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INDO-SINGAPORE TRADE IN SERVICES: ENHANCING CO-OPERATION

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Abbreviations

AIIMS	All India Institute of Medical Sciences
APEC	Asia Pacific Economic Co-operation
ASEAN	Association of Southeast Asian Nations
B2B	Business to Business Transactions
B2C	Business to Consumer Transactions
BOT	Build-Operate-Transfer
CAIT	Central Academy of Information Technology
CECA	Comprehensive Economic Cooperation Agreement
CIDC	Construction Industry Development Council
CII	Confederation of Indian Industry
CITOS	Computer Integrated Terminal Operations System
CITPM	Certified IT Product Manager
DIT	Department of Information Technology
DOT	Department of Telecommunications
EDB	Economic Development Board
EFTA	European Free Trade Association
EHTP's	Electronic Hardware Technology Parks
EOU	Export Oriented Units
EPZ	Export Processing Zones
ERC	Economic Review Committee
FDI	Foreign Direct Investment
FERA	Foreign Exchange Regulation Act
FICCI	Federation of Indian Chambers of Commerce and Industry
FTA	Free Trade Agreement
GATS	General Agreement on Trade in Services
gbps	gigabits per second
GDP	Gross Domestic Product
HDFC	Housing and Development Finance Corporation
HUDA	Haryana Urban Development Authority
ICT	Information Communications Technology
IDA	Infocomm Development Authority of Singapore
IIM	Indian Institute of Management
IISc	The Indian Institute of Science
IIT	Indian Institute of Technology

IL&FS	Infrastructure Leasing and Financial Services
IFPI	The International Federation of the Phonographic Industry
IP	Intellectual Property
IT	Information Technology
JITEC	Japan Information Technology Engineers Examination Centre
JSEPA	Japan Singapore Economic Partnership Agreement
JSG	Joint Study Group
MOU	Memorandum of Understanding
MRA	Mutual Recognition Agreement
MSW	Municipal Solid Waste
MTNL	Mahanagar Telephone Nigam Limited
NASSCOM	NASSCOM (National Association of Software and Services Companies
NICC	National Infocomm Competency Centre
NIE	National Institute of Education
NIEPA	National Institute of Educational Planning and Administration
NIIT	National Institute for Information Technology
NRI	Non Resident Indian
OBU	Off Shore Banking Units
PKI	Public Key Infrastructure
PSA	Port of Singapore Authority
R&D	Research & Development
RBI	Reserve Bank of India
SAARC	South Asian Association for Regional Co-operation
SAFTA	South Asian Free Trade Area
SAPTA	South Asia Preferential Trading Arrangements
SCS	Singapore Computer Society
SINGTEL	Singapore Telecom
STB	Singapore Tourism Board
STPI	Software Technology Parks of India
TIE	The Indus Entrepreneurs
UK	United Kingdom
USA	United States of America
VSNL	Videsh Sanchar Nigam Limited
WEF	World Economic Forum
WHO	World Health Organization
WTO	World Trade Organization

Foreword

India and Singapore are in the process of signing a Comprehensive Economic Cooperation Agreement (CECA). A Joint Study Group was set up by the governments of the two countries to explore the trade potential and areas of mutual cooperation in goods, services, investment and other trade facilitation measures. This study, funded by the Ministry of Commerce, has been carried out by ICRIER to provide inputs to the Joint Study Group in areas of bilateral trade interest and mutual co-operation between the two countries in the services sector.

Through a detailed sectoral analysis, the study identifies domestic and external barriers to trade in services between the two countries and recommends measures for removal/reduction of such barriers through the CECA. The study shows that India could gain significantly from Singapore investment, technical know-how and management expertise in infrastructure services, such as telecommunication and transport. Current barriers to investment such as FDI restrictions (as in the case of telecommunication), multiple clearance procedures, multiple taxes etc. can be addressed through the CECA. Singapore will benefit from the inflow of Indian professionals in sectors such as software, health and education. To remove the qualification related entry barriers, the two countries can sign Mutual Recognition Agreements in selected service sectors. Other barriers such as stringent conditions for employment passes in Singapore can also be discussed under the CECA. The study also identifies areas of complementarity between the two countries in sectors such as information technology and audio-visual products, which can be exploited by both countries to gain greater presence third country markets. Since both India and Singapore are committed to the multilateral trading system (WTO), the study stresses that the framework of CECA should be consistent with the WTO framework, but liberalisation undertaken bilaterally should be much beyond the commitments in the multilateral forum.

The study is very timely, given that negotiations on the bilateral agreements between the two countries have commenced in April 2003. I am confident that this paper will provide significant inputs to policy makers, industry associations and academicians working towards strengthening the competitiveness and capabilities of the service sectors in both the economies.

Dr. Arvind Virmani
Director & Chief Executive
ICRIER

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Section 1: Introduction[1]

India and Singapore place primary emphasis on the multilateral trading system where rules-based WTO (World Trade Organisation) is a key institution that can provide a fair and predictable global trading environment. While an active debate on whether bilateralism/regionalism is a stepping stone towards multilateralism or whether such arrangements detract from liberalisation and fragment the global trading system continues to persist, the point to recognise is that regionalism is here to stay and grow.[2] With the limited success of Uruguay Round to liberalise trade, regional/bilateral preferential arrangements are playing an important role in liberalising world trade.

Both India and Singapore look upon regional FTAs (Free Trade Arrangements) and bilateral FTA's as a complement to the multilateral trading system by ensuring compatibility of the FTAs with rules laid down by the WTO. India has been a member of the seven member South Asian Association for Regional Co-operation (SAARC) which took a major decision towards greater regional economic co-operation in 1991, when it was decided to establish a Preferential Trading Arrangement amongst the SAARC member countries. The member countries have also envisaged the formation of a South Asian Free Trade Area (SAFTA) through successive rounds of South Asia Preferential Trading Arrangements (SAPTA). Singapore has been involved with regionalism *via* the ten-member ASEAN (Association of Southeast Asian Nations) grouping and the larger Asia and Pacific region *via* the twenty-one member APEC (Asia Pacific Economic Co-operation) grouping. In addition, India and Singapore have actively pursued bilateral FTAs.

One of the distinguishing features between the two countries is that while India adopted the FTA route long ago, starting with Nepal and Bhutan in the early 1950s and 1970s respectively, progressively adding on Sri Lanka, Singapore's foray into bilateral FTA was initiated only two years ago. Another distinguishing feature of the FTAs is that while India's bilateral free trade agreements have been with its South Asian neigbouring countries, Singapore has initiated FTAs with countries beyond its geographical proximity. So far, Singapore has concluded bilateral FTAs with New Zealand, Japan, European Free Trade Association (EFTA) and Australia.[3] A third distinguishing feature of India and Singapore's free trade accords is that while India has focused only on liberalising trade in goods, Singapore's trade accords go well beyond just merchandise

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1 We are grateful to the Ministry of Commerce for providing guidance and information. We acknowledge our thanks to various Government Ministries and Departments including, Ministry of Tourism and Culture, Ministry of Communication and Information Technology, Department of Telecommunication, Ministry of Road Transport and Highways, Reserve Bank of India, etc. Thanks are also due to various industry associations, especially CII and FICCI, for providing information. On the Singaporean side, we are extremely grateful to High Commissioner Chak-Mun SEE for useful discussions and to Rahul Sen from ISEAS, Singapore. We would like to thank Arvind Virmani, Director and Chief Executive, ICRIER, for his encouragement and support. We are grateful to A Hoda, Professor ICRIER, for his guidance and useful comments. Sukanya Ghosh, ICRIER, has provided valuable research assistance.

2 For an excellent summary of the debate on Regionalism vs. Multilateralism see Winters, 1996.

3 The FTAs concluded on December 18, 2002.

trade liberalisation. They also encompass liberalisation of services trade and other trade facilitation measures including investment protection and liberalisation, harmonisation and mutual recognition of standards and certification, protection of intellectual property rights, opening of government procurement markets, streamlining and harmonisation of customs procedures, development of dispute settlement procedures etc. and the like.[4] This is in line with the "New Age FTAs".

The proposed Indo-Singapore CECA (Comprehensive Economic Co-operation Agreement) is an alternative track for achieving the objectives of the multilateral trading system and is perhaps India's first concrete step towards co-operation in the services sector. As such, the CECA could act as a testing ground for exploring co-operation in the services sector and may help establish some sort of precedent or benchmark for trade negotiations with other countries. The Indo-Singapore CECA can also be viewed as a major gateway to the ASEAN region and beyond. In recent months, India's "Look East" policy initiated in the earlier nineties has gained considerable thrust. India and ASEAN in their first summit meeting have decided to work towards an ASEAN-India Free Trade Area and enhance economic co-operation in different sectors. A major development that needs to be taken into account relates to the growing coherence between ASEAN and three major economies of Asia, namely China, Japan and South Korea. It is understandable that it is extremely important for India to strengthen economic co-operation with the ASEAN region through setting up of a FTA and the proposed CECA could be a powerful and effective instrument in achieving this goal.

To explore the possible economic benefits from the proposed Indo-Singapore CECA, a Joint Study Group (JSG) was set up under the leadership of Rakesh Mohan, Deputy Governor, Reserve Bank of India (RBI), and Lim Chin Beng, Member of the Public Service Commission, Singapore. The objective of the JSG is to draw up a framework for negotiations for the CECA. The basic framework of the CECA is in line with the "New Age FTAs" and includes liberalisation of trade in goods, services and investments, and other trade facilitation measures. The JSG also explores co-operation elements in fields of mutual interest such as life sciences, information and communication technology, tourism, R&D (Research and Development) and other fields.

This study focuses on the services aspect of the proposed Indo-Singapore CECA. Given that tariffs are much higher in India than in Singapore it is likely that there may not be much gain for India from merchandise trade liberalisation. On the other hand the services sector accounts for a significant proportion in GDP (Gross Domestic Product) and international trade in both countries. Hence there is an increasing realisation that any trade liberalisation measure should focus on liberalising trade in services.

The plan of the rest of the study is as follows: Section 2 highlights the importance of trade in services for the economies of India and Singapore. Section 3 provides a framework within GATS for assessing the trade potential in various service sectors. Section 4 gives detailed analyses of service sectors in terms of their profile, highlights

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4 Rajan and Sen, 2002.

trade possibilities between the two countries, identifies barriers to trade in services and suggests how a CECA can help enhance trade. Section 5 proposes how the proposed CECA could be compatible within the overall framework of GATS (General Agreement on Trade in Services). Section 6 stresses on the main conclusions emerging from the study.

Section 2: Importance of Trade in Services

The importance of commercial services has increased rapidly in recent years accounting for nearly 64 per cent of the world GDP in the year 2000 and 40 per cent of the world stock of foreign direct investment (FDI) by 2002.[5]

In the past two decades, services sector in India witnessed a remarkable growth and it has now replaced agriculture as the dominant sector. The share of services in GDP grew from 38 per cent in 1980-81 to 48 per cent in the year 2000. A large part of this growth is accounted for by the growth in the knowledge-based services rather than traditional services such as tourism. Likewise India's trade in services has also increased. In 1995, India ranked 34th and 28th respectively among the WTO member countries in services exports and imports. This ranking changed to 19th and 18th in the year 2001 (see Table A1 and A2 in Appendix A).

Several factors have contributed to the growth of the services sector in India. On the one hand, there was a growing domestic demand for services, which reflected the rising income levels, and on the other, the government significantly liberalised this sector in the 1990s which increased private and foreign participation and reduced monopoly induced inefficiencies. As the Indian economy embarks upon a higher than global average growth rate (5 per cent), there is significant scope for its trading partners to invest in services. The trading partners would also benefit from imports of knowledge-based services in which India has already established a presence in the global market.

Service sectors contribute towards a significant proportion of Singaporean GDP (66 per cent in 2000) and exports (16 per cent of the total exports). In the year 1995, Singapore ranked 12th and 19th in terms of services exports and imports respectively among the WTO member countries. However, the country has slipped slightly from this position 2001 when it was ranked as the 16th exporter and 21st importer.[6] Singapore is one of the most dynamic economies of the world. Even though it is a small city-state, Singapore has leveraged upon its locational advantage, excellent trade logistic facilities, easy interaction with multinational companies, stable political system and an efficient bureaucracy to become one of the most open and internationalised economies of the world.

The World Economic Forum (WEF) has ranked Singapore as the 4th country in 2001 (among 75 countries taken in the study) in terms of growth competitive index, 1st in

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[5] Balance of Payments Statistics, IMF.

[6] One should note that India's position improved significantly during the same period.

terms of FDI inflows and technology transfer and national saving rate (for 2000), 2nd in terms of overall infrastructural quality and 13th in terms of technological sophistication. Comparatively, India ranked 57th in terms of growth competitive index, 30th in terms of FDI inflows and technology transfer, 41st in terms of national savings rate, 66th in terms of overall infrastructure quality and 28th in terms of technological sophistication.

Given its small domestic market, high degree of openness to trade and FDI, high savings rate, the city-state needs to enhance its trade linkages with countries offering opportunities for investment and trade in sectors of interest to Singapore. In fact, with the regional economic crisis and attempts by neigbouring countries, such as Thailand and Malaysia, to build competing infrastructure, Singapore is now looking at large globalised economies like India with inadequate infrastructure. Singapore is dependent on inward flow of professionals. India does provide culturally compatible, yet internationally competitive low-cost manpower, which can be absorbed by Singapore's knowledge-based sectors. Singapore's export of services to India grew from S$585.2 million (US$361 million) in 1998 to S$ 829.4 million (US$512 million) in 2000, indicating a growth of 41.7 per cent in a two-year time span (Table A3 in Appendix A).[7]

Indian economy is expected to grow at a rate of around 7 per cent in the next 10–15 years. This would require an investment of US$429 million in the infrastructure sector alone[8] and India will benefit from Singapore's experience and technical know-how in infrastructure services. Indian companies have shown an interest in investing in Singapore due to the availability of high quality infrastructure, easy interaction with multinationals, widespread use of English and similar legal system. Since Singapore is developing as a regional and international hub for various services, such as information technology (IT), finance and health, access to the Singaporean market will widen the global marketing network of Indian companies. It is, therefore, in the interest of the two countries to exploit their complementarity in services trade through the CECA.

Section 3: Framework for Sectoral Analysis

The General Agreement on Trade in Services (GATS), established in the Uruguay Round of the WTO negotiations, provides a framework for removal/reduction of barriers to trade in services through successive rounds of multilateral negotiations**.** Since both India and Singapore are members of WTO and are actively participating in the on-going GATS 2000 negotiations, the proposed CECA between the two countries will have to be compliant with the GATS framework. The uniqueness of GATS is to classify service trade into four different modes:

- Cross-border supply or Mode 1 refers to the delivery of services across countries through a transportable media such as paper documents, computer diskette or Internet.

[7] India's export of services to Singapore grew by 34.5 per cent from S$293 million (US$181million) in 1998 to S$394 million (US$243.2 million) in 2000.

[8] CIDC, 2000-2001.

- Consumption abroad or Mode 2 refers to the physical movement of consumers of the services to the location where the service is provided and consumed.
- Commercial presence or Mode 3 refers to the establishment of foreign affiliates and subsidiaries of foreign service companies. It is analogous to FDI in services.
- Presence of natural persons or Mode 4 refers to the temporary movement of service providers to provide services to clients in overseas markets.

Under GATS, for each on the above mentioned modes of supply of services a country can negotiate and make commitments to liberalise market access and national treatment for specific sectors in the sectoral schedule of commitments and across all sectors in the horizontal schedule. The former is applicable to a particular sector while the latter relates to all sectors and could override/complement or qualifies the sectoral commitments. A country is said to have imposed a market access restriction if it does not allow (or partially allow with some restrictions) foreign service providers to enter and operate in its market. A national treatment restriction exist when foreign service providers are allowed to enter the market but are treated less favourably than domestic service providers. GATS also allows a country to impose additional restrictions. A country is said to have made a "full" commitment in a particular mode of supply of services if there are no restrictions on market access or national treatment. A country is said to have made "partial" commitments if the commitments are subject to some restrictions on market access or national treatment. If a country does not make any commitment to liberalise the sector and reserves the right to impose restrictions in future. In such cases the entry "unbound" is made against the relevant sector in the country's schedule.

Within this broad framework, the study analyses Indo-Singapore trade possibilities across different service sectors. The study provides a detailed analysis of the service sectors of trade interest to India and Singapore, including recent development in these sectors, existing trade barriers, removal/reduction of these barriers through the CECA, areas for mutual co-operation and enhancing trade under the CECA. Given the lack of availability of comprehensive and dis-aggregrated data on services, the study is based on a qualitative survey instead of a quantitative analysis. Respondents are drawn from relevant industry associations, domestic private sector, foreign service providers, central/state departments, pubic sector units, autonomous associations, etc. of the two countries.

For each of the sectors of trade interest, the study lists the liberalisation measures undertaken during the Uruguay Round of GATS negotiations and the request for liberalisation which the two countries have made bilaterally in services in the on-going Doha Round in the WTO. This will help to compare the bilateral and multilateral liberalisation and suggest how the CECA can go beyond the GATS liberalisation.

Section 4: Sectoral Analysis

This section provides a sector-wise analysis of service sectors which are of trade interest to India and Singapore. These include tourism, distribution, information technology, telecommunication, audio-visual, health, education, transport (including ports, air transport, roads), construction, financial services, business services (including legal services, architectural and engineering services) and environmental services.

Tourism Services

Globally, tourism constitutes one of the largest service sectors, contributing to one-third of the total world trade. Both India and Singapore have significant export interest in this sector. India, with its rich cultural heritage and diverse topography, is an important tourist destination. However, the country has not been very successful in attracting international tourists due to factors such as perception of the country not being a very safe and secure destination, quality of transport services and related infrastructure, the multiplicity and high level of taxes, insufficient marketing resulting in limited availability of tourist information in source markets and at destinations, etc. Singapore, on the other hand, with very little to offer by way of cultural heritage or scenic attraction has a fast growing tourism sector. Tourist arrival in Singapore grew from around 91,000 in 1964 to more than seven million in the year 2000 (comparatively, India had less than three million international tourists in that year).[9] In the year 2000, Singapore ranked 25th in terms of world's top tourist destinations for travel, while India was only 50th.[10] Growth of the tourism industry in Singapore is due to a holistic approach to development of tourism including the innovative marketing strategies of the Singapore Tourism Board (STB), cleanliness and safety, performance of Singapore Airlines and its involvement in Star Alliance, focus on culture tourism, etc. Besides tourists travelling to Singapore do not face the usual visa hurdles, currency restrictions and custom barriers.

Singapore ranks among the top fifteen countries in terms of tourist arrival to India. There were 49,198 tourist arrivals from Singapore to India in the year 2000, constituting 2.3 per cent of the total tourist arrivals.[11] In the same year, 3,46,000 Indian tourists visited Singapore which was 4.5 per cent of the total tourist visiting Singapore. In 2000, while only 0.5 per cent of the total outbound tourist from Singapore visited India, about 8.5 per cent of India's outbound tourists visited Singapore.[12] Although a large part of this imbalance can be accounted for by the unequal size of the two nations, India needs to look at Singapore as a corridor for attracting tourists from other countries. At present, the major markets for inbound tourist to India are the USA (United States of America), UK (United Kingdom), Germany, and France.[13] Indian tourism industry has to potential

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9 CII, 2002d.

10 Tourism Statistics, 2000, Ministry of Tourism and Culture, Government of India.

11 Tourism Statistics, 2000, Ministry of Tourism and Culture, Government of India.

12 Ministry of Tourism and Culture, 2001.

13 Ministry of Tourism and Culture, 2002.

to target growing markets like Southeast Asia, Japan, South Korea and Taiwan using Singapore as a gateway.

The Singapore Tourism Board is very keen to work with neighbouring countries to promote tourism in the region. Singapore already has multi-country tour packages with Malaysia, Indonesia and other South Asian countries. The Indian Ministry of Tourism and Culture can work jointly with STB to develop and promote multi-country packages, including prime tourist destinations in India. For example, the Buddhist circuits in Southeast Asia can be linked to India's Buddhist circuit in the Bihar region through a combined tour package. Packages that link the centers of Sufi spiritualism in India, West Asia, Central Asia, and Southeast Asia can also be developed. Tourist destinations such as Kerela, which are attractive both for its picturesque landscape (backwaters) and health tourism (ayurveda), can be effectively marketed through a joint Indo-Singapore package deal. Since India does not have an autonomous national tourism board similar to the STB, the Ministry of Tourism and Culture and the individual state tourism departments will have to work closely with the Singapore Tourism Board to set up Indian tourist information offices in Singapore. This would help in increasing awareness about tourist destinations in India. Singapore Tourism Board has already set up several offices in India and they should be extended any co-operation, which they may require.

In India, there is an urgent need to develop tourist infrastructure. According to the accommodation assessment survey commissioned by the Tourism Ministry, at present, there are 68,000 rooms in classified hotels, while the requirement will be 1,25,000 rooms by 2005. The Ministry has estimated that an investment of US$9.8 billion would be required and a large part would have to be financed by the private sector. To this effect, the government has allowed 100 per cent foreign equity (on a case-by-case basis) in the tourism industry. It is recommended that the Indian states, such as Delhi, Uttar Pradesh, Maharashtra, Tamil Nadu and Rajasthan, which attract a large number of foreign tourists, can enter into a co-operation agreement with Singaporean government/Tourism Board/companies for investment in tourist infrastructure. JTCi Consultants (India) Private Limited which is a Indo-Singapore joint venture is already drawing up a detailed tourism master plan for transforming Tehri (in the state of Uttranchal) into a mega tourism destination for the Tourism Development Board, Government of Uttaranchal. The company is also drawing up the master plan and will also do the detailed engineering, architecture and project management for KVL Investment and Constructions Private Limited to develop a 100-acre resort near New Bangalore International Airport.

Singapore has set up state-of-art modern convention facilities and this has made the country the MICE (meetings, incentives, conventions and exhibitions) hub of Asia.[14] India also has tremendous potential for setting up convention facilities and hosting international events. Although this is a high growth area in tourism, Indian companies do not have adequate finance or access to the latest technical know-how needed to set up modern convention facilities required to host large international events. Some states, such as Andhra Pradesh, Haryana and Kerala, have shown interest in setting up modern convention centres. Singapore has the capability of providing the necessary financial and

[14] Information provided by STB, Government of Singapore.

technological support. The CECA can be a stepping stone to enhance co-operation and exchange of expertise between the Indian Convention Promotion Bureau and the STB.

Theme park, amusement parks, recreational clubs, etc. are important tourist destinations. However, Indian companies have not been successful in developing them because they lack finance, management, marketing and technical skills. India can gain from Singapore's experience in promoting tourism by developing amusement/theme parks, recreational clubs, etc. States, which have no natural tourist endowments (e.g., Haryana), can work closely with STB and identify specific locations for the development of leisure tourism.

India has a network of 21 premier Institutes of Hotel Management and 16 Food Craft Institutes. India and Singapore can explore the possibilities of collaborating in human resource development in tourism through the exchange of students, faculty, teaching modules and materials. Investment by Singapore in upgradation of infrastructure and teaching aid in these institutes will be beneficial for India.

A major deterrent to the inflow of tourists between India and Singapore is the acute shortage of seat capacity and problems related to air connectivity. Majority of tourists from Singapore (99.4 per cent) arrive by air. Singapore Airlines has pointed out that its services are limited to a few destinations in India and they do not have enough slots inspite of acute shortage of seats. This is also evident from the fact that even a major metro like Kolkata does not have regular air services to Singapore. A large part of the services in India-Singapore route are reserved for Air India and Indian Airlines. The tourism industry has pointed out that there is an urgent need to enhance the existing Bilateral Air Services Agreement between the two countries, so as to facilitate a greater flow of tourists. Increase in air services should also focus on linkages between the ports of entry and prime tourist locations. Since there are no major restrictions on air taxi/chartered flight operations, Silk Air, a subsidiary of Singapore Airlines is exploring the option of running charter flights from Singapore to tourist locations in India, such as, Jaipur.[15]

India has imposed stringent requirements for applications of travel visas. Singapore, on the other hand, has an automatic entry facility and visitors have the flexibility of getting a "visa on arrival". India also needs to explore the possibilities of granting "visa on arrival" which will give more flexibility to international travellers and encourage greater inflow of tourists. Tourists travelling to India or Singapore could have an entry visa along the lines of the Schengen Visa[16] in Europe. This will encourage free flow of tourists between the two countries since tourist travelling to one country, would be able to visit the other without any visa-related obstacles.

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15 Business Line, 2002, June Issue.

16 15 Schengen countries are: Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Italy, Greece, Luxembourg, Netherlands, Norway, Portugal, Spain and Sweden.

In Singapore, there is a stringent requirement for 'employment passes' for foreign workers in the Food and Beverage sector. The requirement states that the past monthly salary will have to be S$2,500.[17] This makes it difficult for Indians to enter this industry since salaries are much lower in India than in Singapore. The CECA should examine this issue and entry procedures in the hospitality industry of Singapore should be made less rigid taking into account the salary differences between the two countries. In this regard, the two countries can identify a set of premier institutes in India, and students from these institutes can work in Singaporean Food and Beverage sector without any rigid entry requirements.

Tourism has been high on the agenda of the two countries in the multilateral forum. Both countries had made commitments in this sector in the Uruguay Round of WTO negotiations (see Appendix B). In the on-going round of negotiations, the two countries have made request to each other for liberalising trade in this sector. Singapore has requested India to undertake full commitments in Modes 1 and 2 in hotel and other lodging services and travel agency and tour operator services. In the Uruguay Round, India had scheduled that foreign investment in these two sub-sectors will be through incorporation and foreign equity will be limited to a maximum of 51 per cent. Singapore has requested for the removal of this restriction. India has made request under tourism and travel related services in Mode 3 for removal of the restriction on travel agency and tour operators to be a private limited company (as stated in the Singaporean schedule). Under additional commitments for hotel and restaurants and travel agencies, India has requested that access to and use of public services by hotels and restaurants should be on reasonable and non-discriminatory terms and that the qualifications of Indian tourism and travel related services professionals should be recognised in Singapore**.** The recognition of qualification can be facilitated through the CECA by signing a MRA (Mutual Recognition Agreement) in this sector. Since India has already relaxed the foreign equity requirements in the tourism sector, it will not be difficult to incorporate Singapore's request in the CECA.

It is worth noting that in 1994, India and Singapore had signed a bilateral tourism agreement to enhance co-operation between the two countries in this sector. The agreement also covered exchange of tourism related information between the two countries, possibilities of joint venture in the area of tourism and exchange of professionals for tourism training between the competent institutes/organisations of the two countries. However, this agreement was not acted upon.

Distribution Services:

Distribution services include four broad categories of services: commission agents' services, wholesale trade services, retailing services and franchising services. Efficient operation of distribution services involve additional services through the supply chain such as inventory management, direct contracting of production of merchandise, delivery and transportation services, etc.

[17] Economic Review Committee, 2002g.

This sector contributes towards a significant proportion of India's GDP with retailing alone accounting for 10–11 per cent of the GDP. Retailing is the largest industry in India and second largest employer after agriculture.[18] However, unlike most other countries, the retail sector in India is fragmented and bulk of the business is concentrated in the unorganised sector (organised sector accounts for only 2 per cent of the market share). Singapore, on the other hand, has a well-developed distribution network. Although retailing constitutes around 2 per cent of Singapore's GDP,[19] the sector is highly organised and has strong linkages with other sectors, especially tourism. In fact, the retail infrastructure of Singapore has made it an attractive shopping destination and the sector contributes significantly towards the growth and development of the economy. Singapore attracts shoppers not only from neighbouring countries, such as Indonesia and Malaysia, but also from far off countries, such as the USA and the UK. On an average, a tourist in Singapore spends more than 50 per cent of the travel budget on shopping while in India it is only 20 per cent.[20]

Retail sector in India is slowly moving towards an organised format. This is largely due to the initiatives of real estate companies and large corporates who are investing in the development of shopping malls (for example, Crossroads in Mumbai and Ansal Plaza in New Delhi) and chain stores (for example, RPG Group's Food World and Music World). Many Indian manufactures (for example, Titan and Raymonds) have expanded their operations into retailing and more recently, venture capitalists have shown an interest in investing in this sub-sector.

Singapore, with its expertise in the development of world class retailing and distribution trade, can expedite the development of modern formats in India by bringing in technical know-how, finance and skills. This is not possible, at present, since FDI is not allowed in retailing. Although it is unlikely that FDI in retailing would be allowed across the country, the Indian government can explore the possibilities of allowing FDI in retailing in specific locations (such as major metros), similar to the strategy adopted by China. Through the CECA, both India and Singapore can sign a Memorandum of Understanding (MOU) to develop retail infrastructure in large metros, such as Delhi and Mumbai. More concretely, the two countries can mutually identify a specific shopping area within a metro and the Singaporean firms can enter into joint ventures with Indian organised retailers to develop that area. This would allow the Singaporean retail developers to establish their presence in the Indian market and enable the Indian retailers to gain from their expertise.

India is strengthening its position as a sourcing hub for many large international apparel and home-furnishing retailers (for example, Pottery Barn, Crate and Barrel, Gap and Ralph Lauren). Singaporean retailers can explore the possibilities of sourcing their products from India. Many Indian companies have developed branded products (such as

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[18] Mukherjee, A., 2002a.

[19] Information provided by the Ministry of Trade and Industry, Government of Singapore.

[20] McKinsey, 2000.

Tanishq and Oyzterbay in jewelleries) and are in the process of marketing these products through affiliates/chain stores in countries/cities with large NRI/South Asian population. The CECA can facilitate the process of opening up of Indian retail outlets in Singapore.

Neither India nor Singapore offered any liberalisation commitments in distribution services during the Uruguay Round of the WTO negotiations. In the on-going round, Singapore has requested India to open up Modes 1, 2 and 3 in all the sub-sectors of distribution services, namely, commission agents' services, wholesale trade services, retailing services and franchising services. Singapore has also requested that India should open up Mode 4 subject to the horizontal commitments. India did not make any request to Singapore in this sector. In India, FDI is not allowed in retailing and there are some sectoral caps on FDI through franchising.[21] The FDI policy is more liberal for wholesale trade services[22] and commission agents' services. Since, India has already liberalised wholesale trade, franchising services and commission agents' services, Singaporean firms do not face any major restrictions in entering these segments. However, as in the case of other domestic and foreign players, Singaporean firms may face some barriers such as plethora of laws/regulations, multiple clearance procedures, restrictive zoning legislation, multiple sales tax and local levies, lack of a comprehensive legislation regulating the operation of franchising, lack of quality urban infrastructure (such as power supply, approach road, parking facilities), etc. The CECA can help in reducing some of these entry barriers, especially those related to regulatory issues. For example, there can be single window clearance for certain categories of franchises within specific states.

Information Technology:

IT is one of the fastest growing services sectors in India. Between 1995–2000, the sector recorded a compound annual growth rate of more than 42 per cent, which is almost double the growth rate in many developed countries.[23] Software services has been the key driver of growth in this sector (especially the offshore exports and turnkey projects) and has grown from US$195 million in revenue in 1989–90 to a US$8.3 billion industry in 2000–01.[24]

Indian IT industry has largely grown under private Initiatives with government as a facilitator. Government schemes like Export Processing Zones (EPZs), the 100% Export Oriented Units (EOUs), Electronics Hardware Technology Parks (EHTPs) and Software Technology Parks of India (STPIs), have helped businesses access concessions in this sector. The role of multinationals in software development is also very limited – most foreign subsidiaries in India develop software for parent companies and there are hardly any vertical linkages with the domestic software market.

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[21] Mukherjee, A., 2002a.

[22] Up to 100 per cent foreign equity is allowed in cash and carry whole sale trading, for e-commerce activities, for firms engaged in exports, bulk imports with export/ex-bonded warehouse sales, etc.

[23] NASSCOM Strategic Review, 2002.

[24] NASSCOM Strategic Review, 2002.

In stark contrast, the IT sector in Singapore has not only developed under government initiatives, but the government is also the main consumer of these services.[25] The government of Singapore has invested heavily in national information infrastructure and creation of skilled workforce through various initiatives, such as IT2000 and ICT21.[26] The government's aim is to have a pervasive infocommunication network that will support high speed wireless data access for its citizens by 2005.[27] Given the small size of the domestic market, the government also aims to turn Singapore into an "info-communications hub" for the Asia-Pacific region. Therefore, the government is actively positioning the country as a Living Digital Hub[28] for building links with other countries to conduct trials and test new products and services and catalyze the process by which companies then export these solutions.

Another difference between the two countries is that, while India mainly focused on the development of software (the share of software in total IT turnover is more than 50 per cent while that of hardware is around 25 per cent) and is heavily dependent on software services exports; Singapore has a strong hardware manufacturing base. Singapore has evolved from a low-cost production base for labor-intensive electronics manufacturing to one that leverages on intellectual capital and highly advanced technologies. In the year 2000, the total output of hardware-related industry was around S$70.1 billion, which represented an increase of 15.3 per cent from 1998.[29] Electronics constitutes about 45 per cent of the total value added in the sector. The two countries can combine their software-hardware capabilities and together leverage the complimentary skills in infrastructure, manufacturing and operational experience to create an Asian brand identity and compete in the global arena. It is worth noting that China and Taiwan are also trying to leverage on their complementary strength in the hardware-software segment to increase their share in the world's IT trade.

One specific area in which India and Singapore can collaborate is the design, manufacture and distribution of products with embedded software. Currently, most products are conceptualised in the USA and manufactured in Taiwan at considerably high costs. In this segment opportunity lies for India and Singapore to forge mutually beneficial partnerships in high value added manufacturing sector in Singapore using Indian software capabilities[30] and taking advantage of the low-cost environment in India. Singapore is also emerging as a hub for industrial design, which is increasingly becoming a tool of differentiation, for enhancing product competitiveness, and for defining brand

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25 In the year 2000, the ICT (Information and Communications Technology) industry accounted for S$10.9 billion in terms of value added (7 per cent of the GDP).

26 IDA, 2001a.

27 Infocomm Development Authority of Singapore, 2000.

28 Economic Review Committee, 2002f.

29 http://www.edb.gov.sg

30 Confederation of Indian Industry, 2002b.

identity. Here again opportunities lie for deepening strengths and building new capabilities with Indian firms.[31]

With slow down of the US economy, over reliance on the US market for IT exports has adversely affected both India and Singapore, and consequently both countries are now looking eastward to increase their exposure in the Asia-Pacific region. In this respect, Indian IT companies can use Singapore as a gateway to enter the markets of China and Southeast Asia, relying on Singapore's profound cultural linkages with these countries. On the other hand, Singaporean companies can benefit from the contacts and experience of Indian companies in the SAARC region and Europe. CII (Confederation of Indian Industry) of India and IDA (Infocomm Development Authority) of Singapore are exploring the possibility of taking a joint trade mission to China and Japan in order to assess the trade opportunities in these countries. Initiatives like Connect Asia – the creation of an Asian Belt of IT Cities linking the growth regions in Asia of Singapore, Bangalore, Hyderabad, Shanghai, Tokyo and Hong Kong, is also being collectively pursued by the Ministry of Information and Communication in Singapore and organisations like NASSCOM (National Association of Software and Services Companies), CII and FICCI (Federation of Indian Chambers of Commerce and Industry) in India.[32] Through increased connectivity, harmonisation of IT standards and intensification of inter-Asian exchanges of ideas and investment, the venture is expected to produce a conducive environment for e-business, e-commerce, e-society and e-governance.[33]

With a skilled and educated workforce, an environment geared towards providing business capabilities in design, production, marketing, logistics and complemented by highly developed communications, banking and financial infrastructure; Singapore is an ideal springboard for multinationals seeking to establish a foothold, or to expand their operations in the region. As a result, the country has already attracted over 6000 multinational companies to locate their international or regional headquarters. To capitalise on the growth potential in the information communications technology (ICT) sector, the economy is trying to position itself as "nerve centre" for technological development and maintain its competitiveness *vis-à-vis* the regional rivals. The focus is, therefore, not only for multinationals to manage their global and regional activities more effectively from Singapore, but also to spearhead new developments and launch high value-added ventures which can then get re-packaged and exported globally, thus generating multiplier benefits for Singapore. With its IT-savvy talents and IT-ready infrastructure, Singapore is an ideal test bed and launch pad to enter Asian markets.

Indian companies have also recognised the importance of Singapore as a development centre and are increasingly locating their back end operations in the country. While five years ago there were less than 50 Indian companies in Singapore, the figure has now swelled to 300. Indian companies have pointed out that Singapore is an

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31 http://www.asia.internet.com

32 Asia Pacific Network Information Centre, 2001.

33 Department of IT, Ministry of Communications and Information Technology, Government of India.

ideal test bed for new products due to its high quality physical infrastructure, global access to centres of IT excellence and vibrant business environment. The widespread use of English and similar legal system has also made Singapore an attractive destination. A unique venture currently being promoted to help Indian companies establish their presence in Singapore is the opening of the "Indian Centre" by the Economic Development Board (EDB) of Singapore, the JTC Corporation, FICCI and The Indus Entrepreneurs (TIE).[34] The objective behind the Centre is mainly to facilitate the operations of Indian start-ups and entrepreneurial companies in the region as well as promote the use of Singapore's network to access the international market and venture funding.

Singapore also has the precondition for an ideal location for business continuity/disaster recovery operations, including political and economic stability and absence of natural disaster. Indian companies need to explore the possibility of using Singapore as a disaster recovery centre for IT companies.

With a current pool of 93,000 IT professionals, it is estimated that Singapore will outsource more than 20,000 IT professionals in the next five years.[35] India, on the other hand, has witnessed a steady growth in the number of IT professionals from 6,800 knowledge workers (including professionals engaged in software, IT and IT-enabled services) in 1985–86 to 5,22,000 at the end of 2001–02.[36] Premier institutions of higher education namely, the Indian Institutes of Technology (IIT), the Indian Institute of Science (IISc) and the Indian Institutes of Management (IIM), complemented by a large number of other national and regional engineering colleges produce highly trained manpower which can be used by Singapore at a relatively low-cost. A study[37] in 1999 found that the cost of employing an Indian software engineer is only one-fifth of the cost of employing an equivalent Singaporean. In order to source skilled professionals from India, Contact Singapore and the Infocomm Development Authority of Singapore (IDA) have already established offices in Chennai and Bangalore respectively.[38] IDA has also signed an MOU with institutes of higher learning, such as National Institute for Information Technology (NIIT), to source human resources for Singapore's' IT industry and facilitate student and faculty exchange.

Mutual recognition of professional qualification is a pre-requisite for movement of professionals across countries. Singapore has already signed an MOU with Japan for mutual recognition of qualification and liberal access to professionals in each other's markets. The agreement between the National Infocomm Competency Centre, Singapore (NICC) and the Singapore Computer Society (SCS) with the Central Academy of

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[34] The Hindu, 2001.

[35] This information was provided by CII, India.

[36] NASSCOM Strategic Review, 2002.

[37] Ministry of Trade and Industry, Singapore, 2002.

[38] Information provided by Department of IT, Ministry of Communication and Information Technology, Government of India.

Information Technology, Japan (CAIT) and the Japan Information Technology Engineers Examination Centre (JITEC) promotes the mobility of IT personnel between the two countries by mutually recognising the skill standards and certification programs of each country.[39] Similar initiatives need to be established with India. An important step in this direction has been the recent MOU signed between the Singapore Computer Society and Doeacc Society India for employment in Singapore.[40]

In recent years, the composition of Indian software exports has shifted from on-site exports to offshore project development, including turnkey projects and offshore package developments. While in 1988, on-site development accounted for over 90 per cent of exports, by 2000–01, the share had declined to 56 per cent and that of off-shore development increased to 44 per cent.[41] Moreover, critical services such as accounting, insurance-claims servicing, medical transcriptions, call centers, back end operations are increasingly being relocated and outsourced to India. According to NASSCOM, the IT-enabled segment experienced 70 per cent growth in the 2001–02, generating a revenue of US$863 million.[42] Off-site project development is relevant for high wage-labour scarce countries such as Singapore. Singaporean companies can achieve significant cost reductions by basing their operations in India and this will also create platforms for developing new businesses.

The two countries can also collaborate on developing soft infrastructure, such as cross-recognising PKI (Public Key Infrastructure), alternate dispute resolutions for e-commerce, and the development of trust marks. An example of this is the recent MOU signed between Singapore, Japan and Korea on adoption of information security technologies such as PKI inter-operability.[43] The agreement identifies a number of areas of common interest including, but not limited to, broadband networks and advanced communications technologies, IT security and e-commerce and is aimed at removing barriers to trade – especially technical barriers such as differences in standards conformity. An additional goal of this agreement is to facilitate close technological partnerships between Singaporean, Japanese and Korean companies, as PKI can be used for authentication, data confidentiality, data integrity and non-repudiation, all of which are integral components of trusted e-commerce. Japan has also taken the lead in this area by creating an Asian PKI Forum in order to nurture an enabling environment for IT by building common secure infrastructure, e-biz standards and norms on e-transactions. India has already become an affiliate member of the forum and efforts are underway to develop an India PKI Forum.

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39 Ministry of Trade and Industry, Singapore, August 2001.

40 Doeacc, an autonomous society of the Department of Information Technology (DIT) has signed a Memorandum of Understanding (MOU) with its Singapore counterpart, Singapore Computer Society, for mutual recognition of the courses. According to the MOU, a software engineer having Doeacc B level certificate along with three years of work experience will be considered at par with a Certified IT Project Manager (CITPM) associate of Singapore Computer Society. The Doeacc C level certificate holders with one-year work experience will also be considered equivalent to CITPM associate.

41 Kumar, N., 2001.

42 NASSCOM Strategic Review, 2002.

43 Hisanori, M., 2002

Due to the government initiatives, such as IT 2000 and Singapore One, Singapore is connected to more than 20 countries through the broadband network in the Asia-Pacific region, including high-speed links with ASEAN member countries, Japan, China, South Korea, Taiwan, Hong Kong, India and Australia. India, on the other hand, is currently facing a bandwidth shortage. According to NASSCOM,[44] the international and national bandwidth requirement in India by 2005 is expected to reach 291 gbps. The current supply is only around 1.2 gbps. The future drivers of demand for internet bandwidth will come from the fields of Business to Business transactions (B2B), Business to consumer transactions (B2C), communications, entertainment, IT-enabled services etc., where there will be a virtual explosion in the business of generating content ranging from online trading information, video-on-demand, news content, game shows, online contests and news-on-demand. In future, broadband companies will have to rigorously aggregate, store and track content and would require data warehouses and data mines. These represent huge business opportunities for Singapore-based companies to enter the Indian market. The MOU signed between IDA and PentaMedia Graphics (India), to facilitate the latter's use of the Singapore One broadband network, and hosting infrastructure to distribute its content to the global and regional markets is an example of the kind of initiatives that are likely to emerge in the future.[45]

E-governance is another area in which India and Singapore can enter into a collaborative arrangement. Internet connectivity has increased the efficiency of the Singaporean government in administration and tax collection, improved public interface with bureaucracy and enhanced transparencies in administration. Although central and some state governments (such as Andhra Pradesh, Maharashtra and Tamil Nadu) have launched e-governance initiatives, much needs to be done before e-governance is implemented in all the states and central departments. Here India can gain and learn from Singapore's experience in e-governance.

To create a pro-enterprise environment in Singapore, the government initiated the Technopreneurship21 program. As a result, the cumulative venture capital fund was US$6.2 billion, of which in the year 1999 more than 60 per cent (i.e., US$78 million) was channeled into the ICT sector.[46] The government of Singapore has also formed partnerships with companies to share the start-up costs and business risk of projects. Indian companies can tap this pool of venture capital funding. In fact, CII has suggested that the two countries should jointly set up a Indo-Singapore fund to finance joint ventures in specific sectors of interest to both countries, such as IT, life sciences, etc.

Both India and Singapore have made liberalisation commitments in computer related services during the Uruguay Round of GATS negotiations (see Appendix B). While India has imposed a market access restriction, limiting foreign equity to a maximum of 51 per cent, Singapore has impose any market access restrictions under

[44] NASSCOM Strategic Review, 2002.

[45] CII, 2002b.

[46] Hooi, S. P., 2001.

Modes 1, 2 and 3. Singapore left Mode 4 unbound except as indicated in its horizontal commitments. In the current round, India has requested Singapore to undertake full commitments under Mode 4 in the sub-sectors – consultancy services for installation of computer hardware, software implementation services, data processing services and others. India has also requested for additional commitments to recognise the educational qualifications, training and experience of Indian professionals in computer related services. The Singaporean government has already expressed its interest in MRAs in computer related services under the proposed CECA.

In order to strengthen bilateral co-operation and trade between India and Singapore in the IT sector, the two countries signed a MOU in March 2000 which largely focused on sharing of technologies between the two countries.

Telecommunication Services:

Growth of the IT sector is highly dependent on the availability of telecommunication infrastructure. Singapore has one of the most advanced telecommunication infrastructure in the world. This is evident from the fact that in 2001, fixed line penetrations rate per household was around 99.5 per cent, mobile line penetration rate was around 53.9 per cent, personal computers per household was around 47 per cent and internet penetration rate per household was 53.8 per cent.[47] This has largely been possible through the immense government support and direct contribution towards the development of telecommunication infrastructure. To enhance efficiency through competition and drive the demand for telecommunication products and services, the government brought forward full liberalisation of the telecommunication market from April 1, 2000, to April 1, 2002. Under the liberalisation initiative, more than 130 telecommunication licenses were issued and this generated an investment of S$3 billion (US$2.9 million).[48]

Although India has the eighth largest telecommunication network in the world, its tele-density is much below global standards. In the year 2000, India had a tele-density of 3.2 telephone lines per hundred persons, compared to 46 telephone lines per hundred persons in Korea, 48 in Singapore and 11 in China. In the same year, out of 6,07,000 villages only 3,46,000 villages had telephone connectivity.[49] In 2000, WEF had ranked India 73rd, 67th, and 69th among 75 countries in terms of cellular subscribers, Internet users, and telephone lines respectively. Singapore on the other hand ranked 9th, 13th, and 20th respectively.[50]

Till the mid-1990s, Government of India had a monopoly in telecommunication services with the Department of Telecommunications (DOT) being the sole provider of telecommunication services (local and long distance) in the country, except in Delhi and

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47 Development Bank of Japan, 2001.

48 Sebastian, E. F., 2000.

49 This information is provided by CII.

50 The Global Competitiveness Report, 2001-02.

Mumbai, where Mahanagar Telephone Nigam Limited (MTNL) was the sole access provider. International services were provided exclusively by the Videsh Sanchar Nigam Limited (VSNL). Realising that telecommunication sector is the backbone of a knowledge-based economy, the government significantly liberalised this sector in the second half of the 1990s. The main purpose of liberalisation was to reduce monopoly-induced inefficiency and to increase competition and investment in this sector through privatisation and foreign investment. In fact the government's target is to achieve a tele-density of 7 per cent (75 million lines) by 2005 and 15 per cent (175 million) by 2010.[51] In terms of FDI approvals, the telecommunication sector is the second largest after energy sector. Foreign investment inflows in telecommunication increased steadily from an insignificant US$0.67 million in 1993 to US$430.4 million in 1998.[52]

Telecommunication is technology driven and capital-intensive industry and it is becoming increasingly difficult for the Indian government to fund the huge investment required in this sector. In order to attract foreign investment and technical know-how, the government has allowed FDI up to a maximum of 49 per cent in basic, cellular mobile, paging and value added service and global mobile personal communications by satellite; up to 74 per cent (beyond 49 per cent requiring government's approval) in internet service (with gateways), radio paging services and end-to-end bandwidth; and up to 100 per cent in manufacturing of telecommunication equipment and services such as electronic mail and voice mail. Singaporean firms have shown interest in investing in this sector. Collaborations between the two countries in installing sophisticated technology and building infrastructure and high-speed connectivity in India, would lead to a virtuous circle of a larger installed base and economies of scale in telecommunication pricing, which in turn, would lead to lower service charges and eventually translate into more consumer usage and further growth in demand.[53] In this regard, it is worth noting that, Bharati Enterprises (India's leading telecom conglomerate) and Singapore Telecommunications Limited, SingTel (Asia's leading communications company) have set up India's first private sector undersea cable venture. The venture plans a total investment of US$650 million to build a submarine cable network to provide 100 per cent redundancy and the highest reliability to all bandwidth users. The first part of the project, involving 3200 km of cable between Chennai and Singapore has already been developed by Network i2i, a 50:50 joint venture between Bharati and SingTel at a cost of US$250 million.[54]

In spite of the interest shown by Singaporean companies, the actual inflow of FDI from Singapore in telecommunication was only US$1.1million between August 1991 to June 2002, which is only 0.06 per cent of the total FDI inflow. Singaporean companies have pointed out that the foreign equity ceiling of 49 per cent is the single most restrictive barrier to investment in this sector. These companies further pointed out that telecommunication technology is changing at a very fast pace and an FDI ceiling

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[51] NASSCOM Strategic Review, 2002.

[52] Cellular Operators Association of India, 2002.

[53] NASSCOM Strategic Review, 2002.

[54] Ministry of Communications and Information Technology, Government of India.

restricts the ability of the investors to adapt new technologies. Moreover, with a 49 per cent FDI ceiling, the foreign partner in a joint venture does not have management control and cannot influence decision making. Singaporean firms have proposed that the FDI ceiling should be raised to 74 per cent.

Indian telecommunication companies can use Singapore as a launching pad for accessing the Asia-Pacific markets. SingTel Mobile, Mobile One and Sturhub are working on developing a common mobile payment platform and plan to roll out the services in neighboring countries in the Asia-Pacific region.[55] Similar initiatives can be established with key Indian telecommunication players to meet the ever-growing demand of basic and value added telecommunications services in third countries.

In 2000, India exported S$7.3 million worth of telecommunications products to Singapore.[56] The signing of an MRA would significantly reduce technical barriers to trade in telecommunications equipment by allowing equipment to be tested in the exporting country and accepted in the importing country with minimal further regulatory action. Also it would eliminate the costs of re-testing and certification and shorten the time-to-market for each country's manufacturers and exporters of telecommunication equipment. This would further enhance their competitiveness *vis-à-vis* suppliers from other countries, improve market access and provide benefit to consumers due to lower transaction costs.

India and Singapore had scheduled limited commitments in telecommunications services during the Uruguay Round of GATS negotiations (see Appendix B). In the current round, Singapore has requested India to undertake full commitments in Modes 1, 2 and 3 in all the sub-sectors of telecommunication services, as classified under the WTO Services Sectoral Classification List.[57] Singapore has also requested for fully adopting the 1997 Reference Paper on Basic Telecommunication Services.[58]

India and Singapore signed a MOU on April 8, 2002 on co-operation in the field of telecommunication.[59] This MOU is valid for three years and can be extended for further period of three years with written consent from both parties. The MOU focused on exchange of information on telecommunication policy and regulations; exchange of scientific and technical information; exchange of information on current international legislation relating to telecommunication; exchange of information in spectrum management and standardisation; promotion of joint ventures and investment in

[55] Economic Review Committee, 2002f

[56] International Enterprise Singapore, 2000.

[57] During the Uruguay Round of negotiations member countries drew up a Sectoral Classification List (MTN.GNS/W/120) which was based on United Nations Central Product Classification.

[58] It is important to note that bilaterally Singapore is pushing for an increase in the FDI ceiling to at least 74 per cent, whereas multilaterally it is requesting for full commitments in all the sub-sectors for Modes 1, 2 and 3.

[59] Information provided by Department of Telecommunication, Ministry of Communication and Information Technology, Government of India.

telecommunication and MRAs for telecommunication product certification by respective testing agencies.

Audio-visual Services:

Audio-visual services includes motion picture, videotape, television and radio programme production and distribution services; post-production services; sound recording services; motion picture and video projection services; radio and television broadcasting services; talent agency services (including the services of artists); coaching services and other services, such as the content of multimedia products. Recreational cultural and sporting services includes five broad categories of services – live entertainment services of performers/artists and services provided by various companies involved in promoting, organising, and presenting the live events; news agency services (gathering, investigation and supply services of news to newspapers, periodicals and audio-visual media); library, archives, museum, and other cultural services including the management and preservation services of historical sites and monuments, conservation and maintenance of botanical and zoological gardens, wildlife preservation services, etc; sporting and other recreational services and other services.

Audio-visual sector is one of the fastest growing service sectors in India. India is the largest film producing country in the world, producing on an average 800 feature films and 900 short films annually in 52 different languages and dialects.[60] The music industry is third largest in Asia and ranks nineteenth in the world. India is the third largest producer of original entertainment software with over 40,000 hours of original programming (as of early 2001). Indian radio and terrestrial broadcasting network is one of the largest in the world. Given that India is a country with rich cultural heritage and exports of films, television content and software, music, live entertainment, etc. is steadily rising; India has tremendous potential for expanding trade in audio-visual and recreational, cultural and sporting services.

Indian audio-visual and entertainment sector is largely concentrated in private hands and government mainly plays the role of a facilitator, initiating appropriate reforms to support the growth of this sector. To encourage the inflow of foreign technical know-how and skills, the government has significantly liberalised this sector since the 1990s.[61]

Unlike India, the audio-visual sector in Singapore is highly regulated. Direct access to transnational broadcasting is restricted, with only a few selected businesses and media organisations having private satellite dish. The Singaporean film industry is relatively small with the local audience preferring productions from countries such as USA, India and Hong Kong to domestic productions. Given the large Indian diaspora in Singapore, India has potential for exporting films and television software to this city-state. Many Indian broadcasters are already broadcasting their content through the Singaporean cable network.

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[60] FICCI, 2002.

[61] For details see Mukherjee, A., 2002b.

In the past, VSNL was the sole provider of uplinking facilities in India and many channels, especially the foreign channels, uplinked from countries such as Singapore and Hong Kong. Recently the uplinking policy has been significantly liberalised and, as per the new policy, an Indian private company, which need not be a broadcaster, is permitted to set up uplinking hub/teleport facilities for the purpose of hiring out/leasing to broadcasters. In the Union Budget 2002–2003, the custom duties on earth gears were reduced to encourage investment in satellite uplinking hub. Indian companies can enter into joint ventures with Singaporean companies to set up uplinking facilities.

India is slowly moving towards digital technology and can benefit from the inflow of innovative media and broadcasting technologies from Singapore. Technological co-operation between the two countries can enable India to set up high-capacity broadband network and speed up the process of digitalisation. Co-operation between the two countries can benefit Indian film producers, music industry and help content providers to market their products using new technologies. Some Indian companies have already entered into agreements/joint ventures with Singaporean companies to distribute their products/content through the digital network. For example, Lahiri Records, an Indian based company, has entered into a joint venture with Soundbuzz, a digital music service provider in Singapore, to distribute the repertoire of Tamil music digitally and securely using Digital Rights Management Systems to the extensive network that Soundbuzz has built covering Southeast Asia, Australia, Taiwan and Hong Kong.[62] Singapore has one of the lowest rates of piracy among South and South East Asian countries.[63] Piracy is a major problem for the Indian audio-visual industry and this is adversely affecting their total revenue earnings. India can gain from Singapore's capabilities and reputation as IP (Intellectual Property) management centre to manage media content.

Both India and Singapore are trying to develop as a global hub for post-production facilities (editing, sound recording, etc.) and for production of animation software, special effects and computer graphics. Many global players are opening up their operations in India. For example, Pentamedia Graphics, which is one of the top three computer animation companies in the world, has its headquarters in India. Singapore with its strong IT infrastructure is also trying to build its animation industry and companies such as Animate, 25 Frames, VHQ, Animasia, ID Imaging and Garman Animation are experimenting in this area.[64] In this regard, opportunities exist for the two countries to work together, co-produce and pool their respective advantages in order to capture a greater share of the international market. Indian companies will benefit from access to finance, technology and marketing opportunities while Singaporean companies can use the low-cost, high-quality Indian work force. For example, Pentamedia Graphics has teamed up with Singapore's EDB to make a high-tech animated movie on the life of the Buddha.[65]

[62] The Indian Express, 2001.

[63] IFPI (The International Federation of the Phonographic Industry), 2002.

[64] Hu, G., 1997.

[65] The Indian Express, 2002.

In the past, India and Singapore have entered into cultural exchange programmes and bilateral cultural agreements. Under the CECA, India and Singapore can sign a cultural co-operation agreement, by which cultural festivals of India and Singapore can be held in the two countries on a reciprocal basis. The agreement should also include the movement of artists/performers, exchange of professional technical training, etc. This will not only enable the nationals of both countries to know and understand each other's art and culture but also increase the flow of tourists between the two countries. Both countries should also enter into a co-operation agreement to jointly promote the art and culture of the two nations in a third country.

In the Uruguay Round of WTO negotiations, India undertook commitments only in motion picture and videotape distribution services while Singapore undertook commitments in motion picture and videotape production and distribution services and sound recording services (see Appendix B). The two trading partners have not made any requests to each other in the current round.

Health Services:

Health is an important sector in which both India and Singapore can gain through mutual co-operation. Traditionally, government was the main provider of health care services in India with the private sector playing a supplementary role. However, in the past twenty years, the share of private sector has increased and it now accounts for around 70 per cent of the total spending in this industry.[66] Many private players, such as Tatas, Apollo Group, Fortis, Max, Wockhardt, Piramals, Duncan, Ispat, Escorts, etc., have invested in state-of-the-art hospitals in cities like Mumbai, New Delhi, Chennai and Hyderabad. In spite of these investments, there continues to be a huge gap between the demand for and supply of health care services. This is evident from the fact that the population to bed ratio in India is 1:1000, while the WHO (World Health Organisation) norm is 1:300.[67]

Singapore's health care facilities are comparable to that of any developed country. The government has made significant investment in this sector, which is complemented by the private sector. Eighty per cent of the hospital care services is provided by the public sector and remaining 20 per cent by the private sector.[68] Given the small size of the domestic population, Singapore is trying to develop as an Asian hub for providing health care services. Hospitals such as Singapore General Hospital, Tan Tock Seng Hospital, National University Hospital, Gleneagles and Mount Elizabeth have established themselves as regional medical treatment centres. In the year 2000, 150,000 foreign patients (70-85 per cent of which were Malaysian and Indonesians) sought treatment in Singapore.[69] These hospitals have also established linkages with reputed healthcare

[66] The Apollo Hospital Group, 2002

[67] The Apollo Hospital Group, 2002.

[68] Medisource Asia, 2002.

[69] Economic Review Committee, 2002a.

companies and foreign hospitals, such as the Pennsylvania University Medical Centre, Stanford University Hospital and Royal Melbourne Hospital.[70] India too receives foreign patients from neighbouring countries like Bangladesh, largely for specialised services such as neurology and cardiology. At the same time, there is a significant outward movement of rich patients to countries such as Singapore, Australia and the US.[71]

Partnership/co-operation between Indian and Singaporean hospitals would be mutually beneficial. On the one hand, Singaporean hospitals can establish their presence in the huge untapped Indian market, and on the other, Indian hospitals can gain from Singapore's technical and management expertise. This would also benefit the Singaporean patients who would have access to international healthcare services at a much lower cost. In this regard, India will have to identify a set of premier hospitals which can collaborate with Singaporean hospitals.

Medi City – which is an integrated township of super-speciality hospitals, diagnostic centres, medical colleges, R&D, ancillary and subservient facilities, shopping malls, etc., – is being tried out as a pilot project in six states of India. The Haryana Urban Development Authority (HUDA) has recently invited bids from interested parties to set up hospitals or allied services for its proposed Medi City on a 53-acre plot at Gurgaon. Project Development Corporation of Rajasthan (PDCOR), a consortium of IL&FS (Infrastructure Leasing and Financial Services Limited), HDFC and the Government of Rajasthan, is planning a similar facility in Jaipur.[72] Interested Singaporean companies can invest in this segment and the CECA can facilitate any collaborations between the two countries.

Hospitals from the two countries can explore the possibilities of jointly establishing commercial presence in a third country. Instead of individually exploring new markets, hospitals from both countries can combine their mutual strengths – brand name, management and clinical expertise of Singapore with low-cost human resource (talented doctors and nurses) of India – in the form of turnkey projects. Singapore based Parkway Group has already entered into a collaborative arrangement with Chennai-based Apollo hospital to expand operations in Afro-Asian countries.[73] India and Singapore can jointly promote and market the traditional/alternative medicines and treatment procedures and combine such healthcare treatment with tourism packages.

Presently, the cross-country movement of patients is constrained by the lack of portability of health insurance. Indian private healthcare providers have pointed out that the key to opening this market lies in the privatisation of insurance. Besides growth, the international insurance companies through their accreditation system will help in regulating the quality and performance of Indian hospitals. The CECA can help in

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70 Economic Review Committee, 2002a.

71 Chanda, R., 2001.

72 Express Health Management, 2002.

73 The Apollo Hospitals Group, 2001.

exploring possibilities with health care funders in Singapore to overcome the portability of health insurance.

India has a comparative advantage in the supply of high-skilled doctors, paramedical staff and nurses at competitive prices. Although there is significant shortage of doctors in Singapore, the country has imposed significant entry barriers. This is largely due to Singapore's unfamiliarity with medical standards of other countries.[74] The CECA can facilitate the movement of medical personnel between the two countries through mutual recognition of each other's medical degrees. For this, India will have to identify a list of medical institutes whose degrees will be recognised in Singapore. Currently only 28 institutions are named in the register of medical schools in the schedule of Medical Registration Act in Singapore. On a reciprocal basis, Singaporean degrees will also have to be recognised in India. Singapore has imposed stringent conditions for "employment passes" for foreign nurses and paramedical staff. An earnings of S$ 2500 or above per month is required for applying for an "employment pass".[75] This makes it difficult for Indian nurses and paramedical staffs to enter the Singaporean market since the salaries are lower in India. This issue will have to be addressed by the CECA.

Tele-medicine plays a significant role in countries like India where more than 60 per cent of the population live in rural areas with access to only 25 per cent of government healthcare facilities.[76] There is no organised system of delivery of primary health care services and the distribution of specialists is not uniform. For instance, there are more neurologists and neurosurgeons in the single metro Chennai, than in all the states of Northeastern India. Development of tele-medicine will not only provide access to areas that are under-served but will also improve access to specialty care and reduce commuting time and cost for rural and semi-urban patients. In this regard, a collaboration with Singapore will enable India to use the latter's expertise in developing tele-health services. Under Singapore IT 2000 initiatives, the country has established links with international hospitals (for example, the link between Singapore General Hospital and Stanford University) for second opinion and medical education.[77] Similar initiatives can be forged with Indian hospitals.

Singapore has a well-developed medical equipment manufacturing industry, which is largely owned by multinationals, and 90 per cent of the production is for exports. India, on the other hand, has only allowed foreign players to operate in the country as traders but not as manufactures. In fact, India also produces high quality medical equipment, which the country finds difficult to export since the importing nations are not confident of the quality of production. Since the cost of production is much lower in India than in Singapore, the Singaporean companies have shown interest in setting up manufacturing units in India. This can be facilitated through the CECA. A

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[74] Economic Review Committee, 2002a

[75] Economic Review Committee, 2002a

[76] Gapathy, K. 2001.

[77] Chanda, R., 2001.

MRA in medical equipment between the two countries will enable the India manufactures to source their products through Singapore.

With over 500 biotech companies in Asia, the region, and in particular, countries such as Singapore, Australia, China and India have significant potential for developing biotechnology and biotech-related research. The Indian biotech industry has grown from US$ 500 million in 1997 to US$ 1.8 billion in 2001 and is expected to grow to US$ 4.3 billion in 2010.[78] Singapore has also focused on the development of biotech industry. There is significant scope for India and Singapore to collaborate in clinical research. The two countries can jointly set up research network leveraging on each other's comparative advantage. Lack of public awareness and funds is preventing the development of biotech research in India. The Singaporean government has so far channeled more than US$700 million in biotech funds and part of this can be invested in India.[79] Singapore has a shortage of scientists/doctors to carry out research in this area. Currently, only 160 or 6.4 per cent of public sector doctors are involved in clinical research.[80] India with a huge pool of scientists and doctors is well-placed to support Singaporean research in this sector. Furthermore, India's success in information technology provides excellent opportunities for Singapore based bio-informatics firms to expand their operations in India.

During the Uruguay Round of WTO negotiations, India did not undertake commitments in health services. Singapore had committed under Modes 2 and 3. Commitments under Mode 3 is subject to the restriction that the number of foreign doctors registered each year may be limited depending on the total supply of doctors (see Appendix B). For the current round, India did not make any request to Singapore but the latter has requested for full commitments in medical and dental services under Modes 1, 2 and 3. In the Uruguay Round, India did not undertake commitments in biotechnology services, while Singapore made full commitments in Modes 1, 2 and 3. While Singapore did not undertake commitments in health related services, India had committed in this sector with foreign equity limitation of 51 per cent under Mode 3.

Education Services:

With 237 institutions, around 11,089 colleges, eight million students and 331 thousand teachers, India has one of the largest higher education systems in the world.[81] Although one of the prime objectives of the government is human resource development and the budgetary allocation on higher education has increased over the years, it has not been able to keep pace with the demand. This has encouraged private sector participation in this segment and, at present, around 75 per cent of colleges are in the private sector.

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78 CII, 2002b.

79 Information provided by Ministry of Trade and Industry, Government of Singapore.

80 Economic Review Committee, 2002a.

81 Kumar, A., 2001.

In spite of having a wide network of higher education institutes with international reputation, India has not been successful in attracting foreign students. Students coming to India for higher studies have declined from 11,888 in 1994–95 to 6,988 in 1999-2000.[82] This is largely due to the lack of proper marketing abroad, absence of a national qualification standard and rating of institutes, rigid immigration requirements, etc. On the other hand, a large number of Indian students are going abroad for higher education, with the US being the most preferred destination followed by countries such as the UK and Australia.

The emphasis on higher education in Singapore has increased as the country moved from a low-cost manufacturing economy to a knowledge-based economy. In Singapore, the Government is the main provider of educational services (more than 80 per cent), which is supplemented by the private players. In recent years, Singapore has tried to implement a "global school house" concept which aims to attract international students and thereby strengthen Singapore's position as an educational hub.

Significant opportunities exist for the two countries to establish partnership in educational services, build on their individual strengths and increase their share in international trade. Premier institutes in India, such as AIIMs, IIM and IIT**,** can establish partnership/collaboration with leading institutes of Singapore, such as the National University of Singapore, Nanyang Technological University and Nanyang Polytecnic, thereby enhancing the array of undergraduate and postgraduate courses for local and international students. Such partnership agreements can cover exchange of scientific information, identification of commercialisation opportunities, as well as development of industrial linkages with top Indian and Singaporean companies. Collaboration between the two countries should also enable and facilitate the process of opening up of branches of premier Indian educational institutes in Singapore and Singaporean institutes in India on a reciprocal basis.

Some Indian institutes have already signed a MOU with educational institutes in Singapore. For example, the Nanyang Technological University has a MOU with Shanmugha Arts, Science & Technology Research Academy (SASTRA) in Thanjavur, Tamil Nadu, for collaborative research in embedded systems technologies and plans to encourage staff/student exchanges between the two organisations to leverage on the capabilities and expertise of both parties.[83] Although precise data is not available, there has been an increase in the scholarships provided by Singapore government and government linked companies to students from India for pursuing post-secondary and tertiary level education in Singapore. Ngee Ann Polytechnic of Singapore offers technical courses to Indian students with course fee suitably adjusted downwards to be in line with Indian students ability to pay and in return the students have to work in Singapore for sometime.

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[82] National Institute of Educational Planning and Administration (NIEPA), 2002a.

[83] The Hindu, February 2002.

India, so far, has not seriously exploited the potential of exporting education services.[84] A large number of Singaporean citizens of Indian origin have expressed interest in acquiring education in India. Short-term courses/summer programmes on Yoga, Herbal Music, Classical music, Indian Art and Culture is not only appealing to Singaporeans of Indian origin, but also to foreign students studying in Singapore.[85]

Corporate training and executive education is another area in which both countries can work together. With over 6000 multinationals, Singapore is well suited to become a centre for corporate training. Many renowned institutes, such as INSEAD, University of Chicago's Graduate School of Business, University of Pennsylvania's Wharton School, Massachusetts Institute of Technology, Technische Universiteit Eindhoven, Technische Universitat Munchen, Georgia Institute of Technology and John Hopkins University have established their presence in Singapore and are offering a wide range of executive programmes and post-graduate courses. Such partnerships between the institutes of higher learning and industry are important and should be encouraged between India and Singapore through the CECA, as apart from augmenting the industry with skilled infocomm manpower, the training ensures that the local infocomm manpower is equipped with critical networking skills.

There are significant entry barriers for students and teachers, both in Singapore and India. In this regard, the immigration process needs to be more streamlined and assessment factors that would eventually lead to the approval of a student pass should be made transparent so that applicants comprehend the requirements for studying in each of the two countries. Singapore has signed MOUs with universities in Japan (Hiroshima and Kyushu) and New Zealand for student exchanges. Similar MOUs can be signed with reputed institutes of India. With the increase in inflow of international students, there is likely to be a shortage of teachers, faculty members and other administrative staff in Singapore. The National Institute of Education (NIE) is the only teaching institute in Singapore. India with a large pool of trained teacher can meet Singapore's demand. The two countries should also explore the possibilities of short-term faculty exchange programmes, which would not only bridge the manpower shortages but also enhance people-to-people relationship between them.

India and Singapore can gain from their complementary strength – Singapore's technical know-how and India's low-cost high-skilled manpower – in developing e-learning content and customised e-learning solutions to serve the Asian region. The two countries now have a foothold in IT-enabled services and collaboration would enable them to increase their share in the world trade. With a huge demand-supply gap in the education sector, there is significant scope for investment in distance learning in India and interested Singaporean firms can explore this possibility.

Both these countries did not make any liberalisation commitments in education services during the last round of GATS negotiations. In the current round, Singapore has

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84 NIEPA, 2002a.

85 Rajan and Sen, 2002.

requested India to offer full commitments in adult education services and other education services for Modes 1, 2,and 3. India did not make any request to Singapore in this sector.

The Singaporean side of the JSG has identified areas for Indo-Singapore collaboration in education services. These include software developers/product developers; networking specialists; embedded specialists; ASIC designers; industrial designers; automotive designers; bioinformists and chemists. The Ministry of Human Resource Development in India will have to evaluate whether collaboration in these areas is of interest to India and whether some more areas can be added to this list.

Transport Services:

Transport services is an important infrastructure service which has major spill over effects on the competitiveness of other goods and services. For example, an efficient maritime transport services leading to lower freight rates benefits producers, shippers and consumers. Singapore has one of the world's best transport networks. Being a small island country, both sea and air transport play a vital role in the growth of the economy and international trade, and the country has concentrated in developing both these modes of transport. Singapore is the top most country among the 75 countries listed by the WEF in terms of port and air transport infrastructure quality. India ranks 57th in terms of port infrastructure quality and 47th in terms of air transport infrastructure. This not only highlights the need for India to upgrade its transport infrastructure, but also shows that this is one of the sectors in which India can gain through collaboration with Singapore. Unlike countries such as Malaysia, Singapore does not have the experience of building highways and being a small nation state the country does not need an extensive railway network. This is also evident from the fact that in terms of road and rail infrastructure, Singapore ranked much below (40th and 15th respectively), whereas India's road and rail infrastructure quality are ranked 73rd and 21st respectively.[86]

1. Ports

Ports are the gateway to India's international trade since over 90 per cent of the trade volume (77 per cent in terms of value) is moved by sea. The Indian peninsula is strategically located between the Atlantic ocean in the west and the Pacific ocean in the east, with a 5,560 km long coastline, and 12 major[87] and 148 operable minor and intermediate ports.[88] Prior to the 1990s, ports were largely a government monopoly. With liberalisation of the economy in the 1990s, there was a sudden spurt in traffic through ports, which brought to light the capacity constraints and prompted the government to open up this sector for privatisation and foreign investment.

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86 The Global Competitiveness Report, 2001-02.

87 The 12 major ports are: Calcutta (including Haldia), Paradip, Vishakapatnam, Chennai, Ennore and Tuticorin on the east coast and Cochin, New Mangalore, Mormugao, Jawaharlal Nehru, Mumbai and Kandla on the west coast.

88 India Infrastructure Report, 2002.

The single port of Singapore, which is operated by the Port of Singapore Authority (PSA) Corporation, is among the top twenty container ports of the world. It is one of the world's busiest transshipment hubs handling over 250 shipping lines, connecting to 600 ports in 123 countries. The small size of the domestic economy and attempts by neighbouring countries, such as Thailand and Malaysia, to set up competing infrastructure, have forced PSA Corporation to expand its operations beyond Singapore. Presently, PSA has several joint ventures with 13 ports from eight countries in Europe and Asia.[89]

In 1998, PSA was given the contract for maintaining and managing the container terminal at Tuticorin port in southern India for a lease period of 30 years. PSA has also entered into joint ventures with the Gujarat Maritime Board and a private sector to develop a minor port at Pipavav in Gujarat. Although PSA has established a presence in India, it is slow and cautious in expanding its operation in the country. The Corporation has pointed out that the bureaucratic delays, multiple clearance procedures, inadequate infrastructure facilities and connectivity with hinterland, labour laws, etc. have prevented it from investing in Indian ports. Collaboration between the two countries can help in reducing some of these constraints.

PSA Corporation is a leader in applying technologies such as operations research, automation and IT to provide unrivalled container handling services. Opportunities thus exist for the two countries to collaborate in developing and implementing similar technology for improving India's port performance. PSA's state-of-the-art logistical efficiency has won it numerous international awards, including being voted the Best Container Terminal Operator in Asia for 13 consecutive years by The Asian Freight Industry Awards (AFIA).[90]

PSA has also developed Portnet**,** a port community system that allows shipping lines to secure needed berths and marine services quickly and easily *via* the Internet. This technology is currently being installed at ports in China, Italy, Seattle and South Africa. Another key proprietary technology developed by PSA is CITOS, or Computer Integrated Terminal Operations System which plans and directs every activity performed at the port terminal through computerised techniques. India too, needs to adopt these technologies on a broader scale (currently only Tuticorin Port uses CITOS) in order to quicken the pace of port operations.

In order to increase the efficiency of Indian ports and allow smooth flow of traffic, the two countries will need to collaborate in the development of the multimodal transport and logistics services. Here, Indian companies need to leverage on Singapore's expertise in providing total supply chain management services for operating logistics and port handling facilities. Gateway Distriparks, an Indo-Singaporean joint venture operating a third party warehousing facility provider and container freight station at Jawaharlal Nehru Port Trust is already looking at expanding its activity to encompass

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89 Economic Review Committee, 2002b.

90 Portnet.com, 2001.

value-added logistics.[91] The diversification program along with others should look at the possibilities of establishing inland container depots (ICDs) at various locations in the country, as well creating a seamless paperless environment for transport, logistics and trading by simplification and streamlining of documentation. In this regard, the CECA can facilitate partnership between member companies of the two countries.

At the end of the Uruguay Round in 1994, member countries failed to reach a consensus on liberalising trade in maritime transport services. The negotiations were extended till June 1996 but member countries still could not reach a consensus and hence negotiations were suspended.[92] In the current round, Singapore has requested India to offer full commitments in international passenger and freight transport. Singapore has also requested for full commitments under Modes 1, 2 and 3 for maritime agency services, ship broking services, international towing services and freight forwarding services. In the Uruguay Round, Singapore has undertaken commitments to fully liberalise Modes 1, 2 and 3 in construction services but India had only made partial commitments in Mode 3 for construction work for civil engineering. Moreover, under civil engineering, India's schedule only covered a few sectors (see Appendix B). In the current round, Singapore has requested India to fully liberalise Mode 3 in civil engineering.

2. Air transport

The Indian air transport services initially developed under private initiatives. However, in 1953, under the Air Corporation Act, the operation of scheduled air services was made public monopoly. This monopoly lasted for almost 40 years until it was repealed by the Air Corporations (Transfer of Undertaking and Repeal) Act, 1994. Presently, the two public sector undertakings – Air India and Indian Airlines are providing international air services together with a host of foreign carriers. Domestic air services are provided by Indian Airlines along with private airlines such as Jet Airways and Sahara. Infrastructure facilities at airport terminals are provided by the Airport Authority of India (AAI) which is a statutory body under the Ministry of Civil Aviation.

Although air cargo accounts for less than 5 per cent of the total volume of cargo exported, air transport services play a crucial role in the transportation of high-value items and capital goods. Growth of the tourism industry is directly related to the performance of the aviation industry since more than 92 per cent of the foreign tourists arrive by air. The country has around 449 airports/airstrips out of which only 61 are in operational state.[93] Most of these airports are in urgent need for modernisation of equipment and services, terminal technologies and transport facilities. In the Union Budget (2002-03), the government announced that upgradation and management of international airports at Delhi, Mumbai, Chennai and Kolkata would be given on a long-

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91 The Hindu, 2000.

92 Singapore, however, had scheduled liberalisation commitments in freight transportation. (see Appendix B for details).

93 India Infrastructure Report, 2002.

term lease to the private and foreign investors. The government has also proposed some private sector-aided airports to be developed in the next five years in India. Some of the projects under consideration are the construction of an international terminal at Ahmedabad airport, Chennai airport cargo complex, new domestic terminal and second runway of the Delhi airport, and new airports at Aurangabad, Connanore, Devana Halli (near Bangalore), Goa, Guwahati, Hassan, and Mangalore. This presents significant opportunities for countries such as Singapore with well-developed airport infrastructure to invest in this sector. Opportunities also exist for the two countries to collaborate in human resource development and training to ensure that airport management meets the international standards.

In 2001, Air India and Indian Airlines had fleet size of 27 and 50 aircraft respectively. The performance of both these airlines is below the international standards and they have been earning net operational losses for successive years. In fact, Air India had to pull out of many lucrative routes and currently Middle East is the only major destination. On the domestic front, Indian Airlines is fast losing its market share to private airlines and currently its share of domestic traffic is only 40 per cent. On the whole, the Indian airline sector is marked by the lack of funds for modernisation and expansion, low productivity, underutilisation of resources, low fleet base, a bloated workforce, a limited international network and unremunerative yields.

In the late 1990s, to enhance the efficiency and competitiveness of the airline industry, the Indian government announced deregulation and disinvestment of national carriers. Foreign equity participation up to 40 per cent (100 per cent in case of non-resident Indians) was allowed in the domestic airline sector, but foreign airlines were not allowed to pick up the equity, directly or indirectly. The government also proposed disinvestment of 60 per cent of its stake in Air India of which 40 per cent of equity will be given to a strategic partner, which includes 26 per cent of the total equity to a foreign airline.

Singapore Airlines, one of the world's best airlines, had initially shown an interest in investing in the Indian airline sector. However, the Indian government did not have a clear disinvestment policy and more recently have removed the airline sector from the disinvestment list. This is a huge loss for a country like India, which needs to upgrade its civil aviation sector. In this regard, the Indian government should seriously look into the disinvestment policies. The policy of restricting the equity participation of foreign airlines prevents the domestic airline industry from benefiting through imports of technical know-how, expertise and management practices, which are available globally. The ceiling of 26 per cent on foreign ownership for disinvestment of Air India is also not viable since none of the foreign investors are willing to invest in the sector unless the foreign equity participation is raised to 49 per cent. A comprehensive agreement between India and Singapore will enhance transparencies and reduce delays in decision-making, and similar mistakes can be avoided in the future.

Singapore Airlines has pointed out that although there is a shortage of seating capacity, the Airline does not have enough slots since most of the slots are allotted to

Indian Airlines and Air India which have limited number of flights to fly on India-Singapore route. The Airline has requested for more liberal bilateral air services agreement between the two countries and this needs to be explored under the CECA. The Indian tourism industry has also emphasised on the need for more air services between India and Singapore – both for business and tourism.

Air transport services, is largely covered by bilateral air services agreements and the scope of GATS is limited to three sub-sectors: aircraft repair and maintenance service, selling and marketing of air transport services, and computer reservation services. GATS does not apply to all the measures that affect traffic rights or services directly related to the exercise of traffic rights. In the Uruguay Round both India and Singapore did not make any liberalisation commitments in this sector. In the on-going Round, Singapore has requested India to undertake full commitments in Modes 1, 2, and 3 for maintenance and repair of aircrafts, freight forwarding services, general sales agent services[94]. In the Uruguay Round, Singapore has undertaken commitments to fully liberalise Modes 1, 2 and 3 in construction services but India had only made partial commitments in Mode 3 for construction work for civil engineering. Moreover, under civil engineering, India's schedule only covered a few sectors (see Appendix B). In the current round, Singapore has requested that India's commitments should cover all civil engineering constructions and the country should not impose any restrictions on commercial presence.

3. Roads

India's road network, 2 million km in length, is the third largest in the world. However, in terms of quality of roads, India ranks far below many developing countries such as Zimbabwe, Egypt, Chile, China that rank 11th, 27th, 42nd, and 48th respectively.[95]

To improve the quality of road infrastructure, the government has initiated various measures such as allowing private sector to develop and maintain roads on a BOT (Build-Operate-Transfer); granting foreign equity participation up to 100 per cent (with total foreign equity up to US$310 million) in construction and maintenance of roads, highways, toll roads, vehicular tunnels, non vehicular bridges, non-vehicular tunnels, etc.; the National Highway Authority of India provides capital grant up to 40 per cent of the project cost on a case-by-case basis to enhance the viability of the project; duty free import of high capacity equipment for highway construction; etc. As a result of these initiatives, around seven major privately- financed road projects (plus a number of smaller projects, i.e. under US$5 million at state level) totaling US$207.5 million have already been sanctioned and another 20 projects (totaling approximately US$308.1 million) are under consideration.[96]

[94] Any person to whom a member of IATA (International Air Transport Association) or other air carrier has delegated general authority to represent it for purpose of sales of passenger and/or cargo air transportation in a defined territory and who is remunerated accordingly.

[95] The Global Competitiveness Report, 2001-02.

[96] The World Bank, 2002.

The Indian Ministry of Surface Transport has pointed out that there are significant opportunities for Singaporean construction and consultancy companies to invest in this sector on a BOT basis. More specifically, Singaporean companies, such as Sembcorp Engineers & Constructors, which has invested in residential and commercial projects in India and is now shifting its focus towards large infrastructure projects with higher margins (such as building bridges and toll roads), can enter into joint ventures with Indian private sector to invest in the road infrastructure.[97] Besides construction, asset management, traffic management, toll operation, safety management, etc. are all potential areas for collaboration between the two countries. Another area of co-operation between the two countries is the development of services and rest areas along the highways.

It is worth noting that unlike Malaysian companies, only a few Singaporean companies have the experience and technical know-how required for building extensive highways. Due to this reason, Singapore attached a low priority to this sector in the Indo-Singapore CECA. Both India and Singapore did not undertake commitments in road transport services during the previous round of GATS negotiations. However, India had scheduled partial commitments in construction of roads and bridges under Mode 3 (leaving Modes 1 and 2 unbound) while Singapore had completely liberalised Modes 1, 2 and 3 (see Appendix B) for construction services. In their request list to India for the on-going WTO negotiations, Singapore has asked for full commitments under Modes 1, 2 and 3 for maintenance and repair of road transport equipment. Under construction work for civil engineering, Singapore has requested India to remove the restriction of local incorporation and foreign equity restriction of 51 per cent.

Construction of Buildings:

Real estate is another sector in which there is significant scope for Singaporean companies to invest in India. In housing alone, the demand supply ratio is 1:3, with a total housing shortage of over 22 million.[98] Singapore based companies, such as SembCorp Infrastructure (India) Private Limited, have constructed residential buildings including luxury condominiums, residential complexes, commercial complexes/buildings, factories, holiday resorts, etc. Singaporean investment in shopping complexes and malls will boost the Indian retailing industry. However, there are significant barriers to investment in this sector. Although the government has recently allowed 100 per cent FDI in integrated townships with FIPB (Foreign Investment Promotion Board) approvals, FDI is not allowed in real estate and Singaporean firms are more interested in investing in condominiums than in integrated townships. Moreover, various laws, such as Urban Land Ceiling Regulation Act, Land Acquisition Act, Rent Control Act, etc. hinder speedy acquisition of land at reasonable prices, making investment in this sector non-viable.

97 Information provided by CII.

98 http://www.ciioline.org

In this regard, since the Singaporean investment has largely concentrated in cities, such as Mumbai, Pune and Bangalore, interested state governments can enter into collaborative arrangement with Singaporean companies for investment in real estate. The state government can provide land at a concessional rate. In return the company may be asked to reserve a certain portion of the project cost (say 10 per cent) for housing for poorer section of the population at low cost.

In the Uruguay Round India did not schedule commitments in construction of buildings. Singapore had undertaken full commitments in Modes 1, 2 and 3 under construction services. In the on-going round Singapore has requested India to undertake full commitments in Modes 1,2 and 3 for the sub-sectors installation and assembly work and building completion and finishing work under "general construction work for buildings".

Financial Services:

Over the years, Singapore has emerged as a regional and international financial centre. Singapore ranks 11th in terms of financial market sophistication and 8th in terms of financial regulation among the top 75 countries as listed by the World Economic Forum, 2001–02. India, on the other hand, ranks 36th and 39th respectively.[99] Growth of Singapore as a financial hub has been well-supported by various critical factors such as a sound regulatory and supervisory framework, political stability, a pro-business environment, excellent infrastructure and a highly-skilled cosmopolitan labour force, locational advantage linking it to different time zones to intermediate with markets around the world, etc. As a consequence, twenty of the world's top twenty-five banks and more than 650 reputed financial institutes have their presence in the island state.[100]

It is worth noting that Singapore had gradually liberalised its financial market (it had started liberalisation as early as 1960s) – the banking sector was effectively protected from competition for a long period and was given a mandate to modernise. In the process Singapore has created a sound and well-capitalised domestic financial system, which is the backbone of any regional/international financial centre.

India is slowly deregulating the financial services sector since the beginning of the last decade. Some of the measures undertaken so far includes the establishment of an independent regulator – SEBI (Security Exchange Board of India); the increase in FDI ceiling from 20 to 49 per cent in private and public sector banks; allowing foreign banks to operate as branches of their parent banks or to set up subsidiaries; opening capital market for foreign institutional investors, permitting Indian companies to access the international capital markets, and allowing FDI up to 26 per cent in the insurance sector through automatic route subject to license from the Insurance Regulatory & Development Authority.[101]

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99 The Global Competitiveness Report, 2001-02.

100 Economic Review Committee, 2002d.

101 This information is provided by Foreign Investment Promotion Board.

India, too, has the potential of developing as a regional financial centre, given its sound financial system, well-developed capital markets, its advantageous location between the financial centres of the East and West, availability of skilled-English speaking workforce, stable legal system, etc. In this respect, collaboration between India and Singapore in financial services will be beneficial, as India can learn from Singapore's experiences.

In the banking sector, Singapore has a long history of Off Shore Banking Units (OBUs) which have been allowed since 1973.[102] Here, India would benefit immensely in a formal co-operation with Singapore on various issues related to setting up and monitoring of OBUs (to be situated in Special Economic Zones) and the modalities for erecting a proper "firewall" between the OBUs and the domestic sector. Presently, only two banks from Singapore (the Development Bank of Singapore Ltd. and Overseas Chinese Banking Corporation Ltd.) are operating in India and have a token presence in the country with a single branch each. On the other hand, five Indian banks[103] have a presence in Singapore with six branches and Singapore accounts for 16 per cent of total overseas assets of Indian banks. Thus, there is considerable scope for Singaporean banks to expand their network operations in India and this aspect should be discussed under the CECA.

Another area of related interest to India would be to pursue a co-operation agreement with Singapore with regard to currency and commodity exchanges. SIMEX in Singapore has the reputation of being one of the best-run exchanges in terms of systems and regulations and India could gain from learning about monitoring systems required to develop the country's exchanges as well as entry norms, margining systems, etc. that govern SIMEX.[104] Regarding stocks currently most Indian companies are listed at NYSE (New York Stock Exchange) and NASDAQ. Both sides will have to investigate whether there are any impediments to Indian companies listing in the SGX (Singapore Stock Exchange) and work towards removal of such impediments.

As far as the insurance sector is concerned, less than 2 per cent of the holdings in new Indian insurance companies is held by an entity from Singapore *via* foreign institutional investors. On the other hand, India has an insurance outlet in Singapore *viz*. India International Insurance Pvt. Ltd.[105] and the Monetary Authority of Singapore has recently entrusted the management of one of the sick general insurance companies to India International Insurance Pvt. Ltd. Here, the CECA can examine the feasibility of increasing co-operation between the two countries in this sector.

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[102] Deloitte & Touche Tohmatsu, 1999.

[103] State Bank of India, Bank of India, Indian Bank and Indian Overseas Bank have one branch each and UCO Bank has two branches in Singapore.

[104] Business Line, 2002.

[105] It is owned in equal shares by the General Insurance Corporation of India and four nationalised general insurance companies *viz*. National Insurance, New India Assurance, Oriental Insurance and United India Insurance.

India and Singapore can also explore avenues by which Singapore can help Indian companies to raise capital in the international financial markets. The venture capital pool in Singapore is more than 5 per cent of the GDP while in India it is only 0.5 per cent.[106] Singapore based venture capitalists have shown an interest in investing in India and possibilities of such investment should be explored under the CECA. CII has suggested that the two countries can set up an Indo-Singapore fund to finance joint ventures in sectors of mutual interest.

Singapore accords high priority to liberalisation of trade in financial services and, in fact, this sector has been included in all the FTAs which the country has signed (or is in the process of signing) in the recent past. In the Singapore-Australia FTA, the former has offered to bind the liberalisation initiatives in banking licensees, insurance and securities markets and ease the restrictions on whole sale banking overtime. The JSEPA (Japan and the Republic of Singapore for a New-Age Economic Partnership) also stresses on financial services and requires both countries to improve their commitments under GATS. In addition, the JSEPA emphasises on strengthening bilateral co-operation in financial services in regulatory issues, capital market linkages, improvement of market infrastructure, development of regional bond markets and technical assistance to the third countries.

The commitments made by India and Singapore in financial services during the Uruguay Round of negotiation are listed in Appendix B. In the on-going round of GATS 2000 negotiations, Singapore has made a comprehensive request to India in insurance, banking and other financial services. Among the requests put forward by Singapore is the permission for foreign banks to freely repatriate 100 per cent of their net profits as against the current law requiring foreign banks to deposit 20 per cent of their net profits with the Reserve Bank of India (RBI). Incidentally, the Banking Act of Singapore also contains similar provisions applicable to banks operating in Singapore. Singapore has also requested that the requirement allowing India the right to deny licenses to foreign banks when the maximum share of assets in India both on and off the balance sheet of foreign banks exceeds 15 per cent of assets of the banking system should be removed. This requirement however is only an enabling provision that the Reserve Bank of India/Government of India can resort to if considered necessary. In the case of Antwerp Diamond Bank, for example, India did not enforce this provision while allowing the bank to open presence in the country. Presently, the share of assets of the foreign banks in India is at 24.4 per cent. However, if off-balance sheet items are excluded, the share of assets of foreign banks would work out at 8 per cent and the CECA can explore the possibility of raising the asset limit to 25 per cent from the level of 15 per cent.

Other requests by Singapore in banking include the lifting of the current requirement that prescribes the percentage of bank credit that must be lent to priority sector. Priority lending stipulations are currently applicable to both domestic and foreign banks in India. With deregulation of interest rates, banks are free to charge commercial

[106] Bombay First, 2000.

rates of interest on such loans (except in respect of loans up to Rs. 200,000). Thus cross subsidisation is absent and in fact foreign banks have been granted certain positive discrimination in this regard (for example, financing of exports has been included as a priority sector advance for foreign banks). As part of the CECA India has requested that Singapore make a positive commitment in terms of allowing foreign banks in the country to transmit data to their head offices and sister branches for processing. Currently as many as eight foreign banks operating in India are processing their data in Singapore.[107]

Business Services:

The following sub-sections will look at Indo-Singaporean trade possibilities in some selected business services:

1. Legal Services:

Given the similarity in the legal system of the two nations, there is significant scope for trade in legal services between India and Singapore. Mode 4, i.e., the temporary movement of service providers to provide service in a foreign country, is the most important mode of trade in this service sector. Both India and Singapore have imposed stringent conditions for the entry of foreign lawyers. In the past, with the exception of law degrees from six Australian/New Zealand universities and nineteen British universities, no foreign university law degrees were recognised for the purpose of admission to practice law in Singapore. This was amended in November 2000 to allow eligible foreign lawyers to practice in Singapore. As per the new rules, a foreign lawyer, intending to practice Singapore law in Singapore must, *inter alia,* pass a qualifying examination before he/she is registered to practice the Singapore law. Generally, a foreign lawyer who is registered to practice Singapore law may only practice in areas of Singapore law relating to banking, finance or corporate work.

No foreign lawyer can practice in a court of law in India unless there is reciprocal right of the same kind to an Indian lawyer in the country of that lawyer's origin and he/she has obtained a degree (at least two years full time) from a university recognised by the Bar Council of India. The Bar Council of India has currently enlisted almost all UK universities, leading law schools of the USA, Australia, New Zealand and other countries. Law degree from any of these enlisted universities is recognised and the degree holders are allowed to register as advocates, subject to the requirement of reciprocity in treatment to Indians in the aforesaid country. India also has residency requirements for persons of Indian origin with foreign nationality who want to practice law in the country.

In this regard, India and Singapore can sign a Mutual Recognition Agreement, whereby lawyers from renowned institutes in India will be eligible to practice in Singapore on a reciprocal basis.

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[107] Standard Chartered Bank, Deutsche Bank, ABN AMRO Bank, Bank of Nova Scotia, etc.

Both India and Singapore have imposed restrictions on the incorporation of foreign law firms. While foreign firms can establish joint law ventures and formal law alliances with a local Singapore law firm, they do face significant restrictions and are unable to practice Singapore law, employ Singaporean lawyers to practice Singapore law, and litigate in local courts. An Indian law firm cannot currently affiliate itself to a foreign law firm, and a foreign law firm cannot set up practice in India because of Exchange Control issues and Rule 2 of the Bar Council Rules, which prevents Indian advocates from entering into profit sharing arrangements with advocates from foreign countries. Under FEMA (Foreign Exchange Management Act) further mandates that a foreign law firm cannot establish its office without permission from the RBI. It is worth noting that, in the FTA between Singapore and Australia, Singapore has eased the conditions for establishment of joint ventures between Singaporean and Australian law firms. India and Singapore should also work together to ease the conditions for joint ventures between law firms from the two nations.

India and Singapore did not undertake any commitments in legal services during the previous round of GATS negotiations. In the on-going round, Singapore has requested for full commitments under Modes 1, 2 and 3 for legal consultancy services for home country law. Singaporean request states that India can leave Mode 4 unbound, except as indicated in its horizontal commitments.

2. Architectural and Engineering Services

Temporary movement of professionals between India and Singapore in architectural and engineering services is constrained by recognition related barriers, including requirements on qualifications, work experience and licensing/certification requirements. Given that India has a comparative advantage in the supply of architects and engineers, such restrictions hampers its export capabilities in this sector.

Eligibility criteria for architects in Singapore include a university degree accredited by Board of Architects, minimum two years experience in Singapore and passing of a professional practice examination and interview (this may be exempted for eminent foreign architects with over ten years of experience). Singapore only recognises a few international schools and, students from these schools are qualified to sit for the local architect exam. For example, in case of the U.S. graduates, Singapore accepts U.S. schools with a five-year Bachelor of Architecture degree. In India, the profession of architecture is regulated by the Architects Act, 1972, under which foreign architects are allowed to practice if they are resident in India and are registered with the Council for Architecture. There are no nationality and citizenship requirements. Moreover, membership of professional associations is not mandatory for practising in India.

For engineering services, in Singapore only registered professional engineers (by the Professional Engineers Board) are eligible to become directors of engineering firms. The country also has residency requirements. The eligibility criteria include a university degree accredited by Professional Engineers Board, two years practical experience in Singapore or not less than ten years of experience from elsewhere and passing of a professional practice examination and an interview. The Professional Engineers Board has however committed to liberalising engineering services under the ASEAN services negotiation agreement. In India there is no law regulating the profession of engineers.

While Singapore has allowed 100 per cent foreign-owned engineering firms, the chairman and two-thirds of the board of directors must comprise of engineers, architects, or land surveyors registered with local professional bodies. Professional engineering work in Singapore must be under the control and management of a director of the corporation who is a registered owner of at least one share of the corporation; is a registered professional engineer ordinarily resident in Singapore; and has a valid practicing certificate. In the case of a partnership, only registered engineers may have a beneficial interest in the capital assets and profits of the firm, and the business of the partnership must be under the control and management of a registered professional engineer who ordinarily resides in Singapore. In India, foreign investment in engineering services is allowed through the automatic route and there is no FDI ceiling.

Indian Council of Architecture has pointed out that the entry barriers imposed by Singapore, has restricted the movement of Indian architects to that country. In this regard, in the on-going round of GATS negotiations, India has requested Singapore to undertake full commitments in urban planning and landscape architectural services under Mode 4. In this sub-sector, India has also requested for mutual recognition for qualifications and license to practice. India and Singapore should explore these possibilities under the CECA.

Environmental Services:

The global market for environmental technologies, products and services was estimated at around US$450 billion in the year 2000 and is expected to grow to US$640 billion by the year 2010. India's share in this is expected to be around US$7 billion.[108] Realising the importance of this service sector, the government has opened up environmental services for private and foreign investment. Major areas of investment includes waste water treatment, recycling and sanitation; waste management, treatment and disposal; biomedical waste management; industrial and vehicular air pollution control, clean and renewable energy equipment and environmental consultancy services. The private players are increasingly involved in implementation of these projects on a BOOT (Build-Own-Operate-Transfer) and BOO (Build-Own-Operate) basis.

In India, the market for pollution control equipment, particularly equipment for industrial wastewater treatment and monitoring equipment for industrial air pollution control, is estimated to be growing around 10–12 per cent per annum. CII has reported that as compared to around 100 firms in the 1990s, at present, there are around 700 companies providing environmental equipment and services. Most domestic firms, operating in this sector, have joint ventures with companies from countries such as USA, UK, Germany, Netherlands, Canada, Sweden, etc. In this regard, India can explore the

[108] International Trade Forum, 2002.

possibilities of technical co-operation with Asian equipment manufactures and service providers and Singapore can provide a gateway for Indian firms to access the Southeast Asian market.

Waste disposal is one of the major problems faced in India. The daily per capita solid waste generated ranges from about 100g in small towns to 500g in large towns. Most Indian towns/cities do not have adequate capacity for collection and transportation of MSW (municipal solid waste).[109] In addition to MSW, large quantity of waste, in both solid and liquid forms, is generated by the industrial sector like breweries, sugar mills, distilleries, food-processing industries, tanneries, and paper and pulp industries. This urban municipal waste (both solid and liquid) has a tremendous potential for energy generation and a collaboration between Indian and Singaporean companies in this sector will not only enhance the inflow of capital but also enable the Indian companies to upgrade their technical and managerial skills and increase efficiency in operation and management. Currently, there are around 400–500 waste minimising and recycling companies in Singapore and they can collaborate with Indian firms to share their knowledge, expertise, experience and technologies.

Indian consultancy firms have developed expertise in various environmental consultancy services such as the preparation of environmental impact assessment (EIA) reports, offsite and onsite emergency plans, conducting safety audits and regular preparation of safety reports especially for industries which are hazardous in nature. Since there is a demand for such services in Singapore a co-operation between India and Singapore in environmental consultancy services will be beneficial for both countries.

Through legislation passed by the Government of India in 1998, the treatment of bio-medical waste was made mandatory and hospitals with 500 beds and above had to install adequate treatment and disposal facilities by December 1999. This deadline has been extended to December 2002. Interested Singaporean companies can collaborate with Indian State health departments for the installation of bio-medical management facilities in state hospitals.

Both India and Singapore did not made any commitments in this sector during the Uruguay Round of negotiations and they have not made any request to each other in the current round.

Section 5: Compliance of the CECA with the General Agreement on Trade in Services

The recommendations made in the study are consistent with the obligations by India and Singapore under GATS. If India and Singapore wish to do more than has been recommended in the study and extend privileges to each other which are not available to other WTO members then there is a need for an FTA. The proposed CECA will have to

[109] Pachauri, R. K. and P. V. Sridharan, 1998.

be compliant with the GATS framework. GATS has a positive list approach to services negotiations. A positive list approach indicates that there is no prior exclusion of any sectors from the negotiations, i.e., the negotiating countries will list down all the sectors that they have agreed to liberalise. In its FTAs, Singapore has followed both the positive list approach (with Japan) and the negative list approach[110] (with Australia). Keeping in mind the technological developments, interlinkages between the service sectors and complexities of services negotiations, it is suggested that the CECA should also follow a positive list approach.

The basic principle of GATS is that trade liberalisation will be on a non-discriminatory basis. Article II of GATS (Most–Favoured–Nation–Treatment) states that each member country is obliged to provide a treatment to a country, which is no less favourable than the treatment it provides to any other country, i.e., if a GATS member country offers a certain privilege to any other country, whether it be a member or not, it has to extend the same treatment to all GATS member countries.[111] According to this Article, if India offer some privileges to Singapore in any particular sector, say, increase the foreign equity limit in telecommunication for the Singaporean firms from 49 per cent to 74 per cent under the CECA, the country will have to extend similar privileges to all other WTO member countries.

However, Article V of GATS allows member countries to enter into bilateral and regional agreements for liberalising trade in services provided that such an agreement has a (a) substantial sectoral coverage and (b) provides for the absence or elimination of substantially all national treatment discrimination among the trading partners.

Article V does not clearly define the term "substantial sectoral coverage". In the W/120 classification, which was drawn up during the Uruguay Round of services negotiations based on United Nations Central Product Classification, there are 12 broad sectors and 157 sub-sectors. It is assumed that if bilateral and regional trading partners agree to liberalise trade in more than 78 sub-sectors (i.e., more than half of the services sectors listed in the W/120) across all modes of service delivery, it would indicate a "substantial coverage". It is expected that, in the bilateral and regional agreements, the trading partners would expand their commitments to liberalise much beyond their WTO commitments. For example, in the JSEPA, the Singapore-Japan FTA, Japan extended its commitments to 135 sub-sectors (86 per cent of a total of 157 sectors), while Singapore committed on 139 sub-sectors (88.5 per cent). In the Uruguay Round, Singapore and Japan committed on 61 and 103 sub-sectors respectively. In the JSEPA, the commitments are subject to market access, national treatment and domestic regulation disciplines. In essence, this indicates that a country cannot impose additional market access restrictions for the sectors covered under the agreement, must accord same treatment to both local and foreign service providers, and must impose measures in a reasonable, objective and

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110 The negative list approach allows a country to only list those sectors that it does not want to liberalise.

111 During the Uruguay Round, member countries could undertake exemption to this clause, in initial commitments, subject to review. However, it is extremely difficult to take such exemptions in the current round of negotiations.

impartial manner. A similar structure should be followed by the Indo-Singapore CECA. The CECA should also have provisions against companies that engage in anti-competitive practices.

In this regard, it is worth noting that Article V of GATS has some special provisions for developing countries like India. This Article states that developing countries entering into bilateral or regional agreements have the flexibility to liberalise fewer sectors and modes of delivery, in accordance with their level of development. Thus, being a developing country, India has the flexibility to liberalise fewer sub-sectors and modes of delivery under the CECA.

The sectoral discussion shows that India has already liberalised the service sectors autonomously, but has not bound the existing regime in the WTO. If the liberalisation under the CECA goes beyond what both the countries are willing to commit in the current round of WTO, then the CECA will have to be compliant with Article V. As stated under the Article V, India and Singapore will have to notify the liberalisation measures undertaken in the CECA to the Council for Trade in Services together with the time frame of implementation of these measures. Any future modifications will also have to notified to the Council for Trade in Services.

The study also highlights that India and Singapore should enter into Mutual Recognition Agreement in various professionals services. In this respect it is worth noting that the GATS already contains a strong provision for recognition under Article VII. This provision encourages transparency, non-discrimination and objectivity in rating of recognition and also encourages countries to enter into mutual recognition agreements or extend recognition autonomously to other member countries. GATS requires that if a country enters into an (or changes an existing) MRA it will have to inform the Council for Trade in Services.

Section 6: Conclusion

Given the importance of the contribution of the services sector in the GDP and international trade of both India and Singapore, any trade liberalisation process would be incomplete without significant liberalisation of the services sector. This study assesses Indo-Singapore trade possibilities in services in the context of the proposed CECA. It provides a detailed analysis of service sectors of trade interest to both countries, namely, tourism, distribution, information technology, telecommunication, audio-visual, health, education, transport (including ports, air transport, roads), construction of buildings, financial services, business services (including legal services, architectural and engineering services) and environmental services. For each of these sectors, the study analyses the recent developments in the sector, the trade possibilities and the existing barriers to trade between the two countries. It suggests how such barriers can be removed/reduced through the CECA and also identifies areas of mutual co-operation so that both countries can gain through the Agreement.

The study shows that there is significant requirement for investment in the infrastructure sector in India. On the other hand, with high savings rate and small size of the domestic market, it is in Singapore's interest to invest in large globalised economy like India. In sectors such as telecommunication and transport, Indian companies will gain from the technical know-how and management expertise of Singaporean companies. Although India has significantly liberalised investment in infrastructure services, there are still some restrictions such as foreign equity ceiling (as in the case of telecommunication), multiple clearance procedures, multiple taxes, joint venture requirements and the like, which can be addressed through the CECA.

Singapore, with a growing knowledge-based sector, is dependent on the inward flow of professionals. India provides culturally compatible, high quality low-cost professionals, which can be absorbed in Singapore's service sectors such as software, health and education. However, cross-country movement of professionals between the two countries is restricted by several barriers such as mutual recognition of qualification, registration requirements, nationality and citizenship requirements, visa related restrictions, etc. Many of these issues can be addressed through the CECA. More specifically, professional bodies and institutions of the two countries can sign Mutual Recognition Agreements in selected service sectors (health, education, software, architecture, accountancy, etc.) which will help to ease the qualification-related barriers. Other barriers, such as stringent conditions for employment passes in Singapore, restrictions on granting visas to professionals, etc. can also be addressed through the CECA.

The study also identifies areas of complementarity, which can be exploited by both countries to gain greater access in third country markets. For instance, India's software expertise can be combined with Singapore's capabilities in hardware to create a combined brand identity. While Singapore provides an important market for India's audio-visual products, India can gain through modern technical know-how from Singapore. In tourism, where India's share in the world's trade is declining, the country can gain through multi-country packages linking major tourist destination, investment in tourist infrastructure and the like.

Given Singapore's locational advantage and its close linkages with countries in Southeast Asia, India should view Singapore as a gateway for expanding into the ASEAN market especially in sectors, such as tourism, health and software. Also, given the unequal geographical size of the two countries and the quasi-federal structure the Indian government, Singapore could benefit by entering into agreements in selected service sectors with interested state governments.

The study emphasizes that since both India and Singapore are committed to the multilateral trading system (WTO), the CECA should be compliant with the GATS and should follow a positive list approach. However, the liberalisation measures undertaken in the CECA should be much beyond what the countries are willing to commit in the multilateral forum.

Appendix A

Table A1: Relative Position of Singapore and India in World Exports of Commercial Services[1]

	1995			2001		
Exporters	**Rank**	**Value (billion US$)**	**Share in World Total (%)**	**Rank**	**Value (billion US$)**	**Share in World Total (%)**
USA	1	189.5	15.9	1	263.4	18.1
France	2	96	8.1	3	79.8	5.5
Germany	3	80.5	6.8	4	79.7	5.5
UK	4	70.6	5.9	2	108.4	7.4
Italy	5	65.3	5.5	7	57.0	3.9
Japan	6	64.0	5.4	5	63.7	4.4
Hong Kong	9	35.9	3.0	10	42.4	2.9
Singapore	**12**	**29.3**	**2.5**	**16**	**26.4**	**1.8**
Korea	14	25.1	2.1	14	29.6	2.0
Canada	15	21.2	1.8	11	35.6	2.4
China	16	18.4	1.5	12	32.9	2.3
Australia	17	15.5	1.3	13	15.7	1.1
Thailand	21	14.7	1.2	27	12.9	0.9
Malaysia	24	11.1	0.9	26	14.0	1.0
India	**34**	**6.8**	**0.6**	**19**	**20.4**	**1.4**
Indonesia	37	5.6	0.5	39	5.2	0.4
World		*1200*			*1340*	

Source: World Trade Organisation.
Note: [1] Commercial services are defined as *services* minus *government services.*

Table A2: Relative Position of Singapore and India in World Imports of Commercial Services[2]

	1995			2001		
Importers	**Rank**	**Value (billion US$)**	**Share in World Total (%)**	**Rank**	**Value (billion) US$**	**Share in World Total (%)**
Germany	1	131.6	10.9	2	132.6	9.2
USA	2	128.4	10.6	1	187.7	13.0
Japan	3	121.6	10.1	3	107.0	7.4
France	4	76.9	6.4	5	61.6	4.3
Italy	5	64.7	5.4	6	55.7	3.9
UK	6	57.9	4.8	4	91.6	6.3
Canada	9	29.3	2.4	8	41.5	2.9
Korea	11	27.5	2.3	13	33.1	2.3
China	12	24.6	2.0	10	39.0	2.7
Hong Kong	15	21.5	1.8	15	25.1	1.7
Thailand	17	18.6	1.5	28	14.5	1.0
Singapore	**19**	**16.5**	**1.4**	**21**	**20.0**	**1.4**
Australia	20	16.5	1.4	24	16.4	1.1
Malaysia	23	14.3	1.2	22	16.5	1.1
Indonesia	25	13.2	1.1	29	14.5	1.0
India	**28**	**10.1**	**0.8**	**18**	**23.4**	**1.6**
World		*1215*			*1315*	

Source: World Trade Organisation.
Note: [2] Commercial services are defined as *services* minus *government services.*

Table A3: Singapore's Export of Services to India

Services Group	1998 (million Singapore$)	1999 (million Singapore$)	2000 (million Singapore$)
Transportation[1]	255.6	300.9	377.2
Trade related and others[2]	140.9	173.9	173.4
Financial[3]	17.3	17.1	20.9
Insurance[4]	2.8	4.2	6.6
Business [5]	111.9	157.5	220.2
Technical[6]	45.6	26.1	28.8
Royalties[7]	10.9	12.1	2.3
Social[8]	0.2	—	—
Total	**585.2**	**691.8**	**829.4**

Source: Singapore Department of Statistics, Intentional Trade in Services Survey.
Note: Export value less than fifty thousand dollars is denoted by a dash.

[1] Transportation services covers services that involve the carriage of passengers, the movement of goods, charter of carriers with crew (both under freight), and related supporting and auxiliary services.

[2] Travel related services includes Merchanting (being the main item) and telecommunication services. Merchanting is the purchase of a good by a resident of the compiling economy from a non-resident and the subsequent resale of the goods to another non-resident, during the process the goods do not enter or leave the compiling economy.

[3] Financial services cover financial intermediary and auxiliary services. They are broadly classified into bank services, investment services and commissions.

[4] Insurance services are measured by the net premiums earned, and commission income. The net premium earned from inward reinsurance are recorded in export of services, while the net premiums paid for outward reinsurance are recorded in import of services. Also included in insurance payments is insurance on imports.

5 Business services consists of business management, legal, accounting, architectural and advertising.

[6] Technical services include engineering services, computer and information services, construction services and fees for research and development.

[7] Royalties cover receipts and payments for the use of patents, copyrights, trademarks, industrial process, etc.

[8] Social services include personal, cultural and recreational services such as production of movies, fees to actors, fees associated with sports, etc.

Appendix B

Table B1: Commitments Undertaken by India and Singapore

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
Tourism Services				
Hotels and other lodging services Singapore's commitments cover only hotel services	1) Unbound* 2) Unbound 3) Through incorporation with a foreign equity ceiling (FEC) of 51 per cent 4) Ub except as in HC**	1) Unbound* 2) None 3) None 4) Ub except as in HC	1) Unbound* 2) Unbound 3) None 4) Ub except as in HC	1) None 2) None 3) None 4) Unbound
Travel Agency and Tour Operator Services Singapore's commitments cover tourist guide services also.	1) Unbound 2) Unbound 3) Through incorporation with a FEC of 51 per cent 4) Ub except as in HC	1) None 2) None 3) None, other than travel agency and tour operators must be private limited company 4) Ub except as in HC	1) Unbound 2) Unbound 3) None 4) Ub except as in HC	1) Unbound 2) None 3) Unbound 4) Unbound
Restaurant and Catering Services	No commitments	1,2,3) None 4) Ub except as in HC	No commitments	1,2,3) None 4) Unbound
Computer and Related Services				
Software implementation services Consultancy services related to the installation of computer hardware Maintenance and repair services of office machinery Equipment including computers	1,2) Unbound 3) Through incorporation with a FEC of 51 per cent 4) Ub except as in HC	No commitments	1) Unbound 2) Unbound 3) None 4) Ub except as in HC	No commitments
Data processing services Data base services	1,2) Unbound 3) Through incorporation with a FEC of 51 per cent 4) Ub except as in HC	1) None 2) None 3) None 4) Ub except as in HC	1) Unbound 2) Unbound 3) None 4) Ub except as in HC	1) None 2) None 3) None 4) Unbound

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
System integrated services Information technology consultancy services Software development	No commitments	1) None 2) None 3) None 4) Ub except as in HC	No commitments	1) None 2) None 3) None 4) Unbound
Telecommunication Services				
Electronic mail Voice mail On-line information and data base retrieval On-line information and/or data processing	1) None 2) Unbound 3) Through incorporation with a FEC of 51 per cent 4) Ub except as in HC	1) Provision of VAN services is subjected to licence from the Telecommunication Authority of Singapore (TAS) The basic requirements for VAN licence are: - Foreign companies are required to either set up a local branch of their company duly registered with the Registry of Companies and Businesses in Singapore, or grant a power of attorney to a local agent for the provision of their VAN services in Singapore - VAN does not carry traffic which resembles any of the basic telecommunication services 2) None 3) Same as Mode 1 4) Ub except as in HC as above	1) None 2) Unbound 3) None 4) Ub except as in HC	1) None 2) None 3) None 4) Unbound

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
Electronic data interchange	No commitments	Same as above	No commitments	1,2,3) None 4) Unbound
Enhanced/value added facsimile services, including store and forward, store and retrieve	1) None 2) Unbound 3) Through incorporation with a FEC of 51 per cent 4) Ub except as in HC	No commitments	1) None 2) Unbound 3) None 4) Ub except as in HC	No commitments
Audio-visual Services				
Motion picture or video tape distribution services Singapore's commitments further includes services related to production, distribution and public display of video recordings, sound recordings However Singapore's commitments excludes all broadcasting and AV services and materials that are broadcasting related are excluded, examples being free-to-air broadcasting, cable and pay television. direct broadcasting by satellite, and teletext.	1) Unbound 2) Unbound* 3) i) Only through representative offices which will be allowed to function as branches of companies incorporated outside India ii) Import of titles restricted to 100 per Year 4) Ub except as in HC		1) Unbound 2) Unbound* 3) Subject to the prescribed authority having certified that the motion picture has: a) won an award in any of the international film festivals notified by the Ministry of Information & Broadcasting, Government of India; or b) participated in any of the official sections of the notified international film festivals; or c) received good reviews in prestigious film journals notified by the Ministry of Information & Broadcasting, Government of India. 4) Ub except as in HC	

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
Health Services				
Hospital Services	1) Unbound* 2) Unbound 3) Through incorporation with a FEC of 51 per cent 4) Ub except as in HC	No commitments	1) Unbound* 2) Unbound 3) None 4) Ub except as in HC	No commitments
Medical services (classified under Professional services)	No commitments	1) Unbound 2) None 3) None, other than the number of new foreign doctors registered each year may be limited depending on the total supply of doctors 4) Ub except as in HC	No commitments	1) None 2) None 3) None 4) Unbound
Dental services (classified under Professional services)	No commitments		No commitments	1,2,3) None 4) Unbound
Transportation Services				
Maritime transport services				
The services covered are: Freight Transportation, less cabotage	No commitments	1,2,3) None 4) Ub except as in HC	No commitments	1,2,3) None 4) Unbound
Maritime auxiliary services: Shipping agency services Shipping brokerage services	No commitments	1,2,3) None 4) Ub except as in HC	No commitments	1,2,3) None 4) Unbound

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**

Singapore's additional commitments in maritime services state that When the following services are not otherwise covered by the obligation enshrined in Article XXVIII(c)(ii), they will be made available to international maritime transport suppliers on reasonable and non-discriminating terms and conditions:

- pilotage;
- towing and tug assistance;
- provisioning fuelling and watering;
- garbage collecting and ballast; waste disposal
- port captain's services;
- navigation aids emergency;
- repair facilities;
- anchorage; and
- other shore-based operational services essential to ship operations, including communications, water and electrical suppliers.

Construction Services				
India's commitments cover construction work for civil engineering which includes roads & bridges only i.e. : Construction of highways, streets, railways, runways, bridges, tunnels, subways, waterways, harbours, dams, pipelines, communication lines, power lines and construction work of constructions for mining and manufacturing not elsewhere classified e.g. power plants, iron foundries, blast furnaces and coke ovens. It excludes construction work of warehouses and industrial buildings, residential and non-residential buildings.	1) Unbound* 2) Unbound* 3) Through incorporation with a FEC of 51 per cent 4) Ub except as in HC	1) None 2) None 3) None 4) Ub except as in HC	1) Unbound* 2) Unbound* 3) None 4) Ub except as in HC	1) None 2) None 3) None 4) Unbound

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
Financial Services				
Insurance and insurance related services				
Life insurance services including annuity, disability income, accident and health insurance services	No commitments	1) Unbound 2) None 3) Unbound for foreign acquisition of equity stakes in locally-owned insurance companies. Unbound for issuance of new insurance licences and establishment of new representative offices. 4) Ub except as in HC	No commitments	1) Unbound 2) None 3) None 4) Unbound
Non-life insurance services Singapore's commitments include disability income, accident and health insurance and contracts of fidelity bonds, performance bonds or similar contracts of guarantee India's commitments include only insurance of freight	1) Unbound except in the case of insurance of freight, where there is no requirement that goods in transit to and from India should be insured with Indian insurance companies only. Insurance is taken by the buyer or seller in accordance with the terms of the contract. This position will be maintained. Once under a contract the Indian importer or exporter agrees to assume the responsibility for insurance such as in the case of f.o.b. contracts for imports into India or c.i.f. contracts for exports from India, insurance has to be taken only with an Indian insurance company. 2) Unbound 3) Unbound 4) Ub except as in HC	1) Unbound 2) None except for compulsory insurance of Motor Third Party Liability and Workmen's Compensation which can be purchased only from licensed insurance companies in Singapore 3) Unbound for foreign acquisition of equity stakes in locally-owned insurance companies. Unbound for issuance of new insurance licences and establishment of new representative offices. 4) Ub except as in HC	1) Unbound 2) Unbound 3) Unbound 4) Ub except as in HC	1) Unbound 2) None 3) None 4) Unbound
Reinsurance and Retrocession	1) Reinsurance can be taken with foreign reinsurers to the extent of the residual uncovered risk after	1) None 2) None 3) Reinsurance companies can	1) Unbound 2) Unbound 3) Unbound	1) None 2) None 3) None

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	Singapore	India	Singapore
	obligatory or statutory placements domestically with Indian insurance companies. At present this amounts to 10 per cent of the premium of the market overall being reinsured abroad. This will be maintained. 2) Reinsurance can be taken with foreign reinsurers to the extent mentioned above 3) Unbound 4) Ub except as in HC	establish as branches or subsidiaries. Existing representative offices must upgrade to branches or subsidiaries, subject to MAS (Monetary Authority of Singapore) I' criteria for upgrading, by 1 January 1997. 4) Ub except as in HC	4) Ub except as in HC	4) Unbound
Insurance intermediation, limited to reinsurance for India's commitments and comprising broking and agency services for Singapore's commitments	1) Reinsurance of domestic risks can be placed with foreign reinsurers through overseas brokers, to the extent mentioned under reinsurance and retrocession 2) Same as above 3) i) Overseas brokers are allowed to have resident representatives and representative offices who can procure reinsurance business from Indian insurance companies to the extent mentioned above. They can also place reinsurance business from abroad with Indian insurance companies. ii) Except for the business indicated above, the resident representatives and representative offices cannot undertake any other activity in India. iii) All the expenses of the resident representatives and representative	1) Unbound 2) Agents are not allowed to act for unregistered insurers. With the exception of reinsurance risks and risks insured by protection and indemnity clubs, brokers can only place domestic risks outside Singapore with the approval of MAS. 3) Unbound 4) Ub except as in HC	1) Unbound 2) Unbound 3) Unbound 4) Ub except as in HC	1) Unbound 2) None 3) Unbound 4) Unbound

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
	offices have to be met by remittances from abroad and no income can be received in India from Indian residents. 4) Ub except as in HC			
Services auxiliary to insurance comprising actuarial, loss adjustors, average adjustors and consultancy services	No commitment	1,2,3) None 4) Ub except as in HC	No commitment	1,2,3) None 4) Unbound
Banking				
Acceptance of deposits and other repayable funds from the public	1) Unbound 2) Unbound 3) I) Only through branch operations of a foreign bank licensed and supervised as a bank in its home country. Ii) Not more than five licences a year both for new entrants and existing banks. Iii) Investments in other financial services companies by branches of foreign banks licensed to do banking business in India individually not to exceed 10 per cent of owned funds or 30 per cent of the invested company's capital. Iv) Licences for new foreign banks may be denied when the maximum share of assets both on and off balance sheet of foreign banks to total assets both on and off balance sheet of	1) Unbound 2) None 3) Only institutions approved as banks, merchant banks and finance companies can accept deposits Where a foreign financial institution is subject to legislation in its home country which requires that institution to confer lower priority to depositors of its foreign offices vis-à-vis the home country depositors in receivership or winding up proceedings, the MAS may exercise appropriate differentiated measures against that foreign financial institution in Singapore to safeguard the the interest of the Singapore office's depositors Establishment and operation of foreign banks, merchant banks and finance companies are also subject to the	1) Unbound 2) Unbound 3) i) Foreign banks are required to constitute Local Advisory Boards consisting inter-alia of professionals and persons having expertise in areas such as small scale industry and exports. The appointment of Chairman and members of the Board requires Reserve Bank of India approval; ii) Foreign banks are required to publish consolidated financial statements of the	1) Unbound 2) None 3) Commercial banks Foreign banks can operate from only one office (excluding back-office operations). They cannot establish off-premise ATMs and ATM networking and new sub-branches. Provision of all other electronic banking services require MAS' prior approval. Location of banks

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	Singapore	India	Singapore
	the banking system exceeds 15 per cent. 4) Ub except as in HC	limitations listed under banking and the following limitations: <u>Commercial banks</u> No new full and restricted banks. Unbound for new offshore banks. Representative offices cannot conduct business or act as agents. A single/related group of foreign shareholders can only hold up to 5 per cent of a local bank's shares. Aggregate foreign ownership of each domestic bank's shares has been increased from 20 per cent to 40 per cent. <u>Merchant banks</u> Unbound for establishment of new merchant banks <u>Finance Companies</u> No new finance companies. Unbound for foreign acquisition of shares in finance companies and transfer or sale of foreign shareholdings in existing finance companies to foreign parties. All finance companies, local and foreign-owned, can only conduct Singapore dollar business. Ub except as in HC	Indian branches as at 31st March every year. 4) Ub except as in HC	and relocation of banks and sub-branches require prior approval from MAS Banks, with MAS' approval, can operate foreign currency savings accounts only for non-residents Restricted banks can only accept foreign currency fixed deposits from and operate current accounts for residents and non-residents. For Singapore dollar deposits, they can only accept fixed deposits of S$250,000 or more per deposit. Offshore banks can accept foreign currency fixed deposits from residents and non-residents. For Singapore dollar

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
				deposits, they can only accept fixed deposits of S$250,000 or more per deposit from non-residents. Merchant banks Merchant banks can operate from only one office (excluding back-office operations). Location and relocation of merchant banks require MAS' prior approval. Merchant banks can, with MAS' authorisation, raise foreign currency funds from residents and non-residents, operate foreign currency savings accounts for non-residents and raise Singapore dollar funds from their shareholders and companies controlled by their shareholders, banks, other merchant banks and

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
				finance companies Finance Companies Location of finance companies and relocation of sub-branches require MAS' prior approval. Foreign-owned finance companies cannot establish off-premise ATMs, ATM networking and new sub-branches. 4) Unbound
Lending of all types including consumer credit, mortgage credit, factoring and financing of commercial transaction India's commitments exclude factoring	Same as above	1) Unbound 2) None 3) i) Provision of credit and charge card services require MAS' prior approval ii) Singapore dollar loans, by local and foreign-owned financial institutions, to non-residents, non-resident controlled companies and to residents for use outside Singapore require MAS' prior approval 4) Ub except as in HC	Same as above	1) None 2) None 3) Each offshore bank's lending in Singapore dollars to residents shall not exceed S$100m in aggregate Offshore banks should not use their related merchant banks to circumvent the S$100m lending limit

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
				Unbound for establishment of off-premise cash dispensing machines for credit and charge cards 4) Unbound
Payment and money transmission services, including credit, charge and debit cards, travellers cheques and bankers drafts	Same as above	1) Unbound 2) None 3) Remittance shops, except where the remittance business is conducted by banks and merchant banks, are required to be majority owned by Singapore citizens and are required to be licensed by MAS Bankers' drafts can only be issued by banks Only the following can issue stored value cards:- - a bank in Singapore licensed by MAS; and - a juridical person for the payment only of goods or services or both goods and services provided by that person The limitations indicated in lending of all types above also apply to the activities listed in this sub-sector 4) Ub except as in HC	Same as above	1) Unbound 2) None 3) None 4) Unbound

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
Guarantees and commitments	Same as above	1) None 2) None 3) None except for the limitations indicated in activity relating to non life insurance, for insurance companies providing contracts of fidelity bonds, performance bonds or similar contracts of guarantee, and those for all types of lending for Singapore dollar loans to non-residents and non-resident companies mentioned above 4) Ub except as in HC	Same as above	1) None 2) None 3) None 4) Unbound
Trading for own account India's commitments cover only Trading for own account of --money market instruments --foreign exchange --transferable securities whereas Singapore's commitments extend to Trading for own account or for account of customers, whether on an exchange, in an over-the-counter market or otherwise, the following:- --money market instruments --foreign exchange --transferable securities	Same as above	1) Unbound except for trading in products listed in this category for own account. Trading in money market instruments, foreign exchange, as well as exchange rate and interest rate instruments can be conducted with financial institutions only. 2) None 3) Banks and merchant banks are required to set up separate subsidiaries to trade financial futures for customers Financial futures brokers can establish as branches or subsidiaries. They can trade in existing financial futures products. Unbound for trading of new financial futures products.	Same as above	1) None 2) None 3) None except as indicated for activity relating to leasing of all types mentioned above 4) Unbound

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	Singapore	India	Singapore
		The offer of derivative products by both local and foreign owned financial institutions under MAS' supervision are subject to MAS' prior approval and conditions which include the following:- -- the product has been offered by the financial institution in other internationally reputable financial centres and the supervisory authorities of those centres agree to the offer of such products in their markets; -- the financial institution's parent supervisor and its head office must be aware and have no objection to the offer of such products in the Singapore branch/subsidiary, and -- MAS is satisfied that the financial institution has and continues to have the financial strength and adequate internal controls to trade in these products Money changers, except where the money changing business is conducted by banks and merchant banks, are required to be majority owned by Singapore citizens and are required to be licensed by MAS 4) Ub except as in HC		
Trading for own account: Portfolio management,	Same as above	No commitment	Same as above	No commitment

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
custodial, depository and trust services Clearing services for other banks for cheques, drafts and other instruments				
Trading for own account or for account of customers, whether on an exchange, in an over-the-counter market or otherwise, the following:- --derivative products, including financial futures and options -- exchange rate and interest rate instruments, including swaps and forward rate agreements -- other negotiable instruments and financial assets, including bullion	No commitments	Same as given for category prior to the previous one (i.e. trading for own account: money market instruments, foreign exchange, and transferable security).	No commitments	Same as given for category prior to the previous one
Participation in issues of all kinds of securities, including underwriting and placement as agent and provision of service related to such issues	1) Unbound 2) Unbound 3) i) Foreign bank branches licensed to do banking business in India. ii) Through incorporation with foreign equity not exceeding 51 per cent by financial services companies (including banks). 4) Ub except as in HC	1) Unbound except for participation in issues of securities for own account, and underwriting and placement of securities through stock broking companies, banks or merchant banks in Singapore 2) None 3) Foreign stockbroking companies can establish only as non-members of the Stock Exchange of Singapore (SES). Representative offices cannot conduct business or act as agents.	1) Unbound 2) Unbound 3) None 4) Ub except as in HC	1) None 2) None 3) None except as indicated for activity relating to leasing of all types mentioned above 4) Unbound

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
		Unbound for new membership on SES and for foreign acquisition of new and existing equity interests in SES member companies. Unbound for new international memberships. International members can deal in foreign securities and SES-quoted securities with non-residents and resident companies which are substantially or beneficially owned by non-residents. They can also deal with residents in foreign currency denominated securities quoted on SES. For Singapore dollar denominated securities quoted on SES, they can deal with residents only for transactions above S$5m each. Banks' and merchant banks' membership on SES must be held through subsidiaries Unbound for new primary and registered dealers of Singapore Government Securities 4) Ub except as in HC		
Financial consultancy services i.e. financial advisory services	Same as above	1) Commercial presence is required for provision of investment and	Same as above	1) None 2) None

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	Singapore	India	Singapore
provided by financial advisors, etc. to customers on financial matters, investment and portfolio research and advice, advice on acquisitions and on corporate restructuring and strategy		portfolio research and advice to the public 2) None 3) Investment advisers can establish as branches, subsidiaries or representative offices. Representative offices cannot conduct business or act as agents. 4) Ub except as in HC		3) None 4) Unbound
Provision and transfer of financial information, and financial data processing and related software by providers of other financial services	No commitment	1) Unbound 2) Unbound 3) MAS' approval is required and subject to domestic laws on protection of confidentiality of information of customers of banks and merchant banks 4) Ub except as in HC	No commitment	1) Unbound 2) Unbound 3) None 4) Unbound
Settlement and clearing services for financial assets, including securities, derivative products and other negotiable instruments	No commitment	1) Unbound 2) None 3) Unbound. The settlement and clearing services for securities, financial futures and Singapore dollar cheques and interbank funds transfer are provided by the Stock Exchange of Singapore, the Singapore International Monetary Exchange and Banking Computer Services Pte Ltd, respectively. 4) Ub except as in HC	No commitment	1) Unbound 2) None 3) Unbound 4) Unbound
Money broking	No commitment	1) Unbound 2) None 3) Unbound for new money brokers	No commitment	1) Unbound 2) None 3) None 4) Unbound

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
		4) Ub except as in HC		
Asset management, such as cash or portfolio management, all forms of collective investment management, pension fund management, custodial depository and trust services	No commitment	1) Unbound 2) None 3) Both asset management companies and custodial depositories, with MAS' approval; and trust services companies can establish as branches or subsidiaries. Unbound for custodial depository services for scripless securities. The Central Depositary Pte Ltd is authorised to provide securities custodial depository services under the scripless trading system. 4) Ub except as in HC	No commitment	1) Unbound 2) None 3) None 4) Unbound
Factoring	1) Unbound 2) Unbound 3) i) Through incorporation with foreign equity not exceeding 51 per cent by financial services companies (including banks). 4) Ub except as in HC	No commitment	1) Unbound 2) Unbound 3) None 4) Ub except as in HC	No commitment
Venture Capital	1) Unbound 2) Unbound 3) i) Through incorporation with foreign equity not exceeding 51 per cent by financial services companies including banks. ii) Funding has to be entirely out of equity. 4) Ub except as in HC	No commitment	1) Unbound 2) Unbound 3) None 4) Ub except as in HC	No commitment
Financial Leasing	1) Unbound 2) Unbound	1) None 2) None	1) Unbound 2) Unbound	1) None 2) None

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
	3) i) Through incorporation with foreign equity not exceeding 51 per cent by financial services companies including banks. ii) Funding has to be entirely out of equity. 4) Ub except as in HC	3) None except as indicated for activity regarding lending of all types mentioned above 4) Ub except as in HC	3) None 4) Ub except as in HC	3) None except as indicated for activity regarding lending of all types mentioned above 4) Unbound
Business Services				
Professional services				
Engineering Services Singapore's commitments cover following services a) Civil engineering services b) Production engineering services c) Mechanical engineering services d) Electrical engineering services e) Electronic engineering services f) Aeronautical engineering services g) Marine engineering services h) Naval architectural engineering services	1) Unbound 2) Unbound 3) Only through incorporation with a foreign equity ceiling of 51 per cent 4) Ub except as in HC	1) None 2) None 3) Limited Corporations - Only registered Professional Engineers or allied professionals (registered Architects or Land Surveyors) shall be director of the corporations - Not less than two-thirds or such lower proportion as the Minister for National Development may specify in relation to any corporation of each class of shares of the corporation shall be beneficially owned by and registered in the names of registered Professional Engineers or allied professionals - Professional engineering work in Singapore will be under the control and management of a director of the corporation who is a registered owner of at least one share of the	1) Unbound 2) Unbound 3) None 4) Ub except as in HC	1) None, other than engineers should be effectively resident in Singapore 2) None 3) None 4) Unbound

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	Singapore	India	Singapore
		corporation; who is a registered Professional Engineer ordinarily resident in Singapore and who has a valid certificate <u>Unlimited Corporation</u> - Only registered Professional Engineers or allied professionals (registered Architects or Land Surveyors) shall be a director of the corporation - The articles of association of the corporation provide that any person who is neither a registered Professional Engineer nor an allied professional, or is a nominee of such a person, or is not a director, manager or employee of the corporation, shall not be registered as a member of that corporation - The business of the corporation, so far as it relates to professional engineering work, will be under the control and management of a director of the corporation who: -- is a registered Professional Engineer ordinarily resident in Singapore; -- has in force a practising certificate authorising him to engage in such professional engineering work; and -- is a member, or a registered owner of at least one share, of the		

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	Singapore	India	Singapore
		corporation <u>Partnership</u> - The partnership consists of only registered Professional Engineers with valid practising certificates and allied professionals; and - Professional engineering work in each discipline of engineering in Singapore will be under the control and management of a partner who is a registered Professional Engineer in the relevant discipline, ordinarily resident in Singapore and who has a valid practising certificate. 4) Ub except as in HC		
Research and Development Services a) R&D services on the following natural sciences only: - Heat, light, electro-magnetism, astronomy, but excluding atomic energy and related matters Engineering and technology, including applied science and technology for casting, metal, machinery, electricity,	1) Unbound 2) Unbound* 3) Only through incorporation with a foreign equity ceiling of 51 per cent 4) Ub except as in HC	No commitment	1) Unbound 2) Unbound* 3) None 4) Ub except as in HC	No commitment

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	Singapore	India	Singapore
communications, vessels, aircrafts, civil engineering, construction, information, etc.				
Accounting/Auditing Services	No commitment	1) None, other than public accountants must be effectively resident in Singapore or at least one of the partners of the firm must be effectively resident in Singapore 2) None 3) As in mode 1 4) Ub except as in HC	No commitment	1) None 2) None 3) None 4) Unbound
Taxation Services	No commitment	1) None, other than public accountants must be effectively resident in Singapore or at least one of the partners of the firm must be effectively resident in Singapore. Only Public Accountants registered with the Public Accountants Board Singapore can practise as tax consultants for local tax laws. 2) None 3) As in mode 1 4) Ub except as in HC	No commitment	1) None 2) None 3) None 4) Unbound
Veterinary Services	No commitment	1) None 2) None 3) None 4) Ub except as in HC	No commitment	1) None 2) None 3) None 4) Unbound
Architectural Services	No commitment	1) None 2) None 3) <u>Limited Corporations</u>	No commitment	1) None 2) None 3) None 4) Unbound

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
		- Only registered architect or allied professional (Professional Engineers or Land Surveyors) shall be a director of the corporation - Not less than two-thirds or such lower proportion as the Minister for National Development may specify in relation to any corporation of each class of shares of the corporation shall be beneficially owned by and registered in the names of registered architects or allied professionals who are either directors, managers or employees of the corporation - Architectural work in Singapore will be under the control and management of a director of the corporation who is a registered architect ordinarily resident in Singapore; who has a valid practising certificate and is a registered owner of at least one share of the corporation <u>Unlimited Corporations</u> - Only registered architect or allied professional (Professional Engineers or Land Surveyors) shall be a director of the corporation - The articles of association of the corporation provide that any person who is neither a registered architect nor an allied professional, or is a nominee of such a person, or is not a director, manager or employee of the		

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
		corporation, shall not be registered as a member of that corporation - The business of the corporation, so far as it relates to the supply of architectural services, will be under the control and management of a director of the corporation who: -- is a registered architect ordinarily resident in Singapore; --has in force a practising certificate authorising him to engage in the practice of architecture; and --is a member, or a registered owner of at least one share, of the corporation <u>Partnership</u> - The partnership consists of only registered architects with valid practising certificates and allied professionals; and - The supply of architectural services in Singapore will be under the control and management of a partner who is a registered architect, ordinarily resident in Singapore and who has a valid practising certificate 4) Ub except as in HC		
Library Services Translation/Interpretation Services Biotechnology Services	No commitment	1) None 2) None 3) None 4) Ub except as in HC	No commitment	1) None 2) None 3) None 4) Unbound

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	**Singapore**	**India**	**Singapore**
Exhibition Management Services Public Relations Consultancy Services Management Consultancy services, including office management and administrative services Advertising Consultancy Services Buildings and Facilities Management Services, including Cleaning of Building Services Industrial Research Commercial Market Research Economic and Behavioural Research Interior Design Services, excluding Architecture Professional, Advisory and Consulting Services relating to Agriculture, Forestry, Fishery and Mining, including Oilfield Services				
Courier Services in respect of documents and parcels, excluding letters and postcards	No commitment	1) Unbound 2) None 3) Unbound 4) Ub except as in HC	No commitment	1) None 2) None 3) None 4) Unbound
Technical testing and analysis	1) Unbound	No commitment	1) Unbound	No commitment

Sector:	Limitations on Market Access		Limitations on National Treatment	
	India	Singapore	India	Singapore
services	2) Unbound 3) Only through incorporation with a foreign equity ceiling of 51 per cent 4) Ub except as in HC		2) Unbound 3) None 4) Ub except as in HC	

Source: Schedule of Specific Commitments: India and Singapore, General Agreement on Trade in Services, WTO.

Note: * Unbound due to lack of technical feasibility.
** Unbound except as indicated in the horizontal commitments.
1) Cross-border Supply, 2) Consumption Abroad, 3) Commercial Presence, 4) Movement of Natural Persons

Table B2: Horizontal Commitments by India and Singapore

Limitations on Market Access		Limitations on National Treatment	
India	Singapore	India	Singapore
4) Unbound except for measures affecting the entry and temporary stay of natural persons who fall in any of the following categories: a) <u>Business Visitors</u> Persons who visit India for the purposes specified in (i) and (ii) below and who will not receive remuneration from within India: i) for business negotiations, or ii) for preparatory work for establishing a commercial presence in India Entry for persons in this category shall be for a period of not more than 90 days b) <u>Intra-corporate transferees</u> At the level of Managers, Executives and Specialists who have been in the employment of a juridical person of another Member for a period not less than one year prior to the date of application for entry into India and are being transferred to a branch or a representative office or a juridical person owned or controlled by the aforesaid juridical person	1) Presence of natural persons unbound, except for intra-corporate transferees (see below) 2) Temporary movement of skilled personnel unbound except for the temporary movement of intra-corporate transferees at the level of managers, executives and specialists. Intra-corporate transferees refers to managers, executives and specialists, as defined below, who are employees of firms that provide services within Singapore through a branch, subsidiary, or affiliate established in Singapore and who have been in the prior employ of their firms outside Singapore for a period of not less than one year immediately preceding the date of their application for admission and who are one of the following: a) **Managers** - persons within an organisation who primarily direct the organisation, or a department or sub-division of the organisation, supervise and control the work of other supervisory, professional or managerial employees, have the authority to hire and fire or recommend hiring, firing, or other personnel actions (such as promotion or leave authorisation), and exercise discretionary authority over	3) In case of collaboration with public sector enterprises or government undertakings as joint venture partners, preference in access will be given to foreign service suppliers/entities which offer the best terms for transfer of technology 4) Unbound except for measures referred to under Market Access	3) Unbound 4) Unbound Commercial presence, right of establishment and movement of juridical persons are subject to compliance with the following provisions: - A foreigner who wishes to register a business firm must have a local manager who should be a Singapore citizen or a Singapore Permanent Resident or a Singapore Employment Pass holder. (However, a foreigner who is a Singapore Permanent Resident or a Singapore Employment Pass holder can register a business without appointing a local manager) - At least one director of the company must be locally resident - All branches of foreign companies registered in

Limitations on Market Access		Limitations on National Treatment	
India	Singapore	India	Singapore
Managers are: Persons who direct a branch office or one or more departments as their head, or supervise or control the work of other supervisory, professional or managerial personnel and have the authority to appoint or remove the personnel and powers to exercise discretionary authority over day-to-day operations **Executives are:** Persons who are in senior positions within a juridical person including a branch who primarily direct the management, have wide decision-making powers and are either members of the board of directors or receive directions from the board or the general body of shareholders **Specialists are:** Persons who possess high qualifications and knowledge at an advanced level relevant to the organisation's activities or of the organisation's research, equipment, techniques or management and may include persons who are members of accredited professional bodies. Entry for persons in the above categories shall be for a maximum period of 5 years c) <u>Professionals</u>	day-to-day operations. Does not include first-line supervisors, unless the employees supervised are professionals, nor does it include employees who primarily perform tasks necessary for the provision of the service. b) **Executives** – persons within the organisation who primarily direct the management of the organisation, exercise wide latitude in decision-making, and receive only general supervision or direction from higher-level executives, the board of directors, or stockholders of the business. Executives would not directly perform tasks related to the actual provision of the service or services of the organisation. c) **Specialists** - persons within an organisation who possess knowledge at an advanced level of expertise and who possess proprietary knowledge of the organisation's service, research equipment, techniques, or management. (Specialists may include, but are not limited to, members of licensed professions). Entry for these intra-corporate transferees is limited to a three year		Singapore must have at least 2 locally resident agents. (To qualify as locally resident, a person should be either a Singapore citizen or Singapore Permanent Resident or Singapore Employment Pass holder. 4) None

Limitations on Market Access		Limitations on National Treatment	
India	Singapore	India	Singapore
Natural persons to be engaged by a juridical person in India as part of a services contract for rendering professional services for which he/she possesses the necessary academic credentials and professional qualifications with three years experience in the field of physical sciences, engineering or other natural sciences Entry and stay in this category shall be for a maximum period of one year	period that may be extended for up to two additional years for a total term not to exceed five years 4) Specific commitments in market access in any sector or sub-sector, through any mode of delivery, shall not be construed to override the limitations established in the financial services sector		

Source: Schedule of Specific Commitments: India and Singapore, General Agreement on Trade in Services, WTO.
Note: 1) Cross-border Supply, 2) Consumption Abroad, 3) Commercial Presence, 4) Movement of Natural Persons
* Unbound due to lack of technical feasibility.
** Unbound except as indicated in the Horizontal Commitments.

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