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An Open Services Regime
Recipe for Jobless Growth?

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Foreword

While the importance of services in the economy has been acknowledged, the sector doesn't feature adequately in research on growth and development. Economic history in fact contends that growth in developing countries has normally been led by the manufacturing sector. Services sector growth experience has in particular been perceived as job-less, primarily because of its inability to generate opportunities at the lower skill levels which are in abundant supply. The trade-induced employment generation potential of services is further suspect, since services are still largely untraded and deemed as domestic activities.

However, the counterfactual is increasingly becoming the norm in a scenario of technology-led heightened tradability of services. The experience of India is to that extent unique insofar as it lends credence to this thesis and its sustainability. Extrapolating the Indian experience, an open services regime seems to be the best option for large developing countries to sustain growth, competitiveness and employment generation, simultaneously with providing welfare gains to the consumer. These broad-based gains come as a result of cheaper service inputs to all manner of productive activity, as well as to the transformation of business activities and public governance that result when resources are freed-up to be used in new business endeavours.

It is hoped that this review paper would be able to influence the skeptics on the positive developmental impact of service sector liberalization.



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March 17, 2008

Abstract

Development economists' disfavour with services as a viable engine of growth has been expressed both through theoretical and empirical analysis. One of the stylized facts of development economics is that share of services in employment increases only with the rise in per capita incomes. The skepticism emanates from the observed relatively jobless nature of service sector growth, in particular in the low- and middle-income developing countries. However, given that services have become the main source of growth in even the lowest-income developing countries, new empirical evaluation of this thesis has become crucial.

A second stylized fact openly acknowledges trade as a source of growth and development. International trade in services, and in particular in the developing countries, has remained significantly lower in comparison to its share in global output. Further, one of the notable trends in recent years has been the increasing importance of cross-border supply of services in economic activities of countries. But is this a sustainable and viable model of development?

In view of the above, this paper reviews India's experience to understand how services sector liberalisation can generate (welfare) gains for developing countries, in particular vis-à-vis its employment generation potential. The analysis has been based on India's experience of an increasingly open service sector and reviews the different channels through which economic gains are garnered from openness to trade in services. But the lessons from this analysis extend far beyond India and are of interest to both developed and developing countries' policymakers concerned about sustaining the competitiveness of their domestic economy.

JEL Classification: F13, K33, O14

Keywords: Competitiveness, Liberalisation in Services, Global Sourcing of Labour and FDI

An Open Services Regime

*Recipe for Jobless Growth?**

1. Introduction

Development economists' doubts on services as a viable engine of growth and employment generation has been expressed both through theoretical and empirical analysis. This skepticism emanates from evidence of the relatively jobless nature of service sector growth, in particular in the developing countries. Economic history postulates that growth and employment in developing countries has normally been led by an open manufacturing sector, both in the traded and non-traded sectors of the economy.¹ Growth theory accords no special role to service activities, with the possible exception of financial and transport and telecommunication services.² A second stylized fact in development economics is that the share of services in employment increases only with the rise in per capita incomes. However, given that services have become the main source of growth in both developed as well as developing countries, new empirical evaluation of this hypothesis has become crucial. Many service industries are not stagnant and have experienced significant labour and total factor productivity growth.³

Services today are the premier engine of growth in most economies. Since the turn of this century, services have been contributing upwards of 50 per cent of developing country GDP. The last few decades have also seen tremendous expansion of cross-border investments by service sector trans-national companies (TNCs). In 2005, services accounted for about two thirds of FDI inflows worldwide (up from 49 per cent in 1990), and for half of FDI inflows in developing countries.⁴ The increase in FDI in recent years has also led to rising employment in foreign affiliates of TNCs. But the debate pertains to whether it also contributes to significant employment generation in the host economy; is only a small section of the population in developing countries benefiting from the success of the services sector or can services become a sustainable source of employment growth? Thus, while there is very little skepticism today about the growth potential of liberalizing services, the concern of joblessness of services growth in developing countries remain, which calls for careful review and analysis.

The other set of observations pertain to the changes in the trade pattern in services. At about a fourth of total merchandise trade value, trade in services has remained significantly lower as compared to its share in global output. Goods, in other words, are even now more traded as compared to services. However, one of the notable trends in recent years has been the

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¹ Ros (2000); Joshi (2004).

² The seminal work that established the role of financial services in channelling investment funds to their most productive uses thereby promoting growth of output and incomes is by Goldsmith (1969). Subsequent work has shown that financial services can affect growth through enhanced capital accumulation and/or technical innovation. Intuitively, other input services, in particular telecommunication services, would also have similar powerful influence on growth. See Melvin (1989).

³ Though in the long run productivity growth rate in services could still be lower in final services than in manufacturing. Most of such literature however does not consider the role of services in production.

⁴ The World Investment Report 2007 estimates that foreign capital stock of TNCs (i.e. the total assets of foreign affiliates) rose by 20 per cent in 2006.

increasing importance of cross-border supply of services, albeit from a low base.⁵ World commercial services trade (excl. intra-EU25 trade) was at US\$ 4.00 trillion in 2006,⁶ growing at the rate of 12.5 per cent for the last couple of years, and is driven largely by the sharp increases in the cross-border trade in services. A recent analysis by McKinsey Quarterly estimates that by 2015, global cross-border service trade as a percentage of global GDP would reach 30 per cent as opposed to its 18 per cent share in 1990.⁷ This spurt in commercial service trade is occurring in a large number of service sub-sectors, both through partial substitution of services erstwhile supplied through commercial presence of foreign companies or movement of natural persons, and through increased transactions in newly tradable services (like telemedicine and R&D⁸).

This paper attempts an objective assessment of the employment generation potential of the increasing trade and investment-related globalisation in services worldwide, the role of trade policy in improving services openness, and prospects for countries to further their growth and development objectives by a conscious policy of open regime in services. The paper reviews the evolution of trade in services worldwide, and then as a case study goes on to an integrated analysis of the role of the service sector in India's economic development. It discusses the nature of traded services, their contribution to India's overall growth experience, and in particular examines the potential for spillovers from liberal cross-border trade in key sectors like IT, ITeS and financial services vis-à-vis employment generation in the domestic economy. Finally, this Indian experience is related to recent discussions of service sector policy reforms worldwide. The lessons from this analysis extend far beyond India and are of interest to both developed and developing countries' policymakers concerned about sustaining the competitiveness of their domestic economy.

2. Globalization of Services: An Upward Trend

We begin by recalling here that international trade in services has been a regular occurrence for long. Transportation and communication (services that bridge the physical distance between the buyer and seller of goods), tourism, education (students go abroad to study), and temporary (immigrant) workers in foreign lands (viz. plantation/mining/construction workers) have been

⁵ As per the definition used in the WTO General Agreement of Trade in Services (GATS), services can be delivered/traded by means of: (1) cross-border communication without the supplier or the consumer moving; (2) movement of the consumer to the foreign land where the service is to be consumed/available; (3) via movement of the commercial organisation and investment in the consumer's country of residence; and (4) movement of the service provider to in the consumer's country of residence. Consequently, international trade in services encompasses foreign direct investment (FDI) and movement of labour, in addition to the cross-border transactions.

⁶ International Trade Statistics 2007, pg 15. Of this, exports are US\$ 2.04 trillion and imports US\$ 1.97 trillion. This data, collated and reported by WTO, does not include the cross-border investment in services. Reported circumstantial information on sales of services through foreign affiliates abroad, that is, the commercial presence (Mode 3) data indicate that such sales of foreign affiliates in services are rising faster than the traditional trade in services. These estimates suggest that Mode 3 is an important (if not dominant) mode of delivery for trade in services.

⁷ Davis and Stephenson (2006).

⁸ Increased trade in R&D and innovation services, erstwhile considered impossible unless undertaken in the home country of the parent innovating firm due to concerns of inadequate intellectual property (IP) protection, is now becoming more common because of the firms' need to take their low-end innovation activities to the sites of manufacture of the products concerned, in order to be able to garner the synergies of localisation. The fact that the Uruguay Round mandated tightening of IP regimes across the WTO Membership has been implemented since 2005, has helped in this relocation and improvement of tradability.

the most notable and oft traded services in the past several centuries. In most economic literature, however, services were deemed non-tradable because of the high transactions costs (measured in time, distance or otherwise) that prevented the close interface between the buyer and seller deemed necessary for trade in services to occur.⁹ In other words, traditionally, trade in services happened primarily through the investment or commercial establishment in foreign lands and by movement of labour to provide essential services.¹⁰ The new feature of our time therefore is the increased tradability of services by the means of cross-border trade, till late considered feasible only for goods or embodied products, and not services which are essentially disembodied and often require person-to-person interface for their delivery. So what was the change in recent times that increased the range of services that could potentially be traded internationally?

It appears that two important technological innovations of the late twentieth century facilitated this transition. First, the evolution of the new technology of Internet in conjunction with the efficiency of telecommunications network and improved IT hardware created immensely improved potential for linkage between countries. Also, technological advances coupled with cost efficiency considerations and regulatory impediments on free movement of foreign service providers caused a large number of erstwhile domestic service activities to be undertaken arms-length. Second, the IT software enabled technological unbundling of complex service processes (which codifies, standardizes and digitizes knowledge) allowed division of certain services into components requiring different levels of skills and interactivity, thereby allowing certain portions of the erstwhile non-tradable services to be splintered into smaller jobs and farmed to outside providers for enhanced efficiency and exploring new opportunities for supply-chain management in services. That said, it is also important to remember that the enhanced tradability will potentially impact less than a fourth of the total universe of services. The services of hair-stylists, electricians, carpenters, packers and movers for example are unlikely to ever be provided arms-length.

The entrenchment of the above developments were aided by the rapidly falling prices of telecommunication services across the developed world (see Figure 1). Even in developing countries like India, policy reforms since early 1990s enabled the domestic telecommunication firms to grow and prosper in an open and almost control-free policy environment.¹¹ A direct effect of such reforms in developing countries has been a drastic fall in the telecom costs; in most developing countries today, mobile phone call and broadband connection charges are

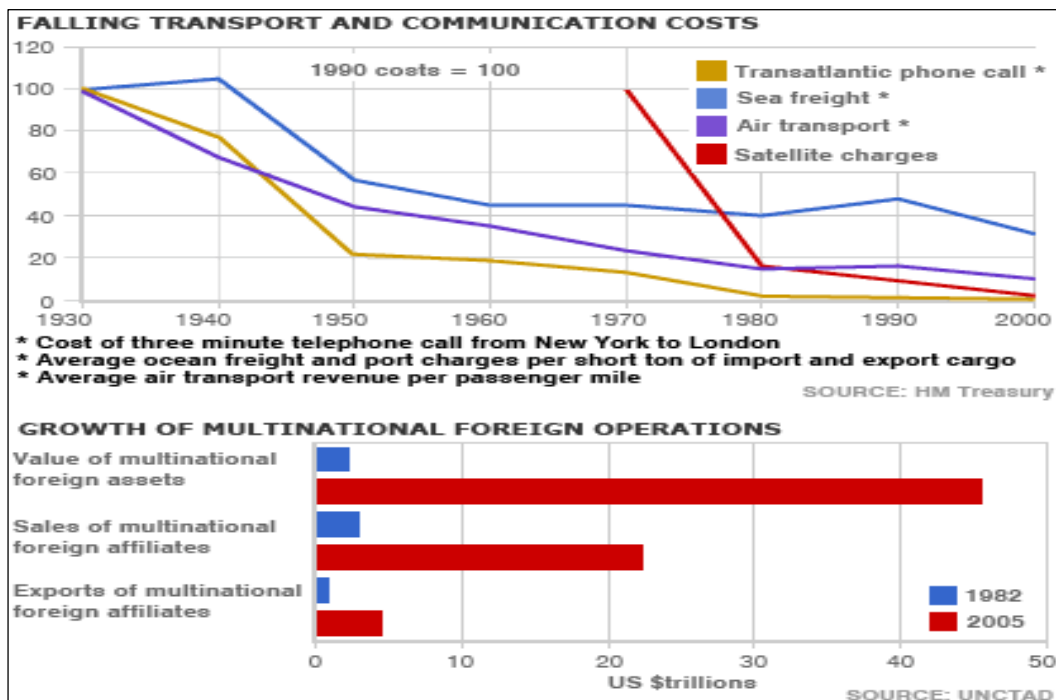
⁹ Mann (2004).

¹⁰ An important point to note here is that not all remittances from labour working abroad can be counted as trade receipts under GATS. As per the current scope in GATS, laid out in the Annex on Movement of Natural Persons, only those services by high-skill temporary foreign providers that are provided via movement of natural persons across national borders under categories of business visitors (and service sales persons), contractual service suppliers and intra-corporate transferees are considered as trade under the fourth mode of GATS. The intention of GATS Mode 4 during the Uruguay Round negotiations was to cover two main categories of natural persons: first, intra-company transferees regarded as 'essential personnel', such as management, professionals and skilled/technical staff linked with commercial presence in the host country; and, second, business visitors with a short-term presence but generally not employed in the host country. Further, GATS Mode 4 does *not* apply to skilled and unskilled natural persons seeking employment in the Member State, nor shall it apply to measures regarding citizenship, residence or employment on a permanent basis.

¹¹ Recent research by Hoekman and Mattoo (2008, see analysis and figures 5a and 5b, pp 16-17) also highlight the radical reforms in key 'backbone service' sectors in India. Barriers to entry by new private firms in have been eliminated in telecommunications and freight transport, and are being phased out in insurance and banking. These reforms are associated with a significant increase of FDI into services, outpacing FDI into goods.

comparable to the rates in OECD countries. The falling tariffs of high-speed internet connections in developing countries has enabled more and more services to be sourced cross-border compared to what was possible via telephone or fax (viz. health services – now a surgeon can consult on an operation or provide diagnostic services online) and increased the range of traders who can participate in cross-border service trade (viz. by allowing greater participation of SMEs).

Figure 1: Trends in Telecom Cost Reduction vis-à-vis Growth of MNC Affiliates



Source: <http://news.bbc.co.uk/2/shared/spl/hi/guides/457000/457022/html/nn3page1.stm>

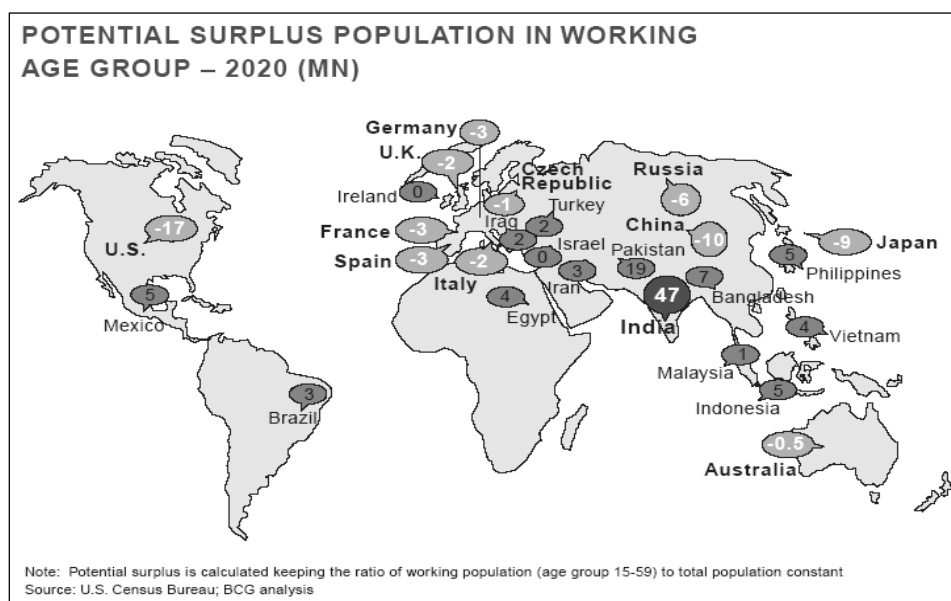
A second impact was from increased investments in cross-border services companies. Global FDI inflows soared in 2006 to reach US\$ 1.31 trillion – a growth of 38 per cent, marking the third consecutive year of growth. Over the past 25 years, foreign direct investment (FDI) increased significantly in absolute terms in all three major sectors: primary, manufacturing and services. However, while the shares of the primary and manufacturing sectors in world inward FDI stock declined, the share of services increased, representing nearly two thirds of the global FDI stock (61 per cent) in 2005, up from 49 per cent in 1990. Data on cross-border mergers and acquisitions (M&As) also confirm the growing importance of services. The sector's share in worldwide cross-border M&As rose from 37 per cent in 1987-1990 to 58 per cent in 2002-2006.¹² In the services sub-sectors, estimated inward FDI stock data for 1990 and 2005 and data on crossborder M&As for 1987-2006 suggest that there has been a relatively steady increase in the shares of electricity, gas and water distribution, and transport, storage and communications in global FDI. The share of construction declined, but FDI in infrastructure services as a group has risen in both absolute and relative terms. Rising outward investment

¹² World Investment Report 2007

and M&As from developing countries, especially in the IT, telecom, automotive and pharmaceutical sectors, mark a notable deviation from the theoretical expectations of North to South direction of capital flows in the high-technology sectors. Figure 1 above charts the growth of service sector MNCs with falling telecom costs.

The other distinctive dynamic trend of recent times is the growth in offshoring with developing countries as important participants, aided in particular by the greater integration of their labour force into the global production system. While international labour movement from developing to the developed countries is not new, the striking feature of the recent heightened participation of developing countries in the world has been the rising skill profile of their workers. Educational levels in the developing countries have increased and meets the demands of internationally traded newer services, and the supply of appropriately educated workers in some countries is not insubstantial. Recent studies¹³ have highlighted that the availability of talent in some low-wage developing countries, especially India, already surpasses that in developed countries. Figures 2 and 3 below indicate the potential surplus in working age population in the world, and highlight that developing countries account for more than twice as many university-educated young professionals, who at the present moment cannot be absorbed in their domestic economy.

Figure 2: Potential Surplus of Working Age Population across the World

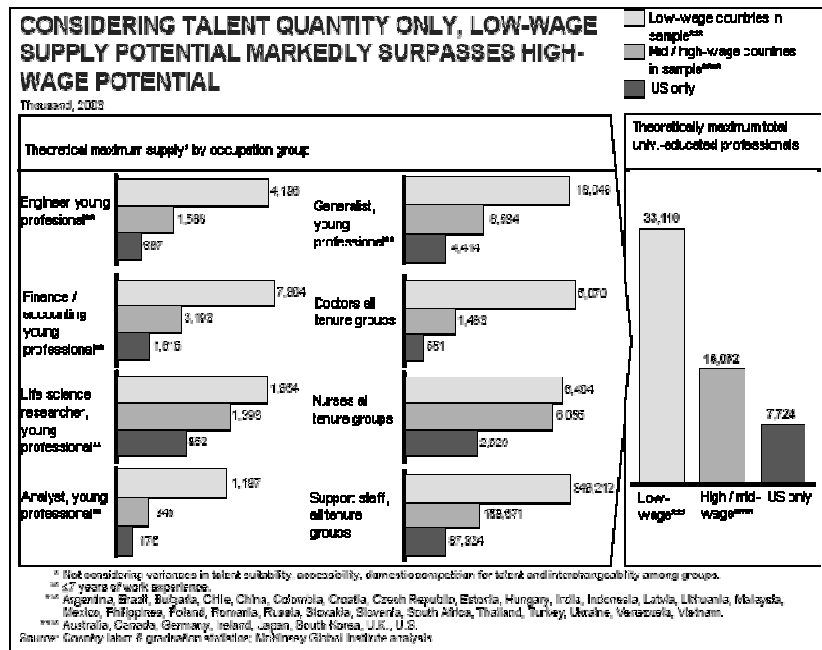


Source: Boston Consulting Group analysis, in Karnik et al (2006)

Also, given that over the next decade, demographic profiles of most developed countries are projected to witness significant declines in their working age population, the reliance on cross-border trade is likely to increase commensurately. On the other hand, the integration of China, India, and the former Eastern bloc into the world economy, together with population growth, has led to an estimated fourfold increase in the effective global labor force, which could more than double again by 2050. This bigger labor pool is already being accessed by advanced

¹³ Viz. reports by McKinsey Global Institute, Boston Consulting Group and Deutsche Bank

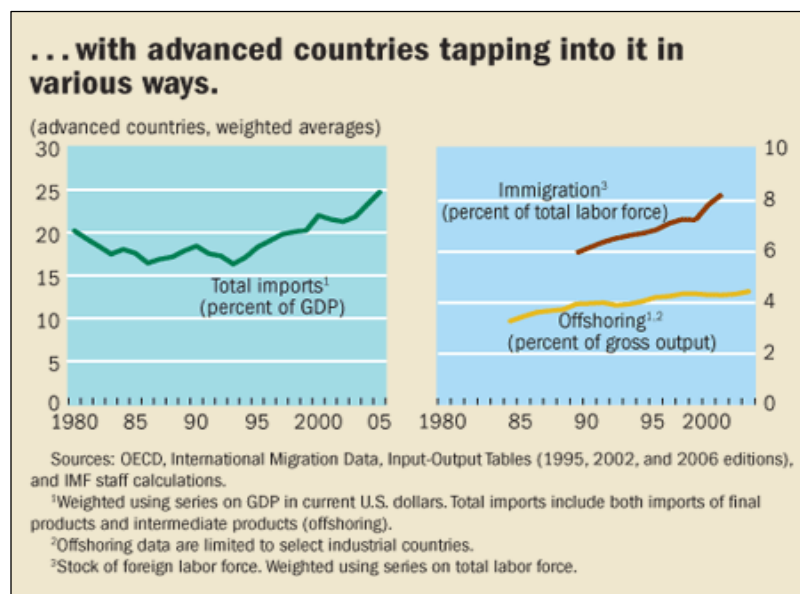
Figure 3: Global Supply of High-Skill Labour



Source: McKinsey Global Institute analysis, in Karnik et al (2006)

countries through imports of final products and services, offshoring of the production of intermediates, and immigration. Hence, given the comparatively greater role of labour in services, it is even more important to acknowledge the demographically advantaged countries as equal trade partners. However, although offshore outsourcing has received much attention in recent times, it is still small in relation to the overall economy (see Figure 4 below).

Figure 4: Share of Offshoring in global Labour Movement



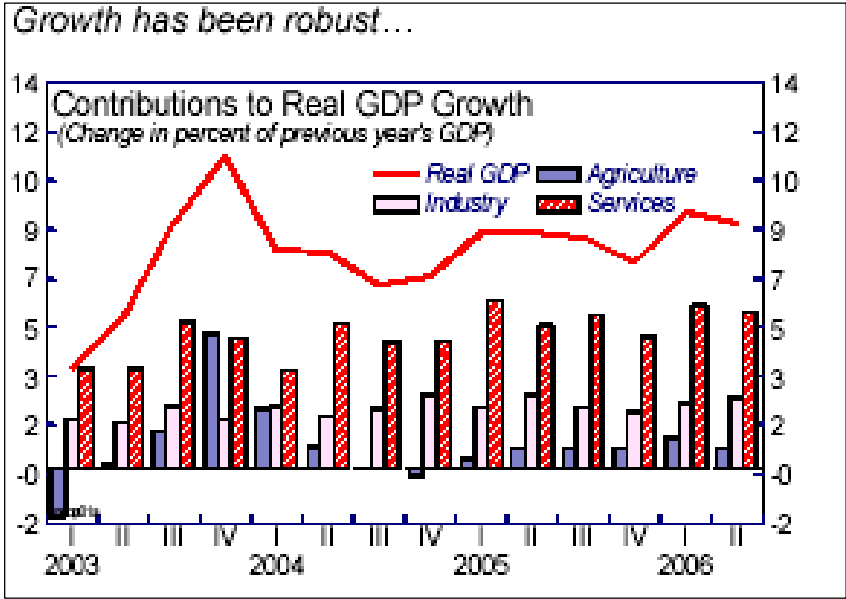
Source: Jaumotte and Tytell (2007)

These trends provide huge scope for demographically advantaged countries like India to exploit their comparative advantages in labour-intensive services without displacing substantial labour in developed economies, and at the same time add to efficiency gains and reduction of costs in the latter. Further opening of markets for cross-border services, by providing the necessary boost to the global growth engine, could become a win-win situation for all.

3. Importance of Services Sector in Indian Economy

Like most developed countries, and notwithstanding the nation’s decades-old policy focus on agriculture and the manufacturing sectors, it appears that service sector has undoubtedly become the most important sector in the Indian economy. More significantly, the different services sub-sectors are not only making important contributions to the nation’s GDP growth, but also in employment creation and generating export revenues, thereby contributing to the overall development of the economy. This section summarises these achievements. In particular, we will also assess why the employment growth in services doesn’t reflect the dynamism of the sectors contribution to the economy and GDP at large.

Figure 5: Sectoral Contributions to Real GDP Growth



Source: IMF Country Report, 2007

India now ranks among ten fastest growing economies in the world, with average economic growth at over 7 per cent a year during the past decade (and over 8.5 per cent in the last four years), and the services sector has been the key driver of this growth for over a decade (see Figure 5 above). During the 1990s, India’s service sector grew at an average annual rate of 9 per cent, ahead of the growth rate of industry at 5.8 per cent per annum and that of agriculture at 3.1 per cent per annum. In India, the service sector contributed approximately 68.6 per cent of the overall average real GDP growth (Service Value Added) in the past five years between

2002-03 and 2006-07; in 2006-07, growing at 11.2 per cent year on year, services (including construction) constituted 61.5 per cent of Indian GDP.¹⁴

Also significant is the fact that service sector growth in India is broad-based (details in Table 1 below), and cross-sectoral complementarities and synergies are helping to strengthen the overall performance of the sector, given that some of these services constitute important inputs for both manufacturing and services growth and productivity. For example, the communications sub-sector has grown at over 15 per cent since 1980s. Consequently, shares of services sub-sectors dependent on advanced IT and telecom technology also increased. Data from India's National Accounts Statistics indicate that the share of communications sub-sector increased from 1.7 per cent to 7.5 per cent, while banking and insurance sub-sectors increased their share from 9.2 to 11.3 per cent; this contrasts starkly with the fact that shares of all other traditional services either declined or at best remained same (details in Table 1 and 2 below).

Table 1: Share of Different Sub-sectors within Services

(at 1999-2000 prices)

	1981-82	1986-87	1991-92	1996-97	2001-02	2006-07
Trade	28.3	27.0	25.1	27.3	26.6	26.7
Hotels & Restaurant	2.0	2.0	2.0	2.4	2.6	2.5
Railways	4.4	4.0	3.5	2.7	2.3	2.2
Other Transport	9.5	9.4	9.5	10.0	9.2	10.1
Storage	0.4	0.3	0.3	0.2	0.2	0.1
Communications	1.8	1.7	1.7	2.3	4.3	7.5
Banking & Insurance	6.5	8.1	10.2	10.7	11.2	11.3
Real Estate & Business Services	13.8	14.8	16.0	15.1	14.7	14.1
Public Administration	14.7	15.3	14.5	12.4	12.8	10.6
Other Services	18.8	17.5	17.1	16.8	16.2	14.9
Total	100	100	100	100	100	100

Source: National Accounts Statistics, Government of India, several years

In the National Accounts Statistics, Computer related services (IT and IT enabled services or ITeS) as well as Other Business Services comprising legal services, accounting, research & development, engineering services, market research services and the like fall under Real Estate

¹⁴ Author's calculation from Central Statistical Organisation estimates of GDP (at factor cost; 1999-2000 prices); http://mospi.nic.in/pressnote_31may07.htm

& Business Services, the share of which has been falling since 1991-92. Details given in the National Accounts show that under this heading only computer related services have increased substantially over the past five or six years. Inexplicably the data do not reflect any great dynamism in respect of Other Business Services (only a modest uptick in growth rate is visible since the Ninth Plan period, see Table 2), although India's exports in this sub-sector have been growing rapidly since 1990s, attaining a growth rate of about 20 per cent year-on-year.¹⁵

Table 2: Growth Rates within the Services Sector

	Sixth Plan	Seventh Plan	Eighth Plan	Ninth Plan	Tenth Plan
Trade	5.3	6.5	9.1	7.3	9.3
Hotels & Restaurant	5.4	6.9	11.2	9.3	9.0
Railways	2.8	5.7	1.9	4.7	7.7
Other Transport	6.9	7.0	8.4	6.0	11.4
Storage	3.5	1.8	2.4	2.2	5.6
Communications	6.7	5.3	14.1	21.8	22.1
Banking & Insurance	7.5	13.4	8.2	9.0	9.3
Real Estate & Business Services	7.3	8.1	6.1	7.2	8.3
Public Administration	6.1	7.9	3.9	8.5	5.2
Other Services	3.9	6.0	7.0	7.0	7.6

Source: National Accounts Statistics, Government of India, several years

The second important fact is that at present services account for about 26 per cent of total organized sector employment in the country while contributing a little over 55 per cent to the national GDP, which has led to concerns about the job-less growth phenomenon in this high-growth sector. A sectoral disaggregation of the employed workforce shows that in 2004-05, the four services categories (excl. construction) contributed 23.4 per cent to the total incremental employment generated in the five year period between 1999-2000 and 2004-05 (gross incremental employment was around 60.82 millions). The services sector improved its share from 22.7 per cent of gross employment to 23.4 per cent in the same period, adding 16.8 million workers in the five-year period. However, despite the low overall elasticity of employment in the country at just 0.48, the latest NSSO data shows that employment elasticity is reasonably high (and increasing) in certain service categories, with financing, insurance, real estate and business services registering an elasticity of employment of 0.94 followed by construction sector employment elasticity at 0.88 (details in Table 3 below).

¹⁵ *National Accounts Statistics and Economic Survey, various issues, and NASSCOM Annual Report, 2004-05.*

Table 3: Employment Statistics (disaggregated)

	Sectoral Share (%) 1999-2000	Sectoral Share (%) 2004-05	Elasticity
Agriculture, forestry & fishing	59.8	58.4	1.52
Mining & quarrying	0.6	0.6	0.82
Manufacturing	12.1	11.7	0.34
Electricity, gas and water supply	0.3	0.3	0.33
Construction	4.4	5.6	0.88
Trade, Hotels & restaurant	9.4	10.3	0.59
Transport, storage & communication	3.7	3.8	0.27
Financing, insurance, real estate and business services	1.3	1.5	0.94
Community, social and personal services	8.4	7.8	0.28
Total	100	100	0.48

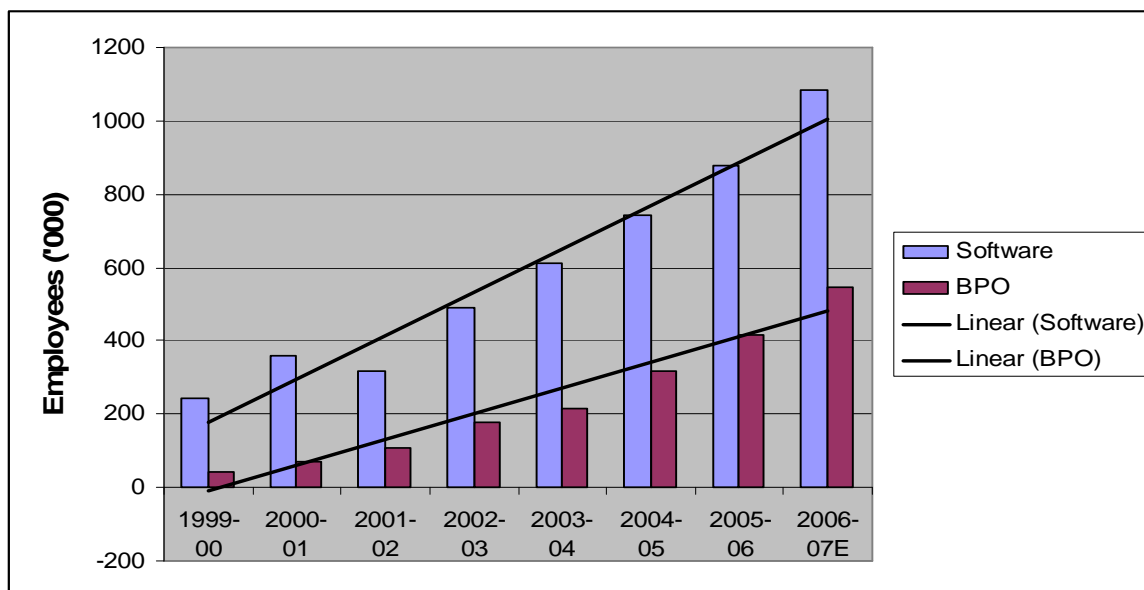
Source: Rangarajan et al (2007); data from NSSO 2004-05, based on 61st Round Survey.

Nonetheless, drawing ready inferences from the above official data may be misleading, as it is believed that a significant portion of the Indian population presently accounted for under the agriculture/rural employment is working in the unorganized service sectors, both in the rural and the urban areas, in particular in the Trade, hotels and transport (which added 10 million incremental organised sector workforce between 1999-2000 and 2004-05); business services; and the informal Community, social and personal services sectors (which added 2.47 million incremental organised workforce in the five years, but the employment share of this last sector is declining in the formal sector, as indicated in Table 3 above).¹⁶ The recent spurt in the net employment in the ITeS or Business Process Outsourcing (BPO) sectors has seen employment of almost 1-1.5 lakh employees every year for the last few years. Figure 6 below highlights the rapid employment growth in India's IT and ITeS/BPO sectors where the employed workforce is projected to cross 2.3 million by 2010.¹⁷ According to NASSCOM estimates, the number of total knowledge professionals employed in the Indian IT-BPO sector increased from 284 thousand in 1999-2000 to 1630 thousand in 2006-07 (E) (details in Table 4).

¹⁶ Assessment based on information on the employment-generation-potential in the unorganised service sectors. At a recent ICRIER conference on 'Productivity Growth in a Globalising Economy: Implications for Business and Policy', India's chief statistician Dr Pronab Sen said: "The NSSO data suggests that almost 50 per cent of the income in rural areas is coming from non-agriculture sources. (also) economic analysts should keep in mind the fact that several Indian manufacturing and service companies have started outsourcing the non-core activities, resulting in high growth of services". But because of inefficiencies in the data collection mechanism, this doesn't show up on official statistics.

¹⁷ NASSCOM estimates, 2006.

Figure 6: Rapid Growth in Employment in India's IT & ITes industry



Source: Calculations based on data from NASSCOM 2007

Table 4: Knowledge Professionals Employed in the Indian IT-BPO Sector

(in thousands)

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07E
Software (exports sector)	110	162	170	205	296	390	513	707
Software (domestic sector)	132	198	146	285	318	352	365	378
BPO	42	70	106	180	216	316	415	545
Total	284	430	522	670	830	1058	1293	1630

Source: NASSCOM Strategic Review 2007, pg 146.

Despite the low employment elasticity in developing country services sectors as compared to the developed countries, and the relatively lower employment impact of FDI when compared to manufacturing sector, India since 2000 has benefited greatly from the outsourcing activities of (primarily the US) MNCs. As discussed earlier, technological advances coupled with cost efficiency considerations and regulatory impediments on free movement of foreign service providers (Mode 4 trade) caused a large number of erstwhile domestic service activities to be undertaken arms-length. For example, US increased outsourcing of low-skill services like preparation of tax returns and credit card analyses to India by 16 fold between 2003 and

2005,¹⁸ while another study by McKinsey¹⁹ finds that about 100,000 basic programming jobs were offshored to India during 2000 to 2003. With many services that were seen as previously non-tradable having now become tradable, given the technology-enabled reduction of need for physical interface between the service supplier and the consumer, relocation of low-end price-sensitive service sectors jobs out of the Western countries has been increasing.²⁰ And if we add the multiplier effect of the secondary domestic employment generation from the ITeS sector employees, services will surely emerge as an important source of potential employment generation for the aspiring low-skill population in India. A recent NASSCOM-CRISIL study²¹ estimates that for every job created in this sector, four jobs are created elsewhere in the domestic economy.

Lastly, and most significantly, particularly from the global integration perspective, India has emerged as one of the leading exporters of commercial services in the world. In recent years, India's merchandise exports to the rest of the world crossed the 1 per cent mark (global ranking 28th as exporter), growing at an average 25 per cent over the last 3 years, although the net merchandise trade balance is negative. But India's invisible (net) inflows continue to offset the growing trade deficit to a large extent; in 2005-06, India's commercial service exports constituted around 37 per cent of the country's global exports (goods and services).

Table 5: Exports of Commercial Services

	2000	2001	2002	2003	2004	2005	2006
Global Exports (US \$ billion)	1,493.8	1,498.0	1,607.8	1,842.2	2,210.9	2,451.9	2,710.8
India's Exports (US \$ billion)	16.0	16.8	19.1	23.1	37.2	54.4	72.8
RoG (y-o-y) of India's exports (%)		4.8	13.8	20.7	61.0	46.4	33.8
India's Share in World Exports (%)	1.1	1.1	1.2	1.3	1.7	2.2	2.7

Source: Calculations based on data from International Trade Statistics, WTO, several issues.

Indian export of commercial services has been among the fastest growing globally in the past 15 years, and grew at over 17 per cent per annum in the 1990s as compared to the world average of 5.6 per cent. Between 2001 and 2006, on average, India's exports of commercial

¹⁸ McKinsey Global Institute (2005). For example, between 2003 and 2005, the number of US tax returns prepared in India grew from 25,000 to 400,000.

¹⁹ Baly and Lawrence (2005).

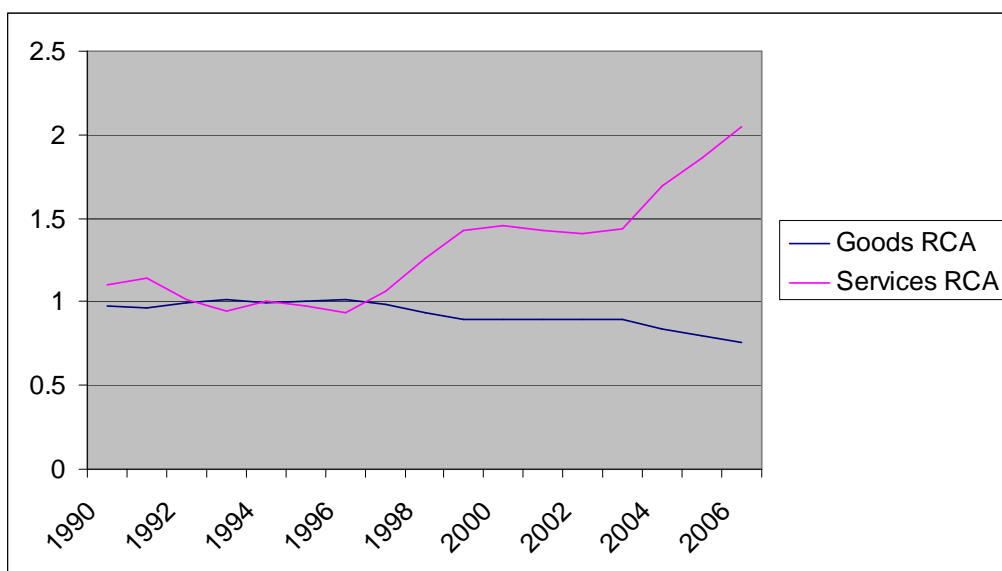
²⁰ Several research findings seem to suggest that developed countries are likely to be only marginally threatened by globalisation of services. See Dossani (2005); Jensen and Kletzer (2005).

²¹ NASSCOM-CRISIL (2006).

services grew at over 30 per cent as opposed to the world average of 10 per cent. In 2006, India exported US\$73.8 billion of commercial services, equivalent of 2.7 per cent of global service trade (estimated at around US\$ 4 trillion), and was ranked 10th in the global commercial service exporters list;²² in 1997, the share in global trade was only 18 per cent. Table 5 highlights India's performance in exports of commercial services in the present decade.

Statistical analyses indicate that India continues to exhibit a strong revealed comparative advantage (RCA²³) in services relative to goods. India's RCA in services has been rising sharply since mid-1990s, increasing the gap with the goods sector drastically in the past decade (Figure 7). A time series analysis of the service sector's RCA indicates that India's current strength in commercial service exports comes from business services, which includes IT software and BPO exports, finance, management and other professional services, among others.²⁴ Between 1996 and 2000, India's RCA in business services grew most dramatically, rising 327 per cent in the quinquennium. The recent trend of increased specialisation of India's exports of services in a selected set of sub-sectors within the services sector reflects the change in composition of exports.

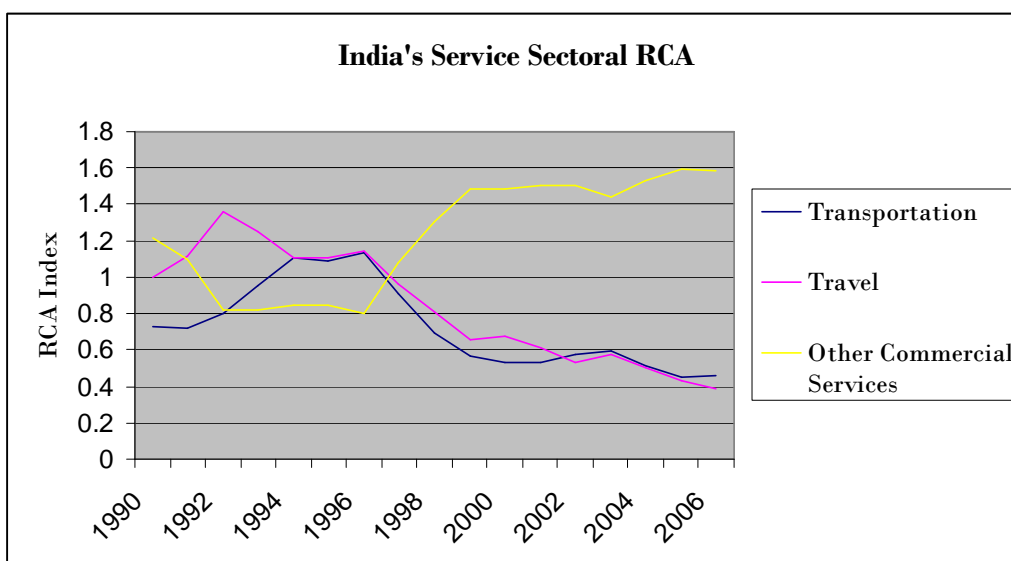
Figure 7: Trends in India's Goods and Services RCA



²² While the dynamic growth of India's commercial — and in particular software services (comprising computer services, IT enabled services and business process outsourcing) — exports are widely reported, the dynamic expansion of its services imports attracts less attention even though the growth rate in 2006 exceeded that of exports. According to the most recent numbers put out by the WTO, India has turned a net exporter of commercial services in 2006, though India's commercial services imports grew by a hefty 40 per cent in 2006 and are only about 5 per cent short of its commercial services exports.

²³ Calculations based on Bela Balassa's Revealed Comparative Advantage (RCA) Index. An index value of RCA > 1 indicates competitiveness.

²⁴ Author's calculation based on data from IMF Balance of Payments Statistics. Also see Karmakar (2005) Appendix Table 1 for related sector specific details on market access and competitiveness.



Source: Calculated from WTO International Trade and Tariff Database, Statistical Program – Time Series, accessed January 2008

It should also be noted here that in India, service exports have been growing at a rate two-and-half times faster than the services sector catering to the domestic market. Growth in commercial services trade can largely be attributed to information technology (IT) boom, in which India has emerged as a world leader. India accounted for 65 per cent of the global market in offshore IT services and 46 per cent of the global BPO market in 2004-05.²⁵ The World Bank²⁶ estimates that while developed countries still dominate global services trade with a share of 80 per cent, between 1994 and 2003, with an annual growth rate of 50-60 per cent year-on-year, exports of Business services (essentially the IT & BPO services) rose by 700 per cent in India (also see Figure 8 for an alternate estimate of the year-on-year growth rates in ITeS exports). A recent study by Elixir Web Solutions has shown that India continues to hold an edge over China as the preferred outsourcing destination, in spite of the rising wage costs and employee crunch, because it commands global confidence to produce perfect turn around time (TAT) for performing a task, especially receiving, completing and returning the assignment.²⁷

Interviews by Wharton analysts with executives in Silicon Valley and other high-tech centers in the US and venture capitalists evoked the answer: “Despite the difficulties, India still offers IT and engineering talent at a relative cost advantage, so the country will retain its appeal as an offshoring destination.”²⁸ Despite the pricing pressure and the rising rupee, over 60 per cent of

²⁵ Evidence available to MGI further indicates that fears about job losses tend to overplay the likely impact of offshoring. In absolute terms, the volume of Mode 1 trade is rather low; and offshoring is but a small part of the total Mode 1 trade. Data collected by the WTO indicate that offshored IT software and business process outsourcing (BPO) services are just 2.5 per cent of world commercial services exports and is a meagre 0.125 per cent of world GDP. And in this, the share of developing countries is presently rather insignificant. The net offshoring threat therefore would appear rather insignificant insofar as the trade/income losses of developed countries are concerned.

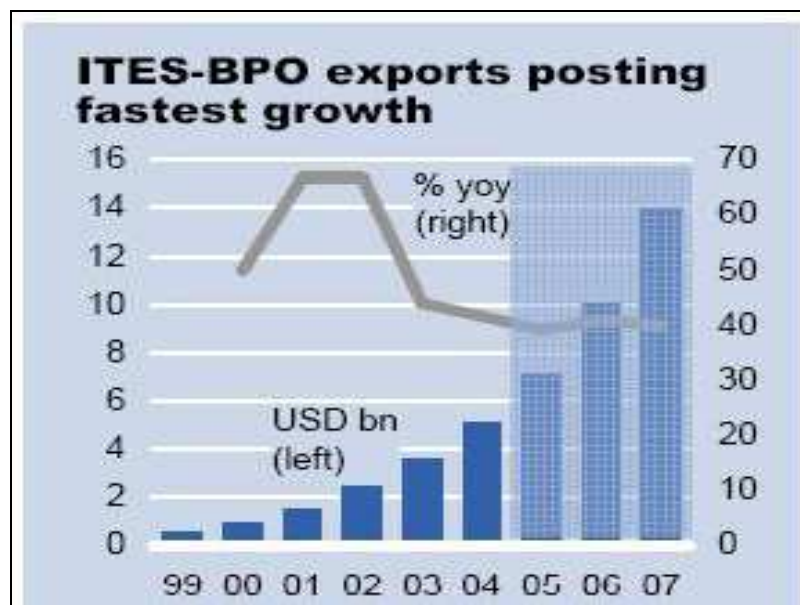
²⁶ Global Economic Prospects (2007): figure 4.5, pg 121, Chapter 4, based on data from IMF Balance of Payments Statistics.

²⁷ Prakash and Samuel, Elixir Web Solutions (2007)

²⁸ India Knowledge @ Wharton (2007)

the world's Fortune 500 companies continue to outsource activities to India. The major segments driving India's IT and ITeS market are: customer care, finance and accounting, human resource management, payment & other administrative services, content development, engineering, logistics, sales, and legal services. In 2006-07, according to data from the Exim Bank of India, software and services exports grew by 33 per cent to register revenues of US\$ 31.4 billion, business services grew at the rate of 82.4 per cent, engineering services and project exports registered revenues of US\$ 4.9 billion, up 23 per cent over the previous year, and Financial services grew at the rate of 88.5 per cent.

Figure 8: Exports from India's ITeS industry



Source: DB Research, 2005

But an even more striking feature is the emergence of India as an important source of outgoing FDI (and offshore employment generation). Driven by active M&A activities by Indian service sector companies in the IT and pharma space in particular, India has contributed to increased FDI flows from Asia to developed countries, thereby adding a new dimension to its rising competitiveness in the sector. According to data collected by Grant Thornton, the last three years have seen a remarkable surge in outbound deals from India which grew from US\$ 0.4 billion in 2005 to US\$ 1.37 billion in 2006 and to over US\$ 45 billion in 2007.²⁹ The inbound deals on the other hand have declined from US\$ 0.85 billion in 2005 to US\$ 0.69 billion in 2006 and to over US\$ 0.16 billion in 2007. In terms of announced value, outbound deals were ten times more than that of inbound deals. The sectoral breakup revealed that IT and ITeS sectors led the list with 20 per cent of total M&As and pharmaceutical sector was next with 14 per cent, closely followed by banking and financial sector with 12 per cent and the automobile sector with 10 per cent share.

The number of deals by Indian firms abroad in IT and ITeS sector was more than triple the number by international companies in India. The IT and ITeS industry logged 175 deals,

²⁹ Also see, 'Invest in USA: The Indian story', published in the Chicago Chronicle.

M&As and private equity transactions combined, valued at about US\$ 3.59 billion during the first nine months of 2007, as Indian companies continued to fuel global ambitions by acquiring international businesses. Many Indian pharma companies have been setting up new plants or acquiring existing plants overseas in order to increase their scale of operations and their share in the branded generic drug segment. While most Indian pharmaceutical and biotech firms have been aggressive acquirers of late, recent notable deals have seen Sun Pharmaceuticals buying Israel's Taro Pharmaceutical Industries for US\$ 454 million (the company, on the whole, has 13 acquisitions to its credit, which include manufacturing sites, brands and companies and Taro is its 14th buy); Jubilant Organosys, a leading domestic player in the pharmaceutical CRAMS segment, has acquired 100 per cent stake in US-based contract injectable maker Hollister-Stier Laboratories LLC (Hollister) for US\$ 138.5 million.³⁰

A FICCI-Ernst & Young study³¹ also estimates that in 2007 alone, Indian firms that set up shop in the US through greenfield units or via acquisitions accounted for US\$ 10.25 billion and created no less than 65,000 jobs; SMEs alone have created over 35,000 jobs in the US in the past year. In 2006, Indian investors became a driving force in the M&A boom in Europe. In UK in particular, India's image as one of a taker of British jobs through off-shoring has changed to that of a creator of jobs. The relationship was increasingly marked by a new resonance - of Indian companies taking over British businesses and creating jobs in Britain, and British companies outsourcing low and high-end work to India to exploit India's strengths in intellectual property and low-cost economy. Indian companies are also increasingly moving up the skills-value-chain of outsourcing. Global outsourcing major Hinduja TMT forayed into the legal process outsourcing (LPO) segment by entering into a joint venture with the United Kingdom's business consultancy firm Centric and one of India's leading law firms, Fox Mandal Little. The new joint venture company - Centric LPO - provides legal outsourcing services to multinational companies and international law firms. Reliance Life Sciences, a Reliance Group company, acquired UK-based GeneMedix Plc for 14.6 million pounds.

4. Experience of GATS mandated Liberalization

The above discussions lead us to the following query: what is the role of GATS negotiations in the observed growth of services trade, in particular the cross-border services supply that has generated significant concerns among traditional suppliers of services. A recent analysis by the WTO Secretariat indicates that liberalization and privatization moves by WTO Members' in different service sectors have been "inspired by technical developments... and user dissatisfaction with prices and quality... GATS has not apparently proven a decisive factor in itself".³² Comparing the depth of commitments across different modes of service supply, the study by Adlung and Roy reveals that Mode 1 has attracted overall far fewer bindings as compared to Mode 3; among the committed sectors, Mode 1 is characterized by the highest share of non-bindings or 'unbound' amongst the first 3 modes of service supply recognised by GATS. This is in spite of the actual trade occurring in a large number of sectors/sub-sectors that were earlier considered technologically impossible, as well as the dynamic spurt of the ICT sector where cross-border trade is becoming a major mode of delivery.

³⁰ India Brand Equity Foundation resources (2007)

³¹ Report on Direct Investments in USA by Indian Enterprises.

³² Adlung and Roy (2007)

Given that even the revised rounds of requests and offers did not improve the market access position in the offers by Members, the plurilateral request on cross-border supply by a group of members are being pursued under the ongoing Doha Round of WTO negotiations to deepen the market access commitments at WTO. The plurilateral requests aim for a substantially higher level of liberalization compared to existing commitments and what has been proposed in two rounds of offers, and span a larger range of sectors/sub-sectors of commercial interest wherein Members have been requested to undertake full national treatment commitments as well as removing market access limitations such as requirements of commercial presence, and citizenship/residency requirements. The main sectors targeted include professional, computer-related, other business, telecommunications, distribution, services auxiliary to all modes of transport, and part of financial services.³³

Even in the bilateral and regional agreements on services, trade partners seem to have opted for the conservative mode when it came to making commitments, and the offers are barely GATS plus. A new study by Roy, Marchetti and Lim³⁴ reviewed services commitments undertaken by 36 countries in 32 Preferential Trade Agreements (PTAs) completed since 2000; the countries involved in fact account for more than 80 per cent of world services exports. Though *prima facie* the preferential commitments show great improvement, it appears that a large proportion of sector-specific commitments are under Mode 1, either ‘unbound’ or without limitations (‘none’) and hence, the scope for improvements to existing commitments is low. For these 36 members, improvements to existing commitments in GATS offers seems to cover on average only 2 per cent of sub-sectors, while the corresponding figure for improvements in PTAs compared to GATS offers is also low at below 4 per cent. Hence, value-added over GATS commitments is often limited.

It also emerges that the developed countries other than US, Australia and Japan, have not added significantly to the sectoral coverage contained in their GATS offers. For example, EU, Norway, Iceland, Switzerland, New Zealand and Liechtenstein are almost static. What is striking is that for these countries, the new GATS offers have also made rather insignificant additions as compared to GATS commitments. While it is true that the proportion of sub-sectors already covered in GATS is over 50 per cent for all of the above mentioned countries, subsequent additions have not been significant given that wide gaps in commitments still remain. However, commitments in the PTAs in the two modes of cross-border trade have gone beyond GATS in a wide range of social sectors. With the exception of health services, where virtually no improvement has occurred under either GATS or PTAs, it is the other social sectors like education and environmental services that has seen significant additions to both existing commitments and new bindings in PTAs. In particular in Other Business Services, the sector in which labour-abundant economies have competitive advantage vis-à-vis the cross-border trade potential, PTA commitments in agreements with the US show an improvement over the existing GATS commitments, but only for its trade partners; US on the other hand offers partial commitments and limited sectoral coverage, and actual policy restrictions remain the almost sole road-block for full commitments.³⁵ There is thus considerable scope for further liberalization.

³³ Chaudhuri and Karmakar (2008, *forthcoming*)

³⁴ Roy, Marchetti and Lim (2008, *forthcoming*)

³⁵ Chaudhuri and Karmakar (2008): *op. cit.*

It is apposite to note here that among the four modes of service supply recognized in the GATS, service provisions under the first two modes are relatively less regulated in almost all countries and across all service sectors, which is conducive to easier market access for under cross-border trade. That said, it needs to be remembered that insofar as GATS follows a positive listing approach of liberalization in which Members are also allowed to schedule most favoured nation (MFN) exemptions and limitations to market access, Members impose several regulatory requirements on foreign service providers which at times amount to *de facto* barriers to trade. The present liberalization experience in services therefore has been more market driven rather than negotiation driven. Clearly, while on the one hand, WTO Members have benefited as service suppliers by liberalization of autonomous regimes in services, there exist several regulatory restrictions/requirements for market access for foreign service providers in most Members' schedules of commitments on services in the multilateral as well as preferential trade regimes.

5. An Open Services Regime : A New Agenda for Growth and Jobs

In a scenario as above, what remains the way forward for countries to maintain a liberal services regime? Our analysis of India's experience with an open services regime clearly indicates positive developmental implications. We have also seen that services contribute to growth in many ways, as inputs into productive activities and also by offering cheaper final services to both individual and business consumers, thereby improving productivity and welfare. However daunting politically therefore, the foremost thing for countries to remember is that high service sector entry barriers must not be maintained because of the fear-of-job-loss induced paralysis. Rather, a liberal and pro-competitive service regime can be a new source of growth and employment generation, as has been the experience in India and other developing countries. In a dynamic economy, continuous structural readjustments are but natural phenomena, and rather than resist change, countries must be open to benefit from the emergent opportunities. In the past couple of decades, India created new skilled job opportunities specifically in those areas where the government control and interventions were minimal; jobs were also created in areas not known of earlier and in the informal service sectors, in response to the demands of the market economy. The positive role of a liberalized cross-border trade regime in services in this development can hardly be doubted.

And as discussed, the gains have not merely been in the economic sphere. The social welfare gains of the liberal services regime in the country extend to efficiency of service provision unexpected in a developing country, and which changed the contours of expectations and delivery modules even at the very lowest strata of the economy. The best and leading example of this has been the opening up of the telecommunication service sector in India. Today, reforms and regulations in the largely open sector has enabled consumers in India to benefit from low call and broadband rates comparable to OECD countries, and customer service that rivals experiences in any developed county. This has not only benefited the upper echelons of society, but also brought newer economic gains and opportunities for the very poorest. In contrast, the limitation of service sector competition in European countries is allowing the service providers in the sector to extract monopoly charges and fees, while providing next to nothing by way of customer support to their huge base of consumers.

The final concern pertains to the prospect of labour-intensive services being replaced by labour-saving technology, as evident in the increasing use of automated services by developed

countries to replace the increasingly unviable BPO jobs, and adoption of Software-as-a-Service, or SaaS, adopted by corporations to rein in information technology spending by use of low-cost Internet-based business process software. This has implications for both the long-term viability of services liberalisation as a source of employment generation. While the above concerns are increasingly being raised by analysts, it appears that such technology is unlikely to be able to entirely replace need for human interface, at least in the near future. True, SaaS threatens the traditional software model, but it actually complements an outsourcing model. Also, SaaS is much more threatening to software providers than to services firms. Vendors who tackle SaaS soon understand that clients' unique business challenges, as well as their insanely close-minded approach to process standardization, drives customization. Customized SaaS environments offer no economies of scale to the software manufacturer or the client.

Thus, in line with the churn of technology jobs as in the US, newer and higher-value added jobs are likely to be created, and India's recent experience indicate that countries can develop domain expertise to move up value-chains which will offset the increasing use of labour-saving technology in services. Indian software companies have worked on building other core differentiators like Quality (CMMI, ISO, etc.) and Creativity/Innovation/R&D/product engineering. Although advances in the latter are being made at a slow pace, it is an important and viable area to continue investing in. Countries will also begin to hedge bets geographically, both within the nation state and in the region, thereby focusing on "smartshoring" and "nearshoring" as active strategies. With the Asia-Pacific region regaining its prominence as an important growth pole for the world, prospects of sustaining a stable medium-term employment impact from an open service regime seem bright.

Therefore, a liberal service regime should be viewed as an opportunity to catalyze support for reforms in other key service-sector infrastructure that are integral to broad-based economic and human development in the country. If a country can provide these broadly to its citizens, then the gain in productivity and employment growth, and other indicators of social and human development will far exceed revenues from exports. These broad-based gains come as a result of cheaper service inputs to all manner of productive activity, as well as to the transformation of business activities that result when resources are freed-up to be used in new business endeavors throughout the economy. In the absence of adequate data to support rigorous empirical analysis, our anecdotal evidence seems to indicate that in the modern-day economic scenario an open services regime remains the best option for sustaining growth, competitiveness, employment generation with simultaneously providing for consumer welfare gains.

Bibliography

- Adlung, Rudolf and Roy, Martin (2007): “Services Liberalization in the New Generation of Preferential Trade Agreements (PTAs): How much further than the GATS?”, *World Trade Review*, July.
- Baliy, Martin and Lawrence, Robert (2005): “Don’t Blame Trade for US Job Losses”, *McKinsey Quarterly*, Vol.1, January.
- Chaudhuri, Sumanta and Karmakar, Suparna (2008): “Cross-Border Trade in Services”, in Juan A. Marchetti and Martin Roy (eds), *Opening Markets for Trade in Services: Bilateral, Regional and Multilateral Approaches in the 21st Century*, Publisher: CUP and WTO, Geneva, forthcoming.
- Davis, Ian and Stephenson, Elizabeth (2006): “Ten Trends to Watch in 2006”, *Mc Kinsey Quarterly Web Exclusive*, January.
- Dossani, Rafiq (2005): “Globalisation and the Offshoring of Services: The Case of India”, pp. 241-267, *Brookings Trade Forum*.
- Elixir Web Solutions (2007): “India remains World’s Favourite Outsourcing Destination”, Media interaction by Elixir Partners Vipul Prakash and Jacob Samuel, September 5, www.livemint.com.
- Goldsmith, Raymond W. (1969): *Financial Structure and Development*. New Haven, CT: Yale University Press.
- Government of India, *Economic Survey*, various issues.
- Hoekman, Bernard and Mattoo, Aaditya (2008): “Services Trade and Growth”, World Bank Development Research Group - Policy Research Working Paper 4461, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/01/02/000158349_20080102162022/Rendered/PDF/wps4461.pdf
- India Brand Equity Foundation resources, 2007, http://www.ibef.org/artdispview.aspx?in=51&art_id=17158&cat_id=116&page=3
- India Knowledge @ Wharton: “Will Jobs Move Back to Silicon Valley from India? Don’t Hold Your Breath...”, 18 October 2007, <http://www.ikw.in/>
- International Monetary Fund, *Country Report – India*, Washington D.C., February 2007
- Jaumotte, Florence and Tytell, Irina (2007): “Globalization of Labor”, *Finance & Development*, Volume 44(2), June.
- Jensen, Bradford and Kletzer, Lori (2005): “Tradable Services: Understanding the Scope and Impact of Services Outsourcing”, IIE Working Paper No. 05-9, Washington D.C., September.
- Joshi, S (2004): “Tertiary Sector-Driven Growth in India- Impact on Employment and Poverty”, *Economic and Political Weekly*, Special Article, India 11 September.

- Karmakar, Suparna (2005): 'India–ASEAN Cooperation in Services – An Overview', ICRIER Working Paper 176, November.
- Karnik, Kiran et al (2006): "Globalization of Services: Facilitators and Barriers", Background paper prepared for the Oxford University workshop on Grand Challenges in Services, May.
- Kirkegaard, Jacob Funk (2007): "Offshoring, Outsourcing, and Production Relocation—Labor-Market Effects in the OECD Countries and Developing Asia", Peterson Institute Working Paper, April, www.iie.com/publications/wp/wp07-2.pdf
- Mann, Catherine L. (2004): "Globalisation of Services: Why, How Much, and What to Do About It", IIE Publication, Washington D.C.
- McKinsey Global Institute (2005): "The Emerging Global Labour Market", June.
- Melvin, James R. (1989): "Trade in Producer Services: A Heckscher-Ohlin Approach", Journal of Political Economy, Vol. 97(5), pp. 1180-1196.
- NASSCOM-CRISIL (2006): "The Rising Tide – Output and Employment Linkages of IT-ITeS".
- NASSCOM (2006): "Factors and Policies Influencing the Expansion of Services Trade – Experiences of the Indian IT-BPO Sector", New Delhi, October; siteresources.worldbank.org/INTRANETTRADE/Resources/WBI-Training/288464-1161888800183/S2b2_Singh_En.pdf
- NASSCOM: *Strategic Review 2007 and Annual Report*, various issues.
- OECD (2005): "Growth in Services Fostering Employment, Productivity and Innovation", Ministerial Meeting of the OECD Council.
- Rangarajan, C. et al (2007): 'Revisiting Employment and Growth', ICRA Bulletin - Money & Finance Vol 3(2).
- Ros, Jaime (2000): *Development Theory and the Economics of Growth*, Ann Arbor, University of Michigan Press.
- Roy, Martin, Juan Marchetti and Hoe Lim (2008): "The Race towards Preferential Trade Agreements in Services: How Much Market Access is Really Achieved?", in Panizzon, Pohl and Sauvé (eds.), *The Regulation of International Trade in Services*, forthcoming.
- UNCTAD (2007): *World Investment Report*, Washington D.C.
- World Bank (2007): *Global Economic Prospects - Managing the Next Wave of Globalization*, Washington D.C.
- WTO (2005): *World Trade Report*, Thematic Essays C: "Offshoring Services: Recent Developments and Prospects".
- WTO (2007): *International Trade Statistics*, Washington D.C.

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