy, etc. we find that these services have restricted liberalisation. Both external and domestic constraints restrict growth in these services. Some of the important external and domestic constraints that have been identified by specialised studies and which need to be removed are:

- With respect to legal services, many of the domestic policies need to be altered. For example, the Indian law which prohibits formation of partnership with enrolled professionals of foreign countries in legal services limits the scope for an Indian firm to build its capacity to advice on foreign law or international law or in a newly developed area. This needs to be suitably altered.
- Prohibition on partnership with multi-disciplinary knowledge prevents capacity building in areas where technology progresses beyond comprehension of lawyer. Restrictions on joint ventures or establishment of firms in India by foreigners should therefore be relaxed, but since this would be a major reform strategically it would be better to delay it by few years.
- In accountancy services, India does not yet have large firms with international visibility. There is a need to embrace international accounting standards and reporting requirements. The process of adoption should be treated as urgent and concomitant changes should be undertaken in domestic statutory legislation.

IV. Though there exists a strong case for trade liberalisation of services, one should not forget that growth is not the sole objective of an economy. Therefore social costs of trade liberalisation of services should also be considered. For the Indian economy this issue becomes even more relevant given the employment dimension of services sector. Services sector in 1999-2000 employed almost 68 percent of urban employment. One of the arguments that is put forward against trade liberalisation is displacement of labour towards sectors where an economy has competitive advantage.

However, some of the services sectors that have traditionally been under public sector, e.g., railways, postal services, etc. are saddled with excessive labour and higher trade liberalisation in these sectors might result in large displacements of labour. Similar concerns are also found in sectors like retail distribution sector that employs large number of unskilled labour. Displacement of labour in these sectors might cause lot of social unrest. Trade liberalisation in these sectors therefore must be undertaken in a phased manner accompanied by appropriate policies to curb unemployment. Thus trade liberalisation policies have to be supported by complementary social policies so as to avoid substantial social costs that might undermine the support for reforms.

- V. Limited empirical research exists in the area of services in India. What remains the biggest hurdle in future research on trade and investment in services is the lack of reliable, timely and easily interpretable data. The data that is more widely available do not currently encompass all forms of trade in services, in particular intra-firm trade in services is not recorded. What is required is trade data on services at a more disaggregated level which is consistent with value-added and employment data and is comparable across time. Efforts should therefore be made to develop a suitable database for furthering empirical research in this field.
- VI. There is a dire need to formulate an Index of Services in order to have a coherent policy on services. Appropriate measures to estimate output in services need to be identified and by attaching suitable weights to disaggregated services, index for services can be formulated. Given the heterogeneity of services, formulation of separate indices can also be considered.

Along with the above policy insights it must be kept in mind that full gains of trade liberalisation in services can be acquired by an economy only if certain economy-wide efforts are made to make general environment more conducive to trade and investments in services. Macroeconomic policies like high tariff rates, large fiscal deficits and rigid labour laws may have as adverse effect on competitiveness of services as on goods. Excessive regulations, discretion in the allocation of licenses and permits, corruption and poor quality of infrastructure could adversely affect the growth of services sector. But, studies have shown that business environment in India is not very competitive as compared to other developing countries (Dollar and Goswami 2002). The regulatory and administrative burdens are considerably high and so are the labour market restrictions. This points to the need for regulation in services, which arises primarily from market failures attributable to natural monopoly and inadequate consumer information. However, it is beyond the scope of this paper to analyse the ways to overcome these weaknesses. But a strong and financially independent regulators and economy-wide efforts to improve business environment can go a long way to sustain the dynamism of India's services sector.

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Appendix

Table 1: Extent of Liberalisation in different Services in India

Services Sectors (1)	Average Growth rate (%) (1997-03) (2)	Share in exports (%) (2001-02) (3)	Restrictions in different Modes (4)	Extent of Liberalisation (5)
1. Telecommunication	21.3	47.26	Fully owned foreign firms allowed in some segments but in most segments it is now increased to 74% from 49%	Substantially liberalised
2. software services	30.4	52.86	No explicit barriers on FDI except 26% dis-investment condition for B2B commerce	Substantially liberalised
3. Banking	8.3	3	Private domestic equity restricted to 49% and foreign equity limited to 74% with 10% voting rights	Moderately Liberalised
4. Insurance	10.8	2	Foreign equity limit of 26% in most segments	Moderately Liberalised
5. Transport (air)	4.2	19.45	Foreign equity limit has been raised from 40% to 49% in domestic air carriers but no direct or indirect equity participation by foreign airlines is allowed	Moderately Liberalised
6. Transport (road)	6.9	Nil	100 % FDI allowed in road transport	Substantially liberalised
7. Transport (railways)	4.8	Nil	FDI not allowed	Less than moderately
8. Travel/hotels and restaurants	10.1	25.7	No restrictions on commercial presence	Moderately Liberalised
9. Dwellings / construction	2.75	1.8	No FDI permitted in real estate but 100% allowed in all other segments	Moderately Liberalised
10. Health	9.8	-	No FDI cap but restrictions under Mode 4	Moderately Liberalised
11. Education	12.1	-	No cap on higher and technical education	Moderately Liberalised
12. Legal services	5.55	-	Highly restricted, restrictions under Mode 4	Less than moderately

Source: RBI bulletin (various years), National Accounts Statistics, CSO and World Bank (2004).

Note: The categorisation of extent of liberalisation in different sectors is based on World Bank (2004) Report.