

# INDIA-SINGAPORE CECA

AN APPRAISAL OF PROGRESS





# India-Singapore CECA

## An Appraisal



# India-Singapore CECA

## An Appraisal

*by*

V. S. Seshadri

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**AIC**  
ASEAN-India Centre at RIS



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विकासशील देशों की अनुसंधान एवं सूचना प्रणाली

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# Foreword

Ambassador Shyam Saran  
*Chairman, RIS & AIC*

The India-Singapore Comprehensive Economic Cooperation Agreement (CECA) which came into effect on 1st August 2005 was the first such comprehensive free trade agreement signed by India covering merchandise trade, trade in services and investment with any country. Economic ties between the two countries have grown significantly over the last decade covering a wide variety of transactions and sectors. Global developments such as the financial crisis in 2008 and the widespread slowdown witnessed in recent years have also had their impact.

This study has sought to capture the trends in bilateral economic relations in trade in goods, services and investment in the light of the various commitments made by the two countries under CECA and, subsequently, under the India-ASEAN free trade agreement in goods. The first review of CECA in 2007 also expanded the concessions but the second review which commenced in 2010 has so far remained inconclusive.

In capturing the trends, the study brings out the special character and vast expanse of bilateral economic ties between the two countries, with Singapore also acting as a gateway or channel for third country trade or investment. Since Singapore is virtually duty free for imports from all countries, the reasons for sluggishness in our exports in recent years cannot be attributed to CECA. The study has identified the various sectors and products where competitors are edging out India where action may be needed. The report has also underlined the need for greater participation by India in regional supply chain arrangements in which Singapore plays an important part.

Imports from Singapore have benefitted from tariff concessions but here too the global slowdown has had its impact. Trade in services have done better but regulatory issues and aspects connected with movement of professionals have slowed down the pace. Investments in both directions have grown. In all these areas the study has tried to identify issues and possible ways ahead by which the full potential for further growth can be realised. In particular the need for an early satisfactory conclusion of the second review becomes important.

The report also highlights the deficiencies in data and the discrepancies that exist between the two sets of data maintained by India and Singapore and makes recommendations that can bring about greater reconciliation between the figures and their understanding. This becomes essential even generally if we have to closely monitor effective implementation of the FTAs we sign.

This is also the third such report brought out by the RIS and the ASEAN-India Center with Dr.V.S.Seshadri as the lead investigator. The first report was on India-Korea CEPA and was published in September 2015. The second report was on India-Japan CEPA that was published in August 2016. These studies have been made at a time when India is moving ahead with its negotiations to conclude more FTAs including the Regional Comprehensive Economic Partnership (RCEP) agreement. It is hoped that these reports will provide some insights and useful suggestions to Indian negotiators in this context as well.

These reports form a part of the study project sponsored by the Ministry of External Affairs on 'Exploring closer Economic cooperation with East and South East Asia' that is being implemented by the ASEAN-India Centre of RIS. An earlier report on 'India and APEC-An appraisal' also formed part of the same project. Feedback on these reports including suggestions, if any, for future work would be most welcome.



**Shyam Saran**

# Preface

Prof. Sachin Chaturvedi  
*Director General, RIS*

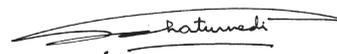
RIS has been closely engaged in promoting India's economic cooperation with East and Southeast Asia. In this context, RIS had earlier published two main studies, viz. India-Korea CEPA - An Appraisal of Process; and India-Japan CEPA - An Appraisal.

The present study entitled "India-Singapore CECA - An Appraisal" aims to study the India-Singapore bilateral economic relations in a comprehensive and objective manner by discussing various aspects related to trade and investment in the light CECA and India-ASEAN FTA. It also undertakes to identify the areas where India needs to come out with fresh initiatives for promoting trade with Singapore. Though the trends in investment are encouraging, still there is need to move forward in the direction of strengthening them.

The study underlines that trade in services between the two countries is substantial in covering several sectors. It emphasizes trade in financial services between the two countries has undergone steady growth in both directions. However, there are concerns that the norms prescribed from time to time in respect of permitted asset size, asset management ratios and other functional parameters could be limiting the operations of some of the Indian banks. The Report, therefore, emphasises that both sides should try and come to a successful conclusion of the second review as soon as possible. A bilateral understanding needs to evolve keeping in view CECA commitments in the area of trade in services.

We are thankful to Dr. V.S. Seshadri, the lead investigator of this study for undertaking this important study. In fact earlier he had also undertaken the three aforesaid studies, which were received well by the policymakers and practitioners.

We are sure the present study would also be found useful and also serve as an important policy research input emanating from RIS and ASEAN-India Centre (AIC) at RIS and go a long way in deepening India-Singapore economic integration. We are grateful to the Ministry of External Affairs for assigning this task to the AIC at RIS as part of the sponsored project on "Exploring Closer Economic Cooperation with East and Southeast Asia".



Sachin Chaturvedi

# Acknowledgements

This study was undertaken under the overall supervision of Ambassador Shyam Saran, Chairman of RIS and the ASEAN-India Centre. The lead investigator was Dr. V. S. Seshadri, Vice Chairman, RIS who also authored the report. Research support for the study was provided by Ms. Aditi Gupta and Ms. Gulfishan Nizami, Consultants in RIS.

Research inputs for the study were obtained, apart from desk research and available literature and data, through consultations held with some of the government departments in India including the Department of Commerce, export promotion bodies, the Reserve Bank of India, industry associations, representatives of companies and experts including some of the former High Commissioners of India to Singapore. The author could also meet with the Singapore High Commissioner in India. The author also visited Singapore and met with certain trade and industry bodies, concerned ministries and industry bodies and representatives of Indian businesses in Singapore. The cooperation received from all is gratefully acknowledged although the responsibility for shortcomings, if any, in the report are attributable only to the author.

Special thanks are due to the High Commission of India, Singapore, and to High Commissioner Vijay Thakur Singh and First Secretary Pradyumn Tripathi in particular, without whose cooperation the many meetings in Singapore may not have been possible.

The study under the aegis of ASEAN-India Centre (AIC) at RIS was supported by a grant from the Ministry of External Affairs of the Government of India which is gratefully acknowledged. The study has also received active support from the senior officials in the Ministry of External Affairs.

The author also received support from Professor Sachin Chaturvedi, Director General of RIS, Dr. Prabir De, Coordinator of ASEAN-India Centre at RIS (AIC) and other colleagues.

As for the report itself, technical assistance in its compilation was provided by Shri N. N. Krishnan. The publication of the report was undertaken by the Publications Unit, RIS consisting of Mr. Tish Malhotra and Mr. Sachin Singhal. Usual disclaimers apply.

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# List of Abbreviations

AIIMS	: All India Institute of Medical Sciences
ASEAN	: Association of South East Asian Nations
ATF	: Aviation Turbine Fuel
BAPL	: Bengal Aerotropolis Projects
BIPP	: Biotechnology Industry Partnership Programme
BIT	: Bilateral Investment Treaty
BMCT	: Bharat Mumbai Container Terminals Pvt Ltd
BOT	: Built, Operate and Transfer
BTS	: Built To Suit
CDSL	: Central Depository Services Limited
CECA	: Comprehensive Economic Cooperation Agreement
CEPA	: Comprehensive Economic Partnership Agreement
CLMV	: Cambodia, Lao PDR, Myanmar, Vietnam
CPMA	: Chemicals & Petrochemical Manufacturers Association
DBS	: Development Bank of Singapore
DGCA	: Directorate General of Civil Aviation
DGCIS	: Directorate General Of Commercial Intelligence And Statistics
DIPP	: Department Of Industrial Policy and Promotion
DTAA	: Double Taxation Avoidance Agreement
EFTA	: European Free Trade Area
EH	: Early Harvest
FDI	: Foreign Direct Investment
FMCG	: Fast Moving Consumer Goods
FOB	: Free On Board
FPI	: Foreign Portfolio Investor
GATS	: General Agreement on Trade In Services
GDA	: Generic Drug Application
GDP	: Gross Domestic Product
GIC	: Government of Singapore Investment Corporation
GJEPC	: Gems & Jewellery Export Promotion Council

HSA	:	Health Services Authority of Singapore
HSD	:	High Speed Diesel
IAFTA	:	India ASEAN Free Trade Agreement
ICAI	:	Institute Of Chartered Accountants Of India
ICT	:	Information & Communication Technology
IE	:	International Enterprise
IMF	:	International Monetary Fund
IP VPN	:	Internet Protocol Virtual Private Networks
ISPL	:	International Seaports Private Ltd
ITA	:	Information Technology Agreement
ITPB	:	International Tech Park Bangalore
ITPL	:	International Tech Park Limited
JSG	:	Joint Study Group
KCT	:	Kakinada Container Terminal
KDWP	:	Kakinada Deep-Water Port
LME	:	London Metal Exchange
MAS	:	Monetary Authority of Singapore
MMTC	:	Metals & Minerals Trading Corporation
MNC	:	Multinational Corporation
MoU	:	Memorandum of Understanding
MRA	:	Mutual Recognition Agreement
NTPC	:	National Thermal Power Corporation
NTU	:	Nanyang Technological University
NUS	:	National University Of Singapore
NVOCC	:	Non Vessel Operation Container Carrier
NYK	:	Nippon Yusen Kaisha
OCBC	:	Overseas Chinese Banking Corporation
OTCS	:	Oki Techno Centre-Singapore
PHARMEXCIL	:	Pharmaceutical Export Promotion Council of India
PoP	:	Points of Presence
PSA	:	Port Of Singapore Authority
QFB	:	Qualifying full bank
RBF	:	Ready Built Facility
RBI	:	Reserve Bank of India
RCEP	:	Regional Comprehensive Economic Partnership
RDBMS	:	Relational Database Management System
ROK	:	Republic Of Korea
ROO	:	Rules of Origin
SCI	:	Shipping Corporation of India

SEBI	: Securities and Exchange Board of India
SEZ	: Special Economic Zone
SIA	: Singapore International Airlines
SICAI	: Singapore Chapter of ICAI
SKO	: Superior Kerosene Oil
SMEs	: Small and Medium Enterprises
SMU	: Singapore Management University
SPS	: Sanitary and Phyto- Sanitary
SPV	: Special Purpose Vehicle
STB	: Singapore Tourism Board
TCS	: Tata Consultancy Services
TPP	: Trans Pacific Partnership
TRIMs	: Trade Related Investment Measures
UOB	: United Overseas Bank
WITS	: World Integrated Trade Solution
WTO	: World Trade Organisation



# Abstract

The Comprehensive Economic Cooperation Agreement (CECA) between India and Singapore came into effect on 1st August 2005. It was the first such comprehensive FTA signed by India with any country covering trade in goods, trade in services and investment. This study seeks to appraise the progress in the implementation of CECA at a time when the second review of the agreement which began in 2010 still remains inconclusive.

The study maps out the trend in India's bilateral merchandise exports which showed an upward climb in the initial years after CECA but which has in recent years declined. Sector and product level analysis brings out the competition at play from other trading nations. Since Singapore has zero MFN duties for practically all the goods, tariffs play no part in the competition. Significant efforts will be needed by Indian exporters to stabilise and strengthen export prospects in potential areas that have been outlined in the study. Promoting an environment that will help India to acquire a greater role in supply chain arrangements in the Asia Pacific region will also be important.

Imports from Singapore into India are examined in the context of not only CECA duty concessions but also on account of the tariff reductions under India-ASEAN FTA of which Singapore is a signatory. Singapore's re-export of products of third country origin have also been tracked to better understand their role. A rapidly growing India could see more imports in the future of products from certain industry segments where Singapore has developed considerable strengths and competitiveness.

Trade in services between the two countries is substantial covering several sectors including transportation, financial and insurance services, tourism, construction, telecom, computer services and business services. Issues constraining further rapid expansion of bilateral trade have been examined in the study with certain recommendations. Movement of natural persons, regulation of banks and concluding mutual recognition agreements in respect of certain professional areas as mandated by CECA are some of the specific aspects addressed which are also understood to be the ones delaying the early conclusion of the second review.

Growth in investments between the two countries have been significant and has injected a great deal of dynamism in the economic relations between the two countries. The study examines growth trends and delves into some details about the major investments in both directions. The issues have also been looked at in the context of the imminent change in the bilateral DTAA provisions following the revision of India's corresponding treaty with Mauritius and the proposal by India to modify CECA in line with its model bilateral investment treaty.

The study urges the two sides to try and come to a successful conclusion of the second review as soon as possible.

Apart from an introductory chapter, the study report has separate chapters dealing with merchandise exports, merchandise imports, trade in services and bilateral investment relations. The last chapter 6 examines how they all add up and suggests certain recommendations. Readers looking for an executive summary may like to directly proceed to Chapter 6 of the report.



# 1 Introduction

India and Singapore signed the bilateral Comprehensive Economic Cooperation Agreement (CECA) on 29 June 2005 which came into effect on 1 August of that year. This was the first such free trade agreement signed by India with any country outside of South Asia and the first ever comprehensive free trade agreement concluded by India with any country that covered not only merchandise trade but also trade in services and investment.

The signing of the agreement was preceded by the establishment of a Joint Study Group set up by the two governments in 2002 to look at a possible FTA. The JSG had recommended that CECA be negotiated as a package of agreements that included the following:

- A Free Trade Agreement that covered goods, services and investment;
- A bilateral agreement on investment promotion, protection and cooperation;
- An improved Double Taxation Avoidance Agreement (DTAA);
- A more liberal bilateral Air Services Agreement and Open Skies for charter flights; and
- A work programme for economic cooperation in a number of areas including education, healthcare, media, tourism and the creation of an India-Singapore Fund with a target of US\$1 billion.

Following the recommendations, the two sides proceeded to hold the negotiations. An Indian Government Press Release at the time of signing of the memorandum of intent for the launch of negotiations in 2003 *inter alia* expected CECA to lead to greater benefits for both countries in trade and investment flows and greater exchanges in professional services especially in the knowledge economy. It specifically noted that CECA would help India to leverage Singapore's strengths in finance, manufacturing and marketing and to achieve greater competitiveness and to use Singapore as a gateway to South East Asia. Linkages with Singapore based MNCs would help Indian corporates to expand their reach globally, it noted.

Eventually when CECA was signed it not only included provisions on trade in goods and services but also had in it provisions of an investment agreement. The idea of a India-Singapore Fund was,

however, not pursued. It also had separate chapters on cooperation in the areas of education, science and technology and media even as the provisions had no direct linkage to trade and investment. An improved DTAA and a more liberal air services agreement were also worked out but did not form part of CECA negotiations. They were all however concluded around the same time.

In retrospect, a large and highly protected market like India that was the case at that time and a city state developing on free trade as its basis may seem to have been unlikely FTA partners. But with the accord of a full dialogue partner status for India in ASEAN in 2002, a time had come for it to further strengthen economic ties with the relatively dynamic South East Asian region. A certain understanding and willingness to show accommodation had also developed between the leadership of the two countries, following the helpful role Singapore had played in India becoming a dialogue partner of ASEAN.

Unlike India, however, Singapore was already some years ahead in FTA making with countries outside of the ASEAN region. By the time of CECA signing, Singapore already had concluded FTAs with New Zealand, Australia, US and the EFTA region. An FTA with India provided a great opportunity to Singapore for easier access to a large and protected market. As a country that had already begun to make forays in the IT, aviation, banking and real estate sectors in India, it seized the opportunity.

The first review of CECA was undertaken in 2007 when India agreed to make further tariff concessions on certain products expanding the product coverage of CECA from 64 per cent to 81 per cent of Singapore's exports to India. The review

also recorded some progress on an MRA for Indian medicinal products in Singapore, and on expediting the grant of Qualifying Full Bank (QFB) licenses to Indian banks.

At the commencement of the second review of CECA in 2010, the two sides devised the following roadmap:

#### **a) Increase bilateral trade<sup>1</sup>**

- Target to double annual trade by 2015 and expansion of product coverage of CECA, align rules of origin in CECA with ROOs in other FTAs signed by India
- Broaden MRAs on goods under CECA to facilitate trade
- Assess implementation of CECA services chapter with a view to further improvement

#### **b) Promote greater business and investment flows**

- Identify ways in which Indian businesses can leverage on Singapore as a business hub in the Asia Pacific to support their international expansion
- Promote bilateral business missions to promote trade and investment

#### **c) Cooperation in India infrastructure development**

- Identify more opportunities for Singapore companies to participate in Public-Private partnership projects in India
- Explore how India can use Singapore as a base to raise infrastructure funding

#### **d) Broaden bilateral cooperation**

- Explore and develop cooperation beginning with Science and Technology, intellectual property rights and the media as provided for under the CECA Cooperation chapters

#### **e) Encourage more people flow**

- Increase two way flow of tourists, businessmen and professionals

- Expedite conclusion of MRAs for dentistry, medical, nursing, architecture, accountancy and company secretary professionals to Singapore
- Explore expansion of the provisions of the CECA to liberalize and facilitate movement of Indian professionals to Singapore.
- Develop closer cooperation in tourism

It is now eleven years since CECA came into force. Both India and Singapore have meanwhile separately entered into bilateral and regional FTAs with several other partners. They have also made more commitments to each other under the India-ASEAN FTA signed in 2009, apart from those that were added on at the conclusion of the first review of CECA in 2007.

The Joint Statement issued after the conclusion of Prime Minister Modi's visit to Singapore in November 2015 called CECA as the bedrock of economic partnership between the two countries. It also urged for an early conclusion of the second review of CECA that has been underway since 2010. This was again reiterated by the two Prime Ministers when Prime Minister Lee visited India in October 2016. The Joint Statement on this occasion stated that the chief negotiators would meet for the early conclusion of the second review.

### **The Focus of this Study, the Methodology and the Organization of this Report**

This study has sought to undertake an appraisal of the implementation of CECA up to 2015-16. The AIC at RIS had conducted similar studies earlier in respect of India's CEPAs with Korea and Japan. The methodology used in the present study is similar. It includes surveying existing literature, undertaking desk research of

trade and investment trends, analysing possible impact of tariff reductions, interacting with stakeholders and industry associations to understand ground realities and also meeting with concerned officials and regulatory bodies. The author of the study also visited Singapore for this purpose.

The rest of this introductory chapter will briefly capture the economic environment that prevailed in the two countries during the implementation period. It will elaborate on their foreign trade profiles and dwell on the overall bilateral trade trends. It will also explain certain unique features of India's bilateral trade with Singapore that has a large element of re-export trade from third country sources or to third country destinations. It will finally outline the organization of the rest of the study Report.

### **The Economic Backdrop During CECA Implementation**

Singapore is a very high income economy with a per capita GDP of US\$ 51,855 in 2015. It has climbed to this position after recording rapid and sustained economic growth for the last several decades. Although geographically measuring only 718 square kilometers with a population of around 5.5 million and virtually no natural resources, the island economy has made good use of its strategic location and its deep water port that is today the second busiest container port in the world. One of the tiger economies of Asia, it developed keeping its economy open to international trade and foreign investment. Its exports and imports have each been significantly higher than its GDP. It also constantly strove to keep up with new technology, to create an environment for promoting innovation and to improve productivity. Manufacturing and services have been the twin pillars of its growth and the constant endeavor has been to upgrade

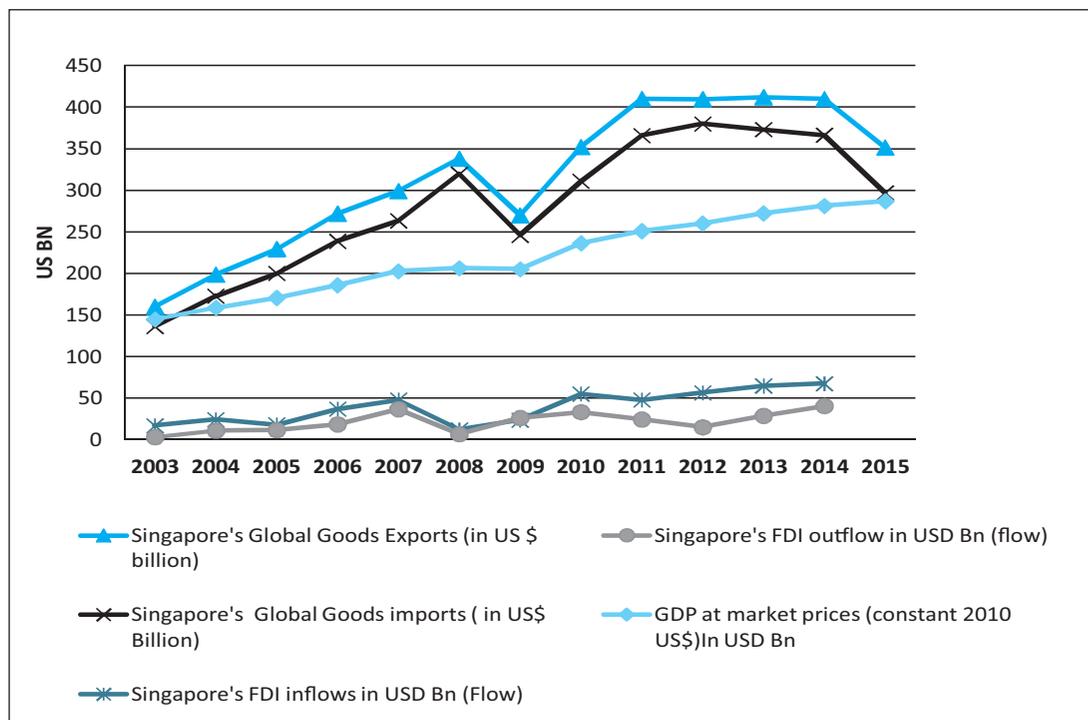
towards the higher end. It has attracted investments in targeted areas through reductions in tax rates, regulatory reform and through investments in infrastructure and R&D. If we were to look at the Singapore economy during the twelve year period 2004-2015, one can discern three distinct periods with different growth trends. It grew at a fairly fast pace during the period 2004 to 2007 even exceeding 9 per cent during a couple of years but on the average growing at 8.7 per cent. Trade continued to be a major plank for its growth. Its foreign trade, both in merchandise goods and in services, almost doubled during the years between 2003 and 2008. Singapore also featured as an attractive destination for foreign investments with average annual FDI inflows touching US\$32 billion during this period. It further emerged as

a significant foreign investor itself with outward investments averaging US\$ 20 billion per year.

The global financial crisis however adversely impacted Singapore and its GDP growth dropped from 9.11 per cent in 2007 to 1.79 per cent in 2008 before touching a negative growth rate of -0.6 per cent in 2009. Its trade was hit by the crisis with exports and imports plunging by 20.18 per cent and 23 per cent respectively in 2009. FDI flows also declined.

Singapore's economy however recovered strong and fast and posted a growth rate of 15.24 per cent in 2010 and 6.21 per cent in 2011. Exports and imports also recorded impressive performances. And FDI inflows exceeded an average of US\$ 50 billion during the two years 2010 and 11.

**Figure 1.1: A Graphical Representation of Singapore's global merchandise exports and imports, outward and inward FDI and its GDP**



Source: IMF, World Bank & UNCTAD

The third distinctive pattern of growth during this twelve year period was from 2012 onwards when the world in general experienced a slowdown in growth and there was also a cooling of world trade. Singapore, with its economy open to and reliant on foreign trade, was also affected with growth averaging to only 3.4 per cent during this period. Exports and imports, which stagnated from 2011 to 2014, shrank by 15 per cent in 2015 from their peak levels of 2011. Trade in services performed somewhat better but even here there was a significant decline in 2015. What is interesting however is that investment inflows did significantly better with annual flows exceeding US\$60 billion.

### Performance of Singapore Currency

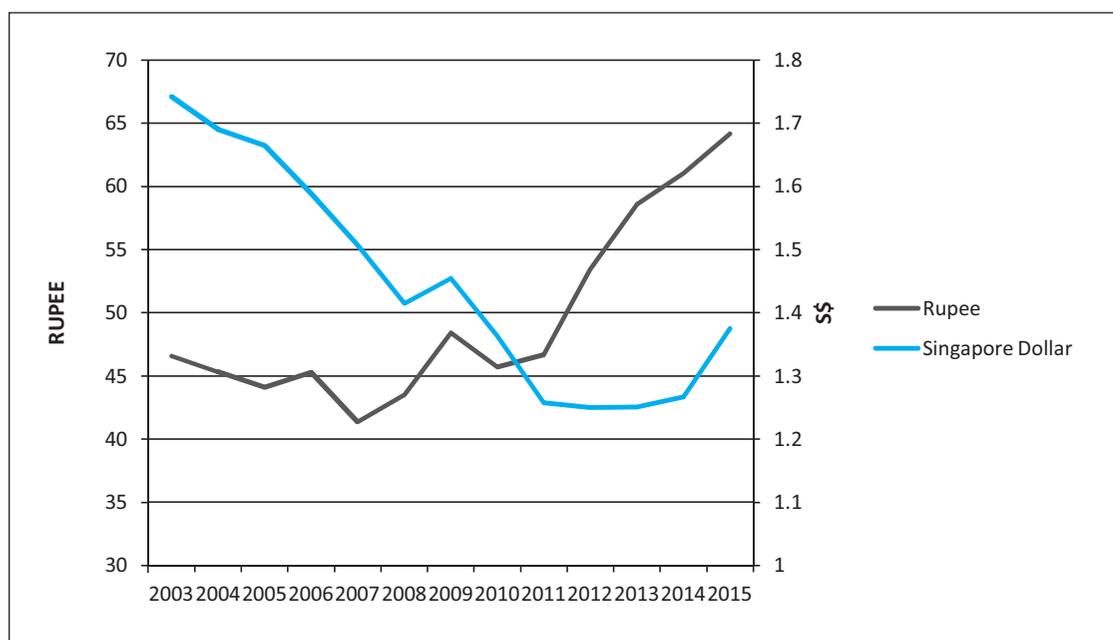
Singapore's economic performance was also reflected in the value of its currency,

Singapore dollar, which strengthened considerably during the twelve year period. From an exchange rate of 1.69 S\$ to 1 US\$ in 2004 it appreciated in value to 1.37S\$ to a US\$ in 2015. In fact it was the strongest in 2013 when it was quoted at 1US\$=1.25 S\$. In relation to the Indian rupee it appreciated from 1S\$=Rs.26.81 in 2004 to 1 S\$= Rs.48.17 in 2014 even as it declined slightly to 1S\$=Rs.46.66 in 2015. The main goal of the monetary policy of the Monetary Authority of Singapore is price stability as a basis for sustainable growth that is also centered on the exchange rate.

### Sectoral Contribution to the Economy

In terms of its economic structure, services constituted the most important sector contributing around 69 per cent of the GDP. Manufacturing accounted for around 20 per cent and construction about 5.2 per cent. The share of agriculture was negligible.

**Figure 1.2: Graph showing the variation in the value for 1 US\$ in terms of Indian Rupee and Singaporean Dollar for the period 2003-2015**



Source: IMF

## Focus on Manufacturing

There are several areas of manufacturing in which Singapore has acquired significant capacities over the years. It is a leading oil refining centre with a well developed petrochemical and downstream industry. Electronics is another major area with several wafer fabrication units and hard disk factories and accounts for a large share of Singapore's merchandise exports. Specialty chemicals, cosmetics and pharmaceuticals, oil field equipment, ship building, environmental equipment, and medical devices are some of the other areas where it has built up considerable strengths. However, owing to lack of basic resources locally, the domestic value added share of most of its manufactured items turns out to be less than 50 per cent.

## Services Specialization

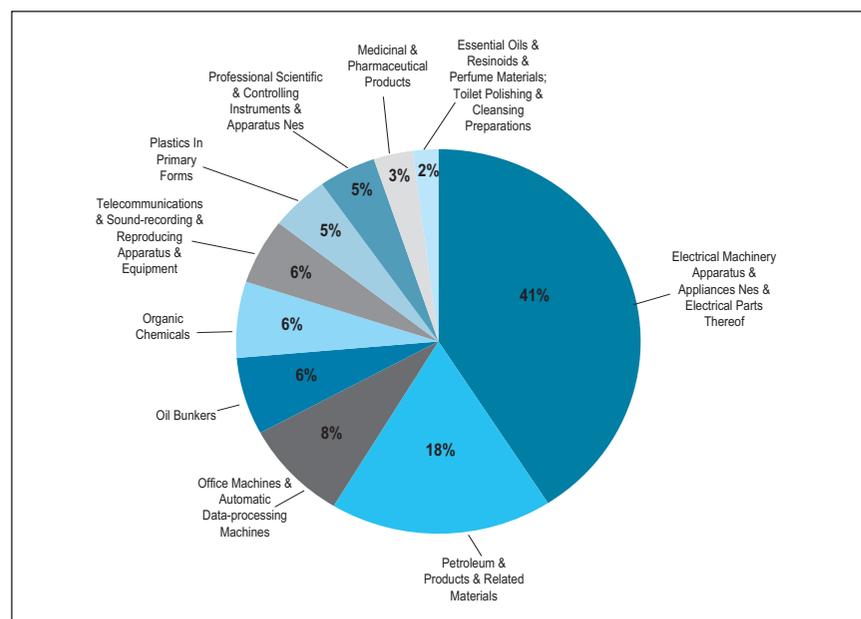
Similarly, in the services sector, Singapore has developed a strong financial services industry that has attracted the presence of major global financial institutions including banks and wealth management companies. It has also emerged as Asia's largest foreign exchange trading centre. Located strategically on the international sea route

it is also a major hub for shipping and ship repair services. In the air services sector it is not only a major regional hub but also acts as a maintenance and repair centre for leading aircraft manufacturers. In the ICT sector it has several global majors, including Indian companies that are using it as their regional centers for development. Its excellent IT infrastructure has also facilitated the location of several data centers in the country. It has also developed its education and health services sectors that are availed of by many in the region.

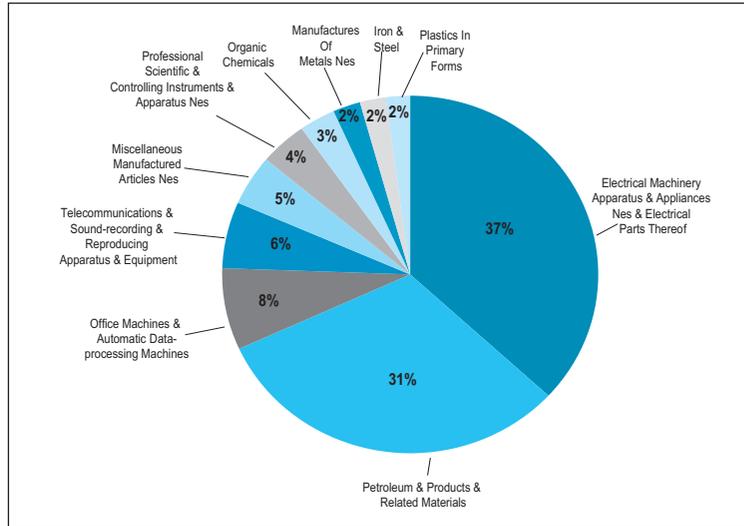
## Singapore's Merchandise Trade

Singapore has always had a surplus position in its merchandise trade. Its main exports are electrical machinery and electronic items, machinery, mineral fuels, organic chemicals, optical and other instruments and plastics. On the import side they include electrical machinery, mineral fuels, machinery, optical and other instruments, gems and jewellery and aircrafts and their parts. The above stated items cover close to three quarters of its exports and imports. There has not been much change over the period under review in terms of the broad composition of its trade.

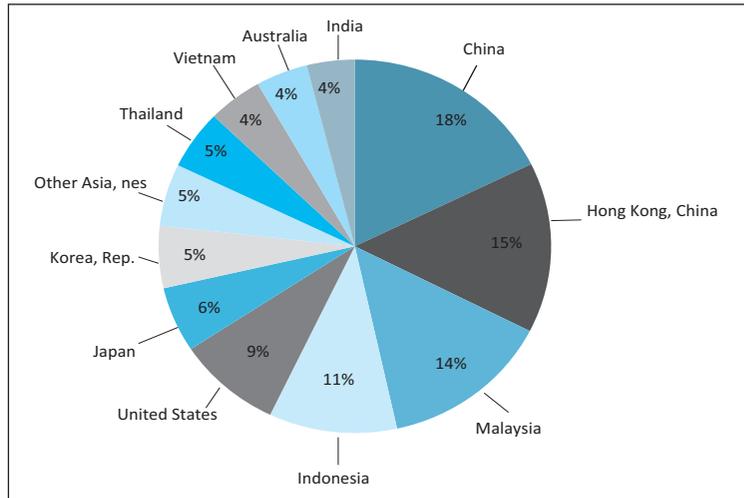
Figure 1.3: Sectoral composition of Singapore's top ten items of global export



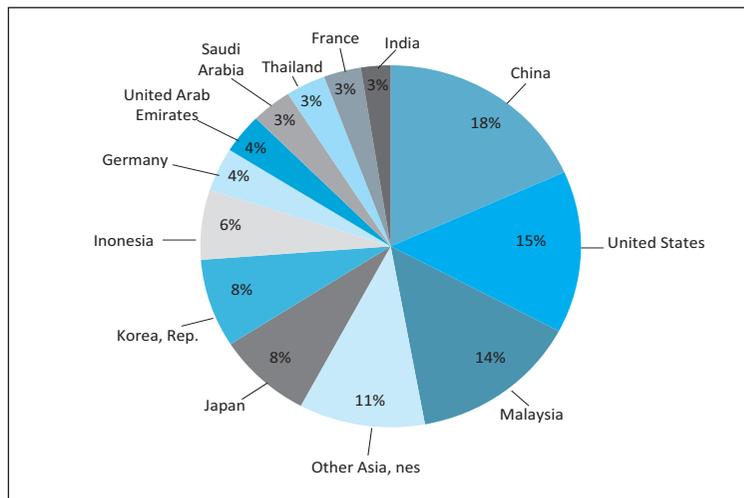
**Figure 1.4: Sectoral composition of Singapore's top ten global imports**



**Figure 1.5 : Singapore's top 12 export Destinations (2015)**



**Figure 1.6: Singapore's top 13 major import sources (2015)**



Source: IE Singapore

In terms of its trading partners there has been a significant change in rankings over the years. While Malaysia, US and Indonesia were its leading export destinations in 2004 they were substituted by China, Hongkong and Malaysia in the first three places in 2015,. In respect of import sources US continued to retain its second place. But China which was at number four position in 2004 climbed to number one and Japan at the third position got relegated to number five position in 2015. India that ranked at 15th position in 2004 in respect

of Singapore's exports climbed to the 12th position. On the import side India's rank improved from 20th position in 2004 to the 13th position by 2015. All the rankings are as per Singapore trade figures.

## Singapore's FTAs with Other Countries

Singapore had its first bilateral FTA with any country only in 2001 but has since then been an active participant in stitching up such trading arrangements with countries/ regions all over the globe. It had already

**Table 1.1: Singapore's FTA with other partners:**

Bilateral	Date of Entry into Force	Regional	Date of Entry into Force
New Zealand-Singapore Comprehensive Economic Partnership (ANZSCEP)	01-Jan-01	ASEAN Free Trade Area (AFTA)	28-Jan-92
Singapore-Australia Free Trade Agreement (SAFTA)	28-Jul-03	ASEAN-China Free Trade Area (ACFTA)	1-Jan-05(Goods)& 1-Jul-07(Services)
United States- Singapore Free Trade Agreement (USSFTA)	01-Jan-04	Trans-Pacific Strategic Economic Partnership (TPSEP)	28-May-06
India-Singapore Comprehensive Economic Cooperation Agreement (CECA)	01-Aug-05	ASEAN-Japan Comprehensive Economic Partnership (AJCEP)	01-Dec-08
Singapore-Jordan Free Trade Agreement (SJFTA)	22-Aug-05	ASEAN-Australia-New Zealand Free Trade Area (AANZFTA)	01-Jan-10
Korea-Singapore Free Trade Agreement (KSFTA)	02-Mar-06	ASEAN-India Free Trade Area (AIFTA)	1-Jan-10(Goods), 1-Jul-15 (Services)
Panama-Singapore Free Trade Agreement (PSFTA)	24-Jul-06	ASEAN-Korea Free Trade Area (AKFTA)	1-Jan-10(Goods), 1-May-09(Services)
Japan-Singapore Economic Partnership Agreement (JSEPA)	01-Dec-08	EFTA-Singapore Free Trade Agreement (ESFTA)	01-Jan-03
Peru-Singapore Free Trade Agreement (PeSFTA)	01-Aug-09	GCC-Singapore Free Trade Agreement (GSFTA)	01-Sep-13
China-Singapore Free Trade Agreement (CSFTA)	01-Jan-09	European Union-Singapore Free Trade Agreement (EUSFTA)	Concluded
Singapore-Costa Rica Free Trade Agreement (SCRFTA)	01-Jul-13	Trans- Pacific Partnership (TPP)	Concluded
Turkey-Singapore Free Trade Agreement (TRSFTA)	Concluded	ASEAN-India (Services & Investment)	15-July-15
Canada	Under Negotiation	Regional Comprehensive Economic Partnership	Under Negotiation
Mexico	Under Negotiation	-	-
Pakistan	Under Negotiation	-	-
Ukraine	Under Negotiation	-	-

Source: WTO RTA Database

concluded FTAs with Australia, New Zealand, EFTA and US before it signed CECA with India in 2005. The trend got accelerated thereafter as reflected in Table 1.1. Most recently, it has also signed the twelve member Trans Pacific Partnership (TPP) that is awaiting ratification before it can come into force. This is really an evolution of the earlier Trans Pacific Strategic Economic Partnership of four countries, Brunei, Chile, New Zealand and Singapore, which came into effect in 2006. Singapore had also concluded an FTA with European Union in December 2012, which is awaiting ratification by the European Parliament. Since India does not currently have FTAs with some of the partners with which Singapore has them, Singapore can be more attractive to Indian investors looking for easier access to those third country markets. It also means that the 'preferential' position that India may have had in Singapore in 2005 such as for example in terms of working out mutual recognition arrangements etc., may perhaps have diminished with the crowding by so many FTA partners.

In 2015, over 73 per cent of Singapore's total trade was covered by its FTA partners.

## **Developments in the Indian Economy**

The Indian economy also grew rapidly during the period under review, although from a much smaller base in terms of GDP per capita. It recorded an average of 8.3 per cent during the eight years from 2003 up to 2011. The next couple of years saw some slowdown with growth rates of 5.6 and 6.6 per cent respectively in 2011-12 and 2012-13 but the trajectory has subsequently climbed back to 7 per cent plus. The global financial crisis did see growth declining to 6.7 per cent in 2008-09 but the downturn was not as harsh as in certain other countries including

Singapore. On the other hand, the global slowdown in recent years has had some impact on India resulting in its somewhat reduced growth rates although there have been other reasons like successive seasons of poor rainfall that contributed to it.

As for foreign trade, the period 2003-08 was perhaps the best for India when exports almost trebled and imports grew at an even higher rate. The global financial crisis saw both exports and imports decline in 2009-10 but the recovery was quick and robust with annual growth rates in 2010-11 and 2011-12 that averaged over 30 per cent. Since then, however, India's trade plateaued and in 2015-16 underwent a further sharp decline by 16 per cent. Decline in global commodity prices, reduction in global demand and all round impact of Chinese slowdown have all been contributing factors. But whether this has also been due to a decline in India's competitiveness has been a matter of debate which is an issue which this study will also try to look at in the context of India's exports to Singapore.

India has been somewhat guarded towards rapidly expanding its FTA network due in part to perceived lack of compelling demonstrated gains. The last FTA to be concluded was the Comprehensive Economic Partnership Agreement (CEPA) with Japan in 2011. While negotiations with several other trading partners have been continuing for some years now there is no indication about any imminent conclusion. At the regional level however India is actively participating in the Regional Comprehensive Economic Partnership Agreement (RCEP) in which Singapore is also a participant.

The five year trade policy statement for 2015-20 announced by the Ministry of Commerce and Industry of India, in its reference to India-Singapore CECA, merely stated that the second review of CECA was now due for conclusion. In its general

comment on implementation of India's FTAs, however, the statement lamented that while under each of the FTAs significant increase in overall trade, in both imports and exports, had taken place, imports had increased at a faster pace. It had also opined that India's partners had made better use of the FTAs. This study will examine these aspects in relation to CECA.

### Bilateral Merchandise Trade

India's bilateral two-way trade with Singapore witnessed a steady rise from US\$ 4.2 billion in 2003-04 to US\$ 25.2 billion in 2011-12, but for a slight dip in the year 2009-10 when there was a worldwide decline (see Figure 1.7). However, after 2011-12, the bilateral trade has shown a steady decline with trade totaling US\$ 15.03 billion in 2015-16. An identical trend was also seen in India's exports to Singapore which rose from US\$ 2.1 billion in 2003-04 to a peak of US\$ 16.9 billion in 2011-12 but has since steadily contracted to US\$ 7.7 billion in 2015-16. India's imports from Singapore have however seen a more wavy trend in traversing from US\$ 2.1 billion in 2003-04 to

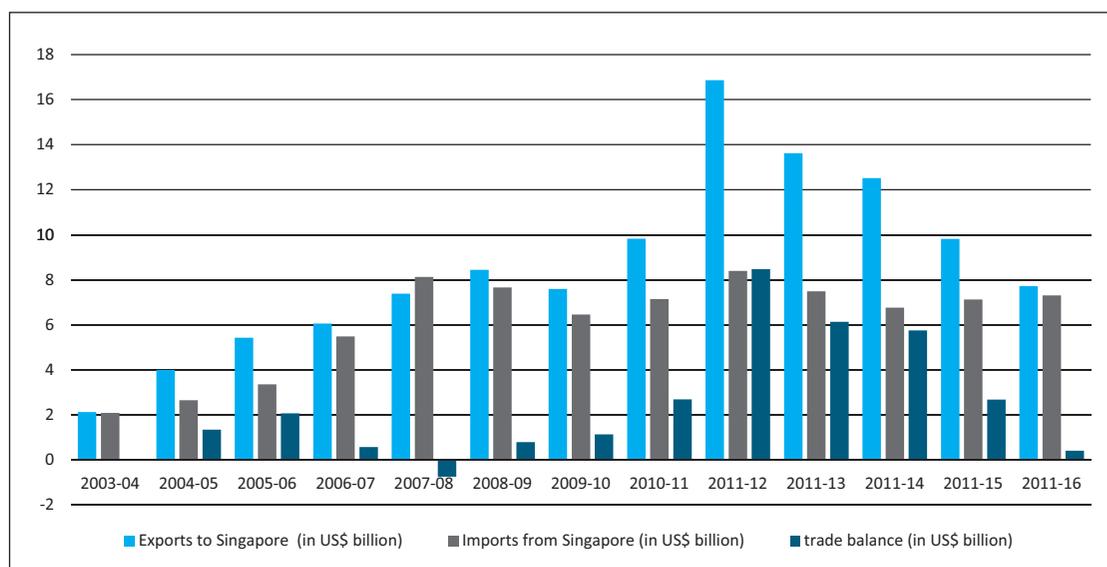
US\$ 7.3 billion in 2015-16. It peaked in 2007-08 and in 2011-12 and is again on an upward ascent now. There were also troughs in 2009-10 and in 2013-14.

During all these years, India had a surplus trade relationship with Singapore (but for a deficit recorded in 2007-08) as per DGCIS figures.

Singapore's share in India's exports grew from 3.33 per cent in 2003-04, to 5.26 per cent in 2005-06 and 5.51 per cent in 2011-12 but declined to 2.95 per cent in 2015-16. Singapore's share in India's imports which was 2.67 per cent in 2003-04 also diminished after some intervening spurts to reach 1.59 per cent in 2014-15 though there was a slight recovery in 2015-16 to 1.92 per cent

Statistics for Singapore's imports and exports based on WITS database show a somewhat different picture. While figures for Singapore's exports to India are significantly on the higher side, compared to DGCIS figures, figures for Singapore's imports from India are much lower with the result that Singapore had a surplus trade with India in all the years except in 2011 and

Figure 1.7: India's bilateral trade with Singapore



Source: DGCIS, Ministry of Commerce and Industry, Government of India.

**Table 1.2: Singapore's Bilateral Trade with India**

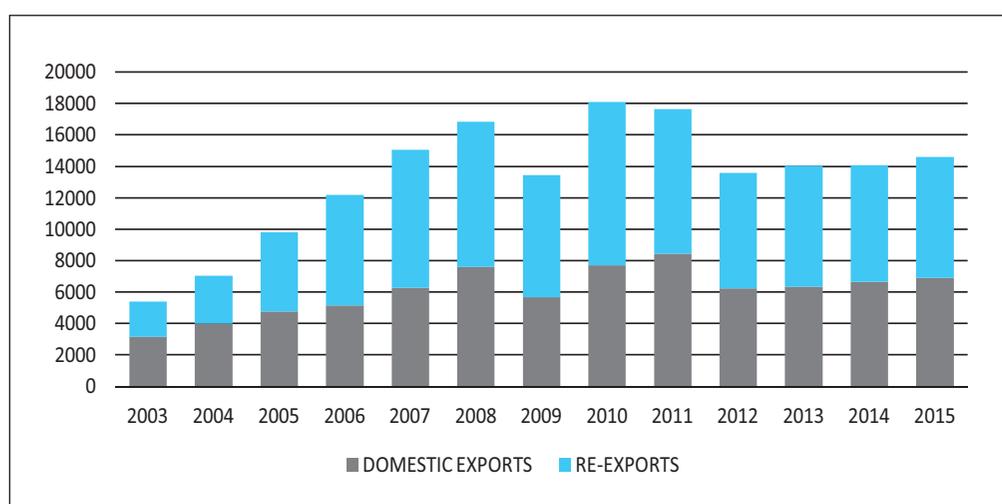
Year	in US\$ (billion)		Share in %	
	Singapore's Exports to India	Singapore's imports from India	India's Share in Singapore's Total Exports	India's Share in Singapore's Total Imports
2004	4.05	2.77	2.10	1.61
2005	5.73	4.06	2.59	2.05
2006	7.45	4.87	2.86	2.08
2007	9.75	5.82	3.47	2.27
2008	11.66	8.41	3.73	2.71
2009	9.03	5.59	3.59	2.34
2010	13.01	9.19	3.98	3.04
2011	13.71	14.12	3.63	3.91
2012	10.54	12.9	2.81	3.46
2013	10.85	9.1	2.88	2.48
2014	10.8	8.25	2.86	2.28
2015	10.27	5.76	3.14	1.97

Source: WITS Database

2012. Singapore's exports to India increased sharply from US\$ 4 billion in 2004 to US\$ 11.7 billion in 2011, declined slightly in 2009 and climbed quickly to US\$ 13.7 billion in 2011. Since then there has been a decline in Singapore's exports to India to US\$ 10.2 billion in 2015. India's share in Singapore's exports increased from 2.10 per cent in 2004 to 3.98 per cent in 2010 but came down to 3.14 per cent in 2015.

Singapore's imports from India also showed a steady increase from US\$ 2.8 billion in 2004 to US\$ 14 billion in 2011 (there was a slight decline in 2009). However, there has been a steady decline in the period thereafter to US\$ 5.8 billion in 2015. India's share in Singapore's imports increased from 1.6 per cent in 2004 to 3.91 percent in 2011 but came down to 1.97 per cent in 2015.

**Figure 1.8: Graph Showing Singapore's Domestic & Re-exports to India**



Source: IE Singapore.

## Unique Character of India's Trade with Singapore

A certain unique aspect of India's trade with Singapore arises from the fact Singapore is an entrepot trading centre. A substantial part of exports from Singapore to India is in the form of re-exports from Singapore of goods that originated in third countries. As will be seen from Figure 1.8 based on Singapore's export and re-export statistics (figures are denominated in Singaporean dollars), Singapore's re-export component is even higher than export of its domestically produced items. The share of re-exports also depends on each sector and these will be discussed in more detail when we study the bilateral exports and imports in subsequent chapters. And in many cases it would appear that the Indian trade statistics may not be capturing the re-exports as imports from Singapore but reflecting the third country source of origin of imports into India than Singapore. This could be one reason why India's imports from Singapore, as per DGCIS, are always considerably less than the figures for Singaporean exports to India as per Singapore statistics, which have re-exports included in them.

It seems also very likely that a good share of India's exports to Singapore also get re-exported to third countries including to CLMV countries, Pakistan and Latin American destinations. But figures in this regard are unavailable. While Singapore itself has separate figures for its domestic exports and re-exports for each destination there are no similar published figures that indicate what component of imports from any source is re-exported. There are in fact many international trading companies<sup>2</sup> having offices in Singapore, including Indian companies, which are involved in such trade. Singapore's strategic location, excellent shipping connectivity, low cost trade finance options and location of many

international trading firms there, are among the many factors facilitating such trade. Goods that may sail from India consigned to or paid for by a trading company in Singapore can get transhipped to third country destinations. This is quite apart from the goods that enter Singapore and then get re-exported, which probably get recorded in Singaporean statistics. It is perhaps for these reasons that India's exports to Singapore, as shown by DGCIS, have also been significantly more than the Singaporean import figures as per their statistics.

This unique character of trade with Singapore has also led to a situation in which while India has a trade surplus with Singapore as per DGCIS figures, it is Singapore that has a surplus as per its statistics. It is learnt that a bilateral working group set up by the two sides is also looking to obtain a better understanding about the differences in the two sets of figures. While this will be extremely useful, what can be said here is that given the substantial re-export aspect, it may perhaps be better for the two sides to refrain from setting targets for bilateral trade. The dynamics of re-export trade are very different and the imperatives driving it can change with time for a variety of reasons that are unrelated to bilateral trade.

## Existing studies on India-Singapore CECA

While there are several studies and papers in the public domain examining the India-Singapore CECA, most of them were written in the initial years after the commencement of implementation of the agreement. Of particular relevance in recent years is the extensive research report<sup>3</sup> 'India Singapore Bilateral Trade and Investment (2003-2013)' brought out by the Institute for South Asian Studies in Singapore. This study

has also dealt with the re-export aspect in some detail. Further, it also dwelt at some length on investments including on Indian investments in Singapore. The report has however not ventured into examining trade trends with specific reference to CECA tariff concessions.

## Organisation of the Rest of the Study Report

The rest of the study report is organized as follows. Chapter 2 will look at India's merchandise exports to Singapore and analyse the trends and future prospects. Chapter 3 will focus on India's merchandise imports from Singapore and examine how CECA and India-ASEAN Free Trade Agreement (IAFTA) tariff concessions may have impacted on them. The bilateral services trade will be analysed in Chapter 4.

Investments, in both directions, will be dealt with in Section 5. Finally, Chapter 6 will examine how they all add up and conclude with some suggestions for future.

### Endnotes

- <sup>1</sup> Source: <http://netindian.in/news/2010/05/11/0006452/india-sigapore-launch-second-review-c...>
- <sup>2</sup> Singapore has a Global Trader Programme that provides for a reduced corporate tax rate of 5 percent or 10 percent on qualifying trade income for certain number of years..To be eligible, companies have to meet certain criteria that depends on turnover from physical trading activities conducted in Singapore, annual local business spending and number of people employed.
- <sup>3</sup> See Chak Hun, Amitendu Palit and Chandrani Sarma - India Singapore Bilateral Trade and Investment 2003-2013, Published by Market Asia Books Pte Ltd, Singapore (2016).



# 2

## India's Merchandise Exports to Singapore

India's exports to Singapore, as per DGCIS figures, increased substantially in the immediate years after CECA came into force, from US\$ 2.1 billion in 2003-04 to US\$ 8.4 billion in 2008-09 (see Figure 2.1). There was some decline in exports in the year 2009-10 due to the impact of global financial and economic crisis at that time. However, exports showed a rapid revival in the next two years increasing to a peak of US\$ 16.9 billion in 2011-12. Thereafter there has been a steady decline in exports declining to US\$ 7.7 billion in 2015-16.

Figures for Singapore's imports from India as obtained from the WITS statistics (see Figure 2.2) show a similar trend but the figures are considerably lower. Singapore's imports from India increased from US\$ 4.1 billion in 2005 to US\$ 8.15 billion in 2008, reached a trough of US\$ 5.6 billion in 2009, affected by the economic crisis, but climbed back to US\$ 14.1 billion in 2011. Since then, however, the imports have steadily declined to US\$ 5.8 billion in 2015.

### Exports of Products of Top 20 HS Chapters

India's top twenty exports to Singapore at two digit HS level are given in Table 2.1. Petroleum products (HS 27) were exported the most accounting for around 40 per cent in 2015-16 even as they went up to 60 per cent of our exports in 2013-14.

The next five top items of export in 2015-16 were miscellaneous goods (HS 99), ships, boats and floating structures (HS 80), jewellery (HS 71), nuclear reactors, boilers, machinery and mechanical appliances, parts thereof (HS84) and organic Chemicals (HS 29) which accounted for over another 35 per cent. It must be mentioned here that imports of miscellaneous goods (HS 99), nickel and articles thereof (HS 75), aircraft, spacecraft, and parts thereof (HS 88) which figure in India's top 20 exports to Singapore did not feature in Singapore's top twenty imports from India as per Singaporean statistics. On the other hand, plastics (HS 39), knitted apparel (HS61), woven apparel (HS 62) and fishery items (HS 03) figured among their top 20 items.

**Table 2.1: India's Top 20 Exports to Singapore**

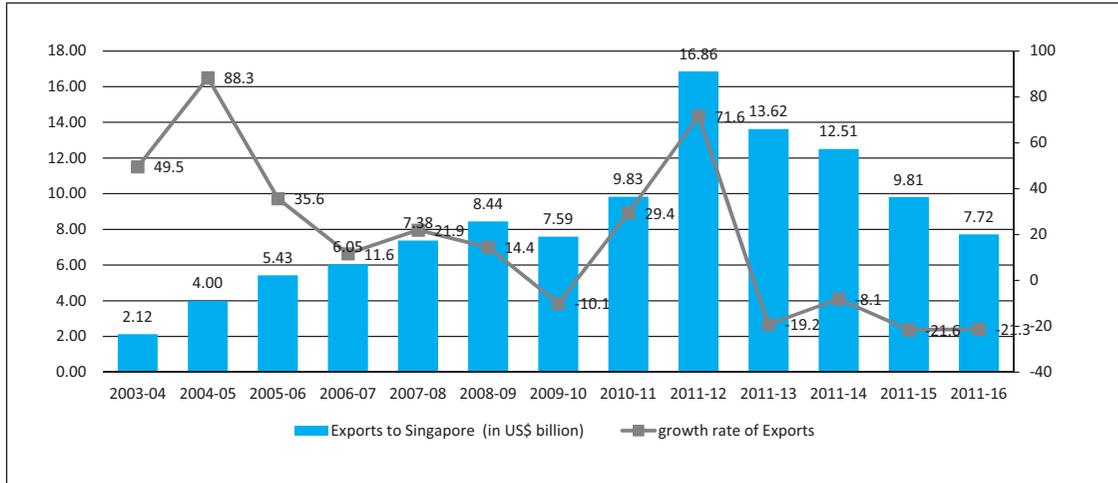
(in Millions US\$)

Chapter	Description	Exports to Singapore												
		2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
27	<i>Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes.</i>	914.3	1874.7	2198.3	3369.9	4036.1	3762.7	2840.9	5518.2	9549.7	7937.0	7464.6	5333.0	2991.2
99	<i>Miscellaneous goods.</i>	120.5	208.3	128.6	467.4	448.1	189.9	828.5	509.4	79.3	98.6	26.4	43.0	995.0
89	<i>Ships, boats and floating structures.</i>	24.2	143.3	447.1	330.1	538.2	1182.6	985.2	859.3	3399.9	1723.5	1614.7	871.9	702.6
71	<i>Natural or cultured pearls,precious or semiprecious stones,pre.metals,clad with pre. metal and artcls thereof;imit. jewlry;coin.</i>	195.4	567.8	1246.0	153.1	219.2	562.2	597.4	489.7	627.1	638.2	533.3	493.4	432.8
84	<i>Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof.</i>	90.0	191.0	151.8	216.8	239.4	470.0	466.7	386.9	479.2	372.9	386.3	426.1	409.3
29	<i>Organic chemicals</i>	43.0	135.1	213.6	200.4	211.6	153.2	163.1	276.6	362.7	506.9	340.2	276.6	274.3
85	<i>Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers,and parts.</i>	111.9	127.6	162.6	229.9	265.5	508.4	385.2	265.0	348.2	209.1	217.3	225.9	212.4
90	<i>Optical, photographic cinematographic measuring, checking precision, medical or surgical inst. And apparatus parts and accessories thereof;</i>	31.2	49.9	53.1	66.8	99.4	110.3	97.3	190.0	273.7	236.6	152.5	163.5	169.7
74	<i>Copper and articles thereof.</i>	11.2	49.7	64.9	186.8	148.8	56.5	107.4	46.5	10.8	7.7	6.4	62.3	137.6
75	<i>Nickel and articles thereof.</i>	0.1	0.1	0.9	0.1	0.1	0.4	1.1	0.4	1.1	295.9	303.6	460.9	112.5
87	<i>Vehicles other than railway or tramway rolling stock, and parts and accessories thereof.</i>	3.9	5.3	37.0	23.8	41.3	104.6	92.5	123.7	326.3	312.3	22.9	70.5	101.2

88	<i>Aircraft, spacecraft, and parts thereof.</i>	0.6	1.8	1.0	1.2	139.9	199.4	139.4	176.5	191.5	133.8	317.9	331.9	91.2
10	<i>Cereals.</i>	11.5	9.5	15.1	14.3	20.6	21.8	19.4	19.1	56.8	86.1	85.9	109.2	70.6
79	<i>Zinc and articles thereof.</i>	0.4	2.8	10.2	16.0	3.4	52.0	1.1	9.6	4.7	2.8	0.2	5.7	65.1
76	<i>Aluminium and articles thereof.</i>	49.8	94.3	108.4	200.0	221.1	311.8	110.7	80.9	92.3	21.9	14.2	21.6	56.7
32	<i>Tanning or dyeing extracts; tannins and their derivatives Dyes, pigments and other colouring matter; paints and var; putty and other mastics; inks.</i>	21.6	16.8	17.6	19.0	20.9	20.0	27.8	31.0	36.7	46.5	60.6	62.3	56.5
30	<i>Pharmaceutical products</i>	17.2	17.4	13.8	12.3	22.2	18.4	17.5	48.2	48.1	65.4	50.6	57.3	55.8
33	<i>Essential oils and resinoids; perfumery, cosmetic or toilet preparations.</i>	7.0	8.2	13.2	17.0	25.9	36.7	38.6	31.6	68.1	85.6	77.1	53.8	54.6
38	<i>Miscellaneous chemical products.</i>	27.6	35.8	42.5	22.1	28.0	46.8	37.8	37.2	41.9	57.0	64.6	60.5	52.3
73	<i>Articles of iron or steel</i>	38.5	42.4	45.2	58.0	66.5	87.7	56.1	58.0	89.1	85.9	62.5	57.8	49.0
<i>Total of top 20 exports to Singapore</i>		1719.8	3581.7	4971.0	5604.9	6796.2	7895.6	7013.7	9157.6	16087.0	12923.6	11801.6	9187.2	7090.2
<i>Total Exports to Singapore</i>		2124.6	4000.4	5425.1	6053.6	7379.0	8444.7	7592.0	9825.3	16857.5	13619.0	12510.3	9809.2	7721.8
<i>Share of Top 20 exports to total exports to Singapore</i>		80.9	89.5	91.6	92.6	92.1	93.5	92.4	93.2	95.4	94.9	94.3	93.7	91.8

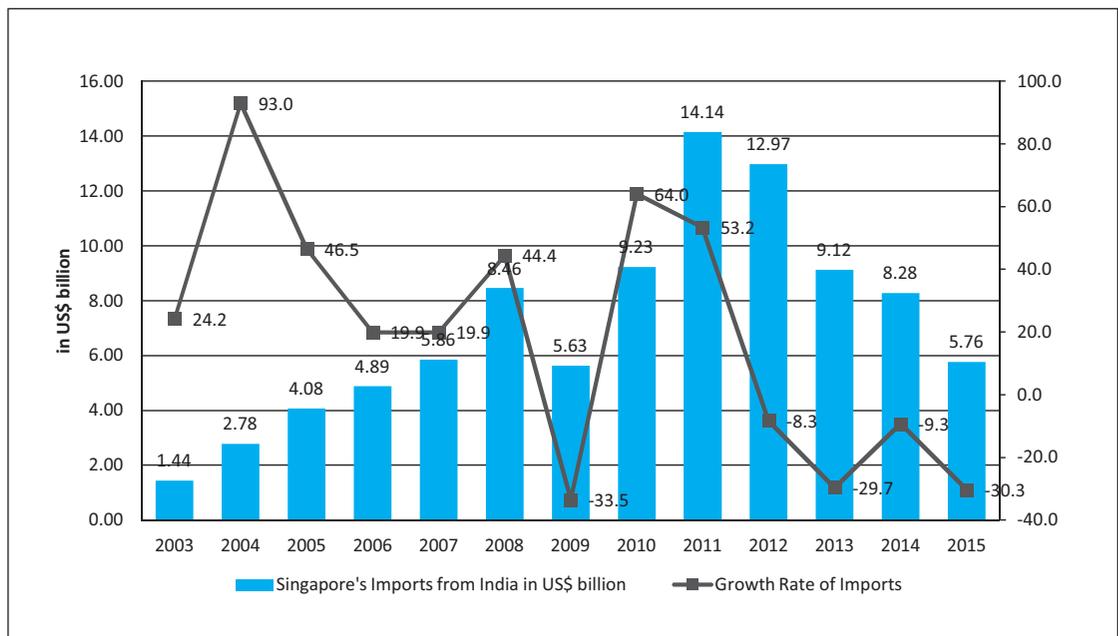
Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Figure 2.1: India's Exports to Singapore (taken from DGCIS)**



Source: DGCIS

**Figure 2.2 Singapore's Imports from India (taken from WITS)**



Source: WITS database

**Possible Reason for Mismatch of Trade Figures:**

One possible reason for the mismatch between the two figures could be the large “re-export” industry in Singapore, with some of India’s exports being possibly redirected to third countries. While the

goods that enter Singapore( even if it is intended for re-export) get normally entered into its imports, it can also happen that certain items that leave Indian shores consigned to a Singapore-based trade entity can get transhipped to a third country destination without the goods

even technically entering Singapore. The re-exports take place not only to CLMV countries in South East Asia and Pakistan but also to Latin American countries.

Singapore's re-export industry is also particularly strong in sectors such as petroleum products, chemicals, metals, plastics, certain manufactured items, scientific instruments & apparatus, essential oils & resinoids & perfume materials in which the volumes of re-exports are considerably high. Many of these sectors also figure prominently in India's exports to Singapore, which is also a regional metal exchange center with several companies serving as authorized warehousing units for the London metal exchange (LME). Many metal producers from different countries including India send their metals temporarily to some of these warehouses, as part of LME arrangements, which are then re-exported, based on requirements worldwide.

It needs to be also mentioned that while India's export of goods under miscellaneous goods (HS 99) is substantial under DGCIS figures, there is no corresponding import figure for these items in Singapore. Another item where there appears to be a wide gap between the figures of the two sides is ships, boats and floating structures (HS 89). Similarly, corresponding figures for nickel and articles thereof (HS 75), vehicles (HS 87), aircraft, spacecraft, and parts thereof (HS 88) and machinery and mechanical appliances (HS 84) do not match. In each of these cases, figures for India's exports are significantly higher than the corresponding Singaporean figures and plausible explanations for the mismatch are given in the trade analysis in the respective sections.

In what follows, the trends in India's exports to Singapore are analyzed for each of the top 20 HS chapters as per DGCIS figures. Since Singapore's MFN applied tariffs are

also zero except for a handful of items, this exercise is not aimed at determining the impact of CECA on exports but to merely provide an overview of the composition of trade as well as the changing structure of trade between the two countries. The analysis will focus on examining the extent of decline in exports to Singapore from India post 2011-12. Data for India's exports has been sourced from DGCIS and is fiscal year wise, while data for Singapore's imports that is referred to for broad comparison at many places has been taken from WITS database that is denominated in US dollars but on the calendar year basis. The analysis that is undertaken at 6-digit level, and at 4-digit level in some cases, will also highlight the wide differences between the two trade figures.

#### **Chapter 27: Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes**

Mineral fuels are the most important items of export to Singapore contributing to 38.8 per cent of India's export in 2015-16 but had an even higher share, close to 60 percent in certain years. They increased steadily from US\$ 914 million in 2003-04 to a peak of US\$ 9.5 billion in 2011-12. In recent years, exports have declined considerably to US\$ 5.33 billion in 2014-15 and a further low of US\$ 2.99 billion in 2015-16. The decline is perhaps due to rising domestic consumption in India. Reduction in domestic subsidies has also contributed to domestic refiners selling more in the domestic market. Most recently, in 2015-16, this is also due to the fall in oil prices.

Singapore's global import of mineral fuels also declined from US\$ 124 billion in 2012 to almost half at US\$ 65 billion in 2015. Imports of mineral fuels from India to Singapore, however, declined more sharply to US\$ 2.9 billion in 2015-16, which is less than a third compared to 2012 export level.

Singapore is a regional center for oil trade with Singapore benchmark prices playing a key role. Major Indian producers<sup>1</sup> of petroleum products use Singapore as a trading hub which has large oil storage terminals that can be used to advantage for further sale depending on price arbitrage. Various products can then be sold at short notice from there with product mixing or blending done depending as per customer specification. It is also relevant to note that there are three major refineries (of Exxon Mobil, Shell and Singapore Refining Corporation) in Singapore that produce a range of refined petroleum products and downstream petrochemical items.

India's top exports under this chapter are Light oils and preparations (HS 271012) and Petroleum oils and oils obtained from bituminous minerals (HS 271019). While exports of the latter to Singapore have shown a sharp decline in recent years, both in terms of value as well as quantity, exports of Light oils and preparations have shown some revival from US\$ 1.53 billion in 2014-15 to US\$ 1.54 billion in 2015-16. In terms of the quantities exported, the exports of this item increased from 1.95 million tonnes in 2014-15 to 3 million tonnes in 2015-16. On the other hand, both high-speed diesel and fuel oil showed a significant decline

Figures for Singapore's imports of Lights oils and preparations show that its import of this commodity fell only in 2015 prior to which it remained at about US\$ 19 billion between the period 2011 to 2014. The decline in imports from India was offset by increased imports from countries such as Japan, Korea and China. On the other hand, while Malaysia remains the top exporter of petroleum oils (HS 271019) to Singapore, countries like Russia, Korea, and Netherlands, etc., have quickly replaced India as the second largest exporter of this set of products to Singapore.

It is also noteworthy that Singapore's re-exports of mineral fuels are very high (SGD 9.2 billion in 2015)

#### **Chapter 99: Miscellaneous goods**

India's exports of miscellaneous goods to Singapore have shown sharp changes between the period 2003-04 to 2014-15 but exhibited a steep surge in 2015-16 to US\$ 995 million. Since these are classified as special transactions, not much information is available on them.

#### **Chapter 89: Ships, boats and floating structures**

India's exports of Ships, boats and floating structures to Singapore increased substantially from US\$ 24 million in 2003-04 to US\$ 3.4 billion in 2011-12 and have since declined to US\$ 703 million in 2015-16. India's major export items to Singapore are other vessels, fire floats etc. (HS 890590), tugs and pusher craft (HS 890400) and, during one year, dredgers and drilling/production platforms. It must be noted that products under this chapter do not figure among Singapore's top imports from India. In fact, Singapore's imports of these items have been negligible as per figures from WITS.

The discrepancy could be due to possible difference in practices between the two countries in the recording of trade of this item. As per Indian practice if payments are received from the export of such items on the basis of an invoice they are recorded as export. In Singapore such trade is recorded only if they are imported or exported as merchandise purchased or sold by an owner in Singapore whether or not they arrived or departed under their own power.

#### **Chapter 71: Natural or cultured pearls, precious or semi-precious stones, precious metals, clad with precious metal and articles thereof; imitation jewelry; coin**

India's exports of gems and jewellery to Singapore increased steadily from US\$ 195 million in 2003-04 to US\$ 627 million in 2011-12 after which there was a steady decline to US\$ 433 million in 2015-16. On the other hand, Singapore's global imports of these items steadily increased in the period and showed a slight decline only in 2015 to US\$ 9.4 billion.

India's major exports to Singapore in this chapter are cut and polished diamonds and articles of other precious metal whether or not plated or clad. Exports of rough diamonds (HS 710231) have shown a one-time spurt amounting to US\$ 94 million in 2015-16. Otherwise, our main export has been of cut and polished diamonds that has seen a steep decline over the years. In terms of caratage, as well, as per GJEPC statistics India's exports which were 4.29 lakh carats in 2011-12, have declined in the last five years and added up to only 2.4 lakh carats in 2015-16. One reason that is being cited for the decline is that consumers in Singapore are steadily going for more branded and upmarket items. The opening of a De Beers Boutique in Singapore could be another factor. As per WITS data, Singapore's imports of cut and polished diamonds (HS 710239) from all sources increased from US\$ 601 million in 2012 to US\$ 782 million in 2014 and declined to US\$ 575 million in 2015. While imports of this item from India declined steadily during the period, imports from other sources such as Israel and Hong Kong have increased steadily.

India's exports of articles of other precious metal (principally gold) to Singapore increased from US\$ 39 million in 2003-04 to US\$ 341 million in 2011-12 but declined thereafter to US\$ 156 million in 2015-16. However, according to WITS data, Singapore's import of this item from India shows a steady increase from US\$ 395 million in 2012 to US\$ 432 million in 2014

and a decline to US\$ 226 million in 2015. While there is a mismatch between the two figures, it is noteworthy that Singapore's import of these products from other sources such as Hong Kong, France and the US has increased steadily in this period.

#### **Chapter 84: Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof**

Exports of machinery and mechanical appliances to Singapore increased from US\$ 72 million in 2003-04 to a peak of US\$ 479 million in 2011-12. Since then, however, there has been a steady decline to US\$ 409 million in 2015-16. Singapore's imports of these products have also seen a steady decline from US\$ 50.6 billion in 2012 to US\$ 43.2 billion in 2015. As per WITS figures, Singapore's imports of these products from India increased from US\$ 99.9 million in 2004 to US\$ 346 million in 2008 after which there was a decline. The period thereafter saw a varying trend with imports falling to US\$ 286 million in 2015.

Exports of items such as spark-ignition or rotary internal combustion piston engines, compression-ignition internal combustion piston engines, turbojets, turbo-propellers and other gas turbines, automatic data processing machines and units, earth moving machinery etc. have followed the trend seen in the overall exports of this Chapter. However, exports of items such as air/vacuum pumps, machinery, plant/laboratory equipment for heating, taps, cocks, valves and similar appliances for pipes and certain parts and accessories have increased steadily in recent times.

Exports of earth moving machinery which increased from US\$ 5 million in 2003-04 to US\$ 127 million in 2008-09, have shown a steady decline thereafter to US\$ 21 million in 2014-15, though there is a slight recovery in 2015-16 with exports increasing

to US\$ 29 million. Singapore's total imports of this product increased steadily from US\$ 218 million in 2008 to US\$ 399 million in 2012, declined slightly in 2013, but increased steadily thereafter to a peak of 451 million in 2015. Its major sources of import of these items were China, Germany and US. However, Singapore's imports of these items from India (as per WITS figures) are negligible which imply a mismatch between the two figures.

Singapore's important items of import from India were taps, cocks, valves (HS 8481), and parts and accessories for machinery (HS 8431 and HS 8473). Singapore's global import of items under HS 8481 rose during the period 2010-2014, declining only in 2015. However, Singapore's import of items under HS 8481 from India, as per WITS database, were steadily increasing, even in 2015, when its global imports fell. India's share in Singapore's global import of this item has risen from 2.8 per cent in 2010 to 4.6 per cent in 2015. Singapore's major sources of import under HS 8481 are the United States and China. China's share in Singapore's imports has been increasing steadily from 2010-2014, declining only slightly in 2015.

Singapore's global imports of items under HS 8431 for the period 2010-2015, showed a declining trend, except in the year 2012. India's share declined also to less than 1 per cent of Singapore's imports. Singapore's major sources of import under this category were the United States, Malaysia and China. While the share of United States declined drastically from being 44.9 per cent in 2010 to 29 per cent in 2015, the shares of China increased from around 3 per cent in 2010 to over 9 per cent in 2015 and that of Malaysia's share from over 6 per cent in 2010 to over 10 per cent in 2015.

Singapore's imports from India of items under HS 8373 have also been declining

from 2010-2015. India's share declined from 0.7 per cent in 2010 to 0.3 per cent in 2015. Singapore's top import sources of this item are China, Malaysia and United States, where Chinese share showed drastic improvement from around 28 per cent in 2010 to 43 per cent in 2015.

## **Chapter 29: Organic Chemicals**

India's exports of organic chemicals to Singapore increased from US\$ 43 million in 2003-04 to US\$ 363 million in 2011-12 and declined steadily from there to US\$ 274 million in 2015-16. The same trend is visible in Singapore's import from India, as per WITS database, which increased from US\$ 100 million in 2004 to a peak of US\$ 442 million in 2012 and then steadily declined to US\$ 271 million in 2015.

India's major export items to Singapore are cyclic hydrocarbons (mainly Benzene HS 29022000) whose exports increased to a peak of US\$ 102 million in 2011-12 but declined to US\$ 40 million in 2014-15, though there was some revival in 2015-16 with exports rising to US\$ 81 million. Singapore's import of this product from India has increased in recent years even though Thailand is still the largest source of import of this product into Singapore.

India also exported items such as saturated acrylic monocarboxylic acids and their anhydrides, mucieic acids and their salts, heterocyclic compounds with nitrogen, etc. Many of these items are used as bulk drugs and intermediates. There are several international drug companies which have located units manufacturing formulations in Singapore. As per WITS data, Singapore's global imports of saturated acrylic monocarboxylic acids and their anhydrides show an increasing trend from 2012-14, declining only in 2015. India's share in Singapore's imports of monocarboxylic acids and their anhydrides rose substantially, from 3 per cent in 2012 to over 15 per cent

percent in 2014, declining by 0.5 per cent in 2015. China and the United States are major import sources under this category of products. China's share in Singapore's import of acrylic monocarboxylic acids and their anhydrides, increased drastically from 34.8 per cent in 2012 to 53 per cent in 2014, but declined by 12 per cent in 2015. India's share in Singapore's import of Heterocyclic compounds with nitrogen increased from 3.17 per cent in 2012 to 3.79 per cent in 2014, which declined to 2.2 per cent in 2015.

As per WITS database, Singapore's overall imports from the world under chapter 29 increased from US\$ 5.5 billion to US\$ 7.3 billion for the period 2010-2014, declining only in 2015. India's share in Singapore's import of items under chapter 29, increased from 4.1 per cent in 2010 to 6.3 per cent in 2012, after which it started falling. In 2015, India accounted for only 4.7 per cent of Singapore's total imports under chapter 29. China's share, however, has been consistently rising and went up from 7.9 per cent in 2010 to 12.3 per cent in 2015. Singapore's other two major sources of import under chapter 29 are Saudi Arabia and the United States.

It may be mentioned here that Singapore's re-exports of Organic Chemicals also accounted for over SGD 2.6 billion in 2015. Some of Singapore's imports of these items from India may, therefore, be determined also by the demand of these items from sources to which Singapore is re-exporting.

#### **Chapter 85: Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts**

India's exports of electrical machinery and equipment to Singapore increased from US\$ 112 million in 2003-04 to a peak of US\$ 508 million in 2008-09 and then steadily declined

to US\$ 212 million in 2015-16. Singapore's import from India of products under this Chapter increased from US\$ 89.7 million in 2004 to US\$ 510.75 million in 2008 and declined thereafter to US\$ 200.53 million in 2015.

India's major exports to Singapore under this Chapter were telephone sets with cordless handset and videophones whose exports declined considerably from US\$ 195 million in 2008-09 to US\$ 21 million in 2015-16. However, figures for Singapore's overall import of these products indicate that there has been no decline in its import of these products which rose from US\$ 3.3 billion in 2008 to US\$ 3.8 billion in 2012. Though there is a slight decline thereafter, the level of imports is still higher than in 2008. Also, Singapore's import of these products from India (according to figures from WITS) is considerably small and not exceeding US\$ 20 million in any year. Similarly, the exports of prepared unrecorded media for sound recording increased substantially to US\$ 139 million in 2008-09, but have since declined to US\$ 7 million in 2015-16. However, Singapore's import of these products from India as per WITS database has been minimal.

An important item of Singapore's import from India (according to figures from WITS) is transmission apparatus for radio, TV etc. (HS 8525) imports of which increased substantially from US\$ 1 million in 2004 to US\$ 285 million in 2008 but declined thereafter to US\$ 5.9 million in 2015. However, figures for India's exports do not reflect the huge imports in Singapore. Hence, there appears to a huge mismatch between the trade figures in this Chapter.

Exports of other items such as electrical apparatus for switching/protecting electrical circuits, etc. and boards, panels, etc. have done well and have steadily increased in recent years. However, as per WITS database,

Singapore's imports of electrical apparatus for switching/protecting electrical circuits etc and boards, panels, etc. (HS 8536) from India show a downward trend for the period 2012-2015, except for the year 2014. India's exports of products under HS 8536 declined from US\$ 23.9 million in 2012 to US\$ 15.2 million in 2015. Similarly, India's relative share has also declined, except for the year 2014, where India accounted for over 1.38 per cent of Singapore's global imports of products under the HS 8536. While India's share has declined, the percentage share of China, as well as Indonesia in Singapore's imports, have been increasing. China's share increased from 19.8 per cent in 2012 to over 25 per cent in 2015. Other major sources of import, in recent years, under this category of products were Malaysia, United States and Indonesia

#### **Chapter 90: Optical, photographic cinematographic measuring, checking precision, medical or surgical instruments and apparatus parts and accessories thereof**

Exports of optical and other instruments and apparatus to Singapore increased from US\$ 31 million in 2003-04 to US\$ 274 million in 2011-12 but declined in recent years to US\$ 157 million in 2015-16. Singapore's imports of these products from India increased from US\$ 57 million in 2004 to US\$ 108 million in 2008. There was some decline in the next couple of years but imports rose to US\$ 230 million in 2012 and declined thereafter to US\$ 139.6 million in 2015.

India's major exports to Singapore under this chapter were medical instruments, their parts and accessories, and various measuring instruments. As per DGCIS statistics, India's exports of electro-diagnostic apparatus (HS901819) declined from US\$ 23.8 million in 2011-12 to US\$ 9.99 million in 2015-16. WITS statistics also show a similar trend. Furthermore, while Singapore's imports of electro-diagnostic

apparatus (HS 901819) from India declined from US\$ 79.4 million in 2012 to around US\$ 10 million in 2015, Singapore's global import of this item also declined from US\$ 234.8 million in 2012 to US\$ 140.7 million in 2015. While Singapore's imports of this item from the United States, Japan and Germany also showed a declining trend in recent years, imports from China have increased. Moreover, as per WITS statistics, India's global exports of items under HS 901819 have also decreased in recent years.

As for Singapore's imports from India of other instruments and appliances of medical science (HS 901890), these declined despite the fact that their global imports of HS901890 have increased in recent years. Imports from countries like US, Mexico and Japan have risen substantially, whereas imports from India declined considerably after 2012 from US\$ 35.6 million to US\$ 3.7 million in 2015. Export figures, as per DGCIS data, also show a decline in India's exports of HS 901890 to Singapore from US\$ 26.63 million in 2011-12 to US\$ 3.43 million in 2015-16.

#### **Chapter 74: Copper and articles thereof**

India's exports of copper and articles thereof have shown a variable trend increasing from US\$ 11 million in 2003-04 to US\$ 57 million in 2008-09 and then showing a decline to US\$ 11 million in 2011-12. However, in recent years, the exports of these products have picked up increasing to US\$ 138 million in 2015-16. Singapore's import of these products from India increased from US\$ 43 million in 2005 to US\$ 165 million in 2007 and showed variation in the period thereafter with imports falling to US\$ 6.22 million in 2014. However, imports bounced back to US\$ 139 million in 2015.

The most important export items under this Chapter are Cathodes of refined copper whose exports have increased to US\$ 122

million in 2015-16. Figures for Singapore's import also exhibit the same trend with imports of cathodes of copper from India increasing to US\$ 133 million in 2015. This is significant since Singapore's total imports of these products have shown a declining trend in recent years from US\$ 1.7 billion in 2011 to US\$ 929 million in 2015.

#### **Chapter 75: Nickel and articles thereof**

Exports of Nickel, particularly non-alloyed nickel to Singapore increased considerably to US\$ 461 million in 2014-15 but declined in 2015-16 to US\$ 106 million. India's exports were practically nil earlier. However, figures for Singapore's import do not reflect this huge surge in 2014-15. Even though Singapore's import of non-alloyed nickel increased substantially in 2014 to US\$ 1.7 billion from US\$ 1 billion, it was mostly sourced from Russia and Australia. Imports from India accounted for just about US\$ 53 million in 2014. Hence, here again, there appears to be a mismatch between the two figures. In any case, India is not a producer of nickel (barring one relatively small unit), nor is Singapore. Singapore is, however, a regional metal trading centre with warehouses stocking metals. International trading companies are also in the process of setting up local warehouses in India. Some Indian metal trading companies also have their offices in Singapore. Do the figures reflect trade between them as part of hedging strategies against changing commodity prices?

#### **Chapter 87: Vehicles other than railway or tramway rolling stock, and parts and accessories thereof**

Exports of vehicles etc. from India to Singapore increased steadily from US\$ 3.9 million in 2003-04 to US\$ 326 million in 2011-12 but declined to US\$ 71 million in 2014-15. There is a slight revival in 2015-16 with exports increasing to US\$ 101 million. Singapore's import of these products as per

WITS database has however increased in some years while declining in others.

India's major exports to Singapore under this Chapter are dumpers and tanks and other armored fighting vehicles. Further, exports of motorcycles have also shown some surge in recent years. Figures for Singapore's imports (based on WITS) corroborate only the latter. According to data sourced from WITS, Singapore's imports from India of motorcycles (HS 871140) increased considerably from US\$ 0.1 million in 2014 to US\$ 10.3 million in 2015. In 2015, India accounted for over 53 per cent of Singapore's imports of motorcycles (HS871140). Other major import sources are Germany, Italy, and Japan.

On the other hand, while figures for India's exports of dumpers (HS 870410) increased from US\$ 55 million in 2008-09 to US\$ 263 million in 2011-12, Singapore's import of these products from India was substantially lower (US\$ 12.6 million in 2008 and nil in 2011).

Singapore's major import items from India under this Chapter, based on statistics from WITS, were motor vehicles for the transport of goods (HS 870423) whose imports increased substantially from US\$ 53 million in 2008 to US\$ 371 million in 2012, declined thereafter and increased again in 2015 to US\$ 29 million. These items, however, do not figure among India's top exports to Singapore. There is, therefore, a significant mismatch between the two figures.

#### **Chapter 88: Aircraft, spacecraft, and parts thereof**

India's exports of aircraft and parts thereof increased substantially from US\$ 0.6 million in 2003-04 to US\$ 331 million in 2014-15 but declined steeply to US\$ 91 million in 2015-16. On the other hand, Singapore's import of these products from India has slightly bounced back in recent years after a steady

decline between 2011 and 2013. Singapore's Imports of items under chapter 88, as per WITS database, increased in the years 2014 and 2015 to US\$ 13.06 million and US\$ 17.3 million, respectively

India's major exports to Singapore in this Chapter are aircrafts of various weights and capacity which show a sudden surge in 2014-15 and parts of airplanes and helicopters. Comparing this to Singapore's import figures, it is seen that Singapore's import of these products from India increased from US\$ 2.5 million in 2004 to US\$ 22 million in 2007 but have since declined and remained below US\$ 15 million throughout the period.

The major items of import by Singapore from India under this chapter are parts of airplanes or helicopters (HS 880330) whose imports accounted for US\$ 16.8 million in 2015.

Singapore's import figures do not reflect the import of airplanes from India as shown by export figures of India. Even in the case of parts of airplanes etc., the traded values as reflected in the two figures are different.

#### **Chapter 10: Cereals**

Exports of Cereals to Singapore increased from US\$ 11.5 million in 2003-04 to US\$ 109 million in 2014-15 but declined in 2015-16 to US\$ 71 million. A similar trend is seen in Singapore's import of these items from India as per WITS database. Singapore's imports of cereals from India increased steadily from US\$ 11 million in 2005 to US\$ 105 million in 2014 and declined slightly to US\$ 87 million in 2015.

India's most important item of export to Singapore under this Chapter is semi/wholly milled rice (HS 100630) whose exports increased to US\$ 95 million in 2014-15 but have come down to US\$ 63 million in 2015-16 (these include exports of rice

parboiled; basmati rice and non basmati rice).<sup>2</sup>Figures for Singapore's import for these items show a similar trend increasing to US\$ 95 million in 2014 before declining to US\$ 80 million in 2015. It must be noted that there is a decline in Singapore's overall imports of this product in 2015. Figures taken from WITS database confirm this trend. However, if we look at India's relative share in Singapore's imports under this chapter, we see that it was consistently rising for the period 2012-15 from over 23 per cent in 2012 to 32 per cent in 2015. India remains the second largest source of rice import for Singapore, followed by Vietnam and the United States. However, Thailand remains India's biggest competitor for this item in Singapore. Also, exports of corn showed some surge increasing from US\$ 0.2 million in 2003-04 to US\$ 12 million in 2011-12 but have since declined to US\$ 4 million in 2015-16. This is also corroborated by figures for import of these products into Singapore.

#### **Chapter 79: Zinc and articles thereof**

India's exports of zinc and zinc articles, particularly non-alloyed zinc to Singapore has shown a varying trend increasing from US\$ 0.4 million in 2003-04 to US\$ 52 million in 2008-09. Thereafter there was a decline with exports reaching US\$ 6 million in 2014-15. However, there is a revival in 2015-16 with exports rising to US\$ 65 million. Though a similar trend is seen in India's overall exports of Zinc worldwide which increased between the period 2003-04 to 2011-12, exports of zinc have declined from US\$ 608 million in 2014-15 to US\$ 527 million in 2015-16

Singapore's import of zinc and articles thereof from India, as per WITS database, increased drastically from US\$ 0.7 million in 2003 to US\$ 36.3 million in 2008, after which it declined from US\$ 18.4 million in 2009 to US\$ 4.4 million in 2014. However, the year

2015 saw a sharp increase in imports of zinc and articles, from India, to US\$ 53.3 million, that corroborates with DGCIS figures.

#### **Chapter 76: Aluminum and articles thereof**

Exports of aluminum and articles thereof increased steeply from US\$ 50 million in 2003-04 to US\$ 312 million in 2008-09 but exhibited a decline in the later period with exports declining to US\$ 22 million in 2014-15. However, there is a slight recovery in 2015-16 with exports increasing to US\$ 57 million. Singapore's imports from India, as per WITS figures, exhibited a similar pattern although the figures are higher. It increased from US\$ 145 million in 2004 to US\$ 320 million in 2007 and declined to US\$ 140 million in 2011. Thereafter there was a steady decline in Singapore's imports from India with imports showing some revival in 2015 to US\$ 70 million.

India's major exports under this Chapter are non-alloyed aluminium. UAE is India's biggest competitor for this product in Singapore.

#### **Chapter 32: Tanning or dyeing extracts; tannins and their derivatives dyes, pigments and other coloring matter; paints and var; putty and other mastics; inks**

India's exports of tanning and dyeing extracts to Singapore declined from US\$ 21.6 million in 2003-04 to US\$ 20 million in 2008-09. Exports grew steadily thereafter reaching a peak of US\$ 62 million in 2014-15. There was, however, a slight dip to US\$ 57 million in 2015-16. A similar trend is observed in Singapore's overall imports of these products as well as its imports from India.

India's major items of export under this Chapter are Reactive dyes and preparations (HS 320416). India is the top supplier of this product to Singapore.

#### **Chapter 30: Pharmaceutical products**

Exports of pharmaceutical products to Singapore increased only slightly from US\$ 17 million in 2003-04 to US\$ 17.5 million in 2009-10. However, there was a sharp increase in the period thereafter with exports increasing to US\$ 48 million in 2010-11. It is noteworthy here that, in May 2010, India and Singapore signed an MOU to facilitate easier market access of generic drugs into Singapore. The agreement enabled speedy registration for generic drugs in Singapore by easing the procedure for regular clearances to export generic drugs to Singapore. Known as 'Verification CECA route' it allows for quicker registration of Indian generics with the Health Services Authority (HSA) of Singapore in cases where a generic drug has already been evaluated and approved by one of HSA's reference drug regulatory agencies (those of EU, US, UK, Canada and Australia

Exports of these products showed some increase in the period thereafter increasing to US\$ 65 million in 2012-13. However, the exports have declined in recent years to US\$ 56 million in 2015-16.

Figures for Singapore's import of these products from India, as per WITS statistics, indicate that imports increased from US\$ 21.58 million in 2004 to US\$ 81.7 million in 2006. There was some decline in the period thereafter with imports falling to US\$ 23.8 million in 2008. Imports recovered in the following years increasing to US\$ 58.8 million in 2015.

#### **Regulatory Time Process Under CECA and Abridged Generic Drug Application (GDA) schemes**

	CECA Scheme time	Abridged Working days
Screening of the Dossier before the first query	14 days	25
Evaluation of Dossier to regulatory decision	90 days	240 days

Source: Pharmexcil

India's major export items to Singapore under this Chapter are medicaments containing other antibiotics and put up for retail sale (HS 300420) and other medicine put up for retail sale (HS 300490) with the latter showing a very consistent and steady growth. It must, however, be noted that figures for Singapore's imports of medicaments containing other antibiotics from India are negligible and do not match with India's exports figure for the same. However, Singapore's import of other medicines for retail use has increased steadily from US\$ 18 million in 2009 to US\$ 53 million in 2014 with a slight decline to US\$ 50 million in 2015. India's major competitors for these products in Singapore are Germany, US and Switzerland. Given that there is a huge demand in Singapore for these items (Singapore's total imports of these products stood at US\$ 1.1 billion in 2015), India's market share is still very limited.

However, Singapore's re-exports of pharmaceutical and other medicinal products are also very high. It could not, however, be ascertained whether much of India's exports are consumed within the country or are re-exported.

An issue pointed out by the Pharmaceutical Export Promotion Council of India (Pharmexcil) relates to the requirement by the Singapore regulatory authorities that the application for generic drug regulation with PSA has to be done within two years of getting the approval from a reference drug regulatory agency. Pharmexcil has proposed a relaxation of the two-year limit since some of the reference regulatory agencies have longer validity periods for generics registered with them, some extending to five years. An alignment between the validity periods of the reference regulatory agency and PSA's registration requirement under the Verification CECA

route, it is felt would be facilitative to our generic drug exporters.

### **Chapter 33: Essential oils and resinoids; perfumery, cosmetic or toilet preparations.**

Exports of essential oils etc., from India to Singapore increased steadily from US\$ 7 million in 2003-04 to a peak of US\$ 86 million in 2012-13 and declined thereafter to US\$ 54 million in 2014-15. Exports in 2015-16 also remained at US\$ 55 million. Figures for Singapore's imports of these products from India as per WITS database, show that its imports rose steadily to a peak of US\$ 67 million in 2014 but declined slightly to US\$ 66 million in 2015. A similar trend is observed in Singapore's overall imports of these products.

The major items of exports by India under this Chapter are perfumes (HS 330300) and Essential oils of other mints (HS 330125). While figures for Singapore's imports of perfumes and essential oils from India are negligible, Singapore's major import items from India (based on data from WITS) are other beauty/makeup preparations (HS 330499) and other hair oil (HS 330590).

### **Chapter 38: Miscellaneous chemical products**

India's exports of miscellaneous chemical products to Singapore showed a varying trend increasing initially from US\$ 28 million in 2003-04 to US\$ 43 million in 2005-06. More recently, the exports of these items increased to a peak of US\$ 65 million in 2013-14 before declining to US\$ 52 million in 2015-16. Figures for Singapore's import of these items from India as per WITS database show that its imports have increased consistently from US\$ 30 million in 2009 to US\$ 59 million in 2015.

Major items of exports under this Chapter are insecticides and herbicides. China is India's major competitor for these products in Singapore.

### Chapter 73: Articles of iron or steel

Exports of iron and steel articles to Singapore increased steadily from US\$ 39 million in 2003-04 to US\$ 88 million in 2008-09 after which there was a slight decline. However, exports quickly bounced back increasing to US\$ 89 million in 2011-12. There was a steady decline in exports of these items since then with exports declining to US\$ 49 million in 2015-16. Figures for Singapore's import of these products from India as per WITS database showed a similar trend with imports declining steadily from a peak of US\$ 86 million in 2012 to US\$ 45 million in 2015. Also, since 2011 there was a decline in Singapore's global imports of articles of iron and steel.

India's major export items to Singapore under this Chapter were tubes and pipes of cast iron (HS 730300), Stranded wire, ropes and cables (HS 731210) and forged items of iron and steel (HS 732619).

India's export of tubes and pipes of cast iron (HS 730300) to Singapore, as per DGCIS statistics, increased from US\$ 4.3 million in 2011-12 to US\$ 6.85 million in 2012-13, but declined thereafter. As per WITS database, Singapore's imports of tubes and pipes of cast iron (HS 730300) from India, declined sharply from US\$ 3.6 million in 2003 to US\$ 0.07 million in 2010, after which it increased slightly to US\$ 0.76 million in 2012. However, in recent years the imports increased from US\$ 5.5 million in 2013 to US\$ 7.38 million in 2014, before falling back again to US\$ 5.71 million in 2015. China remained the largest source for import of this item by Singapore and, India was the second largest import source.

India's export of items to Singapore under the HS 730210, as per DGCIS figures, increased substantially from US\$ 0.07 million in 2011-12 to US\$ 5.92 million in 2015-16. Singapore's import of items under HS 731210 from India, as per WITS

database, rose from US\$ 2.5 million in 2003 to US\$ 24 million in 2008. However, the imports declined steadily from US\$ 18.4 million in 2009 to US\$ 2.2 million in 2015 with the exception of 2011 and 2012, when Singapore's imports of this item from India rose to US\$ 17.4 million and US\$ 15.7 million, respectively. India's major competitors for stranded wires and cables in recent years were China and Malaysia.

India's export of forged items of iron and steel (HS 730219) to Singapore, as per DGCIS figures, declined steadily from US\$ 16.15 million in 2011-12 to US\$ 10.12 million in 2015-16, with the exception of 2014-15. Singapore's import of forged items of iron and steel (HS 732619) from India showed a wavy trend. The imports rose from US\$ 4.3 million in 2003 to US\$ 7.12 million in 2006, after which it declined to US\$ 6.46 million in 2007. However, the imports saw a sharp increase to US\$ 12.77 million in 2008. The following two years, again saw a decline in Singapore's imports of this item from India. But the imports bounced back in 2011 and increased from US\$ 11.52 million in 2011 to US\$ 13.98 million in 2014, before declining slightly to US\$ 12.19 million in 2015. Singapore's major sources of import of this item were China, United States, Italy etc.

### Exports of other items

Apart from these top 20 chapters, there were several other items whose exports to Singapore did well. Exports of non-alloyed tin rose sharply from US\$ 0.05 million in 2004-05 to US\$ 41.55 million in 2015-16.

Exports of marine products such as crabs (HS 030624), frozen shrimps and prawns (HS 030617) and fish fillets and other fish meat (HS 030499) showed some surge in recent years. Exports of crabs to Singapore increased from US\$ 5.94 million in 2004-05 to US\$ 15.66 million in 2015-16. India was the top source of import of this item in Singapore.

Exports of some agricultural items also did well. Exports of vegetables such as Onions and certain other leguminous vegetables showed some increase in recent years. Exports of dried fruits of the genus capsicum or of the genus pimento (HS 090421) also started being exported to Singapore and their exports amounted to US\$ 5.83 million in 2015-16. Cashew nuts (HS ) exports from India also picked up, increasing from US\$ 4.58 million in 2004-05 to US\$ 12.1 million in 2011-12, though it came down to US\$ 8.97 million in 2015-16. While India remains the top supplier of this item in Singapore, it is facing competition from Vietnam and Myanmar in recent years.

Ground-nut (HS 120242) exports from India to Singapore also showed some promise, increasing from US\$ 6.13 million in 2013-14 to US\$ 10.33 million in 2015-16. It was not exported to Singapore before.

Exports of certain processed food items have also shown some potential in recent years. Exports of chocolate and other preparations (HS 180690) to Singapore increased from US\$ 0.3 million in 2004-05 to US\$ 13.88 million in 2015-16. Similarly, exports of Cocoa beans (HS 180100) increased substantially to US\$ 10.26 million in 2015-16. Exports of tobacco and cigarettes also showed some increase. In fact, exports of Cigarettes containing tobacco (HS 240220) increased from US\$ 3.25 million in 2004-05 to US\$ 17.64 million in 2015-16.

India's exports of articles of stone, plastics, cement, asbestos, mica or similar materials (HS 68) to Singapore, as per DGCIS figures, increased steadily from US\$ 3.07 million in 2003 to the US \$ 10.68 million in 2015 with the exception of three years- 2006, 2010 and 2012. However, as per WITS database, Singapore's import of articles of stone, plaster, cement, asbestos, mica or similar materials (HS 68) from India, showed a consistent growth for the

period 2003-2015 with the exception of four years-2005,2006, 2007 and 2010 .It increased from US\$ 2.8 million in 2003 to US\$ 7.84 million in 2015. Singapore's major sources of import under this chapter are- China, Malaysia, Vietnam and Indonesia.

India's Exports of cotton (HS 520100) to Singapore, as per WITS data, also increased from US\$ 2.86 million in 2008-09 to US\$ 12.9 million in 2015-16.Singapore's imports of cotton (HS 520100) from India, as per WITS data, increased from US\$ 5.21 million in 2008 to US\$ 14.7 million in 2010. The imports increased further in 2013 to US\$ 23.1 million but declined to US\$ 11.35 million in 2015.India remained the largest source for import of cotton (HS 520100) for Singapore. Its share in Singapore's global imports rose from over 48 per cent in 2008 to over 99 per cent in 2015.

India's exports of garments under chapter 61 to Singapore, as per DGCIS figures, increased from US\$ 10.96 million in 2003 to US\$ 25.87 million in 2008, after which they declined to US\$ 22.6 million in 2009. The exports increased sharply in 2010 to US\$ 36.03 million but fell back again in 2011 and had been declining ever since. However, in 2015 the exports saw an increase from US\$ 14.73 million in 2014 to US\$ 19.87 million in 2015.

As per WITS database, Singapore's imports of garments under the chapter 61, from India, increased from US\$ 25 million in 2003 to US\$ 32.17 million in 2007, after which it declined for two consecutive years before rising sharply to US\$ 43 million in 2010 . The imports rose further to US\$ 45 million in 2012 but declined thereafter. This is in contrast to India's increasing exports to the world of items under chapter 61 during the period 2009-15, except for the year 2010.Singapore's major sources of import of garments under chapter 61 were China, Malaysia, Vietnam and Indonesia.

Despite getting approval to export processed eggs to Singapore, exports of these items have not picked up yet.

## Conclusions

India's exports to Singapore which scaled high levels from only US\$ 4 billion in 2004-05 to US\$ 16.9 billion in 2011-12 have since seen a steep decline to a level of US\$ 7.7 billion in 2015-16. CECA involved no tariff concessions for India, and MFN duties have always been zero in Singapore for all items of India's export interest. In respect of Singapore's overall imports, India was, in 2005, 13<sup>th</sup> in rank with a 2.0 per cent share. It climbed up to the 10<sup>th</sup> position in 2010 with a 2.97 market share but in 2015 has reverted back to its earlier 13<sup>th</sup> position with a 1.95 percent market share.

China which was third in position with 10.83 per cent market share in 2010 significantly grew in Singapore's imports and was number 1 supplier with a 14.19 per cent share. China's competitiveness has impacted India's exports in many sectors, in particular in the engineering products category. Several other South and East Asian countries have lost market shares and ranking including Malaysia (1 to 3), Thailand (9 to 11), Indonesia (6 to 7), Philippines (11 to 16) and Japan (4 to 5). On the other hand, France (15 to 12), Germany (10 to 8) and the Republic of Korea (8 to 6) have done better in ranking and market shares.

An aspect to note in the context of India's low ranking in Singapore's imports is the low presence of Indian companies in regional supply chains that is seen as hindering their prospects of obtaining greater access in regional, including Singaporean markets. Singapore, in fact, has the highest backward participation index<sup>3</sup> in global value chains among countries in the east and south east Asian region.

However, India does not figure among the five top sources of foreign value added in Singapore's exports of any major industry group except in the residual category of miscellaneous group of industries, that is perhaps mainly owing to India's exports of cut and polished diamonds.

As has been noted by Elif Arbatli and Gee Hee Hong<sup>4</sup> from Singapore's input output tables, a large share of Singapore's imports is intermediate goods mainly imported by export oriented sectors. Singapore has also moved up the value chain, exporting goods with higher sophistication and export complexity. Another recent paper by Mun-Heng Toh<sup>5</sup> on Singapore's participation in global value chains has observed how over the years the share in value added in Singapore's exports have risen with it being highest (over 60 per cent) in electrical and optical equipments, that is closely followed by chemicals, machinery and equipment, basic fabrication of metals, etc. In fact, no area of manufacture is less than 50 per cent foreign value added except transports equipment that also marks over 40 per cent. A larger role for Indian manufacturing in these value chains could be an important area to explore for the future with perhaps certain added trade facilitation features for them within CECA.

It should also be recognized that in India's exports to Singapore, products from two chapters, HS 27 (Petroleum products) and HS 89 (Ships and other vessels), were widely varying annually that also contributed to the sharp changes seen in India's exports. In fact, if export figures for these two HS Chapters were taken out, the figures for other exports from India to Singapore show less variation (Table A.1.2.3), even as they still reflected ups and downs. Even at the HS Chapter level, there was practically no chapter in which exports showed a steadily rising trend throughout.

It would be very important to stabilize and consolidate export levels in areas that have shown positive trends from time to time. These include bulk drugs and generics, dyes, insecticides, cosmetic items, certain steel and engineering items, metals like zinc and copper cathodes, rice and few of the fisheries and agricultural items. Additionally, in product categories where exports have seen reversals, particularly in engineering products, further product level analysis is required to see if remedial action can be taken to improve their export prospects.

## Endnotes

- <sup>1</sup> Reliance starts crude, fuel trading in Singapore official says, <http://www.bloomberg.com/news/articles/2014-11-24/>
- <sup>2</sup> Exports of Parboiled rice declined from US\$ 43.26 in 2014-15 to US\$ 27 million in 2015-16, exports of Basmati rice declined from US\$ 12.47 million in 2014-15 to US\$ 11.66 million in 2015-16 and exports of Rice except parboiled (excl basmati rice) declined from US\$ 39.53 million in 2014-15 to US\$ 24 million in 2015-16.
- <sup>3</sup> Regional Supply Chains in Asia: Examining India's presence and possibilities in the RCEP by Amitendu Palit, Working Paper of Centre for WTO Studies, November 2014.
- <sup>4</sup> Elif Arbatli and Gee Hee Hong, IMF Working paper on 'Singapore's export elasticities: A disaggregated look into the role of global value chains an economic complexity', March 2016.
- <sup>5</sup> Mun-Beng Toh, 'Singapore's participation in global value chains - Perspectives of trade in value added', ERIA-DP-2015,50, July 2015.

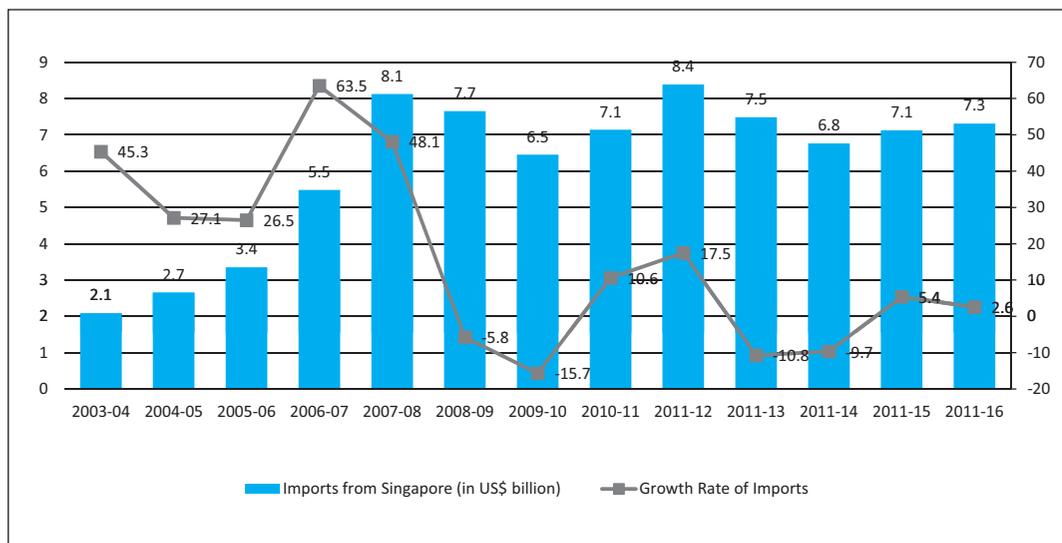
# 3

## Analysis of India's Imports from Singapore

India's imports from Singapore have followed a somewhat wavy pattern. They increased from US\$ 2.7 billion in 2004-05 to US\$ 3.4 billion in 2005-06 after CECA came into force (see Figure 3.1). There were further sharp increases in the next couple of years to US\$ 8.1 billion in 2007-08. The

following two years witnessed some decline due to global financial crisis at that time, but imports bounced back quickly increasing to a peak of US\$ 8.4 billion in 2011-12. Imports declined again in the next two years reaching US\$ 6.8 billion in 2013-14. There has however been a slight revival since then with imports increasing to US\$ 7.3 billion in 2015-16.

**Figure 3.1 : India's Imports from Singapore**

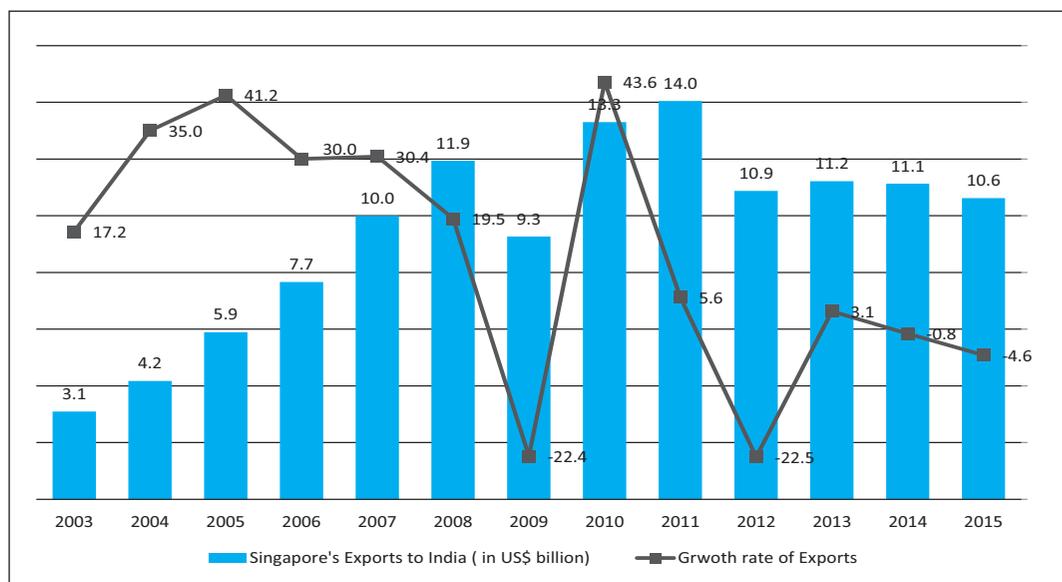


Source: DGCIS.

Figures for Singapore's exports to India (taken from WITS database) indicate a somewhat similar trend though they are considerably higher than the figures for India's imports from Singapore. (see figure 3.2) Singapore's exports to India, as per these figures, increased from US\$ 5.9 billion

in 2005 to US\$ 11.9 billion in 2008 declining thereafter to US\$ 9.3 billion in 2009. Exports from Singapore revived again and rose in the next two years to reach a peak of US\$ 14.0 billion in 2011. Since then, however, they have remained subdued at around US\$ 11 billion with a slight dip to US\$ 10.6 billion in 2015.

**Figure 3.2: Singapore's exports to India**



### Top 20 Items of Import

India's top 20 imports from Singapore at two-digit level are given in Table 3.1 which accounted for 97 per cent of India's total imports from Singapore in 2015-16. Imports of machinery and mechanical parts (HS 84), organic chemicals (HS 29), electrical machinery (HS 85) and mineral fuels (HS 27) together accounted for over 50 per cent of India's total imports from Singapore. Among the leading items what is of particular interest is the decline in the share of non electrical machinery (HS 84) from around 30 percent in 2004-05 to a level that is almost half. There has also

been a significant reduction in the share of electrical machinery from 20 percent in 2004-05 to 15 percent in 2015-16 and the share was even lower in some intervening years. The share of petroleum products (HS27) on the other hand rose very sharply from virtually nothing to account for a third of imports in the year 2011-12. Since then however its share has got reduced to only 11 percent in 2015-16. Also very significant have been the imports of organic chemicals (HS 29), plastics (HS39) and miscellaneous chemicals which have risen sharply compared to 2004-05, with the shares of latter two in the import basket almost doubling.

Source; WITS.

**Table 3.1: India's Top 20 Imports from Singapore**

(in million US\$)

HS Code	Commodity	Imports from Singapore											
		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof.	778.7	1014.7	1231.3	1625.6	1176.2	1109.5	1026.6	1112.4	980.6	984.5	1093.5	1219.9
29	Organic chemicals	359.4	412.6	548.8	643.6	671.1	681.6	898.9	991.5	1133.3	1607.1	1428.4	1190.3
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts.	528.7	657.4	955.1	933	1398.5	1152.9	1054.7	1271.6	1130.6	970.5	907.3	1139.5
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes.	10.5	15.7	1097.5	2655	2175	1495.1	2419.9	2388.5	932.4	552.4	667.8	781.1
39	Plastic and articles thereof.	107.5	122.4	135.8	200.1	213.4	243.2	354.1	419.6	501	619.3	836.8	762.8
89	Ships, boats and floating structures.	173.0	216.6	195.5	697.7	750.5	760.7	192.8	566.5	975.7	698.8	246.2	526.8
90	Optical, photographic cinematographic measuring, checking precision, medical or surgical inst. And apparatus parts and accessories thereof;	110.9	144.2	183.4	267.6	292.7	263.1	260.6	347.0	310.8	287.7	339.3	331
72	Iron and steel	65.7	54.3	78.6	96	89.3	71.2	102.1	135.8	138.8	112.4	226.1	233.8
75	Nickel and articles thereof.	4.4	0.6	8.3	9	4.1	8.1	9.9	9.4	4.9	21.6	356.5	206.6
71	Natural or cultured pearls, precious or semiprecious stones, pre. metals, clad with pre. metal and articles thereof; imit. jewelry; coin.	39.5	19.7	17.8	35.9	102	106.9	91.2	162.6	569.9	192.7	313.2	180.7
38	Miscellaneous chemical products.	35	42.9	60.4	69.5	75.7	73.5	97.8	143.4	142.1	186.7	191.3	176
88	Aircraft, spacecraft, and parts thereof.	46.1	131.4	115.6	125.5	153.4	72.5	65.9	94.7	28.7	39.7	42.7	77.7
40	Rubber and articles thereof.	16.2	17.7	21.5	24.4	21.6	20.6	22.6	26.5	25.7	31.2	36.7	51.7
76	Aluminium and articles thereof.	12.2	17.9	23.3	28.1	31.5	20.5	27.6	39.9	44.6	38.3	35.5	48.2

Table 3.1 continued...

Table 3.1 continued...

32	Tanning or dyeing extracts; tannins and their deri. Dyes, pigments and other colouring matter; paints and var; putty and other mastics; inks.	21.4	24.5	28.6	32.9	31.6	25.2	24.4	30.3	29.8	32.8	38.4	43.4
73	Articles of iron or steel	32.8	51	67.1	76.6	90.3	44.7	83.1	75.8	47.4	56.4	55.5	41.3
18	Cocoa and cocoa preparations	2.2	2	2	3.7	5.6	9.5	16.7	14.0	13.5	13.6	19.7	28.8
49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans.	175.5	258.4	319.5	303.7	83.7	24.5	47.5	226.3	196.2	22.4	22.3	21.9
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations.	5.8	6.8	6.4	13	15.7	20.1	23.3	24.8	22.9	15.2	17.4	19.4
54	Man-made filaments	6.8	6.3	8.8	9.3	9.8	10.5	14.2	11.6	10.2	14.6	19.7	19.1
Total of Top 20 imports from Singapore		2532.3	3217.1	5105.1	7850.1	7391.7	6214	6833.9	8092.2	7239	6497.8	6894.2	7099.9
Total Imports from Singapore		2651.2	3353.6	5484.1	8122.4	7654.6	6454.4	7139.1	8388.5	7486.2	6762.3	7124.3	7305.7
Share of Top 20 imports to total imports from Singapore		95.5	95.9	93.1	96.6	96.6	96.3	95.7	96.5	96.7	96.1	96.8	97.2

Source: DGCIS, Ministry of Commerce and Industry, Government of India

### Top 20 Items different for different Data Sources

The top 20 chapters of Singapore's exports to India as per WITS data included vehicles (HS 87), tools and implements (HS 82), beverages, spirits and vinegar (HS 22) and wood (HS 47) that did not feature in the top 20 HS chapters as per DGCIS statistics. All these four chapters are however primarily, if not exclusively, comprising re-export items from Singapore to India. On the other hand, India's imports of Ships, boats and floating structures (HS 89), cocoa preparations (HS 18), books and other printed materials (HS 49) and man-made filaments (HS 54) were not among Singapore's top 20 exports to India.

### Differences Arising from 'Re-exports'

Some details would perhaps be relevant here about the HS chapters that only figure

among Singapore's top HS chapters. As for HS87, Singapore's exports of vehicles to India increased from US\$ 32 million in 2004 to US\$ 81 million in 2007 and declined thereafter in the next couple of years. However since 2010, exports of these products have increased steadily and stood at US\$ 71.7 million in 2015. Singapore's major exports to India under this Chapter were bumpers and parts thereof (HS 870810), other parts and accessories of bodies for the motor vehicles (HS 870829) and other parts and accessories (HS 870899). All the three items figure prominently amongst Singapore's re-export items of HS Classification 87 to India. Many high-end foreign cars sold in India depend on their Singapore regional stocking centers for import of parts. The true origins of these products are third countries where the manufacturing takes place.

Exports of tools and implements (HS 82) from Singapore to India also showed

some surge increasing sharply from US\$ 22 million in 2004 to US\$ 109 million in 2006. But the period thereafter saw exports declining to about US\$ 40 million. Exports of these items increased again in 2011 to US\$ 87 million, though the trend since then has been unsteady with exports declining to US\$ 69.6 million in 2015. Major exports from Singapore to India under this Chapter were other interchangeable tools (HS 820790) and plates, sticks, tips and the like for tools, unmounted, of sintered metal carbides or cermets (HS 820900). Both the items, again, figure prominently in Singapore's re-export figures for India for HS Chapter 82.

Exports of beverages, spirits and vinegar (HS 22) from Singapore which remained subdued in the early period, increased steeply in 2010 to US\$ 136.5 million that rose further to US\$ 169.9 million in 2011. There was however a decline in the next year with exports falling to almost half and stood at US\$ 61 million in 2015. It must be mentioned that out of a total of 47 tariff lines in this Chapter, 41 belong to Exclusion List. Singapore's major export items to India under this chapter are whiskies (HS 220830) and sparkling wines which are re-exported items of third country products.

Singapore's exports of wood (HS 47) which remained low in the period after CECA was implemented increased from US\$ 10.27 million in 2010 to US\$ 69.95 million in 2013 but declined to US\$ 36.7 million in 2015. The key product exported here was chemical wood pulp, soda or sulphate, other than dissolving grades of coniferous (HS 470321) which increased substantially to US\$ 61.25 million in 2013. This item is also a re-exported item of third country origin.

The comments with regard to Singapore being a re-export hub that were made in Chapter 2 on India's exports are also

equally valid with respect to imports from Singapore. Singapore is a regional stocking centre for aircraft parts, parts for high end foreign cars, liquor and other branded goods. If such re-exports are directed to India they would not obviously receive CECA tariff concession because of their origin. But if the origin of such re-exported products is another ASEAN country then it could do so under the cumulation rules of India-ASEAN FTA (IAFTA).

In the following section, trends in the imports of each of the top HS Chapters as per DGCIS figures will be discussed in detail along with the tariff reduction schedules to get an understanding of the impact of tariff concessions under CECA and IAFTA on trade. The analysis will be carried out at the level of 8-digit tariff lines on the basis of DGCIS statistics but comparisons will be made with WITS statistics.

The extent of domestic exports and re-exports in each chapter will also be examined using Singapore's own trade statistics that is denominated in Singapore dollars. However, before we proceed further in analyzing the import trends it will be important to look at the tariff reduction schedules under CECA and India-ASEAN FTA as also the requirements in respect of rules of origin for the products to become eligible for the tariff concessions.

## **Tariff Concessions under CECA and India-ASEAN FTA**

India initially provided tariff concessions to Singapore under CECA at the eight digit tariff level under three different tariff reduction categories. The Early Harvest (EP) category consisted of 506 tariff lines on which duties were eliminated from 1 August 2005. A second category (A) consisted of 2202 tariff lines on which tariffs were progressively reduced till they were eliminated on 1 April

2009. The third category (B) included 2407 tariff lines on which duties were brought down by 50 per cent by 1 April 2009. Over 6500 remaining tariff lines remained in the excluded list.

The first review of CECA in 2007 resulted in India granting more tariff concessions to Singapore which took the coverage of India's imports from Singapore from 64 percent earlier to 81 per cent. It was agreed that on a further 316 tariff lines (category C) duties will be eliminated by 1 December 2011. On an additional 97 tariff lines (category D) the tariffs were to be reduced in a phased manner to become zero by 1 December 2015. Further, on 135 sensitive tariff lines (category E) the phased reduction was to take place till they reached 5 percent by 1 December 2015.

In all, therefore, CECA provided for tariff concessions to 5663 tariff lines, with around 6000 tariff lines still uncovered.

Singapore also became eligible for further tariff concessions from 1 January 2010 with the coming into force of the India-ASEAN free trade in goods agreement. The agreement provided for a much larger coverage than CECA with the exclusion list limited to only 1297 tariff lines at the eight digit level. For a large majority of tariff lines (7775 lines at eight digit level) tariffs were to be eliminated (NT-1 category) through annual cuts between 1 January 2010 and 31 December 2013. For another 1252 tariff lines, tariffs were to be eliminated by 31 December 2016 through annual tariff cuts over an extended period (NT-2 category). For a further 1905 tariff lines, deemed as sensitive (ST-category), tariffs were to come down to 5 per cent by 31 December 2016. The agreement also provided for a Highly Sensitive Track for palm oil, coffee, tea and peppers but these items do not figure in India-Singapore trade.

## Rules of Origin Requirements under CECA and AIFTA

The rules of origin (ROO) under CECA had three separate lists, with one list having products that are entirely produced or obtained in Singapore, the second listing products for which product specific rules applied and the third list covering all the other products. The last list which covered most items required that at least 40 per cent of the F.O.B. value of the product originated in Singapore apart from satisfying another condition that non-originating materials must have undergone a change in the first 4 digits of the HS code (change in tariff heading) from the finished good.

The rules of origin under India-ASEAN FTA were more liberal and most products were required to meet the triple criteria of (i) tariff classification change (change in tariff sub-heading, CTSH), (ii) regional value addition i.e., the ASEAN-India Free Trade Agreement (AIFTA) content of not less than 35 per cent of the Free on Board (FOB) value and (iii) substantial manufacturing/processing excluding minimal operations like repackaging, simple assembly/disassembly of parts, etc. There were also two additional lists of products one of which related to products produced or obtained wholly in Singapore and the second list for which certain product specific rules applied.

Thus AIFTA provided for a cumulation of content within ASEAN, apart from reducing the value added to only 35 per cent and relaxing the change in tariff line to be only at the six digit level.

### **Chapter 84: Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof.**

India's import of machinery and mechanical appliances from Singapore increased from US\$ 779 million in 2004-05 to US\$ 1626

million in 2007-08. There was a steady decline in imports thereafter declining to US\$ 1027 million in 2010-11. Though there was a slight recovery in the following year, imports fell drastically in the next couple of years to less than US\$ 1 billion. However, imports have been showing a rising trend in recent years, increasing to US\$ 1.2 billion in 2015-16.

### Tariff Reduction under CECA

Tariffs on 55 among all the 8 digit lines under this Chapter were eliminated on 1<sup>st</sup> August 2005 under the early harvest programme. Tariffs on another 180 tariff lines were eliminated on 1<sup>st</sup> April 2009, and on a further 4 tariff lines by 1<sup>st</sup> December 2015. Additionally, on 48 per cent of the tariff lines (511), tariffs were brought down to 50 per cent of the base rate by 1<sup>st</sup> April 2009. Lastly, on a further 14 tariff lines, the tariffs were reduced to 5 per cent by 1<sup>st</sup> December 2015. A total of 265 tariff lines under this Chapter are excluded from any tariff liberalization under CECA.

### Tariff Reductions on CECA Excluded Items under IAFTA

For some of the excluded tariff lines, tariff concessions were also made available for Singapore under the India-ASEAN FTA. Tariffs on 190 of the items were reduced to zero by December 2013 (NT-1), and on another 21 tariff lines the tariffs will be reduced to zero by the end of December 2016 (NT-2). Further, 17 tariff lines under the excluded category were placed under the sensitive track (ST) implying that tariffs

on those tariff lines will be brought down to 5 per cent by the end of December 2016.

### Performance under Different Tariff Reduction Categories

To better understand the effect of tariff liberalization on imports under this Chapter, trends in imports of products under each of the tariff liberalization category are studied separately.

Imports of products under the category A on which tariff was eliminated by April 2009 increased from US\$ 139.8 million in 2008-09 to US\$ 160.35 million in 2009-10 (increase of 14.7 per cent). However imports of these products declined to US\$ 107.9 million in 2015-16. Top imports under this category are listed in Table A.2.1 and these are mostly parts and accessories of machinery and mechanical appliances.

Close to 48 per cent of tariff lines under the chapter were under the tariff liberalization category B, for which tariffs were brought down to 50 per cent of the base rate by April 2009. However, many of the products under this category were also included under full tariff elimination under the India-ASEAN FTA. While tariffs on 360 tariff lines were reduced to zero by December 2013 (NT-1), tariffs on 94 items would be brought down to zero by December 2016 (NT-2). Hence, while CECA preferential tariff (3.75 per cent) for these products is lower than the MFN applied tariff rate (7.5 per cent), the preference given under the ASEAN FTA is even larger (0 per cent for NT-1 and 1 per cent for NT-2).

**Table 3.2: India's Tariff liberalization Schedule for Singapore (HS 84)**

Chapter	Description	A	B	C	D	E	EH	X	Total
84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof.	180 16.7	511 47.5	47 4.4	4 0.4	14 1.3	55 5.1	265 24.6	1076 100

Source: Calculated using India-Singapore CECA text

Imports of products under this category increased by about 20 per cent from US\$ 279.56 million in 2008-09, to, US\$ 335.58 million in 2009-10. However, there was a steady decline in the period thereafter with imports declining to US\$ 103.3 million in 2015-16. India's top imports from Singapore are given in Table A.2.2 and these were mainly boring machinery and parts, petroleum and gas drilling equipment for a few years before their imports declined.

Despite accounting for only a small percentage of the total number of tariff lines in the Chapter, bulk of India's imports fall under tariff categories C, D, E or EH. India's major imports under these categories are given in Table A.2.3.

A sizeable share of imports in fact fell under the Early Harvest category. These included digital processing units, personal computer and digital automatic data-processing machines. These also corroborate with figures for Singapore's major exports to India. Many of these items are also included in ITA-1 and imports into India of laptops and automatic data processing machines or units appear to have seen a more steady import trend.

Imports of products under the exclusion category have been relatively small, increasing from US\$ 11 million in 2004-05 to US\$ 42 million in 2008-09 but have declined thereafter to US\$ 21 million in 2015-16. India's major imports from Singapore under this category are horizontal lathes, turbo-jets and out board engines (Table A.2.4).

### **Domestic Exports vs Re-exports**

Re-exports constituted 58.4 per cent of Singapore's total exports to India of items in chapter 84. As per Singapore's trade statistics, Singapore's major item of export to India under chapter 84 was parts & accessories for machines (HS 84733090),

which constituted 16.19 per cent of the total exports under chapter 84. Among the products under this tariff line, around 70 per cent were re-exported products of third country origin. Singapore's second major item of export to India was processing units for Personal Computers (HS 84715010), 90 per cent of which were domestically sourced, reflective of Singapore's strong computer manufacturing industry established by MNCs. Table A.2.4 (a) of Annexure II separately gives a listing of Singapore's major domestic exports and re-exports under this chapter.

### **Chapter 29: Organic chemicals**

Imports of Organic Chemicals from Singapore increased steadily after CECA was implemented from US\$ 359 million in 2004-05 to US\$ 1.6 billion in 2013-14. The imports however contracted in the last couple of years to US\$ 1.19 billion in 2015-16.

### **Tariff Reduction under CECA**

Tariffs on 67 tariff lines under this chapter were eliminated on the day that CECA came into force. Tariffs on another 153 tariff lines were eliminated by 1<sup>st</sup> April 2009 and on a further 13 tariff lines by December 2011. Tariffs on 445 tariff lines were reduced to 50 per cent of the base rate by 1<sup>st</sup> April 2009 while tariffs on 13 tariff lines (under category E) were reduced to 5 per cent by December 2015. A total of 78 tariff lines were excluded from any tariff liberalization under CECA.

### **Tariff Reduction on CECA Excluded Items under IAFTA**

Tariff concessions subsequently became available on some of the excluded tariff lines under IAFTA. 51 tariff lines were covered under tariff category NT-1, 3 under NT-2 and 6 under ST under the IAFTA, leaving therefore only eighteen items still under exclusion.

## Major Items of Import and Performance under Different Tariff Categories

India's major imports from Singapore under this Chapter were toluene, P-xylene, styrene, ethylene glycol (ethanediol), and vinyl acetate, esters of methacrylic acid and methionine. Figures for Singapore's exports to India obtained from WITS support this. Imports of styrene (HS 29025000) have been particularly high and totalled US\$ 474 million in 2013-14. They have declined somewhat in the last two years but at US\$ 350 million still remained the single largest item of import into India in 2015-16 as per DGCIS figures.

It is noteworthy that IAFTA allowed for tariff elimination (NT-1) on some items on which only partial tariff liberalization was provided under the India-Singapore CECA. Imports of some of these items such as toluene, vinyl acetate and butanoic acids and salts have shown increases in 2013-14, coinciding with the elimination of tariffs on these items (in December 2013) under IAFTA. On the other hand, four items, namely, acrylic acid and salts (HS 29161100), butyl acrylate (HS 29161210), other esters of acrylic acid (HS 29161290) and esters of methacrylic acid (HS 29161400) received zero duty treatment under the Early Harvest programme of CECA even though under IAFTA they have remained under sensitive or excluded categories- implying that Singapore remains the only country which received zero duty for these items (They remain restricted or under the sensitive category under CEPAs with Japan

& ROK as well) as against an MFN duty of 7.5 percent. Imports of Methyl Methacrylate from Singapore have been particularly high in this regard at around US\$ 60 Million per annum and the Indian domestic industry has conveyed the pressure it is feeling as a result.

Anti-dumping duty was imposed on imports of acetone (HS 29141100) from Singapore in January 2008 after which the imports of this commodity remained subdued. But this item remains excluded from any tariff liberalization. In January 2016, the government of India also imposed anti-dumping duties on imports of phenol (HS 29071110) from Singapore acting on the allegations of the domestic industry. Imports may therefore see some moderation in future.

Comparisons with Singapore's export figures of HS 29 indicate that its variation from DGCIS figures is not very pronounced. In 2015, for example, Singapore's exports totalled S\$1.405 billion (approx US \$ 1.0322 billion). The second aspect to note is that over 80 per cent of Singapore's exports under chapter 29 are exports of domestically produced items, reflective of its strong downstream industry in the petrochemicals sector. Table A.2.5 (a) of Annexure II separately gives a listing of domestic exports and re-exports of items under this chapter.

### Chapter 85: Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts.

India's imports of Electrical machinery

**Table 3.3: India's Tariff liberalization Schedule for Singapore HS 29**

Chapter	Description	A	B	C	E	EH	X	Total
29	Organic chemicals	153 19.9	445 57.9	13 1.7	13 1.7	67 8.7	78 10.1	769 100

Source: Calculated using India-Singapore CECA text

and equipment from Singapore increased from US\$ 529 million in 2004-05 to a peak of US\$ 1.39 billion in 2008-09. There was a decline in imports of these products in the period thereafter, but for a slight increase in 2011-12, with imports falling to US\$ 907 million in 2014-15. Imports of these items have recovered in 2015-16 increasing to US\$ 1.14 billion.

### Tariff Reduction under CECA

Out of a total of 657 tariff lines, tariffs on 165 were eliminated on 1<sup>st</sup> of August 2005 when CECA came into force; on 35 tariff lines by 1 April 2009; on 8 tariff lines by December 2011 and on 18 tariff lines by December 2015. Tariffs on more than 50 per cent of the tariff lines were brought down to 50 per cent of the base rate by April 2009, and on 11 tariff lines, tariffs were reduced to 5 per cent by December 2015. Sixty two tariff lines were excluded from tariff liberalization under the CECA.

### Tariff Reductions on CECA Excluded Items under IAFTA

Out of the 62 tariff lines which were excluded from tariff liberalization under CECA, 14 tariff lines were included in NT-1 and NT-2 tracks each under the IAFTA and 8 were placed under the Sensitive Track.

India's major imports from Singapore under this Chapter are certain types of telephone sets (HS 85171290), videophones (HS 85176290) and routers and similar

equipment (HS 851769). Imports of these items have shown some surge in recent years. On the other hand, Singapore's major export item to India, as per WITS database, is other apparatus, for carrier current (HS 851750) exports of which increased substantially from US\$ 271 million in 2014 to US\$ 410 million in 2015.

On the other hand imports of products such as Discs with information technology software have declined considerably during the period which might be due to evolving technology. Most of the items imported from Singapore under this Chapter belong to the Early Harvest (EH) category, tariffs on which were eliminated immediately when CECA came into force. Some of these items also belong to ITA-1.

It is very interesting to note that even though Singapore is considered to be a manufacturing hub for electronic products, only 15 per cent of its exports to India, under chapter 85, is domestically manufactured. The rest of its exports are re-exports.

As for Singapore's top item of export, parts for electrical machines & apparatus (HS 85439090), only about 25 per cent of its export is domestically produced. In the case of other major items of exports such as other electronic integrated circuits (HS 85423900), parts of diodes transistors (HS 85419000) and machines for reception, conversion and transmission (HS 85176299), re-exports account for 80 per cent, 87 per cent and 86 per cent, respectively, of Singapore's exports

**Table 3.4: India's Tariff liberalization Schedule for Singapore HS 85**

Chapter	Description	A	B	C	D	E	EH	X	Total
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts.	35 5.3	358 54.5	8 1.2	18 2.7	11 1.7	165 25.1	62 9.4	657 100

Source: Calculated using India-Singapore CECA text

to India under chapter 85 . Table A.2.6 (a) of Annexure II separately gives a listing of Singapore’s domestic exports and re-exports of items under this chapter.

**Chapter 27: Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes.**

Imports of Mineral fuels from Singapore increased substantially from US\$ 10.5 million in 2004-05 to US\$ 2.66 billion in 2007-08. The next couple of years saw a gradual decline, which was short lived, and imports bounced back in 2010-11 to US\$ 2.4 billion. Imports declined sharply to US\$ 552 million in 2013-14, though there was some recovery in recent years to US\$ 781 million in 2015-16.

**Tariff Reduction under CECA**

Tariff on only one tariff line i.e. electrical energy was eliminated immediately when CECA came into force while tariffs on 6 tariff lines were eliminated by April 2009 and on another 4 tariff lines by December 2011. On a majority of 68 tariff lines (86 per cent) no tariff concessions were provided to Singapore under CECA.

**Tariff Reductions on CECA Excluded Items under IAFTA**

Thirty two of the tariff lines under the Exclusion List of CECA were covered under the NT-1 under IAFTA, tariffs on which were reduced to zero by December 2013. Another 2 tariff lines under the Exclusion list were placed under the Sensitive Track under IAFTA.

**Major Products of Import**

India’s major imports from Singapore under this Chapter were motor spirits, aviation turbine fuel (ATF) and base oil. Imports of items such as special boiling point motor spirits, superior kerosene oil (SKO) and high speed diesel (HSD) also increased intermittently, but has virtually come to a stop primarily because of availability from domestic refiners. Items that have been more consistently imported are motor spirit, ATF, base oil and fuel oil and most of them are imported into ports on India’s eastern coast, direct from Singapore, that can be more economical. Since all of these items are under exclusion both under CECA and IAFTA, imports under this chapter have not been impacted by the free trade arrangements.

Singapore’s export figures seem to confirm the above trade trend. In 2015, it exported S\$1.019 billion worth of HS 27 products to India with 93 per cent of them being exports of domestically refined oil products. Singapore is a leading crude oil refining and trading hub even as it imports all its crude oil feedstock. Table A.2.7(a) of Annexure II separately gives a listing of domestic and re-exports of Singapore of products under HS27.

**Chapter 39: Plastic and articles thereof.**

Imports of Plastics and articles thereof increased steadily and very significantly from US\$ 108 million in 2004-05 to US\$ 837 million in 2014-15, though there was a slight decline to US\$ 763 million in 2015-16.

**Table 3.5: India’s Tariff liberalization Schedule for Singapore HS 27**

Chapter	Description	A	C	EH	X	Total
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes.	6 7.6	4 5.1	1 1.3	68 86.1	79 100.0

Source: Calculated using India-Singapore CECA text

## Tariff Reduction under CECA

Tariffs on 21 tariff lines under this chapter were eliminated immediately on CECA coming into force. Further tariff eliminations took place on 2 tariff lines by April 2009, on 10 more items by December 2011 and on 26 tariff lines by December 2015. On 5 tariff lines, tariffs were reduced to 50 per cent of the base rate by April 2009 and for 42 tariff lines, tariffs were reduced to 5 per cent by December 2015. Additionally, 307 tariff lines were excluded from any tariff liberalization under CECA.

## Tariff Reductions on CECA Excluded Items under IAFTA

IAFTA however substantially brought down the number of excluded items. Out of the 307 excluded items, 20 were included in NT-1, 58 were included in NT-2 and another 149 were included under the Sensitive category under IAFTA. As a result, only 80 tariff lines remain excluded from any tariff liberalization.

## Trade Performance Following Tariff Reductions

Imports of products under this Chapter showed a definitive surge after CECA came into force. Products under tariff category D (on which tariffs were eliminated between the period 15.1.2008 to 1.12.2015) such as linear low density polyethylene, polyethylene, polymers of ethylene in primary forms, propylene copolymers etc. increased substantially between 2008-09 to 2014-15, even if there was a slight decline in 2015-16. The MFN applied tariff rates on these products is 10 per cent.

Imports of polypropylene (HS 39021000) have continued to rise increasing from US\$ 49 million in 2008-09 to US\$ 90.6 million in 2015-16. There were allegations made by domestic manufacturers about dumping of this product. In August 2010, Government of India imposed an antidumping duty on this item (HS 39021000 and 39023000) which was upheld again in the review in May 2016.

In the consultations held by the author of this report with the Chemicals & Petrochemical Manufacturers Association (CPMA) of India, the latter conveyed that India's imports of polyethylene increased sharply from US\$ 14.4 million in 2003-04 to US \$ 360.2 in 2014-15 and imports of polypropylene also went up from US\$ 21.1 million to US\$ 79.9 million during the same period. The imports accelerated with CECA duty levels coming down progressively. CPMA has contended that the petrochemical industry in Singapore was set up on the back of several incentives and government support and global giants have created massive capacities for exporting to large markets like China & India, even as Singapore itself offered a very small market size. This provided a non-level playing field with Indian companies having to grapple with several infrastructural bottlenecks and costs.

Another item for which imports from Singapore were affecting the domestic industry was flexible slabstock polyol (390720) on which tariffs were eliminated in December 2011. However, the Government of India imposed an anti dumping duty on imports of these items from Singapore

**Table 3.6: India's Tariff liberalization Schedule for Singapore HS 39**

Chapter	Description	A	B	C	D	E	EH	X	Total
39	Plastic and articles thereof.	2	5	10	26	42	21	307	413
		0.5	1.2	2.4	6.3	10.2	5.1	74.3	100.0

Source: Calculated using India-Singapore CECA text

in January 2015 following enquiry into allegations of anti dumping.

Import of retro reflective sheeting (HS 39209959) which was excluded from any tariff liberalization also showed some surge in recent years increasing from US\$ 0.1 million in 2011-12 to US\$ 14.4 million in 2015-16. The MFN applied tariff rate on this product is 10 per cent.

Since CECA tariff liberalization was greater than the corresponding IAFTA tariff concession for most of the items in the chapter, the latter was not responsible for the surge in imports of these products.

### Domestic Exports vs Re-exports

Under chapter 39 we see over 90 per cent of Singapore's exports to India under this chapter were domestically produced, reflective of its strong plastics manufacturing industry. The major item in Singapore's domestic export to India, which also figures in its re-exports, is polymers of ethylene in other primary forms (HS 39019090). Other two major items of export, which are purely of domestic origins, are propylene (HS 39021090), propylene copolymers (HS 39023090) and linear low density polyethylene (HS 39011092). Table A.2.8 (a) of Annexure II separately gives a listing of Singapore's domestic exports and re-exports of items under this chapter.

### Chapter 89: Ships, boats and floating structures

Imports of Ships, boats and floating structures from Singapore increased substantially from US\$ 173 million in 2004-05 to US\$ 761 million in 2009-10 after which it declined to US\$ 193 million. Imports of these products quickly bounced back increasing to US\$ 976 million in 2012-13. Though there was a dip in the next two years with imports falling to US\$ 246 million in 2014-15, imports of these products have

recovered increasing to US\$ 527 million in 2015-16. However, figures for Singapore's exports of these items do not match with India's import figures. Barring 2009, when Singapore's exports of these items increased to US\$ 209 million, exports of these items to India have generally remained less than US\$ 10 million. Hence, there is a wide gap between the two figures. It is however indicated in the IE website of Singapore's government that trade is recorded of ships or vessels only if they are imported or exported as merchandise purchased or sold by an owner in Singapore whether or not they arrived or departed under their own power. It is therefore possible that imports of these vessels and offshore platforms were not through purchases from an 'owner' in Singapore, but the payments for the purchase may have been made to companies (including subsidiary group companies) located there.

### Tariff Reduction under CECA

Tariffs on all the tariff lines under this Chapter were eliminated by April 2009.

Imports of items under this Chapter show an erratic trend. Imports of vessels for transport of goods increased from US\$ 52 million in 2004-05 to US\$ 252 million in 2008-09 and declined thereafter. Imports of Tugs and pusher craft also showed some surge increasing from US\$ 28 million in 2004-05 to US\$ 198 million in 2009-10 but decline thereafter but have shown some surge in 2015-16, increasing to US\$ 122 million. Imports of items such as Floating/submersible drilling/production platforms and other light vessels increased substantially up to 2013-14 but declined in the last couple of years. More recently, imports of tankers have picked up increasing to US\$ 106 million in 2015-16 from 18 million in 2014-15. The applied MFN tariff on these products is 10 per cent.

## Chapter 90: Optical, photographic cinematographic measuring, checking precision, medical or surgical instruments and apparatus parts and accessories thereof

India's imports of Optical and other instruments increased from US\$ 110 million in 2004-05 to US\$ 293 million in 2008-09, declined slightly in the next two years and increased again to reach a peak of US\$ 347 million in 2011-12. The period thereafter has seen some variation, with imports totaling US\$ 331 million in 2015-16, a threefold rise compared to 2004-05.

### Tariff Reduction under CECA

Tariffs on 42 tariff lines under this Chapter were eliminated immediately after CECA came into force. Tariffs on another 151 tariff lines were eliminated by April 2009 and a further 5 tariff lines by December 2011. Tariffs on 61 tariff lines were reduced to 50 per cent of the base rate by April 2009. Further, 23 tariff lines were excluded from any tariff liberalization under CECA

### Tariff Reductions on CECA Excluded Items under IAFTA

Out of the 23 tariff lines that were excluded from any tariff liberalization under CECA, 14 were placed under the NT-1 category of IAFTA on which tariffs were eliminated in December 2013. Nine tariff lines continue to be under exclusion.

## Trade Performance as a Result of Tariff Concessions

India's major imports from Singapore under this chapter are chromatographs and electrophoresis instruments (HS 90272000), parts and accessories of instruments and apparatus for physical or chemical analysis (HS 90279090), other automatic regulating/controlling instruments and apparatus (HS 90328990) and parts and accessories for automatic regulating or controlling instruments and apparatus (HS 90329000). Tariffs on all these items were eliminated either immediately when CECA came into force or by April 2009, while the MFN applied tariffs on these items are 10 per cent.

There was also some increase in imports of products under the tariff liberalization category B such as of x-ray apparatus (HS 90221900) and x-ray tubes (HS 90223000). While the MFN applied tariff rate on these items is 10 per cent, the CECA concessional tariff rate is 3.75 per cent. However, tariffs on these items were eliminated in December 2013 under IAFTA. There was no additional impact on imports following IAFTA liberalization.

On the other hand, data for Singapore's exports to India showed that Singapore's major exports to India under this Chapter are other instruments and appliances (HS 901890) and parts and accessories of microtomes (HS 902790). While Singapore's exports of other instruments and appliances

**Table 3.7: India's Tariff liberalization Schedule for Singapore HS 90**

Chapter	Description	A	B	C	EH	X	Total
90	Optical, photographic cinematographic measuring, checking precision, medical or surgical inst. And apparatus parts and accessories thereof;	151 53.5	61 21.6	5 1.8	42 14.9	23 8.2	282 100.0

Source: Calculated using India-Singapore CECA text

have declined in recent years, its exports of parts and accessories of microtomes have increased steadily to US\$ 70 million in 2015.

### Domestic Exports vs Re-exports

Under chapter 90, as per Singapore's trade statistics, the share of Singapore's domestic exports and re-exports to India were more or less evenly balanced, with re-exports making up 51 per cent of the total exports to India. Singapore's top items of export to India, which figured, both in its domestic exports as well as in its re-exports, were parts and accessories of microtomes (HS 90279010) and chromatographs & electrophoresis instruments electrically operated (HS 90272010). However, spectrometers (HS 90273010), other automatic regulating or controlling non electrical apparatus (HS 90328990), parts and accessories based on alpha beta gamma radiation (HS 90229090) and body implants (HS 90219000) featured prominently among Singapore's domestic exports to India, indicating its manufacturing strength in this sector. Another major item of export, dominated by re-exports was non electrical medical surgical instruments (HS 90189090). Table A.2.10(a) of Annexure II separately gives a listing of domestic exports and re-exports under this chapter.

### Chapter 72: Iron and steel

Imports of Iron and steel from Singapore declined immediately after CECA was signed from US\$ 66 million in 2004-05 to US\$ 54 million in 2005-06 but increased thereafter (but for a slight dip in 2008-09 and 2009-10) to US\$ 139 million in 2012-13. Imports of

these items declined to US\$ 112 million in 2013-14 but increased thereafter to US\$ 234 million in 2015-16.

### Tariff Reduction Under CECA

Out of a total of 511 tariff lines, tariffs on 28 were eliminated in April 2009 and on another 26 tariff lines by December 2011. A total of 457 tariff lines were excluded from tariff concessions under CECA.

### Tariff Reductions on CECA Excluded Items Under IAFTA

Under IAFTA, tariff concessions were provided on 450 of the CECA excluded tariff lines, with tariffs on them eliminated on 31<sup>st</sup> December 2013.

### Trade Performance with Tariff Reductions

India's major imports from Singapore under this Chapter were waste and scrap of iron and steel (HS 72042110, 90). Imports of both these items increased in recent years with tariff liberalization. Imports of TMT bars and rods (HS 72142090) also increased substantially in the last couple of years to over US\$ 40 million annually. It appears likely that these exports are from the steel company NatSteel in Singapore owned by the TATA group that has seen some turnaround. Imports of some cold-rolled stainless steel (HS 72193490) have also seen a limited rise. While no tariff concession was provided under CECA on the latter two items, tariff was eliminated in December 2013 under the India-ASEAN FTA (IAFTA). The MFN applied tariff rate on these products is 15 per cent.

**Table 3.8: India's Tariff liberalization Schedule for Singapore HS 72**

Chapter	Description	A	C	X	Total
72	Iron and steel	28 5.5	26 5.1	457 89.4	511 100.0

Source: Calculated using India-Singapore CECA text

## Domestic Exports vs Re-exports

Singapore's trade statistics indicate that over 78 per cent of Singapore's exports to India under chapter 72 were exports of domestically produced items. Singapore's major items of export to India, in 2015, under chapter 72, were waste & scrap of iron & steel (HS 72044900), bars & rods of carbon for concrete reinforcement of iron (HS 7214203) and waste & scrap of stainless steel (HS 72042100), that were all entirely produced domestically. On the other hand, Singapore's exports showed a significant level of re-exports of Ferr0-niobium alloy (HS 72029300) which did not find reflection in DGCIS figures.

Table A.2.11(a) of Annexure II separately gives details of domestic exports and re-exports of major items of Singapore to India under this chapter.

### Chapter 75: Nickel and articles thereof.

After remaining below US\$ 10 million for most of the implementation period, imports of nickel and articles thereof rose sharply to US\$ 356 million in 2014-15 and saw a slight decline to US\$ 207 million in 2015-16.

## Tariff Reduction under CECA

Out of the 27 tariff lines in this Chapter, tariffs on 2 of them were fully eliminated by April 2009 while tariffs on 12 tariff lines were brought down to 50 per cent of the base rate by April 2009. The remaining 13 tariff lines were excluded from any tariff liberalization under CECA.

## Tariff Reductions on CECA Excluded Items Under IAFTA

All the 13 excluded items under CECA were placed under the NT-1 category under IAFTA on which tariffs were eliminated by December 2013.

India's major item of import from Singapore under this Chapter was non-alloyed nickel (HS 75021000). Import of this item rose sharply, from very small levels, to US\$ 355 million in 2014-15 though imports declined to US\$ 199 million in 2015-16. Even as a similar trend was seen in Singapore's export figures, the latter were considerably higher. Exports of these items to India increased to US\$ 520 million in 2013 but came down to US\$ 311 million in 2015. Tariff on this item was eliminated in April 2009 under the CECA while the MFN applied tariff rate is 5 per cent. While Singapore is not a producer of nickel, the exports are presumably from the metal warehouses (both LME authorized and otherwise) that are located in Singapore. Indeed, Singapore's re-export figures to India of nickel (see Annexure A.2.12(a)) confirm this. In any case, since they would not have met the Rules of Origin requirement they probably have not been imported under CECA.

### Chapter 71: Natural or cultured pearls, precious or semiprecious stones, precious metals, clad with precious metal and articles thereof; imitation jewelry; coin.

Imports of gems and jewelry from Singapore declined in the first couple of years just

**Table 3.9: India's Tariff liberalization Schedule for Singapore HS 75**

Chapter	Description	A	B	X	Total
75	Nickel and articles thereof.	2	12	13	27
		7.4	44.4	48.1	100.0

Source: Calculated using India-Singapore CECA text

following the implementation of CECA from US\$ 36 million in 2004-05 to US\$ 18 million in 2006-07. The period thereafter saw a steady increase in imports of these products to reach a peak of US\$ 570 million in 2012-13 but have significantly varied in the period thereafter.

### Tariff Reduction under CECA

Tariffs on 30 tariff lines under this Chapter were eliminated by April 2009 and on another 2 tariff lines by December 2011. Tariffs on an additional 20 tariff lines were reduced to 50 per cent of the base rate by April 2009. No tariff concession was provided on the remaining 39 tariff lines under CECA.

### Tariff Reductions on CECA Excluded Items under IAFTA

Under the India ASEAN FTA, all CECA excluded tariff lines were placed under NT-1 category, with tariff elimination by December 2013. Also, tariffs on the items placed under tariff category B (with only 50 per cent reduction in base rate) were eliminated completely in December 2013 under IAFTA.

### Trade Performance

India's major imports from Singapore under this Chapter were non-industrial diamonds and unwrought forms of gold. Some dealers in Singapore are sight holders and have warehouses from where they supply rough diamonds to India. What is also of relevance is that De-Beers have made

Singapore their auction headquarters in 2013 and Singapore is also used as a delivery point for their on-line auction sales. Imports from Singapore increased substantially to US\$ 92 million, US\$ 180 million and US\$ 89 million respectively in the three years from 2013-14 to 2015-16. Also, while there is no significant cutting and polishing activity in Singapore itself, imports of cut and polished diamonds from third sources to India through Singapore have varied. Another item which has shown some surge in recent years is non-monetary unwrought forms of gold. Imports of these items increased from US\$ 31.7 million in 2013-14 to US\$ 69.2 million in 2015-16.

India's MFN tariff rate for Non-industrial diamonds falling under HS 71023100 is already at 0 per cent. Moreover, the MFN tariff levied by India for the import of non-industrial diamonds falling under the HS 71023910 and HS 71023990 is 10 per cent. However, under IAFTA, tariffs on these items were completely eliminated from 31<sup>st</sup> December 2013.

In respect of unwrought forms of gold (HS 71081200), which is another major item of import, India levies a 10 per cent MFN duty on the import of this item. However, under IAFTA, tariffs on these items were completely eliminated from 31<sup>st</sup> December 2013.

Figures for Singapore's exports to India as per WITS database show a similar trend. Also, exports of a few items such as unwrought silver (HS 710691) which were

**Table 3.10: India's Tariff liberalization Schedule for Singapore (HS 71)**

Chapter	Description	A	B	C	X	Total
71	Natural or cultured pearls, precious or semiprecious stones, precious metals, clad with precious metal and articles thereof; imitation jewelry; coin.	30 33.0	20 22.0	2 2.2	39 42.9	91 100

Source: Calculated using India-Singapore CECA text

substantial (US\$ 318 million in 2013) have come down sharply in recent years.

### Domestic Exports vs Re-exports

The percentage share of Singapore's exports of domestically produced items, as per Singapore statistics, to India, was around 20 per cent in 2015, with some cut and polished diamonds, other precious and semi precious stones and jewellery contributing to it. Singapore's top two items of export to India, non industrial diamonds (HS 71023100) and non-monetary gold (HS 71081200), both were re-exported items of third country origin. Table A.2.13(a) of Annexure II separately gives a listing of domestic exports and re-exports from Singapore to India of items under this chapter.

### Chapter 38: Miscellaneous chemical products.

Imports of Miscellaneous chemical products from Singapore increased steadily from US\$ 35 million in 2004-05 to US\$ 191 million in 2014-15. They have however declined slightly to US\$ 176 million in 2015-16, similar to the trend in plastic products (HS 39).

### Tariff Reduction under CECA

Out of a total of 179 tariff lines, tariffs on 6 of them were eliminated immediately when CECA came into force. Tariffs on 75 tariff lines were eliminated by April 2009 and on a further 8 tariff lines by December 2011. Additionally, tariffs on 15 more items were reduced to 50 per cent of the base rate by April 2009 and tariffs on 26 tariff lines were brought down to 5 per cent by December 2015. A total of 49 tariff lines were excluded from any tariff liberalization under CECA.

### Tariff Reductions on CECA excluded items under IAFTA

Among the CECA excluded tariff lines, 29 were included in NT-1 under IAFTA while another 8 of these were included under the Sensitive track. Only 12 tariff lines remain with no tariff concessions.

### Trade Performance

India's major imports from Singapore under this Chapter were binders for foundry moulds (HS 38249090) and additives for lubricating oils (HS 38112100). Tariffs on both these items were fully eliminated in April 2009 while the MFN applied tariff was 10 per cent. Also, imports of certain items such as insecticides, prepared additives for anti-corrosion and oil well chemicals showed some surge after 2009-10 but declined in 2015-16.

### Domestic Exports vs Re-exports

Singapore is one of the leading chemical manufacturing hubs. About 73 per cent of Singapore's exports to India under chapter 38 are of domestically produced items and re-exports account for the rest. Additive for lubricating oil (HS 38112190), the top item of Singapore's exports to India under chapter 38, is fully manufactured domestically. The other top two export items namely, diagnostic or laboratory reference materials (HS 38220090) and chemical products and preparations including binders (HS 38249099), figure in both domestic exports and re-exports. Table A.2.14 (a) of Annexure II separately gives a listing of domestic exports and re-exports from Singapore to India of items under this chapter.

**Table 3.11: India's Tariff liberalization Schedule for Singapore (HS 38)**

Chapter	Description	A	B	C	E	EH	X	Total
38	Miscellaneous chemical products.	75 41.9	15 8.4	8 4.5	26 14.5	6 3.4	49 27.4	179 100.0

Source: Calculated using India-Singapore CECA text

## Chapter 88: Aircraft, spacecraft, and parts thereof.

Imports of Aircraft and its parts from Singapore increased in the period immediately after CECA came into force from US\$ 46 million in 2004-05 to US\$ 131 million in 2005-06. There was a slight decline in imports in the next year but imports quickly bounced back to reach a peak of US\$ 153 million in 2008-09, after which there was a decline in imports (but for a slight increase in 2011-12) to US\$ 29 million in 2012-13. More recently, imports of these products have shown a rising trend, increasing to US\$ 78 million in 2015-16. Details are given in Table A.2.15.

### Tariff Reduction under CECA

India eliminated tariffs on 6 of the tariff lines under this Chapter by 1<sup>st</sup> August 2005 and on another 11 tariff lines by April 2009, while no tariff concession was provided on the remaining 3 tariff lines.

India's major imports from Singapore under this Chapter were parts of airplanes and helicopters though the imports of these items showed some variation over the years. Tariffs on these items were eliminated under the Early Harvest Category while the MFN tariff was 3 per cent. Imports of spacecraft (incl satellites and suborbital) spacecraft launch vehicles (HS 88026000) increased to US\$ 46.2 million in 2015-16. Perhaps this is attributable to the fact that in December 2015 India launched six Singapore satellites into orbit that may also have found reflection in the import figures.<sup>1</sup>Tariffs on the import of items under the HS 880260 were brought down to 0 per cent from 1<sup>st</sup> April 2009.

While WITS figures for Singapore's exports to India did not reflect exports of spacecraft, exports of other parts of airplanes or helicopters (HS 880330) were considerably higher than India's import figures for the same. Singapore's exports of these items increased from US\$ 28.77 million in 2004 to US\$ 201 million in 2008 but came down to US\$ 151 million in 2015. Is this again due to major world aircraft makers shifting parts from their regional warehouses in Singapore to India depending on local requirement? If so, these were, very likely, shown against their true origin as per Indian trade statistics

### Domestic Exports vs Re-exports

Singapore's parts market is also centered on its aircraft maintenance facility. Much of the maintenance work done in Singapore is performed on aircrafts registered outside of Singapore. The only items that Singapore exports to India under chapter 88 is parts of aero planes or helicopters (HS 88033000), over 93 per cent of which are re-exports

Table A.2.15(a) of Annexure II separately shows Singapore's domestic exports and re-exports to India under chapter 88.

### Chapter 40: Rubber and articles thereof.

Imports of rubber and articles thereof increased from US\$ 16 million in 2004-05 to US\$ 24 million in 2007-08. After some variation, imports remained in the range of US\$ 20-25 million till the end of 2012-13. More recently, there has been a steady rise with imports almost doubling to US\$ 52 million in 2015-16. Details regarding India's imports as per DGCIS statistics may be seen at Table A.2.16.

**Table 3.12: India's Tariff liberalization Schedule for Singapore (HS 88)**

Chapter	Description	A	EH	X	Total
88	Aircraft, spacecraft, and parts thereof.	11 55.0	6 30.0	3 15.0	20 100.0

Source: Calculated using India-Singapore CECA text

## Tariff Reduction Under CECA

India eliminated tariffs on 47 tariff lines under this Chapter by April 2009. Tariffs on a further 29 tariff lines were reduced to 50 per cent of the base rate by April 2009 and on another 1 item, tariff was reduced to 5 per cent by December 2015. A total of 99 tariff lines were placed under the exclusion list in CECA.

## Tariff Reductions on CECA Excluded Items under IAFTA

Out of the 99 tariff lines under the exclusion list in CECA, 36 were included in the NT-1 category of IAFTA, and 2 under NT-2. Additionally, 49 items were placed under ST category on which tariffs will be reduced to 5 per cent by December 2016.

## Trade Performance

India's major imports from Singapore under this Chapter were stoppers (HS 40169980), isobutene-isoprene (butyl) rubber (HS 40023100), halo-isobutene-isoprene rubber (HS 40023900) and other synthetic rubber and practice derived from oils (HS 40021990). It must be noted that while no tariff concession was available on these items under the CECA, tariff concessions were made available to Singapore under the India ASEAN FTA. Apart from Stoppers, for which preferential tariff under IAFTA is 5 per cent compared to MFN tariff of 10 per cent, tariffs were eliminated for all other items by December 2013 under IAFTA (MFN tariff on these are 10 per cent).

WITS figures for Singapore's exports of items under this Chapter indicated that its main item of export to India was halo-isobutene-isoprene rubber (HS 400239) whose exports increased from US\$ 1.39 million in 2014 to US\$ 41 million in 2015.

## Domestic exports vs Re-exports

Under chapter 40, re-exports accounted for 72 per cent of Singapore's total exports to India. According to Singapore's trade statistics, Singapore's major items of export to India are halo-isobutene-isoprene rubber (HS 40023990), butadiene rubber (HS 40022010) and other hygienic or pharmaceutical articles of vulcanized rubber excluding hard rubber (HS 40149090). However, according to DGCIS data the item other hygienic or pharmaceutical articles of vulcanized rubber excluding hard rubber (HS 40149090), which is a domestically produced item of Singapore, doesn't account for a substantial portion of India's imports from Singapore under this chapter. A listing of Singapore's domestic exports and re-exports under chapter 40 is given in Table A.2.16 of Annexure II.

## Chapter 76: Aluminium and articles thereof.

Imports into India of aluminium and articles thereof from Singapore increased from US\$ 12 million in 2004-05 to US\$ 32 million in 2008-09 after which there was a slight decline to US\$ 21 million in 2009-10. However, imports increased in the period thereafter to US\$ 48 million in 2015-16 (There was some decline in 2013-14 and 2014-15). Table A.2.17 gives the details as per DGCIS statistics.

## Tariff Reduction under CECA

Out of the 96 tariff lines in the Chapter tariffs on 5 of them were eliminated by April 2009 and on another 9 tariff lines by December 2011. CECA provided no tariff concessions on the remaining 82 tariff lines.

**Table 3.13: India's Tariff liberalization Schedule for Singapore (HS 40)**

Chapter	Description	A	B	E	X	Total
40	Rubber and articles thereof.	47 26.7	29 16.5	1 0.6	99 56.3	176 100

Source: Calculated using India-Singapore CECA text

## Tariff Reductions on CECA Excluded Items under IAFTA

Out of the 82 excluded tariff lines under CECA, 64 were placed under the NT-1 category of IAFTA and 11 under NT-2. Seven tariff lines remained with no tariff concessions.

## Trade Performance

India's major import item from Singapore under this Chapter was aluminum scrap (HS 76020010) whose imports increased steadily from US\$ 19 million in 2010-11 to US\$ 28 million in 2012-13. Tariff on this item was eliminated in December 2011. Though there was a slight dip in imports of this item in 2013-14, it recovered in the next year rising to US\$ 33 million in 2015-16.

As per WITS figures, Singapore's major export item to India under this Chapter is aluminium waste (HS 76020000). Singapore's second major item of export to India, non-alloyed aluminium (HS 760110), showed some variation over the years and was around US\$ 36 million in 2015. These aluminium ingots were presumably exported from the metal warehouses in Singapore and their true origin was from a third country. Table A.2.17(a) of Annexure II separately gives Singapore's domestic exports and re-exports under chapter 76

### Chapter 32: Tanning or dyeing extracts; tannins and their deri. dyes, pigments and other colouring matter; paints and ver; putty and other mastics; inks.

India's imports of tanning and dyeing extracts from Singapore increased from

US\$ 21 million in 2004-05 to US\$ 33 million in 2007-08 after which there was some contraction in imports to US\$ 24 million in 2010-11. More recently, the imports of these products have shown signs of revival increasing to US\$ 43 million in 2015-16. Table A.2.33 gives the details as per DGCIS statistics.

## Tariff Reduction under CECA

Out of a total of 339 tariff lines in this Chapter, tariffs were eliminated on 56 items by April 2009 and on 36 items by December 2011. On 3 more items tariffs were eliminated by December 2015. For 142 tariff lines, tariffs were reduced to 50 per cent of the base rate by April 2009 and on 1 tariff line, tariff was brought down to 5 per cent by December 2015.

## Tariff Reductions on CECA Excluded Items under IAFTA

Out of the 101 CECA excluded tariff lines, 88 were included in NT-1 under the IAFTA and 1 item was also included in the ST category.

## Trade Performance

Major import items for India under this Chapter from Singapore were blue vat dyes (HS 32041599 and 32041551). While the MFN applied tariff on these items was 7.5 per cent, the preferential tariff on these products under CECA was 3.75 per cent. However under the IAFTA, tariffs on these items were eliminated on 31<sup>st</sup> December 2013 after which there seems to be a steady rise in imports of these items from Singapore. Other major sources of import for India

**Table 3.14: India's Tariff liberalization Schedule for Singapore for Aluminum and articles thereof (HS 76)**

Chapter	Description	A	C	X	Total
76	Aluminum and articles thereof.	5	9	82	96
		5.2	9.4	85.4	100.0

Source: Calculated using India-Singapore CECA text

for products under HS 320415 are China, United States and Germany. While imports from China and Singapore increased in recent years, imports from Germany and United States saw a decline.

WITS data for Singapore's export of these items to India show a similar trend. However, Singapore's major export item under this chapter was pigments and preparations based on titanium dioxide (HS 320611) whose exports increased from US\$ 17 million in 2014 to US\$ 52 million in 2012 and declined to US\$ 28 million in 2015. The DGCIS figures do not reflect this trend.

### Domestic Exports vs Re-exports

Singapore's major item of export, as per Singapore's trade statistics, is pigments calculated on the dry matter (HS 32061110), 99.9 per cent of which is re-exports, implying that its true origin was from a third country. The second major item of export, vat dyes & preparations (HS 32041500) is entirely produced domestically. Out of Singapore's total exports to India in this chapter, re-exports represent over 52 per cent of the total exports.

Table A.2.18(a) of Annexure II separately gives Singapore's domestic exports and re-exports under chapter 32.

### Chapter 73: Articles of iron or steel

Imports of articles of iron and steel from Singapore increased from US\$ 33 million in 2004-05 to a peak of US\$ 90 million in 2008-09 after which there was some variation with imports rising in some years and

declining in others. Imports of these items however declined to US\$ 41 million in 2015-16. Details, as per DGCIS statistics, may be seen in Table A.2.19.

### Tariff Reduction under CECA

Tariffs on 117 tariff lines under the Chapter were eliminated by April 2009, and tariffs on another 15 were eliminated by December 2011. On a further 10 tariff lines, tariffs were reduced to 50 per cent of the base rate by April 2009 and on another 1 item, tariff was reduced to 5 per cent by December 2015. A total of 116 tariff lines under the Chapter were placed under the Exclusion List.

### Tariff Reductions on CECA Excluded Items under IAFTA

Out of the 116 tariff lines under the Exclusion category in CECA, 104 were placed under NT-1 of the India-ASEAN FTA. Twelve tariff lines remained without any tariff concession.

### Trade Performance

India's major imports from Singapore under this Chapter were other articles of iron/steel other than steering or rudder equipment for ships and boats, transmission belting and other screws and bolts. Tariffs on all these items were eliminated in April 2009 and the imports of these items have shown some surge in recent years. However imports of some items such as other tubes, pipes and hollow profiles, seamless, of iron other than cast iron or steel (HS 73042990) and parts of ships, floating structure and vessels (HS 73269080) showed some surge in the

**Table 3.15: India's Tariff liberalization Schedule for Singapore HS 32**

Chapter	Description	A	B	C	D	E	X	Total
32	Tanning or dyeing extracts; tannins and their derivatives dyes, pigments and other colouring matter; paints and varnishes; putty and other mastics; inks.	56 16.5	142 41.9	36 10.6	3 0.9	1 0.3	101 29.8	339 100.0

Source: Calculated using India-Singapore CECA text

**Table 3.16: India's Tariff liberalization Schedule for Singapore (HS 73)**

Chapter	Description	A	B	C	E	X	Total
73	Articles of iron or steel	117 45.2	10 3.9	15 5.8	1 0.4	116 44.8	259 100.0

Source: Calculated using India-Singapore CECA text

period 2011-12 to 2013-14, but have since remained subdued. Details may be seen in Table A.2.19.

Singapore's exports of products under this chapter to India, as per WITS statistics, increased from US\$ 23 million in 2004 to US\$ 79 million in 2008 but declined to US\$ 43 million in 2015. Singapore's main exports to India were screws and bolts (HS 731815), export of which increased from US\$ 1.3 million in 2013 to US\$ 9.7 million in 2015.

### Chapter 18: Cocoa and cocoa preparations

Imports of cocoa and cocoa preparations from Singapore that earlier remained low showed signs of growth in recent years increasing to US\$ 29 million in 2015-16.

#### Tariff Reduction under CECA

Out of a total of 15 tariff lines in the Chapter, tariffs on 2 of them were eliminated by April 2009, on another 1 item by December 2011 and on an additional 2 items by December 2015. Further, 10 tariff lines were placed under the Exclusion List under CECA.

#### Tariff reductions on CECA excluded items under IAFTA

Out of the 10 tariff lines that were placed under the Exclusion List under CECA, 3 were placed under NT-1 in the India ASEAN

FTA and the remaining 7 remained under exclusion.

#### Trade Performance

India's major imports from Singapore in this Chapter were food preparation containing cocoa, cocoa butter fat and oil and cocoa powder not containing sugar. While tariffs on cocoa butter and cocoa powder were fully eliminated in April 2009, imports of these items into India have surged more recently as may be seen from Table A.2.20. It must also be mentioned that for HS 1804 and 1805 the product specific rules of origin specify for a local value added content of at least 40 percent based on direct method or not more than 60 percent based on indirect method which was different from the rules of origin for other products (40 per cent of its content must originate from Singapore/India and non-originating raw materials must have undergone a change in the first 4 digits of the HS code from the finished good).

Imports of food preparation containing cocoa (HS 18062000) have also surged recently. With tariff on these products now eliminated in December 2015, imports could go up further as the present MFN tariff rate on this product is 30 per cent.

Singapore's major export item to India under this chapter as per WITS database were cocoa butter, fat and oil (HS 180400)

**Table 3.17: India's Tariff liberalization Schedule for Singapore (HS 18)**

Chapter	Description	A	C	D	X	Total
18	Cocoa and cocoa preparations	2 13.3	1 6.7	2 13.3	10 66.7	15 100.0

Source: Calculated using India-Singapore CECA text

with exports worth US\$ 8 million in 2015, and chocolate and other food preparations containing cocoa (HS 180620) with exports worth US\$ 10 million in 2015.

**Chapter 49: Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans.**

Imports of printed books and other printed products increased from US\$ 176 million in 2004-05 to US\$ 319.5 million in 2006-07 and declined to US\$ 303.7 million in the following year. There was a steep decline in the next two years with imports declining to US\$ 25 million in 2009-10. Imports recovered slightly in the next few years, to reach US\$ 226 million in 2011-12. However there was a steady decline thereafter with imports remaining subdued at around US\$ 20 million in recent years.

**Tariff Reduction under CECA**

While tariffs were fully eliminated on 10 tariff lines in August 2005, tariffs on another 20 tariff lines were reduced by April 2009 and a further 3 tariff lines by December 2011.

**Tariff Reductions on CECA Excluded Items under IAFTA**

1 tariff line, pertaining to children’s picture books was under the exclusion list under CECA but got included in NT-1 under India-ASEAN FTA.

India’s major import items from Singapore under this chapter were documents of title conveying the right to use information technology software and

hardcopy (printed) of computer software. Tariffs on both these items were fully eliminated by April 2009, though the MFN applied tariff on these is 10 per cent. In more recent years imports have mainly been imported books and periodicals and bank notes.

Figures for Singapore’s exports of these items show a similar trend. Singapore’s exports of unused postage, revenue etc. (HS 490700) increased steadily from US\$ 53 million in 2004 to US\$ 439 million in 2011 but have declined significantly since then. It is worth noting that figures for Singapore’s export of this item is significantly higher than India’s imports. Even though India’s imports of hardcopy (printed) of computer software (HS 491199) has declined considerably, figures for Singapore’s exports show that it is a major item of export to India with exports of about US\$ 21 million in 2015. Hence there appears to be a wide gap between the two sets of figures.

**Domestic Exports vs Re-exports**

Under chapter 49, Singapore mainly exports printed Matter (HS 49119990) and over 70 per cent of them are re-exports. Table A.2.21(a) of Annexure II A separately shows Singapore’s domestic exports and re-exports under chapter 49

**Chapter 33: Essential oils and resinoids; perfumery, cosmetic or toilet preparations.**

India’s imports of essential oils and other preparations from Singapore increased from

**Table 3.18: India’s Tariff liberalization Schedule for Singapore (HS 49)**

Chapter	Description	A	C	EH	X	Total
49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans.	20 58.8	3 8.8	10 29.4	1 2.9	34 100.0

Source: Calculated using India-Singapore CECA text

US\$ 5.8 million in 2004-05 to US\$ 25 million in 2011-12 after which there was a decline in imports of these products. However, imports of these items have shown some recovery in recent years increasing to US\$ 19 million in 2015-16.

### Tariff Reduction under CECA

India eliminated tariffs for Singapore on 78 tariff lines in the Chapter by April 2009 and on another 5 tariff lines by December 2011. Tariff on one more item was reduced to 50 per cent of the base rate by April 2009 and for another 5 tariff lines, tariffs were brought down to 5 per cent. No tariff concession was provided on 42 tariff lines.

### Tariff reductions on CECA excluded items under IAFTA

Under the IAFTA, out of the 42 tariff lines in the Exclusion List, 29 were placed under tariff liberalization category NT-1, 2 under NT-2 and another 11 under ST.

### Trade Performance

India's major imports from Singapore under this chapter were perfumes and toilet waters, synthetic perfumery compounds and patchouli oil. Imports of other perfume and toilet waters (HS 33030090) showed the maximum surge, increasing from US\$ 0.2 million in 2004-05 to US\$ 5.3 million in 2015-16. Interestingly, while this item is listed under exclusion category in the CECA, it is placed under the sensitive track in the ASEAN FTA with a preferential tariff of 5 percent compared to a MFN tariff of 10 per cent in 2016-17.

A similar trend was seen in Singapore's export of these items to India as per WITS database. Exports of perfumes and toilet waters (HS 330300) increased from US\$ 3.9 million in 2011 to US\$ 11.4 million in 2015.

### Domestic Exports vs Re-exports

Singapore's exports to India are almost totally third country products re-exported to India as will be seen in Table 2.22(a) in Annexure II.

### Chapter 54: Man-made filaments

Imports of Man-made filaments have remained subdued for most part, increasing only recently to US\$ 19 million in 2015-16.

### Tariff Reduction under CECA

Out of a total of 236 tariff lines, tariffs on only 6 items were eliminated by December 2015. No tariff concession was provided under CECA on the remaining 230 tariff lines.

### Tariff Reductions on CECA Excluded Items under IAFTA

However, tariff concessions became available for some of the items in the Exclusion List under IAFTA. While 49 tariff lines were included under NT-1 under IAFTA, 108 were included under NT-2 and another 23 were included under the Sensitive Track. Fifty tariff lines remained without any concession.

India's top imports from Singapore under this Chapter was elastomeric whose imports rose steadily from US\$ 2.6 million in 2008-09 to US\$ 19 million in 2015-16. However since no tariff concession was

**Table 3.19: India's Tariff liberalization Schedule for Singapore HS 33)**

Chapter	Description	A	B	C	E	X	Total
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations.	78 59.5	1 0.8	5 3.8	5 3.8	42 32.1	131 100.0

Source: Calculated using India-Singapore CECA text

available on these items either under the CECA or IAFTA, the surge in imports cannot be attributed to tariff concessions. It must be noted that India's import of this item has surged in recent times with Singapore being the second largest supplier after Vietnam.<sup>2</sup> India's applied MFN tariff on this product was 10 per cent. Figures for Singapore's export indicate that its major item of exports to India was synthetic elastomeric yarn (HS 54024400). Export of this item increased from US\$ 12 million in 2012 to US\$ 20 million in 2015 and all of it is also domestically produced as seen from Table A.2.23(a).

### Imports of other Items

Imports of a few other items from Singapore have shown some increase. Imports of projects (HS 98010019) increased from US\$ 5.36 million in 2014-15 to US\$ 13.8 million in 2015-16. On the other hand, imports of power project (HS 98010013) which increased steadily from US\$ 4.65 million in 2004-05 to US\$ 48.43 million in 2010-11, declined sharply to US\$ 1.83 million in 2015-16. It must be mentioned that both these items were under the exclusion category and the MFN applied tariff on them was 10 per cent.

Imports of ingots, pigs, slabs and other primary forms of tin (HS 80011090) also showed some increase in recent years from US\$ 5.7 million in 2014-15 to US\$ 13.7 million in 2015-16. But as per Singapore's figures, its entire export of tin came under 're-export' category.

Imports of certain feed items (HS 23099010 and HS 23099090) also showed some increase in recent years even though they were in the exclusion category.

### Conclusions

India's imports from Singapore rose threefold from US\$ 2.7 billion to US\$ 8.1 billion within a span of three years after CECA came into force in August 2005. Several items benefitted from the tariff concessions including under the early harvest programme. Imports subsequently took a dip during the time of financial crisis but rose again to a peak of US\$ 8.4 billion by 2011-12. The following couple of years again showed a decline even as there is now a recovering trend. A steep decline in its export of refined petroleum products to India, coupled with relative sluggishness in exports of electrical and non-electrical machinery items, contributed to this trend.

Singapore, by being a member of both CECA and IAFTA, has one of the best market access opening into the large Indian market. It has certain strong manufacturing capacities in sectors such as petroleum refining, petrochemicals, a few chemical and steel making segments, high end electronics and certain food industry areas. With limited domestic consumption, it has the capacity to export much of the production. Domestically produced items figured prominently in Singapore's exports of refined petroleum products (HS27), chemicals (HS 29 and 38), plastics (HS39), steel (HS72) and manmade filaments

**Table 3.20: India's Tariff liberalization Schedule for Singapore Man-made filaments (HS 54)**

Chapter	Description	D	X	Total
54	Man-made filaments	6	230	236
		2.5	97.5	100.0

Source: Calculated using India-Singapore CECA text

(HS54). Even in Singapore's exports of non-electrical machinery (HS 84), optical and other instruments (HS 90), aluminium (HS 76) and dyes and intermediates (HS 32) a good share of Singapore's exports were domestically produced items.

At the product level, while many products benefitted from tariff concessions, as indicated in the chapter-wise analysis, it was interesting to note that there were some of them which figured under IAFTA exclusions for sensitive categories (and are sensitive under the CEPAs with Japan and RoK) but got tariff free access under CECA. These included acrylic acids and salts, butyl acrylate, other esters of acrylic acid, methacrylic acid, polypropylene, polyethylene and cocoa products. Imports of those products were substantial and our industry have conveyed the pressure they are facing as a result.

Likewise there were certain items under the CECA excluded list but whose

liberalization under IAFTA had significantly expanded access and imports had surged as a result. These included toluene, vinyl acetate, butanoic acids and salts, TMT steel bars and certain cold rolled stainless steel products. There were also a few items where there were allegations of dumping by Singaporean companies and DGAD have imposed duties wherever dumping was found and where the imports were determined to have caused injury to the domestic industry. These are listed in Table A.2.24 in Annexure II.

#### Endnotes

- <sup>1</sup> <http://www.thehindu.com/news/national/india-launches-six-singapore-satellites-onboard-pslvc29/article7996872.ece>
- <sup>2</sup> It must be mentioned that anti-dumping investigation concerning imports of Elastomeric Filament Yarn from China PR, South Korea, Taiwan and Vietnam were initiated in January 2016 and it was claimed by the petitioner that the subject goods are also being imported under tariff headings 5402 44 00 and 5402 69 90.



# 4

## Trade in Services under CECA

Singapore is a leader in services trade, ranking ninth in the world, just after India which is eighth (US\$ 155 billion), on its global exports of commercial services that were estimated at US\$139 billion in 2015. On imports too it ranked ninth<sup>1</sup> with imports totalling US\$143 billion in the same year, while India ranked tenth with imports at US\$122 billion. Thus, while Singapore had a small overall deficit on its global services trade, India has been having a surplus position for several years now.

Being a major hub for both sea and air transport, Singapore's trade in services is dominated by this sector. More than a third of its export revenues and about 30 per cent of its imports are attributable to transportation services. It also ranks as No. 3 in the world, after EU and US, with export of transport services amounting to US\$ 47.3 billion and ranks No. 5 in the world, after EU, US, China and India, with import of US\$ 44.3 billion in the same sector. Singapore is also a major international banking and financial services center, with its low cost financing, large foreign exchange operations, assembly of wealth management companies and presence of major insurance and other firms. Its export ranking is fourth in the world in this sector

as well as in insurance services. Its excellent connectivity vis-a-vis the Asia Pacific region and the fact that many companies both within the region and outside have preferred to have their global or regional headquarters located in the city have helped in boosting travel services. Its competitive tax regime and efficient infrastructure have also made Singapore a business friendly location for a variety of services ranging from arbitration services to trade and investment promotion events and as a convention centre. Another area of strength derives from the facility it has built up for repair and maintenance of aircrafts and ships that also brings with it substantial revenues. It is also a major re-export hub that makes available several trade related services.

Indian companies are closely involved in some form or the other with these various services. Trade in telecom and computer services, that is of particular interest to India, has a relatively small share in Singapore's overall trade but is substantial for its size. Its strong telecom and internet infrastructure and the english language strengths have been attracting several firms including Indian IT firms to locate their back end services. Other areas that Singapore is aspiring to build up are

research and development, education, high tech manufacturing and health services. High end manufacturing including in some electronic and pharmaceutical products has also meant significant payments for charges for use of intellectual property. The broad sectoral composition of its exports and imports may be seen in Figures 4.1 and 4.2.

As for India's global trade profile in services, apart from transportation services and travel services, India's exports are basically computer and information services, other business services, financial services, communication services, insurance and personal, cultural and recreational services. Its major imports are transportation services, other business services, insurance, financial services and computer and information services.

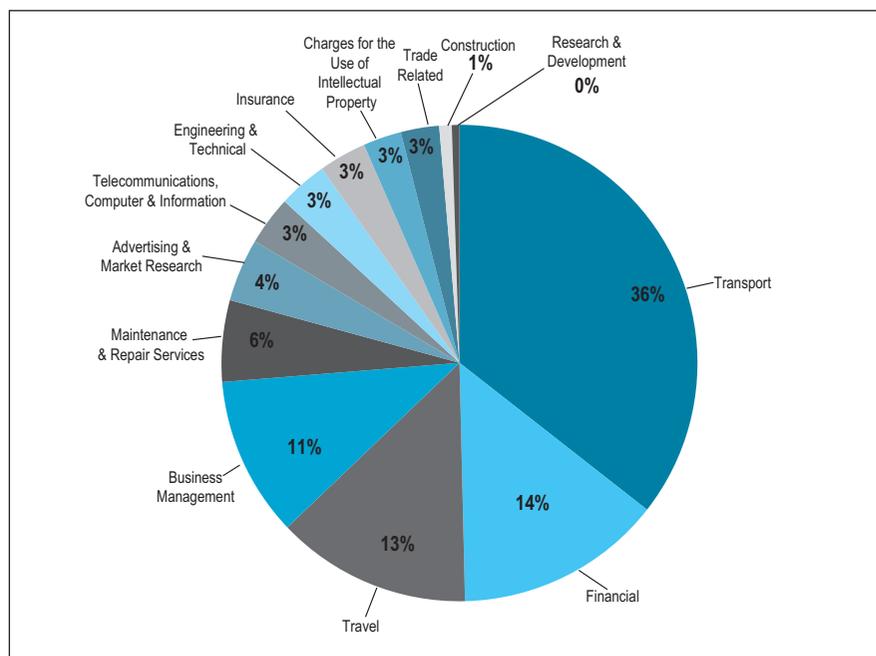
### Commitments under CECA on Services

For India, CECA was the first FTA in which commitments were taken on

services, a path breaking initiative. From its standpoint, its CECA commitments were fairly liberal at that time with many GATS plus commitments that also went in some cases beyond its offers in the Doha negotiations. It made commitments in nine out of the twelve services sectors with only education services and environment services, apart from the residual 'other services', being completely kept out. At the sub-sectoral level, areas where it did not schedule any commitment included legal, printing / publishing, retailing, franchising, entertainment, news agency and media services. The transportation sector also had many sub-sectoral exclusions including road, rail, inland waterways, pipeline and space transport. India has however progressively and autonomously liberalised its investment framework on retailing, franchising, broadcasting and certain transportation sub-sectors like roads, rail etc.

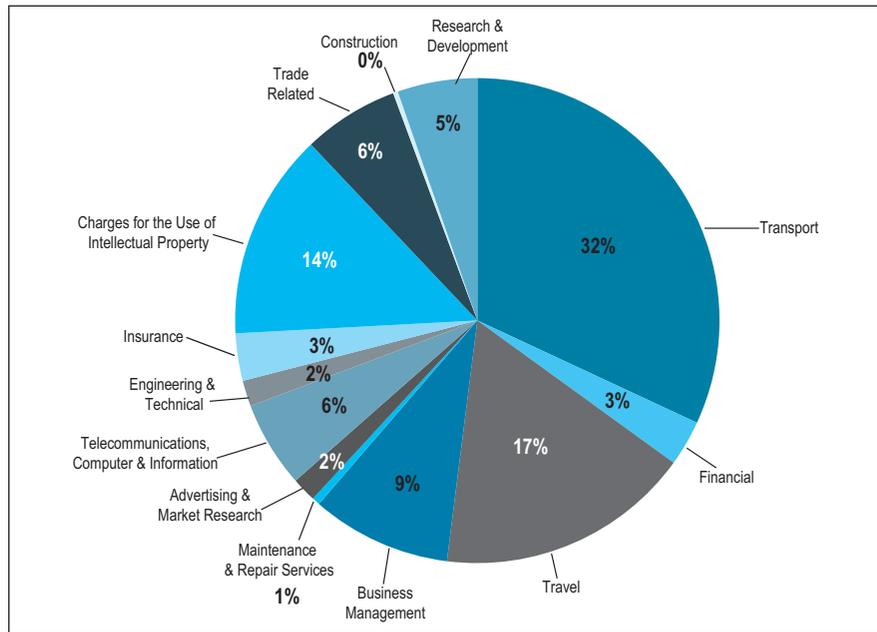
Singapore took commitments in all the twelve sectors under CECA but there

**Figure 4.1: Shares of major services to overall Exports, 2014**



Source: Singapore International Trade in Services Statistics 2014

**Figure 4.2: Share of major services to overall Imports, 2014**



Source: Singapore International Trade in Services Statistics 2014

were also notable sub-sectoral exclusions including printing and publishing, broadcasting, primary education, refuse disposal and sanitation. In the area of health services, it had minimal commitments that did not include FDI in hospitals, telemedicine, etc.

Two sectors, namely financial services and telecom services, received significant market opening commitments by both countries. In financial services, three Singaporean banks, Development Bank of Singapore (DBS), United Overseas Bank (UOB) and Overseas Chinese Banking Corporation Limited (OCBC) were allowed to establish fifteen branches in India over a period of four years. The three banks could also be established locally as wholly owned subsidiaries, but each should have a single form of presence. In return, Singapore agreed for three Indian banks to be granted Qualified Full Banking (QFB)<sup>2</sup> privileges while there was no limit on those seeking only full banking license.

On portfolio investment, some relaxation was given for the two government

owned wealth management companies of Singapore, the TEMASEK and General Investment Corporation (GIC), which could each invest up to 10 per cent equity of paid-up capital in Indian companies or the prevailing threshold at any point of time, whichever was higher.

As for asset management companies, established in India, owned or controlled by Indian or Singaporean judicial persons, they were permitted to invest an additional US\$250 million over then existing cap of US\$1 billion for investment in equities and securities traded in the Singapore stock exchange.

In respect of insurance services, India permitted the three Singapore banks to incorporate an insurance company provided none of them individually or collectively owned more than 26 per cent. An Indian entity, in the form of India Insurance Alliance, which was a joint venture of five Indian insurance companies, was already in operation in Singapore.

There was also a special carve out for the supply of education, audio-visual,

telecommunications and financial services through commercial presence (Mode 3). In these sectors there was requirement for ownership to be vested with Indian or Singaporean persons. However, in the telecom sector, seventeen companies owned or controlled by persons of Singapore were allowed to be treated as juridical persons of Singapore even if they did divest their majority later to third country shareholders. India also agreed to a FDI limit of 74 per cent for internet infrastructure.

Of particular interest to India was also the chapter on movement of natural persons that was quite a novelty at that time. Both the countries agreed to facilitate movement of professionals and short term service providers without any 'labour market testing, economic needs testing or other procedures of similar effects' for temporary entry. Business visitors were to be extended a two month entry that was extendable by another month. Intra corporate transfer of employees was permitted for two years to begin with, which could subsequently go up to eight years. Short term service suppliers, who were employees or were service suppliers of a firm not having commercial presence, could receive entry for ninety days for performance of a contract that was extendable by a further ninety days. Individual professionals, who belonged to any of the 127 disciplines listed in Annex 9A, were also permitted to take up contracts for up to one year. In addition to all the above, spouses and dependants of persons given long term entry could also take up employment. The chapter also had a specific provision that persons granted temporary entry shall not be required to make contributions to social security funds in the host country.

Comparisons with the commitments taken by India in two other bilateral comprehensive FTAs that were signed subsequently may be of interest. Since

these happened five years later, by when India's investment regime had undergone further liberalisation, it was to be expected that India's commitment in the CEPAs with both Republic of Korea and Japan would be higher with coverage extending to practically all the sectors. But neither of the latter had any commitment that went beyond the extent of liberalisation at the time of signing or involved a relaxation to the existing regulatory framework as in the case of CECA. Also noteworthy is that the wide variety of disciplines listed in Annex 9A belonging to which professionals become eligible for short term movement under CECA remains unmatched by the two later FTAs. CECA also had a built-in agenda for mutual recognition agreements (MRA) to be reached between professional bodies of the two countries in several services sectors relating to authorization, licensing or certification requirements for service suppliers. CECA specifically required the two parties to ensure that the respective professional bodies in the sectors of accounting and auditing, architecture, medical (doctors), dental and nursing conclude within twelve months of CECA coming into force. This commitment was, however, not subject to the dispute settlement provisions of the agreement.

### **Bilateral Trade in Services**

According to WTO data India was the ninth largest source of import for Singapore (1.9 per cent share) with imports worth US\$ 2.88 billion in 2014. In the same year, Singapore exported services worth US\$ 3.44 billion to India (tenth in its export profile with a 2.3 per cent share). While Singapore had all along been having a trade surplus with India, imports from India were growing at a more rapid pace of an average 8 per cent in recent years, as against a corresponding 3 per cent in the case of Singapore, raising the prospect of a narrowing of the deficit.

**Table 4.1: India-Singapore Services Trade**

(in million S\$)

	2003	2005	2010	2011	2012	2013	2014
Singapore's* Export to India	1242.4	2113.1	4241.6	4351.1	4442	4978.2	4352.4
Singapore's* Import from India	800.0	1272.1	2907.5	2978.8	2962.9	3447.8	3652.2
Trade* Balance	442.4	841.0	1334.1	1372.3	1479.1	1530.4	700.2

Source: Department of Statistics, Singapore

\*The Figures do not include figures for travel and a few other services.

Since trade figures in a disaggregated form are not available from Indian or WTO sources, the comparative picture that follows is done based on figures available in the website of the Ministry of Trade and Industry of Singapore with trade denominated in Singapore dollars (S\$). These figures are based on data compiled from the trade in services survey of companies conducted by Singapore and excludes data on travel services, freight on imports on transport services, insurance on imports, government services, etc., As will be clear from the discussion later on travel services, India's trade deficit in services will be far more if travel services were also taken into account.

### Broad Trade Trends at Sectoral Level

Exports from Singapore to India have more than doubled since CECA came into force in 2005. Analysing Singapore's export to India, following points are noteworthy.

- Transport services have accounted for the bulk of Singapore's exports. While the export figures saw a steady and rapid growth from 2003 to 2008 when it reached S\$1.92 billion they subsequently declined with both the financial crisis and the general trade slowdown affecting it. Only since 2012 there has been some revival although at S\$ 2.11 billion in 2014, it does not imply a significant growth in recent years.
- Financial services and Construction services have maintained more steady

growth and expansion. On the other hand, insurance services which climbed to S\$240 million in 2009 declined to S\$107 million in 2012 but has sharply climbed to S\$322 million in 2014.

- Revenues for Singapore from maintenance and repair services peaked at S\$262 million in 2008, showed some growth later but have declined to S\$165 million in 2014.
- Exports of telecom, computer and information services exports from Singapore to India have undergone fluctuating fortunes rising for example to S\$ 401.5 million in 2013 but declining to S\$203.4 million the following year. This has also been the case with business management services.
- Exports of personal, cultural and recreational services also grew from a mere S\$5 million to S\$ 207 million in 2011 but delined to S\$107 million in 2014.
- The residual other services again grew from only S\$ 274.5 million to S\$962.6 million in 2012 but declined to S\$390.8 million.

Imports of Singapore from India had risen by 2014 to three times the figure in 2005 even as the base was relatively low. Performance of various types of services were also relatively more steady.

- Transport services exports constituted the bulk of imports from India going up from S\$552 million in 2005 to S\$ 1025 million in 2014. There was however some dip in 2009 and 2012.

- Telecom, computer and information services witnessed sharper and more steady growth from only S\$ 136 million in 2005 to S\$735 million in 2014. This was also the case in respect of business management services, much of which presumably were accounted for by IT enabled services, in which Singapore's imports grew from S\$85 million in 2005 to S\$551 million in 2014.
- Payments by Singapore to India on account of financial services also grew from only S\$18 million in 2005 to S\$232 million in 2014. Payments on account of insurance services, however followed an unsteady trend peaking in 2010 and 2013 to above S\$300 million but declining to S\$252 million in 2014.
- Trade related services payments remained substantial exceeding S\$ 500 million during a few years but declined to S\$341 million in 2014.
- Construction services saw a steady climb from nil in 2005 to S\$ 103 million in 2014.
- Other services saw a trebling from only S\$ 105 million in 2005 to S\$ 355 million in 2014.

### Movement of Natural Persons

At the time CECA was signed, its detailed provisions on this mode of delivery of services (Mode 4 as per WTO parlance) was regarded a major plus for India in return for the many concessions it had agreed to on other issues in the agreement. Annual figures about movement of short term service suppliers, professionals and intra corporate transferees from India to Singapore are however not publicly available. But there can be little doubt that CECA facilitated the process that enabled many Indian service suppliers and professionals to benefit from the large need for external service providers that the Singapore economy had come to depend on in pushing forward its economic development.

The rising number of foreign workers, however, became an issue in the Singaporean elections in 2011. This resulted

**Table 4.2: Singapore's Export of Commercial Services to India**

		(million S\$)									
S. No.	Variables	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
	India (Total)	2113.1	2539.2	3280.8	3569.2	3842.8	4241.6	4351.1	4442	4978.2	4352.4
1	Maintenance And Repair Services	100.6	147.6	207.9	262	164.7	220.1	201.4	163.5	171.2	165.7
2	Transport	1264.8	1482.7	1868.9	1923.2	1570.5	1806.7	1699.7	1898.1	2187.2	2109.6
3	Insurance	71.1	114	138.1	150	240.2	227.4	213.6	106.9	166.1	321.9
4	Construction	9.1	14.9	33.6	44	183.5	177.6	182.9	237.1	246.2	268
5	Financial	81.1	155.2	222.4	210.3	218.5	373.6	401.3	367.2	408.2	398.2
6	Telecommunications Computer & Information	179.7	169.8	206.1	240.7	332.6	274.4	227.8	207.9	401.5	203.4
7	Charges for the use of Intellectual Property	12.7	8.1	9.1	22.3	12	14.6	20.7	25.6	23.9	24.1
8	Personal cultural and recreational	5.8	5.6	20.7	154.9	171.5	204.1	207.3	82.5	105.3	107.2
9	Trade-related	50.2	12.3	21.7	34.9	32.9	66.9	103.2	110.5	106.3	66.6
10	Business Management	63.6	101.2	143.4	218.7	194	226.1	251.3	280.1	420	296.9
11	Other Services	274.5	327.7	408.8	308.1	722.4	650.1	841.9	962.6	742.1	390.8

Source: Singapore Department of Statistics.

**Table 4.3: Singapore's Import of Commercial Services from India**

(in million S\$)

S. No.	Variables	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
	India (Total)	1272.1	1547.4	1896.8	2348.7	2399.7	2907.5	2978.8	2962.9	3447.8	3652.2
1	Maintenance And Repair Services	1.8	3.1	-	-	-	-	-	4.5	5.9	4.3
2	Transport	551.9	611.7	675.1	753.8	703.9	769.8	855.1	809	836.1	1024.7
3	Insurance	50	52.5	46.8	77.9	135.3	305	163.1	122.8	336.3	252.3
4	Construction	-	3.6	14.6	13.3	68.6	56.4	69.1	90.2	76.4	103.1
5	Financial	17.7	58.7	77.8	101.6	112.7	171.5	176.7	216	209.1	232.3
6	Telecommunications Computer & Information	136	143.9	191.7	312.6	320.3	423.7	479.4	453	589.7	734.6
7	Charges for the use of Intellectual Property	-	-	10.2	-	-	-	-	80.2	66.6	18
8	Personal cultural and recreational	53.8	-	-	49.7	35.1	87	90	24.8	31.6	36.2
9	Trade-related	255.9	356.1	480	540.5	437	437.3	466.7	522.5	551.4	340.7
10	Business Management	84.9	108.9	178.5	274.1	320.4	346.8	309.7	359.7	473.3	550.7
11	Other Services	105.1	154.2	164.6	207.7	220.6	258.1	281.8	280.2	271.4	355.2

Source: Singapore Department of Statistics

in the government beginning to move more cautiously on hiring foreign workers. A white paper was also brought out by the government in January 2013 on Singapore's population that sought to address this issue. Following these moves, the government now appears committed to a policy whereby the pace of foreign work force would grow broadly in tandem with local work force and that the government would maintain the foreign share of Singapore's workforce to the existing one third level of local population. This would mean that the growth in foreign work force levels would taper off and plateau by 2030 since growth of local work force will be negligible by that time. Measures to slow down the growth began in 2012 itself with the government hiking the qualifying salaries for some of the professional grades and also applying more stringent requirements in the form of better educational qualifications. The impact

of these measures is already evident with the growth rate of Singapore's non-resident population steadily declining in the last few years to reach 2.3 per cent in 2015. (see Table 4.4).

What is more, in a scenario of reduced growth of foreign workers, the percentage of Employment Pass holders among them who are involved in managerial, executive and specialised jobs (the main category addressed by CECA), came down to 13.54 per cent in 2015<sup>3</sup> as against 14.6 per cent in 2011. On the other hand, the share of S pass holders who are in retail, manufacturing and health care rose from 9.5 per cent in 2011 to 12.86 per cent in 2015. And the share of work permit holders declined from 75.2 per cent to 71.87 per cent. Figures, are however, not available to what extent Indian nationals figure in the different categories.

Some idea about the numbers and trends can also be gleaned from the bilateral

remittance figures provided by the World Bank though it is likely that professionals moving to Singapore for providing a limited service or fulfilling a very short contract may not be sending remittances during their short sojourn. While the major share of bilateral remittances from Singapore is to China (45.7 per cent in 2015), India was second with a share of 13.58 per cent. What can be seen from Table 4.5 is that while the total remittances from Singapore peaked at US\$ 6.7 billion in 2012, they have been at a lower level since then. India's share also peaked in 2012 at 18.24 per cent but has since fallen to 13.58 per cent in 2015. This may indicate that the number of Indian personnel coming to Singapore for work purposes has shown an absolute decline in the last couple of years while Singapore itself has so far been only reducing the annual workforce addition.

All these developments do raise some concern whether Singapore will duly recognise its preferential trading relationship with India that is also reiterated in the very first line<sup>4</sup> of Chapter 9 of CECA while it makes decisions on movement of professionals and service providers. It has been reported<sup>5</sup> that India has raised this issue with Singapore. This news report in 2013 also quoted an unnamed senior Singapore official as mentioning that the one third is a long term target and Singapore has not imposed any quotas for any country.

In taking such a move, he also reportedly added that Singapore has not contravened any provisions in WTO or CECA. There are two sectors, IT services and banking, where the issue relating to movement of natural persons has had a strong impact. These will be discussed in some detail in the respective sections.

It is, however, important to note here that the Minister for Manpower of Singapore Mr. Lim Swee Say stated in his Policy Speech<sup>6</sup> at the Committee of Supply on 8 April 2016 that henceforth work pass applications for Employment Pass will not only look at individual related criteria such as their qualifications, experience and salary but also the company related factors. These include:

- How strong is the Singaporean core in the company?
- Does the company have any firm commitment to nurture and strengthen the Singaporean core for the future?
- As for companies with weak Singaporean core and weak commitment to nurture Singaporean core are concerned, how much will Singapore be affected if they cease to be there?

These if applied for movement of professionals from India may not be in conformity with Article 9.3.3 of CECA that specifically rules out either party requiring labour market testing, economic needs

**Table 4.4: Foreign workforce numbers in Singapore**

S. No.	Variables	Dec. 2011	Dec. 2012	Dec. 2013	Dec. 2014	Dec. 2015
1	Foreign Work force	1,197,900	1,268,300	1,321,600	1,355,700	1,387,300
2	Growth rates		5.87	4.20	2.58	2.33
3	Employment pass	175,400 (14.6)	173,800	175,100	178,900	187,900 (13.54)
4	S. Pass	113,900 (9.5)	142,400	160,900	170,100	178,600 (12.86)
5	Work permits for construction, domestic workers etc.	901,000 (75.2)	942,800	974,400	991,300	997,100 (71.87)

Source: Website of Ministry of Manpower, Singapore

**Table 4.5: Bilateral Remittances from Singapore to India**

(in million US Dollars)

S. No.	Variables	2010	2011	2012	2013	2014	2015
1	Remittances from Singapore to India	957	1113	1225	840	846	828
2	Remittances from Singapore to Worldwide	5764	6583	6717	5565	5911	6095
3	Percentage share of remittances to India	16.6	16.9	18.24	15.1	14.31	13.58

Source: Compiled from World Bank Remittances database

testing or other procedures of similar effect as a condition for temporary entry.

### Progress on the Built-in Agenda on MRA

The Indian and Singaporean professional bodies in the areas of accounting, architecture, medical, dental and nursing have held several meetings as envisaged under CECA with a view to finalizing mutual recognition agreements. So far however, definite progress has emerged only in respect of nursing. The Singapore Nursing Board and Indian Nursing Council have reached agreement<sup>7</sup> by which the former has agreed to recognize the nursing degrees awarded by four Indian nursing institutes (AIIMS, Delhi; Manipal College of Nursing; Christian Medical College, Vellore and College of Nursing, Thiruvananthapuram). However, even this limited agreement is still to be formally signed.

From indications it appears that there could be a greater chance for agreements to be also reached in the areas of accountancy and architecture. The website of the Institute of Chartered Accountants of India (ICAI) notes that 'Under the aegis of Comprehensive Economic Cooperation Agreement between Government of India and Singapore the institute is in dialogue with CPA Singapore for assessment of qualifications leading to MRA. Both the institutes have initiated the process of comparative evaluation of each other's qualification and other requirements. The exercise is at advanced stage.<sup>8</sup>

The Board of Architects of Singapore and the Council of Architecture of India

have also met on several occasions to discuss the registration requirements and regulatory provisions prevailing in the two countries. Since mutual recognition may also require some legal changes, it is understood that these are also under consideration.

It may be mentioned that ASEAN presently has MRAs among its member countries, including Singapore, in the areas of Dental Practitioners, Engineering Services, Medical Practitioners, Nursing Services, Tourism Professionals, Architectural Services and Accountancy Services. Additionally, there is also an ASEAN MRA framework arrangement on Surveyors. Furthermore, Singapore separately has MRAs with certain other partners. For example, it has an MRA with CPA Australia on Accountancy. (ICAI of India also has an MRA with CPA Australia).

It must be clarified here however that existence of an MRA by itself is not an agreement for licence to practice the profession in a host country for which the respective professional body may have different path ways in different countries. But MRAs are facilitating mechanisms between the home country and the host country and securing the license, wherever necessary, becomes easier. The common usage of English language in both India and Singapore makes it a good country for India to continue trying to conclude MRAs that can also then serve as a model for taking up with other countries. But considering Singapore's market size and recent sensitivities on manpower inflows, India would need to show pragmatism in terms of the number of professionals who may actually be able

to benefit. The attempt should be to get equivalence of standards and qualifications with closer relations developed between the professional bodies. If necessary it can start with fewer qualifying institutions/degrees in India that can then be further expanded depending on further discussions in the future.

## Travel Services

### Indian tourists visiting Singapore

Travel services basically account for earnings from tourism and associated services and principally depend on tourist arrivals. A statistics and market insight report on India published by the Singapore Tourism Board (STB) in 2014 noted that India was Singapore's fifth largest tourist market. Likewise, among Indian outbound travelers, Singapore featured among the top five favoured tourist destinations. While the actual number of Indian tourists to Singapore keep rising, their growth which was in double digits in the first few years after CECA was signed, declined subsequently following the economic crisis. It picked up in 2010 but has since shown more moderate growth. India's share in the total number of foreigner arrivals has been generally at around 6 per cent except in the period 2007-2010 when it climbed to over 7 per cent. (see Table 4.6)

Leisure tourism accounts for 68 per cent of Indian visitors to Singapore with

the balance 32 per cent being business visitors. Increasing disposable income, improved connectivity, decreasing cost of international carriers particularly with low cost carriers, availability of affordable travel packages, facility of English language, cultural links and availability of Indian cuisine are regarded as some of the main reasons for the rising numbers. On the other hand, the high cost of living associated with Singapore is regarded a restraint that appears to have come into play in more recent years. Indian business travelers are the second most numerous in Singapore after China.

On an average, an Indian business traveller stays for five days and spends S\$1800, that is assessed as 27 per cent more than his counterparts. Considering that more than one million Indian tourists visited Singapore in 2015, and taking an average spend of US\$1000 by each one of them, Singapore's annual receipts on this count alone would exceed US\$ 1 billion. These do not, however, figure in the services statistics in Tables 1, 2 and 3.

### Singapore tourists coming to India

The number of tourist arrivals in India from Singapore has also seen good growth over the years. From only 68,666 arrivals in 2005 it has more than doubled to reach 152,238 in 2015 accounting for a 2 per cent share among all tourist arrivals in India (Table

**Table 4.6: Number of tourist arrivals in Singapore from India**

S. No.	Variables	2005	2010	2011	2012	2013	2014	2015
1	No. of tourist arrivals from India	583,592	828,903	868,991	894,993	933,553	943,636	1,013,986
2	Growth rate over previous year	23.8	14.2	4.8	3.0	4.3	1.1	7.5
3	No. of tourist arrivals from all sources	8,943,041	1,1638,336	13,171,303	14,496,091	15,569,923	15,095,152	15,231,469
4	Percentage share of Indian tourists	6.52	7.12	6.6	6.17	6.0	6.25	6.65

Source: Compiled from data on Singapore Tourism Board Website

4.7). After Malaysia, Singapore is also the second highest source of tourist arrivals into the country from ASEAN countries. While only 5 per cent of visitors from Singapore came for business purposes in 2005, at 35.3 per cent in 2014 they constituted a major share. Almost a third of visitors arrive during the fourth quarter of the year and Chennai at 28 per cent is the most favoured city of arrival. Delhi and Mumbai come next at slightly over 20 per cent each. But considering the much smaller base, tourist receipts for India from Singaporean visitors would be relatively lower than arising from Indian tourists visiting Singapore.

## Transportation

### Air Transportation Services

Liberalisation of air services is normally not part of FTA commitments and is governed by separate bilateral agreements. However, Chapter 8 of CECA on air services recognized the strategic partnership in civil aviation and the importance of air connectivity to support the expansion of tourism, trade and investments between the two parties. It also committed both the parties to review and enhance their bilateral air services agreement and explore further areas of mutually beneficial cooperation.

The bilateral consultations took place in August 2005 resulting in enhancement of services that have subsequently been overtaken by further liberalization and

enhancement in 2007 and in 2013. The latest MOU in 2013<sup>9</sup> further increased the seating capacity to the six metros by about 10 per cent with Indian and Singaporean air carriers having 29,700 seats each per week in each direction. This revised capacity is in addition to unlimited seating capacity to 18 Tier 1 and Tier 2 cities in India, which was available for all ASEAN countries including Singapore.

Presently there are 216 direct flights between India and Singapore, covering all the six metros in India and Singapore as well as nine other Tier 1 cities – Ahmedabad, Amritsar, Kochi, Coimbatore, Jaipur, Lucknow, Tiruchirappalli, Thiruvananthapuram and Vishakapatnam. The total seat capacity in the flights between all Indian cities and Singapore also adds up to almost 47,000 per week in each direction.

The positive aspect is that the number of air passengers between the two countries has grown significantly. From India to Singapore, they have grown from 909,110 in 2005-06 to 1,698,480 in 2015 and on the return sector the growth was from 853,310 to 1,639,140 during the same period as per data available on the Website of DGCA. Also the total air freight carried from India to Singapore added to 49,422 tonnes in 2015 and totalled 47,697 tonnes in the reverse direction for the same year.

There is however a wide gap between the levels of utilization by the air carriers

**Table 4.7: Number of tourists arrivals from Singapore to India**

S. No.	Variables	2005	2010	2011	2012	2013	2014	2015
1	No. of tourist arrivals from Singapore to India	68,666	1,07,487	1,19,022	1,31,452	1,43,025	1,50,731	1,52,238
2	Growth rate over previous year			10.7	10.4	8.8	5.4	4.5
3	No. of tourist arrivals in India from all sources	3.92	5.78	6.31	6.58	6.97	7.68	8.03
4	Percentage share of Singaporean tourists				2.00	2.05	1.96	1.9

Source: Compiled from Indian Ministry of Tourism Database

of the two countries. The seat utilization in respect of flights relating to the metros was relatively low at 43.49 per cent by Indian carriers as against 89.72 per cent by Singapore designated airlines.

The performance by Indian carriers between Tier 1 cities and Singapore, where there were no seat constraint capacities, was even poorer. Only Air India, from the Indian side had a direct flight every day from Tiruchi to Singapore. On the other hand, all the four Singapore air carriers – Singapore Air lines, Silk Air, Tiger Air and Scoot, in all cover nine Tier 1 cities totaling to 45 flights per week.

As a result of better capacity utilization in the case of metros, and also owing to greater coverage of Tier 1/2 cities, it is not surprising that Singapore carriers flew 1,143,750 passengers from India to Singapore and 1,109,210 passengers on the return in 2015 – in effect accounting to 2/3rds of the passenger traffic with only a third picked up by Indian carriers.

In the case of cargo the percentages were even higher at over 80 per cent by Singapore carriers.

Will Indian carriers be able to do better in the future? There is a perception that Indian carriers can do better with more attractive slotting arrangements at the Singapore end. This concern will need to be addressed. Secondly, more attention needs

to be given to cargo movement that acquires even greater importance if India has to benefit from the likely growth in e-commerce that will increase the demand. Additionally, if the ‘Make in India’ programme needs to succeed, Indian carriers will need to be able to cater to ‘just in time’ supply requirements if India has to be able to become part of the growing production chain arrangements in the Asia-Pacific region. For this to succeed however more attention will also need to be paid to drastically reduce the dwell time at Indian airports that is far too high compared to other Asian airports. The new Indian aviation policy has sought to deal with many of these issues. It has also relaxed the 5/20 policy that had constrained new or smaller or newer Indian air carriers from entry into the international traffic segment.

The relaxation could enable more Indian carriers to also cater to the Singapore sector including Vistara airlines that began operations in 2015 and is a joint venture between the Tata group of India and the Singapore Airlines, with the former holding a 51 per cent share.

CECA could also promote further cooperation between the two countries in the areas of cargo handling and airport logistics in which Singapore has acquired a world class reputation. (The Singapore company SATS is already working with Air India and the Taj Group.)

**Table 4.8: Passenger and freight traffic in 2015 between India and Singapore**

	Indian Carriers	Singapore Carriers	Total	Percentage of Singapore Carriers
Passengers to India from Singapore	529,927	1,109,210	1,639,137	67.67
Passengers from India to Singapore	554,729	1,143,750	1,698,479	67.33
Freight to India from Singapore	9,060	38,637	47,697	81.0
Freight from India to Singapore	9,582	39,840	49,422	80.61

Source: Compiled from data on DGCA website.

## Maritime Services

Shipping and maritime services constitute an important part of services trade between India and Singapore. India's merchandise exports to many third countries also get routed or transshipped via Singapore for a variety of reasons that makes these services even more important. Singapore's role in the operation of many of the shipping services is further enhanced since many foreign owned shipping companies have chosen to register their vessels in Singapore because of some taxation and other benefits.

While an exact quantification of what may be shipped between the two countries appear hard to find, what can be detailed in this section is to give some idea of the bulk goods trade that arrive in Indian ports from Singapore or vice versa. A good share of the trade, perhaps even a majority, also takes place through container carriers with some of them taking place through smaller feeder vessels and the rest through liner shipping.

## Bulk Goods Trade

Tables 4.9 and 4.10 give the volumes of bulk items traded between major Indian ports and Singapore during 2014-15. While imports into India are petroleum products, fertilizers, coal and coke, steel and edible oil, exports are basically refined petroleum products and food grains. Some imports would likely be of third country origin but transshipped at Singapore.

The bulk goods carriers plying between India and Singapore are both Indian and foreign owned. Some Indian business groups, dealing in commodity trade, also own vessels and find it convenient to do their business from Singapore. The joint venture TATA NYK Shipping Private Limited that owns several bulk carriers and whose services are not just limited to India-Singapore voyages is also headquartered in Singapore.

**Table 4.9: Principal Commodities unloaded as bulk cargo in India's main ports from Singapore in 2014**

(in thousand tones)

	All major ports
POL - crude	6934
POL - products	773
Fertilizer	33
Fertilizer (Raw material)	72
Iron and Steel	64
Edible Oil	967
Coking coal	127
Coal thermal	258
Total	9228

Source: Ministry of Shipping, Govt. of India

**Table 4.10: Principal Commodities loaded as bulk cargo in Indian major ports for Singapore in 2014**

1. (in ,000 tonnes)

	All major ports
POL - Products	5754
Food Grain	44
Other ores	7
Total	5805

Source: Ministry of Shipping, Govt. of India

## Container Carried Trade

As for container carried trade a broad estimate is that 80 per cent is carried through liner shipping services (and there are 26 such services with 147 vessels plying the different routes) with the balance being taken by feeder services operated by smaller vessels. While Shipping Corporation of India (SCI) forms a part of the Index 1 line plying between Far East and India touching also Singapore, there are many Singapore based shipping lines, including PIL, X-Press Feeder, Bengal Tiger Line etc., that are part of these liner schedules.

Another relevant aspect is the role of non-vessel operating container carriers (NVOCCs), which do not necessarily own ships but own and lease containers, buy space from container carriers and sub-sell it

to smaller shippers. They also collect small quantities of cargo from customers and aggregate them into a full container load for shipments. Several companies in this line of business, including Indian companies, are located in Singapore and form an important link in the logistical chain.

Finally, an aspect also to note here, which will be described in more detail, in the chapter on investment, is the investment in port and container handling infrastructure by the Port of Singapore Authority (PSA) International including its building of a new container handling terminal at Jawaharlal Nehru Port at an estimated cost of US\$ 1.25 billion that will handle 4.8 million 20 feet TeUs by the end of first phase to be completed in 2018.

### IT Services

Almost all major Indian IT companies including HCL Technology, Infosys, Wipro, Tata Consultancy Services (TCS) and Tech Mahindra are present in Singapore and cater to clients in diverse sectors ranging from finance, infrastructure management and healthcare with technologies to enterprise mobility, cloud and analytics. Some of them also have their Singapore office serving as the regional headquarters for the ASEAN region. Their activities, as gleaned from press reports, are given below:

- HCL: HCL started its operations in Singapore in 1980 and was HCL's first foray outside India. It now serves as the regional headquarters for the Asia Pacific region in Singapore. HCL introduced the Singapore IT landscape to many a leading international brands - the first RDBMS, first Enterprise Storage, first ERP, etc. HCL has provided the first ever Wi-Fi based patient tracking system in Asia, for a leading healthcare provider in Singapore. It also opened a co-innovation lab in Singapore in July 2011 with Eli Lilly, a global pharmaceutical corporation, to develop new and disruptive technologies and solutions, and accelerate the process of bringing ideas to fruition together with a wider collaborative ecosystem.<sup>10</sup>
- Tata Consultancy Services (TCS): TCS Singapore entered Singapore in 1987 and provides IT services, solutions and outsourcing to some of the leading banking, finance and insurance firms operating in Singapore and has a number of globally recognized brands in airlines, telecom and retail as its customers. TCS Singapore also set up a US\$ 2 million, 750-seat near-shore delivery centre in Changi Business Park, as the primary software development and delivery centre for the Singapore customers of TCS.<sup>11</sup>
- It has built strong academic relationships with National University of Singapore (NUS), Nanyang Technological University (NTU) and Singapore Management University (SMU) and strategic partnerships with leading technology companies like Oracle, IBM, HP and SAP.<sup>12</sup> In August 2011, TCS set up the iCity Lab in collaboration with Singapore Management University for smart solutions for intelligent Asian cities at an investment of US\$ 6 million.<sup>13</sup> In March 2015, the company expanded its presence in Singapore with the opening of the new 1000-person TCS Singapore Banking and Financial Services (BFS) Center which provides a range of application development, digital and IT Services to leading global banks in the Asia Pacific region.<sup>14</sup>
- WIPRO: Wipro Singapore Pte Limited was incorporated on 13 July 2007 to act as a software development and investment company. In 2007, Wipro entered into a definitive agreement

with Oki Electric Industry, Singapore to acquire Oki Techno Centre-Singapore (OTCS).<sup>15</sup>

- Cognizant: Cognizant started operations in Singapore in 2005 and has steadily grown its presence and investment in the country. The company's area of IT operations in Singapore extends to banking, insurance, life sciences, manufacturing, retail and logistics, consumer goods, and hospitality. In 2012, Cognizant expanded its presence in Singapore with the opening of a new 30,000 sq ft development centre located within the Changi Business Park. The centre which accommodates about 370 employees and enhances Cognizant's existing operations in Singapore, which include regional leadership and operational support services for the company's businesses in the Asia-Pacific region.<sup>16</sup>
- Tech Mahindra: Tech Mahindra entered Singapore through its partnership with Satyam Computer Services Ltd., which established its first "Global Innovation Hub" facility dedicated to research and development (R&D) in Singapore in 2006. The facility was developed to test and develop applications with technology partners in efforts to continually improve services to global customers. Later in 2013, Satyam and Tech Mahindra merged into a single entity. The company reportedly contributes around 23 per cent of the company's global revenues and is looking to build on this.
- L&T Infotech: L&T Infotech started operations in Singapore through a branch office which was opened in 2002. Its major focus areas are manufacturing, telecom (mainly mobile phone applications) and energy and petrochemicals.<sup>17</sup> In 2011,

the company opened a new centre in Singapore, intensifying focus on wealth management technology for its clients, mostly in the banking and finance sector.<sup>18</sup>

- Infosys: Infosys commenced operations in Singapore in 2004, serving as its regional hub addressing business demands in the South-east Asian market. In 2011, Infosys Ltd. invested nearly US\$ 6 million to set up a new software development center in Singapore, as an innovation hub and deliver high-quality service capabilities to clients across verticals.<sup>19</sup>

### Growth and Prospects

Looking at the trends in IT spend in Singapore, it is seen that they have been growing at around 5 to 6 per cent annually, although there was stagnation in 2015. (see Figure 4.3)

While Singaporean companies have around 63 per cent of the market share, Indian companies (having India as their headquarters) accounted for 7 per cent of the revenue of all global vendors in the Singaporean market in 2014. The balance 30 per cent share or so is held by international IT majors.

The relative market shares of ten Indian companies in 2014 may be seen in Table 4.11.

As already seen from Table 4.3, Singapore's imports of IT and IT enabled services have seen a steady rise over the years.

What may also be of interest is the relative share of business of Singapore based affiliates of Indian software companies as against all foreign applications of Indian companies. This share has remained at 3.3 per cent for the last three years as per an RBI survey.<sup>20</sup> They had a higher share of 4.4 per cent in 2011-12.

## Challenges Ahead

As indicated earlier, employment of foreign workers has become a very sensitive issue in Singapore. In response to this concern promoting local work force participation has become a key government priority. Indian IT companies should be responding to this priority by making efforts to attract local talent and to train them and develop their careers. While this is important, they will also need the understanding from the authorities that these are allowed to be undertaken in a manner that does not affect their business prospects. Article 9.1.3 of CECA clearly notes, while recognizing the right of a party to regulate entry of natural persons' that such measures will not be 'applied in a manner so as to unduly impair the benefits accruing to the other party or delay trade in goods or services or conduct of investment activities under this Agreement'.

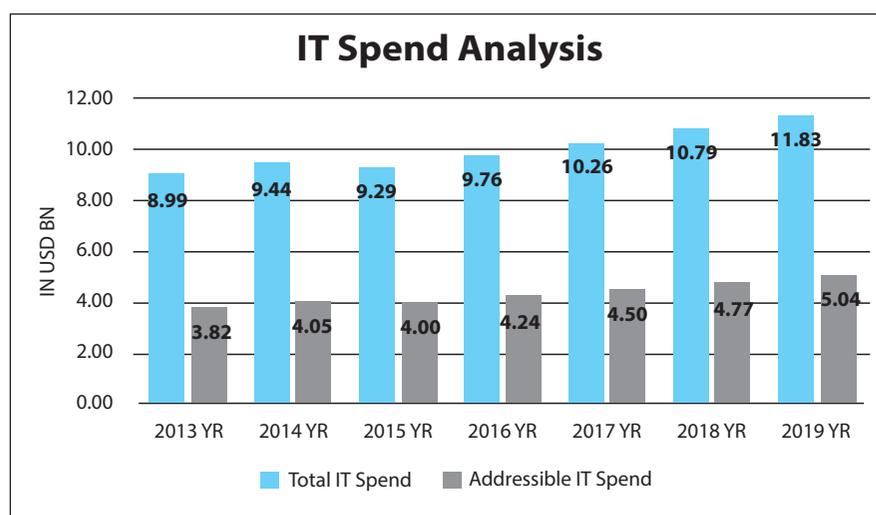
Additionally, the specific commitments entered into by the two countries under CECA for short term movement of service suppliers and longer term entry for intra-corporate transferees (managers, executives and specialists) and professionals become relevant. For all such temporary entry,

CECA also specifically has a general principle in Article 9.3.3 that 'neither party shall require labor market testing, economic needs testing or other procedures of similar effects as a condition for temporary entry in respect of natural persons'.

Indian IT companies are themselves known to be making efforts towards greater hiring and training of local personnel including even polytechnics. They are also developing joint programmes with some of the local universities. But the availability and interest evinced among probable candidates also needs to be kept in view. Timely delivery of a service is a key objective of every IT vendor company. It needs to be also considered that several Indian IT companies conduct their regional operations from Singapore.

A possible way to alleviate the problem in the IT sector could be for Indian IT companies to rework their business model that enhances greater reliance, in terms of work support, on their Indian headquarters and reducing their on-site personnel presence requirements. A via-media could then be devised, based on bilateral discussions and negotiations, for fast track clearance of visas for multiple entry

Figure 4.3: Total IT spend of Singapore



Source: Gartner ITS Service Line Forecast 2015Q3.

shorter duration visits for personnel from headquarters.

An amicable way needs to be found that will not commercially affect the operation of Indian IT companies who are servicing their clients in Singapore and in the region in a range of critical sectors from banking to infrastructure and from airlines to health care. What will be important is to ensure greater predictability in the system so that businesses can plan their further development on that basis. Indian IT companies also perhaps need to give greater publicity and outreach for their local recruitment activities and training efforts.

### Financial Services

As seen from Tables 4.2 and 4.3, bilateral trade in financial services between the two countries has undergone steady growth in both directions but for minor reversals in some years. In 2014, Singapore exported financial services worth S\$ 398 million to India while importing S\$ 232 million. India's exports which were merely S\$18 million in 2005 rose more than tenfold during this period. In the case of Singapore these have grown fivefold with a wider base to begin with.

### Indian Banks in Singapore

Indian banks have had a presence in Singapore for a long time since 1941 when

both Indian Bank and the Indian Overseas Bank, head quartered in Chennai, began their operations with branches in Singapore. Eight Indian commercial banks have their presence today with the State Bank of India (SBI) having the largest level of operations with six branches. Along with ICICI Bank which has two branches, these are also the only two Indian banks, among eight foreign banks, which have the Qualifying Full Bank (QFB) status in Singapore. QFBs have additional privileges compared to full banks and these include increased branching, ATMs off premises, sharing ATM network with other QFBs and ability to commercially negotiate for their credit card holders to get advances from local bank ATMs, etc.,

In addition to the above, The Bank of India and the United Commercial Bank which set up branches in Singapore in 1951 are also active as full banks with the latter having two branches. The Bank of Baroda operates as an offshore bank and the AXIS Bank has been functioning as a merchant bank for the last five years.

It may be mentioned that there were some reservations despite CECA commitments, regarding the grant of QFB status to three Indian banks in Singapore. A view was apparently taken that the credit rating requirements of applicant banks were not on par with prudential requirements of the Monetary Authority of Singapore.

**Table 4.11: Top India-based Vendors**

Rank	Vendor Name	Market Share (%)	Change in Rank from Previous Year
1.	Tata Consultancy Services	2.69%	-
2.	HCL Technologies	1.32%	-
3.	WIPRO	1.02%	
4.	Cognizant	0.57%	▲ 2
5.	Tech Mahindra	0.47%	-
6.	Genpact	0.41%	▼ 2
7.	Infosys	0.25%	▲ 1
8.	Polaris	0.17%	▼ 1
9.	L&T Infotech	0.15%	-
10.	Zensar Technologies	0.09%	-

Source: Gartner (April 2015)

Subsequent consultations between the two sides during the review of CECA has however enabled the SBI and ICICI Bank to obtain the QFB status and the Singaporean banks in India to expand their presence.

It is beyond the scope of this study to look into the regulatory issues that fall within the preserve of the Reserve Bank of India (RBI) and the Monetary Authority of Singapore (MAS). And no argument will sought to be made for weakening of prudential regulations. However perceptions need a mention and there are concerns that the norms prescribed from time to time in respect of permitted asset size, asset management ratios and other functional parameters could be limiting the operations of some of the Indian banks.<sup>21</sup> One way to have a better understanding and possible roadmaps for further development could be to have a regular dialogue between RBI and MAS when these issues are discussed. There can also be greater information sharing about the stringent measures being taken at the Indian end to deal with issues relating to non-performing assets in Indian public sector banks.

There is also the other issue relating to manpower hiring that has come to the fore in the banking sector, not dissimilar from that facing the IT sector outlined earlier. Many banks are now required to go through the procedures of the Fair Consideration Framework and seek out Singaporean candidates before they are able to apply for employment pass for inducting personnel from their Indian parent banks. While induction of local hires is to be encouraged, it will be important at the same time to put in place a predictable regime. The sector also has its special needs in that the officers at the supervisory and specialist levels need to have knowledge of not only local banking practices and regulations but also of the

regulatory framework and reporting needs of the home country and the parent bank's culture of doing business and management. An understanding would need to evolve about acceptable ratios between home and host country talent in this sector and on the types and levels of personnel who could come under the category of intra corporate transferee who could be a manager, an executive or a specialist, for which there is a clear commitment in Chapter 9 of CEPA.

As per the Survey on International Trade in Banking Services conducted by the Reserve Bank of India (available in the RBI Bulletin of November 2016) for 2015-16, the return on asset of Indian banks' branches in Singapore has steadily declined from 1.0 per cent in 2011-12 to 0.1 per cent in 2015-16. The fee income of Indian banks' branches operating in Singapore has also declined from Rs. 1890 crore in 2011-12 to Rs. 680 crore in 2015-16.

### **Singaporean Banks in India**

The Development Bank of Singapore (DBS) began its operations in Mumbai in 1994 and has twelve branches in different parts of the country. It has also applied in 2015 to recast itself as a wholly owned subsidiary in India that is pending approval with the RBI. India is regarded as one of the key markets by the bank and accounts for around 5 percent of the bank's global book with its investment in India at around Rs.6500 crore (US\$1 billion) till April 2016. It plans to operate around 70 branches with focus on expanding its SME business. It has also launched a 'mobile only bank' in India from April 2016 called Digibank<sup>22</sup> through which it hopes to garner 5 million customers over the next five years.

DBS, has also opened a subsidiary in December called DBS Asia Hub 2 with a paid up capital of Rs.70.5 crore with its principal business as providing technology related services to the DBS group.

The United Overseas Bank of Singapore also commenced its operations with a branch in Mumbai in India from 2009 providing a whole range of banking services. In July 2015 UOB also entered into an agreement with Temasek to provide venture debt financing to start-ups in India and China with the joint venture reportedly offering up to US\$ 500 million for Asian start-ups.

Both Temasek and GIC have also taken stakes in Indian banks either directly or through their affiliates. While their equity share in ICICI Bank was over 12 per cent at one stage this has now come to around 5 per cent. They also reportedly hold shares in AXIS Bank, HDFC Bank, Kotak Mahindra Bank and Bandhan Bank<sup>2324</sup> among others.

### Insurance Services

Bilateral trade on insurance services has been substantial. In 2014, for example, Singapore's export of insurance services to India totalled S\$ 322 million and its import from India added up to S\$ 252 million. While it can be surmised that bulk of these receipts relate to trade and transportation activities, absence of further data precludes any meaningful analysis.

However, in terms of commercial presence there are two Indian insurance companies functioning in Singapore. The Indian International Insurance in Singapore is a locally incorporated company registered in 1987 providing both general insurance and reinsurance products. It is owned by the five Indian insurance companies-General Insurance Corporation, New India Assurance, United India Assurance, Oriental Insurance and National Insurance-with a share of 20 per cent each. Its insurance products largely relate to marine hull, automobiles and property and casualty. It enjoys an A- rating since 2010 and has a single office.

The Life Insurance Corporation of India Pvt. Ltd., Singapore is also a fully owned

subsidiary of LIC India and registered as a direct life insurer. It has, however, been in operation only since 2013.

There is no Singaporean insurance company that has a commercial presence in India but Singaporean government owned wealth fund Temasek has shares in life insurance companies ICICI Prudential Life Insurance and SBI Life.<sup>25</sup>

### Conclusions

- Unlike trade in goods, India's exports of services to Singapore appear to have seen steady growth particularly propelled by Indian exports of IT and IT enabled services. India, however, continues to have a substantial trade deficit, particularly if travel services are also taken into account. India's ability to increase its earnings on the services front is constrained partly due to its capacity limitations in the areas of transportation, infrastructure and due to lack of depth in financial services and conducive business environment. These are, however outside the scope of CECA and have to be separately addressed. But there are regulatory and related aspects in services trade that are impacting on levels of market access. They would need to be addressed under CECA and following suggestions are given in this regard.
- Implementing the built in agenda: Early action for mutual recognition agreements to be reached in the areas of accounting, architecture, dental and medical services preferably within a year. Immediate commencement of implementation of the MRA on nursing that has already been concluded by the two sides.
- There are some concerns among some of the Indian banks in Singapore that the norms prescribed for them in respect of permitted asset size, asset management ratios and other functional parameters are significantly limiting their operations. The Singapore

Bank DBS is also having ambitious plans to expand their operation in India. It may be a good idea for the regulatory authorities in India, the Reserve Bank of India and the Monetary Authority of Singapore (MAS), to have a regular exchange of views about regulatory issues so that both regulatory compliance and business expansion can proceed harmoniously.

- It would be very important to bring more predictability in the regulatory aspect regarding employment passes, particularly in relation to Indian banks and IT companies in Singapore. A bilateral understanding needs to evolve keeping in view CECA commitments. Indian companies may also need to be seen as making an effort to increase local recruitment of personnel and greater public outreach about those efforts may also be helpful. This is clearly a sensitive area but a carefully planned move forward is necessary.
- In the air services area Indian carriers have talked about proper slotting as an issue at the Singapore end that may need some attention.

### Endnotes

- <sup>1</sup> Singapore and India become sixth and fifth in exports respectively and sixth and seventh in imports if EC is taken as one entity for ranking purposes.
- <sup>2</sup> QFBs have additional privileges compared to full banks including increased branching, ATMs off premises, sharing ATM network with other QFBs, ability to negotiate for their credit card holders to get advances from local bank ATMs, etc.
- <sup>3</sup> In his speech at the Committee on Supply on 8 April 2016, the Minister for Manpower Mr. Lim Swee Say mentioned that the growth of Employment Passes has slowed down from 32,000 in 2011 to 9000 in 2015.
- <sup>4</sup> The first line of Chapter 9 on Movement of Natural Resources reads 'This Chapter reflects the preferential trading relationship between the parties.....'
- <sup>5</sup> Government decries CECA violation by Singapore by Nayamima Basu, Business Standard, 17 February 2013.

- <sup>6</sup> Text of speech available at the website of the Ministry of Man Power of Singapore [www.mom.gov.sg](http://www.mom.gov.sg)
- <sup>7</sup> 'Soon Indian nurses may practice in Singapore as it signs MRA Pact' by Ditasha Seth, Economic Times, 1 July 2015.
- <sup>8</sup> Reference may also be made to the section on 'International Initiatives' in the ICAI website [www.icaai.org](http://www.icaai.org)
- <sup>9</sup> Details available on the website of the High Commission of India in Singapore.
- <sup>10</sup> <http://www.hcltech.com/it-infrastructure-management/singapore>
- <sup>11</sup> <http://www.dnaindia.com/money/report-indian-it-majors-start-ups-flocking-to-singapore-1982771>
- <sup>12</sup> <http://www.tcs.com/worldwide/asia/locations/singapore/Pages/default.aspx>
- <sup>13</sup> <http://www.tata.com/article/inside/K097uAIWH0c=/TLYVr3YPkMU=>
- <sup>14</sup> [http://www.tcs.com/news\\_events/press\\_releases/Pages/TCS-Expands-Singapore-Operations.aspx](http://www.tcs.com/news_events/press_releases/Pages/TCS-Expands-Singapore-Operations.aspx)
- <sup>15</sup> [http://articles.economictimes.indiatimes.com/2007-09-29/news/27676877\\_1\\_semiconductor-design-wipro-technologies-sudip-nandy](http://articles.economictimes.indiatimes.com/2007-09-29/news/27676877_1_semiconductor-design-wipro-technologies-sudip-nandy)
- <sup>16</sup> <http://www.thehindubusinessline.com/info-tech/cognizant-opens-new-centre-in-singapore/article3081713.ece>
- <sup>17</sup> <http://www.bankingandfinance.com.sg/news/692131/1-amp-t-infotech-opens-centre-of-excellence-in-singapore>
- <sup>18</sup> [http://articles.economictimes.indiatimes.com/2011-01-18/news/28424120\\_1\\_1-t-infotech-singapore-centre-wealth-management](http://articles.economictimes.indiatimes.com/2011-01-18/news/28424120_1_1-t-infotech-singapore-centre-wealth-management)
- <sup>19</sup> <http://www.wsj.com/articles/SB10001424052970204618704576640781457468452>
- <sup>20</sup> Survey on Computer Software and Information Technology Enabled Services Exports: 2015-16, RBI Bulletin, November 2016.
- <sup>21</sup> Indian banks scale down Singapore exposure by Nupur Anand and Manojit Saha, Business Standard, August 4, 2014.
- <sup>22</sup> DBS Bank rolls out mobile only bank in India, Business Line, 21 April 2016.
- <sup>23</sup> Global Investors put more capital in Bandhan Bank, Economic Times, 23 February 2016.
- <sup>24</sup> Singapore's Heliconia to buy 2.6% in Kotak Mahindra Bank for Rs. 1,296 crore, Economic Times, 12 April 2013.
- <sup>25</sup> SBI sells Rs. 1794 crore stake in life co. to KKR, Temasek, December 10, 2016.

# India Singapore Investment Relations

## Introduction

Quite in contrast to the sluggishness that has developed in bilateral merchandise trade in recent years, the bilateral investment exchanges, particularly from Singapore to India, have been growing. In this Chapter, the broad investment trends in both directions are captured in Section 2. The provisions in CECA and the investment friendly clauses incorporated in the bilateral Double Taxation Avoidance Agreement (DTAA) are then dealt with in Section 3. A more detailed profiling of investment flows at the sectoral level from Singapore to India and vice versa, based on newspaper and other reports, is undertaken in Sections 4 and 5. Certain key pending issues and possible way forward are presented in Section 6.

## 2. Bilateral FDI flows between India and Singapore

### India's FDI Inflows from Singapore

Singapore's investment strategy in India has have three key elements - promoting private investment from Singapore in India, encouraging countries like Japan to invest in India through Singapore and exploring the possibilities of collaborative investment in third countries.<sup>1</sup> Singapore has been a

leading source of FDI to India for several years now and third countries have also used Singapore for routing their investments. But there is not much evidence for collaborative investments in third countries except both in the telecom sector and in the form of Indian companies raising funds in Singapore and investing them in third countries.

As per the statistics maintained by the Department of Industrial Policy and Promotion (DIPP) Singapore's FDI flows to India declined from US\$ 117 million in 2000 to US\$ 62 million in 2004 with its share in India's total FDI remaining at a little over 1 per cent. However, they received a boost with an inflow of US\$ 321 million in 2005, probably in anticipation of CECA. Subsequent years saw annual FDI inflows from Singapore continuing to rise, increasing to US\$ 3.7 billion in 2008, with a share of 10.15 per cent. There was a dip in the next couple of years due to the world financial crisis with inflows declining to US\$ 2.1 billion in 2010 though Singapore's share in India's FDI continued to remain above 10 per cent.

FDI inflows from Singapore almost doubled in the next year to US\$ 4.25 billion in 2011 with a share of about 12.29 per cent. There was again some decline in FDI inflows

**Table 5.1: India's FDI inflows from Singapore**

Year	FDI equity inflows from Singapore		FDI equity inflows from all Countries		Singapore's Share in India's FDI
	Rs. in crore	US\$ in million	Rs. in crore	US\$ in million	
2000	501.5	116.6	10092	2347	5.0
2001	160.7	35.7	15842	3520	1.0
2002	226.2	47.1	16123	3359	1.4
2003	168.1	36.5	9564	2079	1.8
2004	285.5	62.1	14781	3213	1.9
2005	1416.9	321.5	19271	4355	7.4
2006	2853.2	620.7	50357	11120	5.6
2007	5830.6	1455.7	65495	15921	9.1
2008	15775.9	3763.5	159530	37095	10.2
2009	14826.2	3059.5	130980	27044	11.3
2010	9675.8	2121.3	96015	21007	10.1
2011	19597.0	4255.1	159935	34621	12.3
2012	15242.2	2897.2	121591	22789	12.7
2013	22211.6	3874.1	129483	22038	17.6
2014	43286.1	7092.4	175313	28785	24.6
2015	86294.4	13413.2	250228	38783	34.6
Total	238351.8	43172.3	1424600	278076	15.5

*Source:* Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India

in 2012, though the period thereafter has seen acceleration. They almost doubled from US\$ 3.9 billion in 2013 to US\$ 7.09 billion in 2014 which increased further to US\$ 13.4 billion in 2015. Singapore's share in India's total FDI increased to 34.5 per cent in 2015. In fact, during the period April 2015 to March 2016, India's FDI from Singapore was US\$ 13.69 billion (Rs 89,510 crore) while from Mauritius, it received US\$ 8.35 billion (Rs 64,706 crore), making Singapore the top source of foreign direct investment (FDI) into India during that financial year and accounting for a third of all FDI inflows.

Figures for Singapore's FDI into India as per the Department of Statistics of the Singapore Government are presented in Table A.5.2 and are denominated in Singapore dollars. Using the average exchange rate between US\$ and SGD from

IMF, rough estimates for Singapore's FDI outflow to India have also been given in the table in US dollars for ease of comparison. As per these figures, Singapore's FDI outflow to India declined upto the year 2002 and started increasing in the period thereafter. India's share in Singapore's total outward FDI which was less than 1 per cent prior to 2005, improved in subsequent years increasing to 3.1 per cent in 2014. It is still to be seen, when the disaggregated figure for 2015 are published, if they will show the dramatic increase (almost 100 per cent) in FDI inflows compared to 2014 in line with DIPP figures. Among its outward foreign investment destinations, India figures tenth in rank. China figures at the top with a 17.75 per cent share. Other Asian economies which received more FDI from Singapore than India were Hong Kong, Indonesia, Australia and Malaysia.

**Table 5.2: Singapore's FDI in India (Stock as at Year End)**

Year	Singapore's FDI in India (in SGD)	Singapore's Total FDI (in SGD)	Share of India in Singapore's total outward FDI	Singapore's FDI to India (in US\$)
2000	884.7	97546.5	0.9	513.2
2001	489.2	131446.0	0.4	273.0
2002	-0.7	146575.3	0.0	-0.4
2003	626.2	152968.7	0.4	359.5
2004	765.4	179633.9	0.4	452.9
2005	1286.5	200399.2	0.6	773.1
2006	2565.0	245347.4	1.0	1614.5
2007	4740.4	316336.5	1.5	3145.7
2008	6740.9	311517.8	2.2	4765.7
2009	9545.2	370248.7	2.6	6562.4
2010	10630.8	425673.8	2.5	7793.4
2011	11242.1	446999.2	2.5	8940.0
2012	12909.4	493024.7	2.6	10326.2
2013	15219.9	536317.2	2.8	12165.5
2014	19432.4	619997.2	3.1	15339.1

*Source:* Department of Statistics, Government of Singapore and IMF

There is evidently a high degree of variance between the figures for India's FDI inflows from Singapore as per DIPP and Singapore's FDI outflow to India as per Singapore statistics. During the initial years, figures for Singapore's outflow to India were on the higher side. However, post 2008, figures for India's total inflows have been consistently higher than Singapore's FDI stock in India and the difference between the two has widened. In some years, the difference is more than US\$ 10 billion. It probably indicates the difference between what can be called investments by Singapore companies as against third country companies which make investments into India using their Singapore based holding companies to route them. It is also understood that Singapore applies a standard of minimum 10 per cent equity share or a 10 per cent voting share held by Singaporean nationals or entities in the company for an overseas investment by that Singapore based company to be deemed

as a Singaporean investment for statistical purposes. Additionally, it needs to be also noted, for the sake of country attribution, that overseas investment is recorded according to immediate destination, rather than the ultimate destination.

### **India's outward FDI to Singapore**

Singapore has remained the top most investing destination for Indian companies. It is seen as a key regional financial centre and a shipping and aviation hub for the Asia-Pacific. It has become a platform for Indian companies building their trade and investment ties with other Asian countries, notably other Southeast Asian nations. Some of the larger Indian business groups have also set up holding companies in Singapore that are used for investments in other Asian countries or globally, as it is an international financial centre with easier financing and refinancing schemes.<sup>2</sup> A variety of factors have facilitated these investments including the ease of being able

**Table 5.3: India's Outward FDI Stock**

Country	Amount in INR billion at market value		
	Total ODI	Equity	Debt
Singapore	1,315.00	1,114.60	200.3
Mauritius	799.2	624.9	174.3
Netherlands	694.2	598.8	95.4
United States of America	627.5	297.9	329.6
Bahrain	289.1	51.4	237.7
United Arab Emirates	266.8	185.8	81
Jersey	260.5	241.4	19.1
Australia	148	144.8	3.1
United Kingdom	143.8	116.7	27.2
Cyprus	122.8	121.6	1.1
Total OFDI	5,320.10	4,212.60	1,107.50

*Source:* RBI, Data Release on Annual Census on Foreign Liabilities and Assets of Indian Direct Investment Companies, 2014-15 (December 2015)

to raise funds locally, the benefit of interest rate arbitrage, location of major clients, excellent air and sea connectivity not only with ASEAN and the Far East but also with far away locations in Latin America, good IT infrastructure, a trade facilitating business environment and prevailing tax arbitrage. The investments are predominantly in the finance and insurance, trading, transport and storage and the ICT sectors. (This is not unlike Singapore's overall inward FDI stock which as of end 2014 added up to S\$1.02 trillion of which two thirds were in the financial and insurance services and retail and wholesale trade. Investment holdings, as part of financial services, themselves totalled S\$ 445 billion).

According to Mr. Anil Kishora, country head and Chief Executive Officer of the State Bank of India in Singapore, Indian companies have made a cumulative investment of close to US\$ 25 billion in Singapore.<sup>3</sup> Some 6,000 Indian companies were registered in Singapore in 2014 up from 4,000 in the preceding two years, making it the largest business community. (According to some reports these have now further risen to 8000). India's outward FDI stock to

Singapore upto March 2015 was about INR 1315 billion (see Table 5.3) accounting for a share of about 25 per cent of India total FDI stock in the period. According to Indian RBI statistics, India's FDI stock has also been rising in recent years.

Based on banking transactions, RBI also provides details of overseas financial commitments by Indian companies that includes not only loans and equity but also guarantees. These are summarized in respect of Singapore in Table 5.4 for the five year period 2011-15. They indicate that there has been some decline in the financial commitments vis-à-vis Singapore, even as the annual figures reflect a fluctuating trend. Secondly while commitments in the form of guarantees have always been high, this mode has come to account for 75 per cent share of financial commitments and both equities and loans have been less used.

According to Singapore statistics India's FDI stock in that country has been somewhat stagnant and even showed some decline in the last five years. It reached a peak of S\$24.5 billion in 2010, but has subsequently declined and totalled S\$22.67 billion in 2014. While India was the ninth

**Table 5.4: India's ODI in Singapore (2011-15)**

India's ODI in Singapore	Financial Commitment (in US\$ million)			
	Equity	Loan	Guarantee Issued	Total
2011	987.3261	1999.986	4198.051	7185.363
2012	947.8888	1015.843	2421.408	3904.802
2013	592.5816	594.205	3645.623	4832.409
2014	484.9652	609.8025	5316.117	6410.885
2015	615.8571	707.094	3954.36	5277.311

*Source:* Compiled using RBI data.

largest investor country in Singapore in 2009, its ranking declined to being 12 in 2014. Among Asian economies Japan, Hong Kong and Malaysia had higher levels of FDI in Singapore in 2014, compared to India.

As already mentioned, comparing national investment statistics need care since definitions vary and there are also reporting (or census) errors and limitations. Depending on whether they include equity, loans, guarantees, re-invested earnings and divestments they can reflect wide differences. Exchange rate fluctuations also remain a factor and, as seen from the introductory chapter, these fluctuations have been substantial.

### Portfolio Investments by Singapore based FPIs in India

Singapore based Foreign Portfolio Investors (FPIs) have also been active in the Indian

equity and debt market. Singapore has the No.3 position, after United States and Mauritius, for several years now, in respect of assets under custody of foreign portfolio investments with assets totalling Rs. 252,743 crore ( approx. US\$ 37 billion) consisting of Rs. 151,409 crore (approx. US\$ 22 billion) of equity and Rs. 101,334 crore (approx. US\$15 billion) of debt as of January 2016. As will be seen from Table 5.5 the asset share of Singapore based FPIs have been in the range of 10 to 13.5 per cent among all FPIs.

As per the website of Central Depository Services Limited (CDSL) there are in all 244 Singapore based FPIs registered with the Securities and Exchange Board of India (SEBI). While a large number of these are Singapore based subsidiaries or branches of asset management companies of third country origin, a significant number are also of Singapore origin. In fact, several banks, life

**Table 5.5: Assets under Custody of foreign portfolio (Equity and Debt) Investors**

(in Rs. Crore)

Countries	As of January 2012	As of January 2013	As of January 2014	As of January 2015	As of January 2016
USA	273,728	354,734	430,567	718,667	680,820
Mauritius	294,662	354,395	311,781	518,081	441,819
Singapore	119,477 (11.45)*	183,111 (13.35)	150,398 (10.54)	290,655 (12.09)	252,743 (11.48)
Luxembourg	81,736	116,908	120,651	203,921	189,171
UK	56,359	65,270	78,297	108,336	96,521
Total	1,043,130	1,370,866	1,426,875	2,402,494	2,200,837

*Source:* Central Depository Services Limited

\*Figure in parenthesis reflects share of Singapore in total.

insurance companies, sovereign wealth funds and other asset management companies are known to have built up significant holdings in Indian stocks and debt.

### 3. Investment Provisions in CECA and Double Taxation Avoidance Agreement (DTAA)

CECA was negotiated at a time when India's readiness to make commitments in respect of bilateral investment agreements was still somewhat conservative. CECA therefore provided only for a limited positive listing of commitments by India in terms of pre-establishment national treatment (unlike later CEPAs with Japan and Republic Korea which were based on a negative listing of commitments on this score) even as it extended full national treatment for the post establishment phase for management and operation of the investment. Its definition of investment was however, broad based that included portfolio investments, IPRs, any right to money under a contract, business concessions conferred by law or under contract. It did not however, cover investment by an enterprise which was having negligible or nil business operations in the home country or with no real or continuous business there. Also, unlike the later CEPAs with Korea or Japan, it did not have clauses on "fair and equitable treatment". In respect of restraining performance requirements too, CECA simply incorporated the TRIMS agreement of WTO in the investment chapter whereas both the later CEPAs had TRIMS plus obligations including prohibiting requiring technology transfer as a performance requirement.

It may be mentioned here that while commitments by India in CECA may have been limited compared to certain other later bilateral investment promotion agreements and vis-à-vis CEPAs with Korea and Japan, they were certainly much wider in scope

compared to the Model Bilateral Investment Treaty (BIT) of the Govt. of India that was announced in December 2015. Apart from other differences, the BIT does not envisage any commitment at the pre-establishment stage. It will accord national treatment to foreign investors only after they have established their business in India. The scope of investments covered by the model BIT is also restricted to an enterprise that is established in the host state. The model BIT also makes it mandatory for foreign investors to exhaust local judicial remedies before seeking international arbitration for investor state disputes.

Additionally, an aspect in CECA that had a strong real impact in terms of promoting investments was the simultaneous revision that was made in the bilateral double taxation avoidance (DTAA) agreement that *inter alia* provided for the following:

- Tax exemption on capital gains in India, that were to be in place as long as a similar provision existed in India's bilateral DTAA with Mauritius;
- Reduced withholding tax ranging from 15 per cent to 10 per cent

The amended DTAA also included a 'Limit of Benefits' clause that stipulated that benefits of the tax treaty can only be claimed by a company if it incurred an annual expenditure of US\$ 200,000, on operations in Singapore, in the two years prior to the date capital gains arise. Hence, companies which were set up primarily for the purpose of capital gains exemption cannot avail this benefit. In addition to lower capital gains tax, Singapore investors were entitled to a lower rate of tax withholding in India – 15 per cent on interest come that would otherwise be between 20-40 per cent under regular domestic tax laws.<sup>4</sup>

There is no capital gains tax or withholding tax in Singapore. Its corporate

tax rate of 17 per cent had the further potential to be considerably less if deductions were taken. The personal income tax rate that was generally 20 per cent in Singapore could also be less depending on various factors. These substantial tax concessional elements have attracted foreign investors to use Singapore as their base for making investments in India. The definition of “investor” as per CECA was also quite broad-based that enabled foreign investors who set up establishments in Singapore or even foreign asset based companies and funds based in Singapore to benefit from CECA provisions. An additional factor was that Singapore had similar free trade agreements with a host of other countries including the 28 member European Union that further consolidated the CECA benefit in being able to attract a large number of corporates in those countries to locate in or route their investment through Singapore.

#### **4. Sector-wise FDI Inflow from Singapore**

As per DIPP statistics, India’s FDI inflows from Singapore during the period January 2000 to December 2014 totalled US\$ 29.767 billion. Sector wise, services sector, including financial services, attracted the maximum with a 22.2 per cent share. Telecommunications came in next with a share of 9.53 per cent followed by drugs and pharmaceuticals (7.06 per cent), computer software and hardware (6.23 per cent) and trading (6.22 per cent). Details have, however, not been given about the balance 48.3 per cent.

The DIPP statistics, however, do not include re-invested earnings or divestments. It is also understood they include all investment flows that come as FDI from Singapore registered companies. They, therefore, include not only domestic Singapore companies but also third country companies routing their investments through their holding companies in

Singapore that may include even certain Indian business groups.

As per Singapore statistics, which are given in Singapore dollars and in the form of FDI stock, Singapore’s investment stock in India as of December 2014 totalled S\$19.432 billion which is just about half the total inflows as per Indian figures. While Singapore figures include reinvestment of earnings and divestments, it is understood that they do not include investment by third country holding companies routing their investments through Singapore. They also include only investments in which a Singapore direct investor owns 10 per cent or more of the ordinary shares or voting power in an overseas direct investment enterprise.

According to Singapore statistics covering FDI stock up to 2014, manufacturing (31.79 per cent) accounted for the maximum share that also showed a significant and steady increase from 2005 onward. Wholesale and retail trade including e-commerce (25.36 per cent) came next which too increased steadily and showed rapid expansion from 2012. On the other hand, finance and insurance (15.89 per cent) and information and communications (14.39 per cent) showed stagnation since 2012. The share of transportation and logistics sector (3.93 per cent) though small also rose steadily. Professional, scientific and technical etc., (2.69 per cent), real estate (2.5 per cent), accommodation and food (1.14 per cent) and Construction ( 1.1 per cent) were the other areas. Details may be seen in Table 5.6

#### **Singapore Government Owned Fund Management Institutions**

Before we go further into detailing some of the major investments in the different sectors by Singapore in India it would be important to briefly take note of three key Singapore government owned institutions that directly, or through their subsidiaries or affiliates,

Table 5.6: Sector wise details of Singapore's FDI into India

(in Million Singapore Dollars)

Time	Singapore's Direct Investment in India	Manufacturing	Construction	Wholesale & Retail Trade	Accommodation & Food Service Activities	Transport & Storage	Information & Communications	Financial & Insurance Services	Real Estate Activities	Professional, Scientific & Technical, Administrative & Support Services	Others
2004	765.4	486.6	39.6	69	na	44.8	44.5	-163.2	85.2	8.4	na
2005	1,286.5	458.1	23.1	183.9	na	57.8	366.4	-156.3	na	20.8	204.7
2006	2,565	640.1	29.2	158.3	na	159.4	810.8	140.4	na	73.3	294.4
2007	4,740.4	1,052.4	na	294.4	na	255	na	512.1	na	142.9	345.1
2008	6,740.9	1,442.9	na	455.3	na	291.4	2,184.2	1,164.5	457.8	222.3	466.1
2009	9,545.2	1,436.4	na	560.3	na	464.8	4,184.8	1,286.2	464.3	468.2	484.3
2010	10,630.8	1,898	na	663.3	na	393.5	4,227.4	1,953.7	467.3	483.2	327.8
2011	11,242.1	2,332.4	30.4	818.2	na	405.9	na	2,568.6	398.2	526.3	244.9
2012	12,909.4	2,443.7	31.3	2,292.7	161.8	427.7	2,822	3,374.5	395.3	396.5	563.9
2013	15,219.9	3,956.6	158.5	3,395.2	218	342.9	2,818.2	3,029.3	497	476.8	327.5
2014	19,432.4	6,179	217.4	4,928.3	225.5	764.1	2,797.1	3,088.3	487.1	523.4	222.1

Source: Singapore Department of Statistics

have a preponderant role in Singaporean investments overseas. One is the Monetary Authority of Singapore (MAS) that is less visible and whose investments are more in bonds and securities. Both the Government of Singapore and the Monetary Authority of Singapore are separately registered as FPIs with SEBI, apart from the Central Provident Fund Board of Singapore.

Second is the Government of Singapore Investment Corporation (GIC), a fund manager of the government, whose mandate is to achieve a good long term return of that part of the government reserve that is placed under its management.

The third is Temasek International Investment Company whose aim is to maximise shareholder value and it is also exposed to higher risk than MAS and GIC but has also delivered higher returns over time.

### **Government Investment Cooperation**

Investments by MAS are less publicised. Even GIC is very economical with information about its portfolio size or earnings but it is learnt to have a global portfolio exceeding US\$100 billion. In the twenty year period up to March 2016, GIC was able to generate a real return of 4 per cent above global inflation. Its portfolio includes 65 per cent of global equities and 35 per cent of global bonds. GIC regards India as an important partner offering a strategic platform to do business and also has an office in Mumbai with a team of about twenty professionals. GIC has been quite active in India as an FPI in publicly listed portfolio investments and also in the private equity unlisted companies apart from taking a large interest in the real estate sector. It also has equities in venture funds, India value funds and several start ups. It has further shown particular interest in the financial services sector with holdings in several Indian banks.

GIC's focus in recent years has been on real estate. In 2015, the Singapore sovereign wealth fund formed a joint venture with DLF Home Developers to invest US\$ 300 million (Rs 1,990 crore) to develop projects in two land parcels acquired by DLF in Delhi. This was followed by a tie-up with global investment giant KKR to set up a non-banking financial company to lend to real estate developers early in the year.

This was consistent with GIC's strategy to form joint ventures for investment in residential projects in India. In 2014, it announced a joint venture with the Bengaluru-based Brigade Group to invest INR 1,500 crore in residential development. These were followed up with two joint ventures with the Delhi-based Vatika Group, to develop two residential projects in Gurgaon. In the commercial real estate space, it acquired the BSE-listed Nirlon – that owned an information technology park at Mumbai's Goregaon – in 2014 for about INR 800 crore.<sup>5</sup>

GIC has also backed several Indian private technology startups such as Flipkart, which is valued at over US\$ 15 billion, cab aggregator Ola, valued at US\$ 5 billion and online retailer Shopclues.<sup>6</sup>

### **Temasek**

Temasek is a huge investment fund conglomerate that operates more on commercial principles. It owns a global portfolio of S\$242 billion (approximately US\$ 180 billion) as of 31 March 2016. The return for Temasek since inception in 1974 was 15 per cent compounded annually and it enjoys a Aaa credit rating. Its thematic focus now extends to transforming economies through tapping potential of emerging economies like China, India, South East Asia and Latin America through investments in sectors such as financial services, infrastructure and logistics. It also looks at growing middle

income population and seeks to leverage growing consumer demand in sectors such as telecom, media and technology and real estate. It seeks out companies with IPR and other competitive advantages. It also looks for emerging champions in the form of companies with a strong local base with potential for growth.

In India, Temasek has an exposure of approximately US\$ 9 billion that accounts for roughly 5 per cent of its global portfolio. The accretion has been in the range of US\$ 1 billion per year in recent years. . It has investments in the form of direct investments and portfolio investments through its FPI arms that reportedly include Aranda investments, Allamanda Investments, Camas Investments and Heliconia Investments. Temasek's subsidiaries and associated firms that include the whole range of Singapore companies - DBS Bank (about 30 per cent share held by Temasek), Singtel (56 per cent owned by Temasek), PSA International (100 per cent), Capital Land (39.56 per cent owned by Temasek), ST Engineering (50 per cent), Singapore Technologies Telemedia (100 per cent), Surbana Jurong, Sembcorp (49.5 per cent owned by Temasek), Singapore International Airlines (56 per cent), SATS Limited (43 per cent), Changi Airports, Ascendas (51 percent by Temasek and 49 per cent by JTC which is a statutory Singapore government agency for industrial estates and similar properties) - also are all actively involved in various investment or other projects in India. Temasek also has offices in Mumbai and Chennai.

Temasek has investments in many Indian companies including in several members of the TATA Group, Bajaj Corp, Mahindra, CIE, Crompton Greaves, Oberoi Realty, GMR Energy, Axis Bank, Glenmark Pharma and Sun Pharma. The investments are in both public and

private companies. It also has a Non Bank Finance Company Fullerton India Limited that provides housing finance, loans to SMEs, loan against property, etc. In 2015, the company's major investments were in consumption-oriented segments such as healthcare and pharmaceuticals, financial services (including insurance), technology (e-commerce or payment) and consumer (FMCG companies). These included investments in Global Health (owner of Medanta franchise), Intas Pharmaceuticals, Snapdeal and Manthan (data analysts). It purchased stakes in Glenmark Pharmaceuticals Ltd, Sun Pharmaceutical Industries Ltd and Oberoi Realty Ltd through the public investment route.<sup>7</sup>

It plans to continue to scout for investments across consumption-oriented segments in India even as it was open to opportunities from other sectors including in real estate sector.<sup>89</sup> The company is also open to investing in distressed assets in India either through an asset reconstruction firm or directly. Ravi Lambah, co-head, India and head for telecom, media and technology at Temasek International Pte. Ltd said that the company's investment had gone up from 4 per cent of the total portfolio size to 5 per cent in 2015-16; and the portfolio was quite resilient.<sup>10</sup>

### **Certain Major Investments in India by Singapore companies**

According to details given in the DIPP annual newsletter for 2014, the top 25 FDI equity inflows into Indian companies for the period January 2000 to December 2014 from companies in Singapore accounted for close to 30 per cent of all FDI inflows into India from Singapore. It will be seen from details given at Annexure III that practically all such investments listed are companies of non-Singapore origin, including from India, which have routed their investments

through their subsidiaries or associates based in Singapore.

But, as earlier outlined, companies of Singapore origin also have made significant investments. While GIC and Temasek, are present in India as basically fund managers, other sector specialized Singapore companies have also made certain major investments as outlined below. Most of them also are wholly or substantially owned by the Singapore government.

### **Telecommunications Bharti Airtel-Singtel**

Singtel entered the Indian market in the period 1999-2000, when Mr. Sunil Mittal of Bharti Televentures was looking for a core investor for his telecom project. Along with the capital, SingTel also brought the expertise to establish and run a telecom business.<sup>11</sup>

Presently Singtel is the single largest shareholder in Bharti Airtel with an effective stake of about 36 per cent. It has a direct shareholding of about 15 per cent in the company. The rest comes through its shareholding of 46 per cent in the privately held Bharati Telecom that has a 45 per cent shareholding in Bharti Airtel.

In June 2016, Singtel and Airtel joined hands to deliver high-speed, secure data network coverage to Asia-Pacific, the Middle East, Africa, Europe and the US. They have combined resources into one network to provide high speed data connectivity to 325 cities across the world through 370 Points of Presence (PoP) thus forming one of the largest Internet Protocol Virtual Private Networks (IP VPN) globally.<sup>12</sup>

### **Energy - Sembcorp**

Semb Corp, a leading energy, water and marine group of Singapore has entered into a joint venture partnership called Semb Corp Gayathri Power Complex in Andhra

Pradesh near Nellore which will be a 2X 1320 MW super critical coal fed power plant costing US\$ 3 billion. Semb corp will hold a 88 per cent share and the remaining 12 per cent will be owned by Gayatri energy ventures.

Semb corp also has acquired a 68.74 per cent stake in Semb corp Green Infra headquartered in Pune that has wind and solar assets totaling 800 MW across seven states in southern, western and central India.

### **Real Estate - Ascendas, Surbana Jurong**

Ascendas Group operates in India through several entities, Ascendas Land International Pte Ltd, Ascendas India Development Trust and Ascendas India Growth Programme. Ascendas Land has completed two phases of International Tech Park in Pune comprising 1.3 million sqft and is starting the third phase construction of 0.6 million sqft. Ascendas India Development Trust has developed projects including Ascendas OneHub series of projects in Gurgaon, Chennai and Coimbatore and International Tech Park in Gurgaon, and the Ascendas India Growth Programme which is a real estate fund that targets business space developments.<sup>13</sup>

The initial operation of Ascendas in India included IT Parks and hi-tech buildings, as well as built-to-suit (BTS) and ready-built facilities (RBF). In 2005, Ascendas rebranded the International Tech Park Limited (ITPL) at Whitefield in Bangalore as 'International Tech Park, Bangalore' (ITPB) after buying out Tata's stake. The 69-acre ITPB was India's first hi-tech park of its kind designed to provide 'work-live-play' environment for IT and technology-related businesses.<sup>14</sup>

In July 2015, Ascendas India Trust, acquired an IT building housing large multinationals in Hyderabad (aVance3) for US\$ 63million (Rs 294 crore). The group had

previously acquired two other buildings in the same city in February 2012 (aVance1 and aVance2) together spread over 4.22 lakh sqft.<sup>15</sup>

As of 2016, the properties of the trust, included CyberPearl, aVance Business Hub and the V in Hyderabad; International Tech Park and CyberVale in Chennai and International Tech Park in Bangalore. The aggregate floor area is 9 million sqft, valued at Rs 5,576 crore and houses 297 tenants. Of this, 3.92 million sqft was acquired in 2014-15 and another 3.02 million sqft is under development phase in these three cities. Bangalore remains Ascendas India Trust's major area of focus with 38 per cent of its existing assets and 74 per cent of the upcoming portfolio. However, the company is planning on expanding its investment portfolio in terms of its geographical reach by acquiring properties in Mumbai, Pune, Delhi and Gurgaon. In Pune, Ascendas-Singbridge Group has provided the Trust with a right to first refusal to acquire International Tech Park Pune, an SEZ under development with a total floor area of 2.3 million square feet. In addition, it will be acquiring a property named BlueRidge 2 with over 1.5 million sqft of floor area in Pune. The acquisition is supposed to be completed by December 2016.<sup>16</sup>

Singapore's Surbana Jurong urban planning group designed the masterplan for the construction of a new smart city in the Indian state of Andhra Pradesh called Amaravati, which will become the new capital city of that state. Singapore firms are also bidding for various projects in the construction phase of the new smart city.<sup>17</sup>

Apart from this, more recently, during a meeting between the External Affairs Ministers of both countries, India expressed that it wants to explore the possibility of

Singapore's involvement in major Indian infrastructure projects including the Smart City project and also whether Singapore can participate in rejuvenation of other Indian cities.<sup>18</sup>

### **Port Infrastructure: Port of Singapore Authority (PSA) and International Sea Port Pvt. Ltd. (ISPL)**

PSA International, is amongst the world's biggest container port operator by volumes, and is owned by Temasek Holdings, the sovereign wealth fund of Singapore.<sup>19</sup> PSA was one of the first to enter India when the country opened its ports to private investments in the late 1990s. PSA India Pte. Ltd. owns and operates container ports and was incorporated in 1998 and is based in Mumbai, India. The company is operating five ports in India at Tuticorin, Chennai, Mumbai, Kolkata and Kakinda.

In 1999, PSA International entered into a joint venture with South India Cooperation Agencies Limited (SICAL) for the upgradation of Tuticorin port in Tamil Nadu.<sup>20</sup> Also in 2000-01, PSA set up a joint venture with the Government of Gujarat to develop a container terminal at the Pipavav port in Gujarat, which is India's first private sector-run port.<sup>21</sup> Chennai International Terminals Pvt. Ltd. incorporated in 2006 operates as a subsidiary of PSA International Pte Ltd. and provides container terminal services in India and serves the automobile, pharmaceuticals, textile, leather, light engineering, and chemical manufacturing sectors.<sup>22</sup>

In 2014, PSA International signed an agreement with Jawaharlal Nehru port to build a Rs.7,915 crore container loading facility. The deal which was hailed as the biggest single foreign direct investment (FDI) yet in an Indian port has an FDI component of INR 3,160 crore. Bharat Mumbai Container Terminals Pvt. Ltd

(BMCT), a wholly-owned subsidiary of PSA Bharat Investments Pte Ltd (which is a unit of PSA International Pte Ltd), signed the concession agreement with JN port in May 2014.<sup>23</sup> In the same year, the company also won a container-handling ten year contract at Union government-owned Kolkata port, which will help the firm boost its presence on India's eastern coast.<sup>24</sup>

Also in 2015, PSA group entered into a joint venture with Bothra Shipping Services Pvt Ltd of Visakhapatnam, and Kakinada Infrastructure Holdings Pvt Ltd., to set up the Kakinada Container Terminal (KCT) on the Chittagong-Kakinada-Colombo route and the Haldia-Kakinada-Singapore route. KCT would cater to the needs of exporters of agricultural products in the Krishna-Godavari region. It would offer a freight advantage for exporters of rice, seafood, ceramics, paper, and agro products.<sup>25</sup>

### **Port Infrastructure and International Seaports Private Ltd. (ISPL)**

The Singapore-based consortium of International Seaports Private Ltd. (ISPL) a wholly-owned subsidiary of the Singapore-based International Seaports Pte Ltd, had received a contract in 1999 to upgrade the Kakinada project in Andhra Pradesh. ISPL signed an agreement with the AP Government for operation and maintenance of the Kakinada Deep-Water Port (KDWP) and assigned the development to Cocanada Port Company Ltd, a special purpose vehicle (SPV) constituted by ISPL.<sup>26</sup> It also bagged a project for the construction of three berths at Dhamra port in Orissa for dry bulk cargo with an investment of around INR 1,400 crore.<sup>27</sup> However, there were several problems and delays in both these projects. ISDPL withdrew its participation from the Dhamra project due to difficulties in acquisition of land required for the proposed rail links between Bhadrak and Renital stations and in the change in the

composition of the companies investing in the project.

In May 2002, ISPL also concluded an agreement with Kolkata Port Trust for the construction of a berth (4A) at Haldia dock on BOT (build, operate and transfer) basis.<sup>28</sup> The Haldia berth project was completed ahead of schedule and commercial operations were commissioned in January 2004.<sup>29</sup>

### **Civil Aviation - SIA, SATS and Changi Airports**

The Tata Sons and Singapore International Airlines (SIA) launched a 51:49 joint venture airlines VISTARA in 2013 with an equity investment of Rs. 750 crore. That has subsequently been raised by Rs. 250 crore.

Singapore's SATS limited has a 50:50 joint venture with Air India since 2008 to provide a world class service in ground and cargo handling. It is in operation in five locations - Bengaluru, Delhi, Hyderabad, Mangalore and Trivandrum - focusing on passenger handling, baggage handling, load control, ramp handling and cleaning.

Singapore's SATS also has a joint venture with the Tata Group called Taj SATS air catering.

Changi Airport India, a wholly-owned subsidiary of CAI, had initially taken a 26 per cent stake in Bengal Aerotropolis Projects (BAPL) for implementing the project at Andal, near Durgapur in Bardhaman district. Later, in August 2014, CAI increased its stake to 32.2 per cent, with fresh infusion of capital that was further raised to 36.32 per cent in April 2015.<sup>30</sup> The project is awaiting completion. Meanwhile an MoU was also signed between Airport Authority of India and Changi Airport in November 2015, at the time of India's Prime Minister's visit to Singapore, for maintenance of Jaipur and Ahmedabad airports. But the two parties have not been able to come to an agreement on taking the proposal forward.

**Table 5.7: Sector wise details of FDI in Singapore by India**

(in Millions of Singapore Dollars)

Year	Manufacturing	Wholesale & Retail Trade	Transport & Storage	Information & Communications	Financial & Insurance Services	Professional, Scientific & Technical, Administrative & Support Services	Others	Total
2004	17.4	23.6	93.7	86.6	228.1	10.9	-	481
2005	36.1	61.4	120.2	328.1	701.7	44.8	-	1,303.1
2006	383.8	206.6	59.5	452	1,487.3	54	20.5	2,577.6
2007	-	184.9	104.8	677.9	-	152.2	42.6	13,025.7
2008	490.1	197.3	518	942.2	14,351.2	249.1	104.8	16,861.4
2009	546.1	444.3	631.9	847.2	18,034.8	1,159.8	282.8	21,954.8
2010	579.8	795.9	862.2	1,049	19,567.6	1,213.9	na	24,515.8
2011	627.1	906.9	838	878	19,524.5	-32.6	483	23,204.5
2012	707.2	764.9	512.4	456.5	20,691.4	70.6	266.8	23,487.6
2013	62.5	986.8	400.9	202.6	21,717.7	225.9	105.5	23,846.4
2014	161.5	1,540.8	274.6	325.7	20,277.5	-8.2	na	22,673.2

Source: Singapore Department of Statistics

## 5. Sectoral Focus of India's Outward FDI into Singapore

A sectoral break up of FDI flows from India into Singapore may be seen in Table 5.7. It indicates that these investments have predominantly gone towards financial and insurance services. While a part of these account for investments in the areas of banking and insurance, the bulk of the amounts are really funds channeled to the holding companies of Indian corporate groups in Singapore who then made their investments globally. Another sector that attracted investments was wholesale and retail trade with several Indian companies maintaining trading outfits in Singapore. Investments in manufacturing were however, much less and also declined significantly from its peak in 2012 indicating perhaps divestments or losses. ICT and transport and storage were other areas in which investments took place. What is noteworthy is that investments in these sectors were considerably higher till 2010 after which there was a decline indicating again some divestments.

According to the statistics available on the RBI website, the four prominent areas for India's investments in Singapore have been – agriculture and mining, finance and insurance services, manufacturing and transport, storage, and communication services. The wholesale and retail trade sector have also attracted significant levels of investment as seen from Table 5.8. These figures, however, include not only equity and loans but also guarantees.

There are reportedly over 6000 Indian businesses that are registered in Singapore (some recent reports suggest they now exceed 8000)<sup>31</sup> ranging from what may be just liaison offices to those involved in substantial investments. Among all Indian business groups<sup>32</sup>, the TATA group has established the most wide ranging international investment presence in Singapore with fifteen of its group companies having subsidiaries or other offices employing over 3000 personnel. TATA steel's investment in Corus steel was made out from its Singaporean office.

**Table 5.8: India's ODI in Singapore on sector wise basis**

(in US\$ million)

S. No.	Sector	2011	2012	2013	2014	2015
1	Agriculture, Forestry, Fishery & Mining	1138.28	369.31	617.79	1108.99	1476.70
2	Community, Social and Personal Services	26.93	92.15	89.48	234.79	60.45
3	Construction	55.52	57.41	134.15	65.71	385.98
4	Electricity, Gas and Water	231.52	52.98	2.65	16.58	109.46
5	Financial, Insurance and Business Services	1871.69	1362.08	943.19	2282.10	848.56
6	Manufacturing	819.76	755.91	1105.64	710.06	1095.78
7	Miscellaneous	33.29	0.72	4.96	75.12	51.75
8	Transport, Storage and Communication Services	2764.27	1104.21	1040.67	1293.87	745.58
9	Wholesale, Retail Trade, Restaurants and Hotels	244.11	389.63	893.88	623.68	502.47
	India's Total ODI in Singapore	7185.36	4184.39	4832.41	6410.88	5276.73

Source: Figures compiled based on RBI data.

TATA NYK is a 50:50 joint venture based in Singapore between TATA Steel and NYK Shipping intended to serve bulk carrier needs of the TATA group. Natsteels is also a local steel making company of the TATAs manufacturing certain steel products including TISCON bars.

TML Holdings owns much of international business of TATA Motors including of Jaguar Landrover of UK. Companies like TATA Chemicals and TATA Power also manage their international business from their Singapore based units. The Trust Energy Resources in Singapore of the TATAs is a wholly owned subsidiary of TATA Power responsible for securitising coal supply and the shipping of coal for TATA Power's thermal generation plants in India.

The TATA Consultancy Services also has its Asia Pacific headquarters in Singapore from where it oversees its operations in South East Asia. TATA Capital manages private equity business and TATA

International is involved in trading and procurement of a range of goods including minerals, metals, agricultural products like pulses, rice and sugar.

Among the few manufacturing units set up by other Indian businesses include a plant manufacturing steel racks and furniture by Godrej. Punj Lloyd also acquired an engineering company by name Sembawang Engineers & Constructors in the urban transportation and infrastructure sector. In fact Singapore has become the resource and project management hub for Punj Lloyd's operations in the South East Asia region.

Several other Indian business groups including the Adani Group, Jindal Steel and GVK Power also have their shipping and trading activities based in Singapore that *inter alia* seek to ensure security of supply of coal and other raw materials for operations of their plants in India. There are also many Indian companies involved in commodity trading, including MMTC, Ushdev International and Aditya Birla's

Swiss Singapore that have their operations carried from Singapore. Furthermore the Indian companies trading in petroleum products including Reliance have used Singapore as a trading hub where they have also leased storage facilities.

It is noteworthy that GMR Energy (Singapore) Pte. Ltd. a subsidiary of GMR Infrastructure Ltd. led a group of investors in 2010 to set up 800 MW combined cycle project in Jurong Island of Singapore. At S\$ 1 billion it was one of the largest investments made by an Indian company in Singapore. The GMR group however, exited in 2013 by selling its 70 per cent stake for US\$ 600 million.

In 2009, WIPRO Singapore Pvt. Ltd. acquired Singapore's Unza Holdings, which makes personal care products, for about US\$ 246 million in 2007 to expand its consumer care product portfolio.<sup>33</sup> It also signed a definitive agreement to acquire 100 per cent shareholding of the L.D. Waxsons Group, a Singapore based fast moving consumer goods (FMCG) company for an all cash consideration of about US \$144 million (approx Rs 780 crore) in 2012.

Fortis Healthcare bought the 23.9 per cent share held by TPG capital in Singapore's Pakway Holdings Ltd. for US\$ 686 million (Rs. 3119 crore) in 2010.

Singapore's role as a financing hub is again another aspect that attracts Indian corporates to have their presence in Singapore. While the size of presence depends on the needs of each corporate, it is noteworthy that 150 active bonds from 70 Indian issuers are now listed on the Singapore stock exchange which reportedly covers some 80 per cent of overseas bond listing by Indian companies. In recent months, the Singapore stock exchange has also hosted 'Masala Bonds', which are rupee denominated bonds outside India, of Adani Transmission, NTPC and India Bulls Housing Finance.

## 6. Key Pending Issues and Way Forward

Singapore, with its surplus capital, is keenly looking at investment opportunities abroad that can bring high and steady long term returns. India, as a large emerging market, is clearly a desired destination from the point of Singapore based investors as is evident from the steady investment accretions that are taking place. India is still, however, not the most preferred destination and many other Asian countries including China, Hong kong, Indonesia and Malaysia rank above India in terms of larger investment outflows from Singapore to them. During this author's visit to Singapore, including in the interaction with the Singapore Business Federation, there was general appreciation conveyed for the new initiatives being taken by the government in India including in the form of 'Make in India' that was putting much needed emphasis on manufacturing. There was however, also an acknowledgement that the level of adjustment of Singapore companies to India, when compared with their business dealings with certain other Asian countries, was still not great. Differences in the culture of doing business could be one factor. There was also emphasis from the Singaporean side about the need for further improvements in ease of doing business and for greater predictability and transparency in respect of the regulatory framework and taxation.

There was also an expectation that Singapore may get to showcase itself better with the initiatives its companies were taking in the making of the new state of Andhra Pradesh and its capital Amaravati. It was felt that if successful they could help trigger several more initiatives in the form of further investments from Singapore.

Indian companies, in general, did not bring to the fore any issue of concern

that they faced in the Singapore business environment in terms of making investments there. However, one aspect that may need underlining here is the need for Indian companies to go in for long term investments that can bring sustained gains. Many Indian corporates are looking at a presence in Singapore in view of it being a trading hub, a regional financial centre for raising funds at competitive rates, or simply to have a good address for conducting easy global operations. But there are other possible spillovers that sustained linkages with local companies and institutions can bring. Singapore is constantly evolving and innovating and longer term tie-ups and collaborations, can help Indian corporates keep up with global best practices. More Indian corporates investing in sectors of local importance will also add strength to the bilateral relationship.

But both Indian and Singaporean businesses were keen to know how the capital gains exemption will be resolved<sup>34</sup> under the current bilateral DTAA with Singapore after India had agreed with Mauritius for a two year phase out for the termination of the exemption in India's bilateral DTAA with Mauritius. Some in fact tended to argue that Singapore was not Mauritius, particularly because of the Limit of Benefits clause in the case of the former, and retention of the exemptions was worth considering in the case of Singapore particularly to safeguard the high level of investment flows taking place into India from Singapore.

While nothing definite can be said about the likely impact of the withdrawal of exemptions on the level of investment flows from Singapore and a more detailed evaluation may be needed for that purpose, it would be an aberration if the exemption was retained at a time when the government in India is trying to provide a level playing field for all inward investments and avoiding

arbitrage between jurisdictions. And there is nothing special about the quality of investments coming from Singapore, as compared to other sources, that can be said to merit a special exemption. On the other hand, there may be a case for India to bring down its own corporate tax rates and other tax liabilities for all investors, both domestic and foreign, that an attractive business environment provides that is also even handed.

It has also been reported<sup>35</sup> that India is likely to seek renegotiations with Singapore about the investment chapter of CECA to bring it in line with India's model draft investment agreement. As already pointed out there are several provisions in the investment chapter of CECA that carry more extensive commitments than the BIPA model text including those relating to pre-establishment national treatment and recourse to international arbitration in case of disputes. Here the key issue would be one of timing of the renegotiations. Considering the high level of inflows from Singapore and also considering that India's commitments under some of the other BIPAs, including under the investment chapters of CEPAs with Japan and Korea, are far more extensive, it may be appropriate to take up the renegotiations with Singapore on this issue somewhat later depending also on how negotiations with other partners proceed.

Finally, the wide differences that exist between the data maintained by the two countries on investment flows both at the aggregate level and at the level of sectoral composition need better understanding and, if possible, reconciliation. While some plausible explanations for the wide disparity have been given at various places in this chapter, this would need to be carefully studied by the Joint Working Group on Trade and Investment set up by the two sides.

## Endnotes

- 1 Shekhar Vibhanshu (2007), "India-Singapore Relations: An Overview", IPCS Special Report, No. 41, June 2007
- 2 [http://www.business-standard.com/article/pti-stories/india-s-pore-firms-invest-usd-51-bln-in-each-other-s-markets-114081500379\\_1.html](http://www.business-standard.com/article/pti-stories/india-s-pore-firms-invest-usd-51-bln-in-each-other-s-markets-114081500379_1.html)
- 3 [http://www.business-standard.com/article/pti-stories/india-s-pore-firms-invest-usd-51-bln-in-each-other-s-markets-114081500379\\_1.html](http://www.business-standard.com/article/pti-stories/india-s-pore-firms-invest-usd-51-bln-in-each-other-s-markets-114081500379_1.html)
- 4 <http://www.dealstreetasia.com/stories/singapore-is-now-indias-biggest-source-of-foreign-direct-investment-22482/>
- 5 [http://www.business-standard.com/article/companies/temasek-plans-to-invest-in-indian-real-estate-116071201416\\_1.html](http://www.business-standard.com/article/companies/temasek-plans-to-invest-in-indian-real-estate-116071201416_1.html)
- 6 <http://economictimes.indiatimes.com/small-biz/startups/shopclues-says-valued-at-1-1-billion-after-gic-investment-plans-ipo-in-2017/articleshow/50543807.cms>
- 7 <http://www.livemint.com/Industry/rhUJaJqMc4Ihw1VSeshkOP/Temasek-Holdings-may-invest-in-distressed-assets.html>
- 8 <http://www.thehindubusinessline.com/companies/temasek-scouts-for-more-investments-in-india/article8840335.ece>
- 9 Temasek Holdings is for the first time considering investment in real estate as an asset class in India.
- 10 <http://www.livemint.com/Industry/rhUJaJqMc4Ihw1VSeshkOP/Temasek-Holdings-may-invest-in-distressed-assets.html>
- 11 <http://3g4g.in/2006/08/25/the-emergence-of-asian-telecom-giants-singtel-hutch-and-maxis/>
- 12 <http://www1.singtel.com/about-us/news-releases/singtel-and-airtel-announce-a-strategic-aliance-to-provide-seamles-high-speed-d.html>
- 13 <http://www.dnaindia.com/money/report-ascendas-india-looks-beyond-south-eyes-properties-in-pune-mumbai-2231568>
- 14 [http://www.business-standard.com/article/companies/itpl-is-now-intl-tech-park-bangalore-105061001084\\_1.html](http://www.business-standard.com/article/companies/itpl-is-now-intl-tech-park-bangalore-105061001084_1.html)
- 15 <http://economictimes.indiatimes.com/wealth/personal-finance-news/ascendas-india-acquires-multi-tenanted-it-building-in-hyderabad-for-rs-294-crore/articleshow/48297279.cms>
- 16 <http://www.dnaindia.com/money/report-ascendas-india-looks-beyond-south-eyes-properties-in-pune-mumbai-2231568>
- 17 <http://www.dw.com/en/what-to-expect-from-the-india-singapore-strategic-partnership/a-18861462>
- 18 <http://www.thehindu.com/news/national/external-affairs-minister-sushma-swaraj-visit-to-singapore-india-singapore-decide-to-scale-up-trade-ties/article6324029.ece>
- 19 <http://www.livemint.com/Companies/dN6BT2IrOOSjrQcBWwvFJ/PSAJN-Port-ink-biggest-shipping-FDI-agreement.html>
- 20 <http://www.sical.in/tuticorin.html>
- 21 India-Singapore Relations: An Overview (2007), Institute Of Peace And Conflict Studies (IPCS) Special Report, June 2007
- 22 <http://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=40787556>
- 23 <http://indiaibusiness.nic.in/newdesign/index.php?param=newsdetail/7433>
- 24 <http://www.livemint.com/Companies/joY2pUIDAUOjqx93KPLnNO/Singapores-PSA-wins-container-handling-deal-at-Kolkata-port.html>
- 25 <http://www.thehindubusinessline.com/economy/logistics/container-operations-set-to-begin-at-kakinada-port-from-nov-15/article7850051.ece>
- 26 <http://www.thehindubusinessline.com/2000/08/09/stories/090940c7.htm>
- 27 <http://www.projectstoday.com/News/NewsPrint.aspx?Nid=7061>
- 28 <http://www.thehindubusinessline.com/2002/05/17/stories/2002051700340600.htm>
- 29 <http://www.financialexpress.com/archive/It-weighs-buying-entire-stake-in-singapore-jv-from-partners/48370/>
- 30 [http://www.business-standard.com/article/companies/changi-raises-its-stake-in-bapl-to-36-32-115033100818\\_1.html](http://www.business-standard.com/article/companies/changi-raises-its-stake-in-bapl-to-36-32-115033100818_1.html)
- 31 'PM Lee meets Modi, says Singapore and India committed to deepening ties', Straits Times, 4<sup>th</sup> October 2016.
- 32 [http://economictimes.indiatimes.com/magazines/panache/how-Singapore--is-turning-into-India-Inc's-gateway-to-the-world\\_by\\_Amit\\_Burman,December\\_23,2014](http://economictimes.indiatimes.com/magazines/panache/how-Singapore--is-turning-into-India-Inc's-gateway-to-the-world_by_Amit_Burman,December_23,2014)
- 33 <http://www.livemint.com/Companies/b2jFcoLae87vxkoDCtdPoL/Wipro-buys-some-Yardley-operations-for-455-mn.html>
- 34 A Protocol revising the DTAA has been signed by the two countries on 30 December 2016. For more details see endnote 3 of Chapter 6.
- 35 'India writes to Singapore, Japan, South Korea to tweak investment pacts' by Deepshikha Sikerwar, 11 August 2016, Economic Times.

# 6

## How do They All Add Up?

In the foregoing chapters, the impact over the years of India-Singapore CECA has been examined in respect of India's merchandise exports and imports vis-a-vis Singapore, the bilateral trade in services and the investment flows between the two countries. At the end of each chapter certain suggestions for implementation have also been made. In this concluding chapter we will summarise them together and look at the overall impact and suggest a way forward particularly at a time when the second review of CECA has remained inconclusive for over six years now.

A key overall aspect that emerges from the study is the rather unique character and expanse of the trade and investment relationship between the two countries. Singapore today is the single largest recipient (25 per cent) of India's overseas investments even if some of these investments then get routed to third countries. It is also becoming the leading source of investment flows into India and presently holds the third position on foreign investment stock in the country. While a good part of these investments is of third country origin with investments merely getting routed through Singapore, investments into India from domestically

rooted companies in Singapore are also very sizable. The same position applies to portfolio investments from Singapore into India.

India's level of trade in services with Singapore is also the highest that India has with any Asian country. Its role as a regional maritime and air transport hub and as a financial services centre is no doubt a key driving factor.

As for merchandise trade, the uniqueness hinges on three counts. Firstly, Singapore has a zero duty regime even on MFN basis for all but 6 tariff lines. Secondly, the Singapore market, though small in size at a little over 5 million people is a market with a high level of affordability with a per capita GDP of over US\$55,000. Add to this a visiting tourist population of over 15 million per year many of whom end up shopping in Singapore. It becomes a regional window for showcasing products (The renowned Mustafa store in Singapore that has grown to stretch over an entire street illustrates this phenomenon). Thirdly, over half of Singapore's exports to India are re-exports of goods of third country origin. A good part of India's exports to Singapore may also be getting re-exported to third countries underlining the country's role as a trade facilitating hub.

It is very important to have a good data base to get a precise idea about what forms the bilateral component of overall trade and investment flows between the two countries and what derives from Singapore's role as a gateway for trade and investment to South East Asia and beyond. This is unfortunately missing and the differences in data maintained by the two sides are glaring. In merchandise trade, for example, while India has been having a surplus as per its data, it is Singapore that has the surplus as per the database of the latter. In this report an attempt has been made to identify the various methodological issues that lie behind some of the differences. The report has also sought to point out at the product level what may be purely bilateral trade and what may be on account of re-exports. Clearly, however, more clarity is necessary and on a continuing basis.

The two sides have set up a Joint Working group on trade and investment that *inter alia* is learnt to be looking at getting a better understanding about the large differences in trade data. But it is also very important for India on its own part to a) introduce a system for tracking utilisation by Singapore of CECA and IAFTA tariff concessions by monitoring the certificates of origin presented at the time of clearance of imports from Singapore into India and making this data publicly available; b) refine the annual surveys being conducted by the Reserve Bank of India on trade in IT services and financial services in a manner that bilateral trade trends and other issues being faced by Indian services companies with countries like Singapore with which we have an FTA are separately examined. The surveys should also seek to cover trade in sectors like transportation and travel services in which we have substantial trade with Singapore; and c) refine the annual census by RBI on both outward and inward foreign investments so that they give a clear picture of not only the inflows but also the

total investment stocks on a country wise and sectorally disaggregated basis.

As for the impact, on merchandise trade, CECA made no direct difference to India's exports to Singapore since most tariffs in Singapore were zero even without CECA. The only difference, after the first review, was the introduction of a quicker 'Verification CECA Route' for registration of Indian generic pharmaceuticals with the Health Services Authority of Singapore (HSA) in cases where a generic drug had already been evaluated and approved by HSA's reference drug regulatory agencies (those of US, EU, UK, Canada and Australia). This has benefitted Indian pharma companies to some extent even as private practitioners in Singapore are largely known to prefer prescribing innovator drugs. The Pharmaceutical Export Promotion Council of India (Pharmexcil) has proposed that the Singapore authorities could be persuaded to relax the requirement that the application for such generic drug registration with PSA has to be done within two years of getting the approval from the reference drug regulatory agency. This is because some of the reference regulatory agencies have longer validity periods for their registration of generics, some extending to five years. An alignment between the validity periods of the reference regulatory agency and PSA's registration requirement would be a facilitative measure that deserves consideration than a uniform two year requirement.

Even as India's exports were otherwise not impacted by CECA provisions, India's exports did, however, show some momentum in the first several years after CECA came into force that appeared to diminish later. India's export rose from only US\$ 4 billion in 2004-05 to US\$ 16.9 billion in 2011-12 but has seen a steep decline to a level of US\$ 7.7 billion in 2015-16. The large share of refined petroleum products in India's exports, and the dynamics of oil trade, including more recently of depressed

prices, is no doubt a contributory factor for the export trend in this set of products.

But even in respect of other HS Chapters, there was practically no chapter in which exports showed a steadily rising trend throughout. Increased competition from other countries, particularly China, contributed to the decline in exports in several sectors as pointed out in the HS chapter level trade analysis in chapter 2. Singapore's rising incomes and affordability of its consumers have also meant that they now favor more branded goods such as in jewellery or even pharmaceuticals.

Another aspect behind sluggishness in India's exports is the low presence of India in the value or production chain arrangements of multinationals in which Singapore has come to acquire an important part. Singapore, in fact, has the highest backward participation index in global value chains among countries in the east and south east Asian region. However, India does not figure among the five top sources of foreign value added in Singapore's exports of any major industry group except in the residual category of miscellaneous group of industries, that is perhaps mainly owing to India's exports of cut and polished diamonds. In areas like electronics, chemicals and petrochemicals, precision instruments and certain high technology products Singapore has significant domestic exports and their import content is more than 50 per cent. A larger role for Indian manufacturing in these value chains could be an important area to explore for the future with certain added facilitation for them within CECA as appropriate.

As for imports into India from Singapore, the CECA concessions have certainly made a difference. Even as they have followed a wavy trend with ups and downs the decline from the peak in 2011-12 as a result of global slowdown is not so sharp as India's exports. Singapore has

certain strong manufacturing capacities in sectors such as petroleum refining, petrochemicals, certain speciality chemicals, a few steel making segments, high end electronics, optical and medical instruments and certain food industry areas. With limited domestic consumption it has the capacity to export much of the production. The report has flagged in Chapter 3 the various specific products where imports from Singapore have significantly risen. By end 2016, by when all tariff reduction phase-outs under both CECA and India ASEAN FTA will be complete, Singapore would have a very preferential access into the large Indian market. As the Indian economy gathers steam imports of these products could rise further.

It is important to note that there are some items which figure under India-ASEAN FTA exclusions or under its sensitive categories (and are also categorised as sensitive under the CEPAs with Japan and RoK ) but get tariff free access under CECA. These include acrylic acid and salts, butyl acrylate, other esters of acrylic acid, methacrylic Acid, polypropylene, and polyethylene. Imports of each of those products have been substantial, and Singapore is the only country that has such preferential access for them. Likewise there are some items under the CECA excluded list whose liberalisation under IAFTA has significantly expanded access. Imports have surged as a result of toluene, vinyl acetate, butanoic acids and salts.

In certain areas such imports could also affect the domestic industry as was flagged by the Chemicals and Petrochemical Manufacturers Association of India which showed particular concern about rising imports of items like polyethylene, polypropylene, methyl methacrylate, etc., Following allegations of dumping, the government of India has also imposed anti-dumping duties on a few chemical products such as phenol, certain forms of polypropylene and flexible slabstock polyol.

Close monitoring may be necessary and it is relevant to take note here that the government of India has already notified in 2009 the bilateral safeguard provision included under Article 2.9 of CECA. In March 2016, the bilateral safeguard provision under India-ASEAN FTA has also been notified. It does not however appear these have been invoked in any case so far.

The bilateral services trade, unlike goods trade, has seen more steady growth particularly in the IT and IT enabled services sector. Singapore, despite its small size, has a substantial share in world services trade. It is a regional hub for air and shipping services, is a major world financial centre, has emerged as a favored business, convention and arbitration centre and holds facilities for repair and maintenance of aircrafts and ships. It enjoys a surplus in its services trade with India with an export of US\$3.44 billion and import of US\$ 2.88 billion in 2015. What is however encouraging for India is that its deficit is narrowing. While Singapore has a surplus trade with India in the transportation, finance, construction, maintenance and repair and personal and recreation services India has higher earnings on account of telecommunication, computer and information, business management and trade related services.

The aforementioned figures, however, do not include travel services in which Singapore seems the winner. While there are no figures available about the earnings, Indian tourist arrivals in Singapore exceeded 1 million for the first time in 2015 as against 150,000 coming from Singapore to India in the same year.

Remittances from Indian nationals working in Singapore are another substantial element. However, following more restrictive foreigner employment policies being followed by the government of Singapore in recent years, these have

dropped, as per World Bank statistics, from a peak of US\$1225 million in 2012 to only US\$828 million in 2015.

Indian banks in Singapore have also seen their return on assets decline sharply in recent years. Both the banking and IT sectors have also seen some regulatory and manpower movement issues that are impeding their further expansion. These may need to be looked at carefully since India's main gain from CECA was expected to come from the services sector.

India's ability to increase its earnings on the services front is constrained partly due to its capacity limitations in respect of transportation, infrastructure, depth in financial services and business environment. These are outside the scope of CECA and have to be separately addressed. But there are a few regulatory and related aspects in services trade that are impacting on levels of market access. The specific aspects that need addressing under CECA are given below.

- Implementing the built in agenda: Early action for mutual recognition agreements to be reached in the areas of accounting, architecture, dental and medical services preferably within a year. Both sides should also agree on immediate entry into force of the MRA on nursing that has already been finalised by the two sides.
- There are some concerns among some of the Indian banks in respect of permitted asset size, asset management ratios and other functional parameters which are significantly limiting their operations. The Singapore Bank DBS is also having ambitious plans to expand their operations in India. It may be a good idea for the regulatory authorities in India and Singapore, the Reserve Bank of India and the Monetary Authority of Singapore, to have a regular exchange of views about regulatory issues with a view to ensuring that both regulatory

compliance and business expansion can proceed harmoniously.

- It would be very important to bring more predictability in the regulatory aspect regarding employment passes particularly in relation to Indian banks and IT companies in Singapore. A bilateral understanding needs to evolve keeping in view CECA commitments. Indian companies may also need to be seen as making an effort to increase local recruitment of personnel and some public outreach about those efforts may also be helpful. This is clearly a sensitive area but a carefully planned move forward is necessary.
- Indian IT companies could also try and see if they can rework their business model that relies less on onsite presence but makes use of more short term visits by experts from their respective headquarters for which multiple entry visas will need to be more expeditiously processed and issued. If so, this additional provision could be sought to be incorporated in CECA.
- In the bilateral air services trade, Indian carriers have fared somewhat poorly accounting for only about a third of passenger seats and even less on cargo carriage. This is in part due to the inability of some of the carriers to offer competitive packaging including with attractive features like wide bodied jets and frequency of operations. But Indian carriers have also referred to slotting as an issue at the Singapore end that may need to be fairly worked out.

As earlier mentioned, the high level of investment exchanges between the two countries is a special characteristic of the bilateral economic relations. Singapore, with its surplus capital, is keenly looking at investment opportunities abroad that can bring high and steady long term returns.

India, as a large emerging market, is clearly a desired destination from the point of Singapore based investors as is evident from the steady investment accretions that are taking place. India is still however not the most preferred destination and many other Asian economies including China, Hong Kong, Indonesia and Malaysia rank above India in terms of larger investment outflows from Singapore to them.

During this author's visit to Singapore, including in the interaction with the Singapore Business Federation, there was a general appreciation conveyed for the new initiatives being taken by the government in India including in the form of 'Make in India', 'Start Up India', 'Skill India', etc. that were putting much needed emphasis on manufacturing. (Investments from Singapore in India have significantly risen in the last two years in a range of areas including energy, port development and real estate development.) There were, however, also suggestions from the Singaporean side about the need for further improvements in ease of doing business and for greater predictability and transparency in respect of the regulatory framework and taxation. They conveyed that the level of adjustment of Singapore companies to India, when compared with their business dealings with certain other Asian countries, was still not very satisfactory. Differences in the culture of doing business could be one factor. In this regard there was also an expectation that Singapore may get to showcase itself better with the initiatives its companies were taking in the making of the new state of Andhra Pradesh and its capital Amaravati. If successful, they could help trigger several more initiatives in investments in the future.

It would, however, be very good if Singapore could look at investing more in India's infrastructure and projects like the smart cities.<sup>1</sup> It is hoped that the new Financial Dialogue to be co-chaired by

Deputy Prime Minister Shanmugarathnam of Singapore and Finance Minister Arun Jaitley could help to facilitate the process.

As for Indian companies investing in Singapore they are doing so for a variety of reasons. Many find Singapore a good platform for raising funds at competitive rates. Several large Indian business groups have set up holding companies in Singapore for dealing with their global operations presumably benefitting from the international headquarters award programme of the Economic Development Board of Singapore that allows for reduced corporate taxes for qualifying companies. Many also conduct their trading operations using Singapore as a hub to benefit from the trade facilitating environment of Singapore. Here again the Global Traders Programme of Singapore is an incentive with a reduced corporate tax rate for a certain number of years for income from physical trading, brokering of physical trade and derivative trade income. Indications are that Singapore is likely to continue to draw Indian companies that is also evident in the steadily rising number of Indian companies being registered in Singapore.

Indian companies, in general, did not bring to the fore any issue of concern that they faced in the Singapore business environment in terms of making investments there. However, one aspect that may need underlining here is the need for Indian companies to go in for long term investments that can bring sustained gains. Many Indian corporates are looking at a presence in Singapore in view of it being a trading hub, a regional financial centre for raising funds at a competitive rates, or simply to have a good address for conducting easy global operations. But there are other possible spillovers that sustained linkages with local companies and institutions can bring. Singapore is constantly evolving

and innovating and longer term tie-ups and collaborations, can help Indian corporates keep up with global best practices. More Indian corporates investing in sectors of local importance will also add strength to the bilateral relationship.

Both Indian and Singaporean businesses were keen to know how the capital gains exemption will be resolved<sup>3</sup> under the current bilateral DTAA with Singapore after India had agreed with Mauritius for a two year phase out for the termination of the exemption in India's bilateral DTAA with Mauritius. Some in fact tended to argue that Singapore was not Mauritius, particularly because of the Limit of Benefits clause in the case of the former, and retention of the exemptions was worth considering in the case of Singapore particularly to safeguard the high level of investment flows taking place into India from Singapore.

While nothing definite can be said about the likely impact of the withdrawal of exemptions on the level of investment flows from Singapore, it would be an aberration if the exemption was retained at a time when the government in India is trying to provide a level playing field for all inward investments and avoiding arbitrage between jurisdictions. And there is nothing special about the quality of investments coming from Singapore, as compared to other sources that can be said to merit a special exemption. On the other hand, there may be a case for India to bring down its own corporate tax rates and other tax liabilities for all investors, both domestic and foreign, that can offer an attractive business environment that is also even handed.

It has also been reported that India is likely to seek renegotiations with Singapore about the investment chapter of CECA to bring it in line with India's model draft investment agreement. As already pointed

out there are several provisions in the investment chapter of CECA that carry more extensive commitments than the BIPA model text including those relating to pre-establishment national treatment and recourse to international arbitration in case of disputes. Here the key issue would be one of timing of the renegotiations. Considering the high level of inflows from Singapore and also considering that India's commitments under some of the other BIPAs and also under the investment chapters of CEPAs with Japan and Korea are more extensive it may be appropriate to take up the renegotiations with Singapore on this issue somewhat later depending also on how negotiations with other partners proceed.

During the visit of Prime Minister Modi to Singapore in November 2015, which also saw the bilateral relationship upgraded to a strategic partnership, the Joint Statement referred to CECA as the bedrock of economic partnership between the two countries and also called for an early conclusion of the second review that commenced in 2010. The Joint Statement issued on the occasion of the visit of Prime Minister Lee Hsien Loong to India in October 2016 recognised the importance of CECA in providing the foundation for economic cooperation. It further noted that the chief negotiators would meet for an early conclusion of the Second Review.

Considering the size and scale of bilateral relations and the potential for future growth, an early and mutually satisfactory conclusion of the Second Review will be important. It is learnt that issues relating to regulation of banks, movement of professionals and MRAs in the services sector are holding this up. A Singaporean official was quoted some years ago by *Business Standard* as saying<sup>2</sup>, 'Yes, it (the second review of CECA) has taken a bit longer. We are in no hurry. These

sort of negotiations take time. The Indian government is yet to come to terms with our laws. If CECA review takes over ten years then also it is no big deal. Life goes on'.

With RCEP negotiations currently underway, will it be reasonable to expect that some of the perceived shortcomings in the implementation of CECA can be corrected through the RCEP negotiations? In the view of this author, considering the dynamics of RCEP negotiations among sixteen diverse participating countries and considering the generally conservative approach shown by ASEAN countries in the liberalization of trade in services, this is unlikely to be able to be achieved through RCEP.

It would therefore be important for the issues to be further pursued through the Second Review. The situation facing Indian banks and IT sector may need to form an important consideration here. More issues have also now come to the table. The lapsing of the DTAA provision is expected to take place in a few months time. It could perhaps be given a phase-out as in the Mauritius case if there is good understanding. India's proposal to review the investment chapter of CECA also needs resolution. Singapore's keen desire to promote investments in states like Andhra Pradesh as well as through greater role for its banks are evident. On the other hand, India is keen to have more investments from Singapore in the infrastructure sector. Any further revision of the bilateral air services agreement needs to be perhaps also linked. Will all this be able to be put together in a manner that there can be 'give and take' and a satisfactory way forward?

#### Endnotes

- <sup>1</sup> 'India seeks investments from Singapore in investment projects', DNA India, 16 August 2014.
- <sup>2</sup> 'Singapore in no hurry to review economic pact with India' by Nayanina Basu, *Business Standard*, September 2, 2014.

<sup>3</sup> This report finalized early in December 2016. On the 30th December 2016, both India and Singapore signed a third protocol amending the DTAA, in line with the amendment done earlier on the India-Mauritius DTAA. From 1 April 2017, the amendment provides for source based taxation of capital. Further it

grants a two year transition period from 1 April 2017 to 31 March 2019 during when capital gains on shares will be taxed in source country at half of normal tax rate subject to fulfillment of conditions on Limitation of Benefits clause (source: Press Release issues by Department of Revenue of Government of India, 30 December, 2016)

# Annexures



**Table A.1.1: India's exports of mineral fuels (HS 27) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
271000	*Petroleum oils & oils obtained from bituminous mineral other than crude preparations; containing 70% or more by weight of these oils	179.6	373.7				
271012	Light oils and preparations:	58.7	336.08	2138.0	4217.0	1538.2	1544.5
271019	Other petroleum oils and oils obtained from bituminous minerals etc	635.8	1123.9	1490.4	5070.8	3721.7	1377.2
271099	Other waste oil	7.2	13.73	7.20	162.41	38.91	19.5
271111	Liquefied natural gas	0.02	0.00	0.00		22.63	51.8
Total of top exports to Singapore		881.3	1847.4	3635.5	9450.2	5321.4	2985.4
Total exports to Singapore		914.33	1874.7	3762.7	9549.7	5333.0	2998.7
Share of top exports to total exports		96.39	98.55	96.62	98.96	99.78	99.81

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.2: India's exports of mineral fuels (HS 27) to Singapore: Quantities**

HS Code	Description	Exports to Singapore (Quantity in thousands tonnes)				
		2004-05	2008-09	2011-12	2014-15	2015-16
271000	*Petroleum oils & oils obtained from bituminous mineral other than crude preparations; containing 70% or more by weight of these oils	1703.35				
271012	*Light oils and preparations	863.4	2468.16	4488.59	1950.93	3008.3
271019	Other petroleum oils and oils obtained from bituminous minerals etc	3820.71	2880.38	6129.47	5768.88	3934.97

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1. 3: India's exports of Miscellaneous goods (HS 99) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
999300	Special transactions & commodities not classified	120.5	197.8	189.9	78.97	43	994.99
999999	Unspecified items	0	10.47	0	0.31	0	0
Total exports to Singapore		120.53	208.28	189.93	79.28	43.03	994.99

Source: DGCIS, Ministry of Commerce and Industry, Government of India

Note: Singapore's imports of these items have been negligible as per figures from WITS.

**Table A.1.4: India's exports of Ships and floating structures (HS 89) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
890110	Cruise ships, excrsn boats and similar vessels principally designed for transport of persons, ferry-boats of all kinds	9.45	46.32	64.67	81.31	41.59	13.59
890120	Tankers				25.37		
890190	Other vessels for transport of the goods and other vessels for the transport of both persons and goods	3.97	9.5	499.19	279.99	153.56	64.45
890400	Tugs and pusher craft			125.54	566.02	192.3	88.29
890510	Dredgers			39.35	315.81	48.82	114.58
890520	Floating/submersible drilling/production platforms		52.25	57.49	552.29	2.1	0
890590	Other vessels, fire floats etc		29.09	388.73	1392.8	423.03	339.93
890690	Other under hdng 8906		0.01	0	186.19	9.03	81.74
Total of top exports to Singapore		13.42	137.17	1175.0	3399.8	870.43	702.58
Total exports to Singapore		24.23	143.35	1182.6	3399.9	871.93	702.65
Share of top exports to total exports		55.39	95.69	99.35	100.0	99.83	99.99

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.5: India's exports of Gems and Jewellery (HS 71) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
710231	Non-industrial diamonds unworked/ simply sawn cleaved or bruted	0.0	0.1	0.1	0.0	0.8	93.7
710239	Diamonds, whether or not worked, but not mounted or set: Others	138.9	515.0	348.8	238.3	160.9	131.9
710310	Unworked/ simply sawn/ roughly shaped precious and semi precious stones	0.0	0.0	0.0	10.1	8.0	10.6
710490	Other syn/ recnctrdtd precious/ semi precious stones	0.0	0.0	0.3	2.9	16.0	1.0
711311	Articles of jewelry and parts thereof of silver w/n plated/ clad with other precious metal	0.4	0.3	0.5	0.7	38.1	1.2
711319	Articles of other precious metal w/n plated or clad	38.7	41.7	171.4	340.7	267.7	155.5
711419	Articles and parts of other precious metal w/n plated or clad with precious metal	1.8	4.0	5.2	17.7	0.0	2.6
711719	Other imitation jewelry of base metal w/n plated with precious metal	14.8	4.3	0.5	0.7	0.4	0.5
711890	Other coin			12.4	12.2	0.0	30.7
Total of top exports to Singapore		194.6	565.4	539.3	623.3	491.6	427.8
Total exports to Singapore		195.4	567.8	562.2	627.1	493.4	432.8
Share of top exports to total exports		99.6	99.6	95.9	99.4	99.6	98.8

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.6: India's exports of Machinery and mechanical appliances (HS 84) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
8407	Spark-ignition reciprocating or rotary internal combustion piston engines	0.92	0.11	29.03	41.77	27.76	36.68
8408	Compression-ignition internal combustion piston engines (diesel or semi-diesel engines)	6.96	15.97	38.89	18.52	3.03	1.39
8409	Parts suitable for use solely or principally with the engines of heading 8407 or 8408	3.68	2.45	16.43	16.16	27.13	15.85
8411	Turbo-jets, turbo-propellers and other gas turbines	0.01	0.25	5.84	38.17	23.44	25.61
8413	Pumps for liquids, whether or not fitted with a	2.98	3.22	11.97	9.19	23.66	18.28
8414	Air/vacuum pumps,air/other gas compressors and fans;ventilating/recycling hoods incorporating a fan,w/n fitted with filters	1.01	2.82	3.3	5.57	5.07	10.09
8419	Machinery,plant/laboratory equipment,w/n electricallyheated,for heating,cooking,etc,excl machinery for domestic purpose;storage water heaters,non-el	1.43	0.37	14.45	9.01	13.15	15.45
8421	Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases	0.65	2.25	6.64	4.27	5.51	5.67
8426	Derricks;crns,incl cable crns;mobl lftng frms,strdl crns and works trcks ftd wth a crn	0	20.26	0.88	1.84	0.88	2.88
8429	Self-propelled bulldozers,angledozers,graders levtrs,scrprs,mechanicalshovels,excavators,shovl loaders,tamping machines and road roll	0	0.17	4.79	1.29	6.77	5.75
8430	Othermoving,gardening,leveling,scraping,excavating, tmpng,cmpctng,extrctng/bornng machnry,fr earth,mnrsl/ores;pile-drvr;snow-plou	5.18	64.5	126.69	67.69	21.09	28.56
8431	Parts suitable fr use solely/prncply wth the mchnry of hdgs.nos.8425 to 8430	5.52	9.32	43.1	40.63	28.12	45.03
8448	Auxlry mchnry usd wth mchns of hdg 8444, 8445,8446/8447;prts and accsrs usd wth this hdg/of hdg 8444,8445,8446/8447	0.62	0.7	3.7	10.52	11.42	8.85
8452	Sewng mchns,excl book-sewng mchns of hdg no 8440;furnt,bases and covrs spcly dsngd for sewng mchns;sewng mchns nedls	0.23	0.01	0.22	7.73	6.63	6.04
8466	Prts and accsrs suitbl fr use wth mchns of hdg nos8456 to 8465,incl wrk/tool holdrs,slf-openg dieheads,etc;tool h	1.55	1.6	12.62	10.65	5.77	4.9
8471	Automatic data processing machines and units	9.91	9.34	22.04	27.95	41.43	19.65
8473	Prts and accsrs(excl covers,carryng cases etc)usd wth mchns of hdg no.8469 to 8472	17.71	20.21	37.04	36.49	25.85	32.67
8475	Mchns fr assemblnc elctrc/elctrc lamps, tubes/valve/flash-bulbs,in glass envelops,mchns fr mnfctrng/ht wrkng glass/gla	0	0	0.01	8.01	39.18	26.31
8479	Mchns and mchnl applncs hvng indivl functns,n.e.s.	2.33	4.96	6.83	12.82	11.97	4.16
8481	Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducin	9.64	12.11	30.35	36.32	50.04	55.64
8482	Ball or roller bearings	1.16	2.04	3.35	4.65	5.55	6.67
8483	Trnsmnsn shfts and crnks;gears;ball screws; bearing housing andothr plain shft bearings spd chngrs incl torque cnvtrsflywh	1.26	1.13	1.9	1.94	2.61	4.1
Total of top exports to Singapore		72.75	173.79	420.07	411.19	386.06	380.23
Total exports to Singapore		89.98	190.76	469.89	479.11	426.02	409.34
Share of top exports to total exports		80.85	91.10	89.40	85.82	90.62	92.89

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.7: India's exports of Organic Chemical (HS 29) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
2902	Cyclic hydrocarbons	1.4	66.9	58.0	102.3	40.3	81.0
2903	Halogenated derivatives of hydrocarbons	1.7	14.4	1.0	1.0	0.2	0.4
2905	Acyclic alcohols and their halogenated, sulphonated, nitrated or nitrosated derivatives	0.6	2.9	3.8	12.0	12.2	10.3
2906	Cyclic alcohols and their halogenated, sulphonated, nitrated or nitrosated derivatives	4.4	3.7	7.9	24.2	14.3	14.5
2909	Ethers and their derivatives ketone peroxides (w/n chemically defined) and their halogenated sulphated nitrated/nitrosated derivatives	0.2	0.3	3.9	37.5	30.0	16.6
2914	Ketones and quinones, w/n with other oxygen function, their halogenated sulphated nitrated/nitrosated derivatives	0.7	1.0	3.6	6.2	3.3	4.4
2915	Saturated acyclic monocarboxylic acids and their anhydrides, halides, peroxides and peroxy acids; their halogenated sulphated nitrated/nitrosated derivatives	2.7	3.3	5.9	11.3	17.9	18.6
2918	Carboxylic acids with additional oxygen function anhydrides halides peroxides and peroxyacids their halogenated sulphated nitrated/nitrosated derivatives	0.1	0.2	1.5	3.0	10.2	7.4
2921	Amine- function compounds	0.5	0.7	2.4	0.8	3.9	3.9
2922	Oxygen-function amino-compounds	0.4	0.2	0.3	4.1	4.2	3.6
2924	Carboxamide-function compounds amide-function compounds of carbonic acid	0.1	0.3	0.6	0.8	2.4	3.2
2925	Carboximide-function compounds (including saccharin and its salts) and imine-function compounds	0.0	0.0	0.2	0.5	1.4	2.6
2932	Heterocyclic compounds with oxygen heteroatom(s) only	0.1	0.1	0.8	2.7	10.3	5.2
2933	Heterocyclic compounds with nitrogen	0.4	0.4	1.6	6.0	32.4	19.4
2934	Mucic acids and their salts w/n chemically defined, other	0.0	0.0	7.8	14.9	46.5	41.2
2935	Sulphonamides	1.0	0.7	0.5	1.2	4.2	3.3
2941	Antibiotics	8.8	7.6	10.9	9.7	6.8	7.3
2942	Other organic compounds	12.2	20.9	28.6	105.4	20.7	13.8
Total of top exports to Singapore		35.1	123.5	139.2	343.2	261.1	256.7
Total exports to Singapore		43.0	135.0	153.2	362.6	276.7	274.2
Share of top exports to total exports		81.8	91.5	90.9	94.7	94.4	93.6

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.8: India's exports of Electrical machinery and equipment (HS 85) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
8502	Electric generating sets and rotary converters	2.9	3.7	1.9	6.7	1.3	3.4
8504	Electrical transformers, static converters (for example, rectifiers) and inductors	5.6	5.9	32.8	30.0	18.4	28.9
8507	Electric accumulators, incl separators therefor w/n rectangular (incl sq)	3.9	5.8	13.4	19.7	17.3	10.8
8517	Electrical apparatus for line telephony/ telegraphy, incl telephon sets with cordless handset carrier-current line system; videophone	1.5	1.5	195.4	61.3	25.5	20.7
8523	Pre-recorded unrecorded media for sound recording/sound recording of other phenomena, other than products of ch.37	0.3	0.6	139.4	131.0	6.0	6.9
8524	*Records, tapes & other recorded media for sound/other similarly recorded phenomena but excl products of chapter 37	69.9	75.7				
8525	Transmission apparatus for radio, telephony etc w/n incorporating reception apparatus/sound recording/reproducing apparatus; tv cameras	1.0	1.7	29.8	1.1	9.6	9.2
8532	Electrical capacitors fixed, variable/adjustable (pre-set)	0.8	0.8	1.8	4.3	4.8	5.3
8535	Electrical apparatus for switching/protecting electrical circuits etc. (e.g. switches, fuses, lightning arresters etc) for a voltage exceeding 1000 v	0.6	0.8	0.9	2.7	3.4	2.9
8536	Electrical apparatus for switching/protecting electrical circuits etc. (e.g. switches relays etc.) For a voltage not exceeding 1000 volts	2.2	2.5	5.5	27.7	42.9	50.4
8537	Boards panels etc equipped with two or more apparatus of hdg 8535/8536, incl those incorporating instruments/apparatus of ch 90	0.1	0.0	2.2	3.9	9.5	22.5
8538	Parts suitable for use solely/principally with the apparatus of hdg no.8535,8536/8537	0.3	0.4	7.6	10.5	20.0	12.1
8541	Diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices, including photo	1.8	3.9	33.9	8.6	2.7	1.8
8542	Electronic integrated circuits and micro-assemblies	1.7	1.4	11.9	8.2	7.2	3.2
8543	Electrical machines and apparatus, having individual functions n.e.s. in this chapter	0.3	0.2	1.9	1.5	2.3	8.2
8544	Insulated (including enamelled or anodised) wire, cable (including co-axial cable) and other insulated electric	1.8	4.3	11.5	8.2	10.3	10.5
Total of top exports to Singapore		94.6	109.3	489.9	325.3	181.2	196.7
Total exports to Singapore		111.7	127.5	508.3	348.1	225.8	212.4
Share of top exports to total exports		84.6	85.7	96.4	93.5	80.2	92.6

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.9: India's exports of Tools and implements (HS 90) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
900150	Spectacle lenses of other materials	0.16	0.24	0.42	0.34	1.49	1.34
900211	Objective lenses for cameral,projectors or photographic enlargers or reducers	0.01	0	0	0.05	2.75	3.4
900659	Other cameras	0.01	0	0.05	0.13	1.33	2.66
901580	Other instruments and appliances:	0.2	0.12	12.71	11.38	8.66	15.67
901590	Parts and accessories of surveying,phtogrmcl,hydrogrphic instruments etc excl compasses	0	0.08	0.73	2.01	0.93	2.03
901812	Ultrasonic scanningapparatus	1.64	2.36	3.22	0.27	41.63	8.2
901813	Magnetic resonance imaging apparatus			1.39	4.54	0.31	2.69
901819	Othr elctro-diagnostc apparatus incl thse forfunctional explrtraty examination or for checking physiological parameters	0.49	0.61	0.36	26.83	17.52	9.99
901839	Catheters and the like; other needles	0.2	0.74	1.59	5.94	1.7	1.96
901890	Other instrumentsandappliances of medical science	2.27	2.9	16.43	26.62	2.82	3.43
902214	Other, for medical, surgical or veterinary uses :	0.72	1.9	11.55	38.03	13.55	0.23
902230	X-ray tubes	14.54	24	31.16	0.45	0.08	38.44
902290	Other, including parts and accessories :	0.8	2.85	2.89	2.28	1.49	16.94
902610	Instruments and apparatus for measuring or checking the flow or level of liquids	0.91	0.59	3.02	6.98	3.95	2.64
902620	Instruments and apparatus for measuring/ checking pressure	0.07	0.09	0.43	1.23	5.42	4.83
902690	Partsandaccessories of instruments/ apparatus of hdg9026	0.14	0.15	0.29	0.54	3.04	1.22
902780	Other instruments and apparatus of hdg 9027	0.05	0.07	0.11	0.47	1.88	1.91
902790	Microtomes;parts and accessories of hdg 9027	0.07	0.13	0.21	0.28	0.82	1.56
902830	Electricity meters	0.02	0.05	0.05	0.16	10.96	3.1
903010	Instrument and apparatus for measuring or detecting ionising radiation	0	0.02	0.22	2.18	0.73	3
903089	Other instruments and apparatus	0	0.01	6.24	0.39	0.19	0.39
903090	Parts and accessories of hdg 9030	0.04	0.23	1.26	2.13	2.06	3.89
903180	Other instruments, appliances and machines	0.23	0.57	2.77	1.61	1.77	2.06
903289	Otherautomaticregulating/ controllinginstrumentsandapparatus	0.46	0.29	1.66	25.84	17.7	21.54
903300	Parts and accessories for machines,appliances,instruments/ apparatus of chapter 90,nes	0.43	1.54	2.17	82.08	5.62	3.45
Total of top exports to Singapore		23.46	39.54	100.93	242.76	148.4	156.6
Total exports to Singapore		31.18	49.96	110.31	273.68	163.42	169.7
Share of top exports to total exports		75.24	79.14	91.50	88.70	90.81	92.28

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.10: India's exports Copper and articles thereof (HS 74) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
740311	Cathodes and sections of cathodes of refined cop	2.1	28.5	16.8	0.0	41.1	121.7
740811	Wire of refined copper of which maximum cross-sectional dimension exceeds 6mm	6.3	18.1	24.0	2.7	0.1	0.2
741999	Other articles of heading 7419	0.7	1.0	2.6	1.7	17.2	12.7
Total of top exports to Singapore		9.1	47.6	43.5	4.4	58.4	134.5
Total exports to Singapore		11.2	49.7	56.5	10.7	62.3	137.6
Share of top exports to total exports		81.7	95.7	76.9	40.7	93.7	97.8

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1. 11: India's exports Nickel and articles thereof (HS 75) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
750210	Nickel,not alloyed			0.0		460.7	106.3
750610	Plates,sheets,foil etc of nickel,not alloyed				0.0	0.0	5.4
Total of top exports to Singapore		0.0	0.0	0.0	0.0	460.7	111.7
Total exports to Singapore		0.0	0.1	0.4	1.1	460.9	112.5
Share of top exports to total exports		0.0	0.0	0.0	0.9	99.9	99.3

**Table A.1.12: India's exports Vehicles (HS 87) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
870321	Vehicle with spark-ignition internal combustion reciprocating piston engine of cylinder capacity<=1000cc	0.0	0.0	0.0	2.5	0.0	0.0
870410	Dumpers designed for off-highway use	0.0	0.3	55.2	263.0	2.2	38.7
870810	Bumpers and parts thereof	0.1	0.1	0.7	0.2	2.9	0.3
870840	Gear boxes	0.2	0.8	9.7	0.0	0.8	0.2
870899	Other parts and accessories of vehicles of hdg 8701-8705	2.0	2.9	3.7	4.3	2.9	2.9
870990	Parts of the vehicles of hdg 8709	0.2	0.1	0.3	0.4	0.0	6.4
871000	Tanks and other armored fighting vehicles, motrsd, w/n fitted with weapons and parts of such vehicles			33.0	49.9	46.8	34.0
871120	Motor cycle etc with reciprocating internal combustion piston engine of cylinder capacity>50 cc to 250 cc	0.2	0.0	0.0	1.7	5.0	2.8
871140	Motor cycle etc with reciprctn internal combustion piston engine of cylinder capacity>500 cc to 800 cc			0.0		3.4	11.9
Total of top exports to Singapore		2.7	4.1	102.6	321.9	63.9	97.1
Total exports to Singapore		3.9	5.3	104.6	326.3	70.5	101.1
Share of top exports to total exports		68.9	77.7	98.1	98.7	90.6	96.0

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.13: India's exports Aircraft, spacecraft, and parts thereof (HS 88) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
880230	Airplanes and other aircraft, of an unladen weight >2000 kg but not exceeding 15000 kg			6.1		222.7	0.0
880240	Airplanes and other aircraft, of an unladen weight exceeding 15000 kg			0.0		15.1	0.0
880260	Spacecraft (incl satlts and suborbital) spacecraft launch vehicles			0.6		6.8	0.0
880330	Other parts of airplanes or helicopters	0.5	0.4	172.6	169.3	83.3	88.4
880390	Other parts of goods of hdg 8801 or 8802	0.0	1.4	18.2	14.4	3.1	2.7
880529	Other parts	0.0	0.0	0.0	7.8	1.0	0.1
Total of top exports to Singapore		0.5	1.8	197.5	191.5	331.9	91.2
Total exports to Singapore		0.6	1.8	199.4	191.5	331.9	91.2
Share of top exports to total exports		91.2	100.0	99.0	100.0	100.0	100.0

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.14: India's exports Cereals (HS 10) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
100190	*Other wheat and meslin	2.2	0.0		0.0		
100300	*Barley			1.5	0.0		
100590	Other maize (corn)	0.2	0.8	7.9	12.1	10.2	3.8
100620	Husked (brown) rice				0.0	1.6	1.7
100630	Semi/wholly miled rice w/n polished/glazed	8.2	8.5	11.4	44.4	95.3	62.7
100640	Broken rice	0.1	0.0	0.0	0.0	1.3	2.2
Total of top exports to Singapore		10.6	9.4	20.7	56.6	108.4	70.4
Total exports to Singapore		11.5	9.5	21.8	56.8	109.1	70.6
Share of top exports to total exports		91.9	98.4	95.2	99.6	99.3	99.7

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.15: India's exports Zinc and articles thereof (HS 79) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ Million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
790111	Zinc, not alloyed, containing by wt ≥ 99.99% zinc	0.0	2.3	51.1	4.3	3.9	63.0
790112	Zinc, not alloyed, containing by wt < 99.99% zinc					1.6	2.1
Total of top exports to Singapore		0.0	2.3	51.1	4.3	5.5	65.1
Total exports to Singapore		0.4	2.8	52.0	4.7	5.7	65.1
Share of top exports to total exports		0.0	81.7	98.3	90.9	95.6	99.9

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.16: India's exports Aluminium and articles thereof (HS 76) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
760110	Aluminium-not alloyed	40.6	74.8	299.2	78.5	11.1	48.7
760120	Aluminium alloys	1.4	9.1	1.4	6.3	0.0	0.0
760429	Others bars,rods profiles of aluminium alloys	0.6	0.5	1.3	0.8	2.9	2.2
760611	Rectangular(including square) plates sheets,strip of aluminium-not alloyed	2.0	1.9	0.2	0.3	1.0	1.1
760612	Rectangular(incl sqr)plats etc.of aluminium alloys	3.9	7.1	5.5	3.8	2.8	0.9
760692	Other plates,strips etc of aluminium alloys	0.0	0.0	0.0	0.1	1.0	2.0
Total of top exports to Singapore		48.6	93.4	307.5	89.8	18.8	54.9
Total exports to Singapore		49.8	94.3	311.8	92.3	21.6	56.7
Share of top exports to total exports		97.6	99.1	98.6	97.3	87.2	96.8

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.17: India's exports Tanning and dyeing extracts (HS 32) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
320210	Synthetic organic tanning substances	0.2	0.8	1.4	3.8	3.2	3.3
320412	Acid dys w/n premetalsd and prptns based theron mordnt dys and prptns based thron	2.1	1.9	4.4	5.6	8.4	5.1
320414	Direct dyes and preparations based thereon	0.0	0.1	1.4	2.8	4.2	2.5
320415	Vat dyes (incl those usable in that state as ppigmnts and preprations based thereon	5.5	0.2	0.1	0.3	0.4	0.1
320416	Reactive dyes and preparations based thereon	5.5	5.3	4.9	11.3	33.5	30.0
320417	Pigments and preptns based thereon	1.5	1.6	3.0	3.2	3.0	5.1
320419	Other, including mixtures of colouring matter of two or more of the sub-headings 3204 11 to 3204 19 : azoic coupling	1.0	1.2	0.9	3.6	3.4	4.2
320420	Synthetic organic prdcts of a kind used as fluorescent brightening agents	2.8	2.1	2.1	2.5	1.3	1.3
320890	Other paint varnish(incl enml and lacqr) based on synthetic plymr/chemically manufacturednaturalpolymer etc	0.4	0.4	0.0	0.2	0.2	1.1
Total of top exports to Singapore		19.0	13.5	18.1	33.3	57.6	52.6
Total exports to Singapore		21.6	16.8	20.0	36.7	62.2	56.5
Share of top exports to total exports		88.0	80.4	90.7	90.6	92.6	93.1

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1. 18: India's exports Pharmaceutical products (HS 30) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)						
		2008-09	2009-10	2010-11	2011-12	2012-13	2014-15	2015-16
300120	Extrcts of glnds/otr orgns/ of thr secrtns	0.1	0.0	1.2	2.1	0.0	0.0	0.1
300290	Toxns,culturs of microrgnsm and smlr prodts	0.4	0.2	19.2	0.3	0.4	0.7	0.0
300390	Othr medicants(excl headng 3002,3005,3006)for therapeutic prophylactic uses not put up for retail sale	4.2	3.2	8.0	14.2	22.7	11.5	2.5
300410	Mdcmnts cntng pencllns/drvtvs throf wth a pencllnc acid strctr/ strptmycns or thr dervtvs put up for rtl sale	3.1	1.0	1.2	2.1	3.3	7.2	5.4
300420	Medicaments containing other antibiotics and put up for retail sale	0.9	2.5	5.5	3.1	3.5	4.1	7.4
300439	Other : pituitary hormones; prednisolone; dexamethasone; danazol; other progestogen and oestogen group hormones :	0.1	0.1	0.2	0.8	0.8	0.2	4.1
300450	Other medicaments containing vitamins or other products of heading 2936 :	0.3	0.7	2.0	4.1	5.0	0.6	1.6
300490	Other medcne put up for retail sale	7.1	8.3	9.6	18.7	27.9	28.9	30.7
Total of top exports to Singapore		16.1	16.1	47.0	45.2	63.5	53.3	51.8
Total exports to Singapore		18.3	17.5	48.2	48.1	65.4	57.3	55.8
Share of top exports to total exports		87.6	91.7	97.6	94.1	97.2	93.0	93.0

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.19: India's exports Essential oils and resinoids(HS 33) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
330124	Essential oil of peppermint(mentha piperita)	0.6	1.0	9.6	5.6	0.4	0.2
330125	Essential oils of other mints	0.6	2.7	14.8	22.0	9.7	13.8
330190	Other conc of esnl oils in fats/fixd/wax like trpnc byprdcts of deterpenation of esnl oils aqus distlts/soltn of esnl	1.3	0.4	2.8	2.4	2.8	2.8
330290	Other: mixtures of aromatic chemicals and essential oils as perfume base:	1.0	0.6	1.0	6.1	3.3	3.3
330300	Perfume and toilet waters.	0.5	2.0	1.9	13.6	22.4	20.4
330499	Other beauty/make up preparations nes	0.9	0.3	1.9	4.2	3.9	5.6
330510	Shampoos	0.0	0.2	1.4	1.1	1.2	0.8
330590	Other : hair oil :	0.5	0.3	0.9	1.9	2.5	3.1
330610	Dentrifrices	0.1	0.1	0.1	0.5	1.5	1.1
330720	Personal deodorants and antiperspirants	0.0	0.0	0.4	2.8	2.4	0.2
Total of top exports to Singapore		5.6	7.4	34.7	60.1	49.9	51.3
Total exports to Singapore		7.0	8.2	36.7	68.0	53.7	54.6
Share of top exports to total exports		81.2	90.8	94.7	88.4	93.0	93.9

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1. 20: India's exports Miscellaneous chemical products (HS 38) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
380810	*Insecticides	21.5	13.5	19.3	12.1	25.4	13.7
380820	*Fungicides	2.7	10.2	1.9	2.0	0.7	0.6
380830	*Herbicides-anti-sprouting products and plant-growth regulators	0.0	0.0	3.2	8.4	7.4	17.5
380850	Aldrin (iso); binapacryl (iso);camphechlor (iso)			1.3	0.1		
380890	*Other similar products	0.4	3.2	1.0	4.6	1.1	0.7
381119	Other anti-knock preparation	0.2	0.0	0.7	1.1	2.2	4.3
381121	Addtvs fr lbrctng oils contng oils obtaind from petroleum and bituminous minerals	0.3	1.2	9.6	2.6	0.4	1.8
381129	Other additives for lubricating oils	0.0	0.0	0.0	1.4	0.0	0.2
381190	Other prepared additives anti-corrsive prpns and othr prpd additvs	0.2	2.1	3.2	3.2	6.1	4.1
381700	Mixed alkylbenzebes and mxd alkyl naphthalenes othr than those of hdg no. 2707/2902	0.6	1.5		0.0		
381800	Chmcl elmnt dopd for elctrncs in disc-wfrssmlr forms-chmcl cmpnds dopd for elctrncs	0.0	0.1	1.2	0.0	0.4	0.1
382370	Industrial fatty alcohol			1.4	0.9	0.9	0.1
382490	Chemical prodcts nes	0.4	1.3	2.3	1.1	10.1	3.5
Total of top exports to Singapore		26.4	33.2	45.2	37.5	54.6	46.6
Total exports to Singapore		27.6	35.8	46.8	41.9	60.5	52.3
Share of top exports to total exports		95.4	92.7	96.6	89.5	90.4	89.1

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.21: India's exports Articles of iron or steel (HS 73) to Singapore**

HS Code	Description	Exports to Singapore (in US\$ million)					
		2003-04	2004-05	2008-09	2011-12	2014-15	2015-16
730300	Tubes, pipes and hollow profiles of cast iron	3.1	3.4	5.8	4.4	6.4	5.4
730423	Other drill pipe:			11.0	0.9	0.2	0.4
730441	Other tubes, pipe and hollow profile of circular cross-section of stainless steel, cold drawn or cold rolled	0.1	0.0	4.1	0.3	0.0	0.0
730459	Other tubes, pipes and hollow profiles of circular cross-section of other alloy-steel, not cold rolled			1.5	1.3		
730629	Other			0.0	0.6	0.0	2.1
730630	Other, welded, of circular cross-section, of iron or non-alloy steel:	0.0	0.0	1.6	2.2	0.1	0.1
730721	Flanges of stainless steel	0.1	0.5	0.6	2.8	3.0	3.0
730799	Other tube/pipe fittings of other iron/steel	0.1	0.1	1.6	2.5	4.0	1.8
730840	Props and similar equipment for scaffolding, shuttering or pit-propping	0.1	0.2	0.6	0.4	1.4	2.3
730890	Other structures and parts of structures etc	0.6	0.3	5.1	1.6	2.2	1.0
731100	Containers for compressed/liquefied gas of iron/steel	0.3	0.1	1.2	2.7	1.1	0.9
731210	Stranded wire, ropes and cables	5.7	11.0	20.3	16.4	3.9	2.5
732393	Other household articles of stainless steel	8.0	4.6	0.9	0.5	0.5	0.4
732394	Other household articles of iron (other than cast iron) or steel, enamelled	4.8	2.0	0.2	0.9	0.2	0.5
732599	Other cast articles of iron or steel of malleable cast iron	0.4	0.9	1.9	3.0	3.1	4.1
732611	Grinding balls and similar articles for mills, forged or stamped but not further worked	0.2	0.2	0.0	2.2	0.1	0.0
732619	Other articles of iron or steel forged or stamped but not further worked	6.7	6.0	12.8	16.2	15.5	10.1
732690	Other articles of heading 7326	1.7	2.8	5.0	13.4	5.7	6.5
Total of top exports to Singapore		31.9	32.1	74.2	72.2	47.3	41.0
Total exports to Singapore		38.4	42.4	87.8	89.1	57.7	49.0
Share of top exports to total exports		83.0	75.6	84.6	81.0	81.9	83.7

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.1.22: Ranking of Major sources of Imports of Singapore**

Country	2005		2010		2015	
	Rank	Share in %	Rank	Share in %	Rank	Share in %
China	3	10.3	3	10.83	1	14.19
United States	2	11.7	2	11.46	2	11.23
Malaysia	1	13.7	1	11.69	3	11.14
Other Asia, nes	5	6.7	5	6.35	4	8.31
Japan	4	9.6	4	7.86	5	6.26
Korea, Rep.	8	4.3	6	5.79	6	6.13
Indonesia	6	5.2	7	5.42	7	4.84
Germany	10	3.0	12	2.86	8	3.02
UAE	18	1.3	14	2.05	9	2.75
Saudi Arabia	7	4.5	8	3.61	10	2.68
Thailand	9	3.8	9	3.31	11	2.62
France	15	1.9	13	2.39	12	2.46
India	13	2.0	10	2.97	13	1.95
UK	14	2.0	15	1.80	14	1.88
Russian	#N/A	#N/A	20	1.08	15	1.74
Philippines	11	2.3	11	2.96	16	1.53
Netherlands	#N/A	#N/A	17	1.72	17	1.39
Switzerland	20	1.2	18	1.46	18	1.26
Qatar	19	1.2	16	1.77	19	1.23
Vietnam	#N/A	#N/A	#N/A	#N/A	20	1.21
Hong Kong	12	2.1	#N/A	#N/A	#N/A	#N/A
Kuwait	16	1.8	#N/A	#N/A	#N/A	#N/A
Australia	17	1.5	19	1.11	#N/A	#N/A

Source: Calculated using WITS online database

**Table A.1.23: India's exports to Singapore**

Year	India's Exports to Singapore (in US\$ million)	
	Exports (All HS)	Exports (Excluding petroleum and Ships)
2003-04	2124.61	1186.05
2004-05	4000.41	1982.39
2005-06	5425.08	2779.64
2006-07	6053.61	2353.59
2007-08	7378.98	2804.69
2008-09	8444.7	3499.35
2009-10	7591.99	3765.89
2010-11	9825.25	3447.82
2011-12	16857.45	3907.85
2012-13	13619	3958.54
2013-14	12510.31	3431.06
2014-15	9809.17	3604.25
2015-16	7721.81	4027.99

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.1: India's top imports of HS 84 from Singapore under tariff category A  
(0% by April 2009)**

HS Code	Description	Imports from Singapore (in US\$ million)					
		2004-05	2008-09	2009-10	2013-14	2014-15	2015-16
84119100	Parts of turbo-jets/turbo propellers	0.05	4.68	0.77	1.92	1.64	2.3
84119900	Parts of other gas turbines	2.2	2.06	38.15	0.3	2.93	1
84145190	Others	0.89	1.55	0.37	0.68	1.83	0.81
84145990	Others	1.47	2.58	2.66	3.49	1	1.62
84149040	Parts of industrial fans,blowers and the like	0.73	7.42	10.73	10.04	6.15	4.78
84212190	Others	0.14	1.74	3.55	0.85	1.38	7.59
84219900	Othr parts of fltrng/purfyngmchnry	0.88	1.85	5.16	2.26	1.53	2.86
84289090	Others		1.43	0.2	0.75	0.61	0.75
84314920	Parts of ships derricks and cranes	1.06	0.94	1.48	0.72	0.52	0.19
84314930	Parts of other excvtnng,lvng,tmpng and excvtnngmchnryfr earth mnrl/ores,slf-prpld	5.47	0.54	0.4	0.12	0.06	0.11
84314990	Parts of other machinery of hd 8426,8429,8430	6.93	25.47	15.18	8.34	3.51	3.07
84483990	Others	0.67	1.35	0.88	3.27	4.68	3.57
84522110	Automatic industrial sewingmachines with capacity>=150watt and speed>=1500 stitches/ min	1.87	1.1	0.47	1.54	2.66	2.61
84522190	Other automaticsewingmachines	2.27	1.7	2.19	0.82	2.11	1.94
84522900	Other sewing machines	20.17	14.59	15.7	17.25	17.8	27.73
84669390	Other parts accessories, attachment for machine-tool	0.86	4.74	2.07	2.47	1.16	1.82
84729090	Others(coin-sorting and countingmachineetc)	0.09	3.42	3.5	0.1	0.17	0.62
84792090	Oil seed crushing/garndngmachinery (including for extraction/prpn of anml/vgtblfatsandoils	1.79	0.98	0.58	0.01	0.48	0.07
84798999	Other	3.81	13.41	13.25	18.22	18.12	15.02
84799090	Parts of other machinery and mechanicalappliances, havingindividuall functions	2.68	5.54	3.53	4.81	4.9	4.73
84807900	Other moulds for rubber/plastics	1	1.71	1.38	1.93	2.16	1.32
84818030	Industrial valves(excl pressure-reducing valves,and thermostcly controlled valves)	0.79	1.87	1.46	0.67	1.44	0.13
84818049	Other inner tube valves	0.26	0.98	1.82	1.14	0.73	1.29
84818090	Others	1.85	8.46	4.69	7.63	4.83	4.09
84819090	Other parts of the items under hdg 8481	1.32	1.99	2.03	4.75	8.46	1.46
84822090	Other tapered rolled bearings	2.34	1.26	1.34	2.08	0.58	1.03
84836090	Others	0.16	1.76	1.27	0.73	0.7	1.17
Total of top imports under Tariff category A		61.75	115.1	134.8	96.89	92.14	93.68
Total imports under Tariff Category A		71.17	139.8	160.4	111.8	109.8	107.9
Share of top imports to total imports under category A		86.8	82.3	84.1	86.7	83.9	86.8

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2. 2: India's top imports of HS 84 from Singapore under tariff category B (Reduction by 50% of base rate by April 2009)**

HS Code	Description	Imports from Singapore (in US\$ million)						
		2004-05	2008-09	2009-10	2011-12	2014-15	2015-16	
84071000	Air-craft engines		22.43	32.08	4.71	6.85	2.68	B, NT-1
84099990	Other parts of semi diesel engines	4.1	8.7	3.2	3.6	4.1	5.2	B, EL
84129090	Parts of other engines and motors	2.6	1.6	1.1	2.2	0.4	0.5	B, NT-1
84192090	Sterilisers,n.e.s.	0.1	0.2	0.3	0.2	1.2	0.8	B, NT-1
84198990	Others	0.4	1.7	1.9	4.8	2.6	3.9	B, NT-1
84212300	Oil/petrol-filters for internal cmbstnengns	0.5	0.5	0.2	0.7	0.5	0.5	B, EL
84212900	Other fltrng/purfyngmchnry and apprtsfrlqd	0.6	2.6	1.5	1.5	1.6	1.9	B, NT-2
84213990	Others	1.2	2.4	0.8	3.0	1.3	2.0	B, ST
84248990	Others	0.1	1.1	0.6	1.5	0.6	0.3	B, NT-2
84261900	Other(trnsprtrcrns, gantry crns,brdgcrcns)	0.1	0.5	5.5	18.3	0.3		B, NT-1
84264900	Othrmchnry of hdg 8426,slf-prpld	0.2	4.8	0.1		0.1	0.1	B, NT-1
84281011	Lifts of a kind used in buildings	0.4	1.1	1.8	2.0	4.4	1.7	B, NT-1
84281019	Other lifts	0.0	0.9	1.3	1.4	2.4	0.3	B, NT-1
84282019	Conveyors,excl belt conveyors	0.0	4.5	3.8	3.4	2.3	0.1	B, NT-2
84304110	Tube well drilling and core drilling machinery	0.3	2.3	0.0				B, NT-1
84304120	Petroleum and gas well drilling equipment	9.9	24.4	151.3	3.4	0.8	0.7	B, NT-1
84304190	Othr self propld boring/sinking machnery	0.2	4.8	19.4	2.2	0.0	7.0	B, NT-1
84304900	Othrborg / sinkngmachinrynt self-prpld	0.3	5.9	6.5	11.8	10.1	5.2	B, NT-1
84306900	Other machinery,not self-propelled	0.0	0.9	0.8	6.5	0.5	0.2	B, NT-1
84311090	Others	0.3	2.0	0.4	1.0	0.1	0.0	B, NT-1
84313910	Prts of elvtrs,cnveyrs and mvngpvmnts	0.2	0.8	2.3	0.5	0.6	0.2	B, NT-1
84313990	Prts of othrlftng,hndlng and loadngmchnry of hdg.no.8428	0.8	6.1	0.9	2.7	0.4	0.5	B, NT-1
84314310	Parts of boring/snkngmchnry,slf-prpld	3.8	13.9	13.8	8.1	1.6	0.3	B, NT-1
84314390	Parts of borgng/snkngmchnry,notslf-prpld	5.1	32.5	19.6	21.8	39.3	10.8	B, NT-1
84439959	Other parts and accessories of goods of sub-heading 844331, 844332		14.1	9.2	5.5	7.7	7.6	B
84439990	Parts of othrpntngmchnry and machines for uses ancillary to printing	1.0	4.6	4.1	3.9	1.8	1.2	B
84472090	Knitting machines,n.e.s.		0.1	0.2	3.5	0.1	0.1	B, NT-1

84563000	Machine-tools operated by electro-discharge process	0.1	0.4	0.5	1.6	1.7	2.9	B, NT-1
84592990	Others	0.4	1.2	0.1	3.9	0.1	0.1	B, NT-2
84593990	Others	0.1	0.3		2.2		0.0	B, NT-1
84594090	Others	0.0	13.2	0.1	0.0	0.0	0.0	B, NT-1
84613010	Vertical broaching machines					2.1	5.6	B, NT-1
84679900	Parts of other tools for working in hand	0.5	7.3	0.4	1.5	0.1	0.1	B, NT-1
84734090	Parts of other office machines of hdg no.8472	0.9	9.6	4.0	4.4	6.4	5.3	B, NT-2
84741090	Sorting, screening, separating, washing machines of other mineral substances		0.5	0.8	1.7		0.0	B, NT-1
84742010	Crushing/grinding machines for stone and mnrl mineral		5.3	2.2	1.7			B, NT-2
84742090	Other crushing/grinding machines	0.0	4.5	0.1	0.7			B, NT-2
84743900	Othrmxng/kneadng machines	0.0	1.2	0.1	0.0	1.4	0.1	B, NT-1
84748090	Machinery for agglomerating, moulding/shaping, plastering materials/other mineral products, n.e.s.	0.6	0.1	0.0	1.4		2.0	B, NT-1
84749000	Parts of machines of hdg 8474	0.8	2.2	1.1	5.8	0.7	2.2	B, NT-1
84752900	Other machines for manufacturing or hot working glass or glassware	2.8	0.1		1.0	0.1	0.5	B, NT-1
84759000	Parts of hdg 8475	0.1	1.0	0.3	3.2	9.4	4.0	B, NT-1
84778090	Other machinery for working rubber/plastic	0.1	1.1	7.8	2.5	0.1	0.4	B, NT-1
84779000	Parts of machines of working rubber/plastic	0.5	1.2	1.1	4.6	0.1	0.2	B, NT-1
84814000	Safety/relief valves	0.1	0.9	0.3	5.3	1.1	2.0	B, NT-2
84831099	Other transmission shaft(incl cam and crank shaft)	0.3	1.1	0.5	1.3	0.7	0.6	B, EL
84833000	Bearing housings, not incorporating ball or roller bearings; plain shaft bearings	0.4	0.8	0.8	1.1	1.0	1.3	B, NT-1
84834000	Gears and gearing, excl toothed wheels, transmission elements presented separately; ball screws; gearboxes and speed changers, incl torque convert	0.4	2.2	1.4	2.5	1.1	1.3	B, EL
84849000	Other gaskets and similar joints of metal	0.2	0.8	0.9	1.3	1.2	1.3	B, ST
84879000	Other machinery parts of heading 8485	8.4	3.9	2.8	5.6	0.5	1.2	B
Total of top imports under Tariff category B		48.8	223.8	308.0	171.2	119.3	84.5	
Total imports under Tariff Category B		70.6	279.6	335.6	219.5	145.0	103.3	
Share of top imports to total imports under category B		69.2	80.1	91.8	78.0	82.3	81.8	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2. 3: India's top imports of HS 84 from Singapore under Early Harvest (EH), tariff category C (Tariff elimination by Dec 2011), category D (Tariff elimination by Dec 2015) and E (Tariff reduction to 5% by Dec 2015)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2008-09	2010-11	2011-12	2014-15	2015-16	
84137099	Others	3.1	0.5	0.3	0.2	0.7	4.9	E, ST
84139190	Others	1.1	5.0	7.4	6.6	5.4	4.7	C, NT-1
84433220	Dot matric printer	0.1	5.1	0.9	10.1	0.3	0.1	EH
84433240	Laser zet printer	48.7	11.8	7.9	2.2	0.6	0.1	EH
84433250	Ink jet printer	6.9	6.1	4.8	9.7	1.1	1.3	EH
84439951	Ink cartridges with print head assembly	38.2	37.1	35.0	20.2	4.9	4.6	EH
84571020	Machining centres - vertical	5.4	6.6	7.3	8.2	7.1	9.3	C, NT-1
84713010	Personal computer (laptop,palmtop,etc)	10.4	72.1	46.9	44.6	72.8	87.9	EH,NT-1
84713090	Other digital automatic data-processing machine weghng<=10kg with a keyboard and display consisting of a central processing mach	14.5	14.6	19.5	36.0	35.0	32.3	EH,NT-1
84714120	Large/main frame computer	8.7	0.3	2.3	0.2	0.0	0.3	EH,NT-1
84714190	Other digital automatic data-processing machine comprising a central processing unit and an input and output unit wh/not combined	21.4	18.5	15.1	14.4	19.3	15.3	EH,NT-1
84714900	Other digital automatic data processing machine presented in the form of system	17.2	21.8	21.7	21.6	24.5	34.8	EH,NT-1
84715000	Digital processing units excl of sub hdngs 847141 and 847149,wh/not cont one/two typs of uni, like storg/input/output units	61.2	140.0	180.5	224.6	376.0	531.2	EH,NT-1
84716029	Other printer	5.0	0.6	0.2	0.4	0.3	0.2	EH,NT-1
84716030	*Monitor	15.6						EH
84716050	Scanners	6.9	2.5	2.3	3.2	2.6	1.7	EH,NT-1
84716090	Other	3.6	2.6	3.9	1.7	1.5	0.7	EH,NT-1
84717020	Winchester/hard disc drives	92.0	53.0	34.9	26.4	17.2	17.3	EH,NT-1
84717040	Magnetic tape drives	5.7	1.3	1.9	0.9	0.6	0.4	EH,NT-1
84717050	Cartridge tape drive	3.6	4.2	3.2	3.2	3.0	6.3	EH,NT-1
84717090	Others	12.6	33.2	34.7	44.1	53.9	58.9	EH,NT-1
84718000	Analogue/hybrid automatic data processingmachines	21.5	19.2	17.0	31.6	43.1	38.4	EH,NT-1
84719000	Other	17.3	25.7	11.6	17.8	14.8	13.0	EH,NT-1
84733010	Parts and accessories of microprocessors	34.4	20.9	10.5	11.0	2.5	1.4	EH,NT-1
84733020	Parts and accessories of motherboards	7.1	8.7	12.6	4.3	5.3	4.3	EH,NT-1
84733030	Parts and accessories othrmntdprntdcrcitbrds	48.8	50.6	42.3	23.6	14.9	10.9	EH,NT-1
84733091	Network access controllers	4.4	2.0	1.8	1.7	1.5	0.6	EH,NT-1
84733099	Other	72.5	46.3	54.2	40.0	35.1	49.3	EH,NT-1

84735000	Parts and accessories suitable for use with mchns of two/more of hdngsnos 8469 to 8472	1.7	14.1	1.5	4.6	0.9	6.2	EH,NT-1
84743200	Machines for mixing mineral substances with bitumen	0.9	6.6	5.6	1.1			C, NT-1
Total of top imports under category EH, C,D and E		590.8	631.0	587.5	614.0	744.7	936.4	
Total imports under EH, C,D and E		625.8	696.5	634.2	660.5	780.6	966.3	
Share of top imports to total imports under EH, C,D and E		94.4	90.6	92.6	93.0	95.4	96.9	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.4: India's top imports of HS 84 from Singapore under Exclusion list**

HS Code	Description	Imports from Singapore (in US\$ million)						
		2004-05	2008-09	2011-12	2013-14	2014-15	2015-16	
84081010	Out board engines	0.2	7.4	0.7	0.7		0.3	X,NT-1
84089090	Others	0.5	4.1	2.6	3.1	7.5	0.5	X,NT-1
84111200	Turbo-jets of a thrust>25 kn			0.0	8.9	10.4		X,NT-1
84123900	Other pneumatic power engines and motors	0.0	1.2	0.3	0.4	1.3	0.1	X,NT-2
84131990	Other pumps fitted or designed to be fitted with a measuring device	0.1	0.2	0.1	5.1	0.0	0.1	X,NT-1
84135090	Others	0.1	0.4	0.3	1.2	1.4	0.3	X,NT-1
84144090	Others	0.5	0.4	0.3	0.3	0.5	0.9	X, ST
84158390	Other air condng machines not incorporating refrigeration unit	0.1	1.2	0.1	0.3	0.2	0.4	X, ST
84186990	Others	0.2	1.4	0.9	2.0	0.8	2.6	X,NT-1
84199090	Parts of machinery plant and similar laboratory equipment and of institutions/storage water heaters (excl domstc type)/falling wthnhdgno.8419	0.1	6.7	1.5	2.0	2.7	1.2	X,NT-1
84223000	Machinery for filling, closing, sealing, capsuling or labelling bottles,cans,boxes,bags/otr containers;mchnry for aerating beverages	0.1	0.6	0.0	0.0	0.0	1.0	X,NT-1
84229090	Parts of other machinery	0.4	1.5	3.6	1.2	1.8	0.8	X,NT-1
84271000	Self-prpld trucks pwrd by an elctrc motor		0.3	0.6	0.4	0.2	0.4	X,NT-1
84291120	Bulldozers		0.1	0.4		0.5	1.2	X,NT-1
84295900	Other mchnclshovls,excvttrs and shovloadrs	0.8	1.0	1.5	0.1	0.2	0.3	X,NT-2
84312010	Prts of fork lift trucks	0.0	0.2	0.5	0.0	0.3	0.2	X,NT-2
84538000	Other machinery of hdng 8453		0.0	0.1	1.3	1.6	0.1	X,NT-1
84581100	Horizontal lathes,numerically controlled	0.5	1.2	4.1	4.2	3.1	5.6	X,NT-1
84823000	Spherical roller bearings	2.3	3.5	4.1	1.0	0.6	0.8	X,NT-1
84824000	Needle roller bearings	0.5	0.6	1.0	0.1	0.1	0.1	X,NT-1
Total of top imports under Exclusion list		6.4	31.8	22.8	32.5	33.2	16.9	
Total imports under Exclusion list		10.7	42.4	38.1	37.6	37.1	20.6	
Share of top imports to total imports under Exclusion list		60.3	75.0	59.8	86.4	89.4	82.2	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.4(a): Singapore's Annual Domestic & Re-Exports to India (Chapter 84)  
value in S\$ Thousands**

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS:	
1	OTHER PARTS & ACCESSORIES FOR MACHINES OF HEADING 8471 (HS 84733090)	1,29,252
2	PROCESSING UNITS EXCL THOSE OF SUBHEADING 8471.41 OR 8471.49 FOR PERSONAL COMPUTERS (NMB) (HS 84715010)	3,10,606
3	OTHER PROCESSING UNITS EXCL THOSE OF SUBHEADING 8471.41 OR 8471.49 NES (NMB) (HS 84715090)	2,74,569
4	OTHER PARTS & ACCESSORIES OF PRINTING MACHINERY NES (HS 84439990)	9,345
5	PARTS OF BORING OR SINKING MACHINERY OF SUBHEADING 8430.41 OR 8430.49 (HS 84314300)	25,198
6	LAPTOPS NOT MORE THAN 10KG WITH AT LEAST CPU KEYBOARD & A DISPLAY (NMB) (HS 84713020)	38,793
7	HARD DISK DRIVES (NMB) (HS 84717020)	23,822
8	INK FILLED PRINTER CARTRIDGES (HS 84439920)	8,066
9	OTHER MANUAL SEWING MACHINES EXCL HOUSEHOLD TYPE & BOOK SEWING MACHINES OF HEADING 8440 (NMB) (HS 84522900)	237
10	BALL BEARINGS (HS 84821000)	3,744
11	OTHER PARTS OF MACHINERY OF HEADING 8426 8429 OR 8430 (HS 84314990)	24,643
12	ASSEMBLED PRINTED CIRCUIT BOARDS OF MACHINES OF HEADING 8471 (KGM) (HS 84733010)	5,646
13	PROPRIETARY FORMAT STORAGE DEVICES (NMB) (HS 84717050)	31,212
14	PARTS OF ELECTRICALLY OPERATED MACHINES FOR ASSEMBLING ELECTRIC OR ELECTRONIC LAMPS TUBES VALVES OR FLASH BULB & FOR MAKING OR HOT WORKING GLASS OR GLASSWARE (HS 84759010)	49,246
15	PORTABLE HANDHELD COMPUTERS NOT MORE THAN 10KG WITH AT LEAST CPU KEYBOARD & A DISPLAY (NMB) (HS 84713010)	6,761
16	WINDOW OR WALL AIR CONDITIONERS SELF-CONTAINED OR SPLIT SYSTEM OF OUTPUT NOT OVER 26.38KW (NMB) (HS 84151010)	3
17	OTHER STORAGE UNITS (NMB) (HS 84717099)	22,121
18	OTHER TAPS COCKS VALVE & SIMILAR APPLIANCES FOR PIPES BOILER SHELLS TANKS VATS OR THE LIKE (NMB) (HS 84818099)	643
19	PARTS OF MACHINERY OF HEADING 8426 (HS 84314910)	1,083
20	PERSONAL COMPUTERS IN THE FORM OF SYSTEMS EXCL PORTABLE COMPUTERS OF SUBHEADING 8471.30 (NMB) (HS 84714910)	30,716
21	MACHINING CENTRES FOR WORKING METAL (NMB) (HS 84571000)	25,103
22	OTHER TOOL HOLDERS & SELF OPENING DIE HEADS FOR OTHER MACHINE TOOLS OF HEADINGS 8456 TO 8465 (HS 84661090)	19,037
23	OTHER BEARINGS (HS 84828000)	1,422
24	PARTS OF OTHER ELECTRICALLY OPERATED MACHINES (HS 84799030)	12,606
25	OTHER PARTS FOR OTHER COMPRESSION IGNITION INTERNAL COMBUSTION PISTON ENGINES NES (HS 84099979)	746

26	OTHER UNITS OF AUTOMATIC DATA PROCESSING MACHINES (NMB) (HS 84718090)	3,750
27	SPHERICAL ROLLER BEARINGS (HS 84823000)	119
28	OTHER MACHINERY PARTS NOT CONTAINING ELECTRICAL CONNECTORS INSULATORS COILS CONTACTS OR OTHER ELECTRICAL FEATURES NES IN CHAP 84 (HS 84879000)	2,481
29	CONTROL & ADAPTOR UNITS OF AUTOMATIC DATA PROCESSING MACHINES (NMB) (HS 84718010)	7,092
30	PERSONAL COMPUTERS EXCL PORTABLE COMPUTERS OF SUBHEADING 8471.30 COMPRISING AT LEAST A CPU INPUT & OUTPUT UNIT IN THE SAME HOUSING (NMB) (HS 84714110)	18,494
31	OTHER AUTOMATIC SEWING MACHINES EXCL HOUSEHOLD TYPE & BOOK SEWING MACHINES OF HEADING 8440 (NMB) (HS 84522100)	36
32	OTHER MACHINES & MECHANICAL APPLIANCES HAVING INDIVIDUAL FUNCTIONS NES NON-ELECTRICALLY OPERATED (NMB) (HS 84798940)	9,570
33	OTHER PARTS OF PUMPS OR COMPRESSORS (HS 84149019)	6,151
	RE-EXPORTS:	
1	OTHER PARTS & ACCESSORIES FOR MACHINES OF HEADING 8471 (HS 84733090)	300592
2	OTHER PARTS & ACCESSORIES OF PRINTING MACHINERY NES (HS 84439990)	143943
3	PARTS OF BORING OR SINKING MACHINERY OF SUBHEADING 8430.41 OR 8430.49 (HS 84314300)	97577
4	INK FILLED PRINTER CARTRIDGES (HS 84439920)	84506
5	HARD DISK DRIVES (NMB) (HS 84717020)	74508
6	LAPTOPS NOT MORE THAN 10KG WITH AT LEAST CPU KEYBOARD & A DISPLAY (NMB) (HS 84713020)	64639
7	OTHER PROCESSING UNITS EXCL THOSE OF SUBHEADING 8471.41 OR 8471.49 NES (NMB) (HS 84715090)	62714
8	OTHER MANUAL SEWING MACHINES EXCL HOUSEHOLD TYPE & BOOK SEWING MACHINES OF HEADING 8440 (NMB) (HS 84522900)	61421
9	BALL BEARINGS (HS 84821000)	57593
10	ASSEMBLED PRINTED CIRCUIT BOARDS OF MACHINES OF HEADING 8471 (KGM) (HS 84733010)	46900
11	WINDOW OR WALL AIR CONDITIONERS SELF-CONTAINED OR SPLIT SYSTEM OF OUTPUT NOT OVER 26.38KW (NMB) (HS 84151010)	36942
12	OTHER TAPS COCKS VALVE & SIMILAR APPLIANCES FOR PIPES BOILER SHELLS TANKS VATS OR THE LIKE (NMB) (HS 84818099)	34377
13	PROCESSING UNITS EXCL THOSE OF SUBHEADING 8471.41 OR 8471.49 FOR PERSONAL COMPUTERS (NMB) (HS 84715010)	34072
14	PARTS OF MACHINERY OF HEADING 8426 (HS 84314910)	33775
15	OTHER PARTS OF MACHINERY OF HEADING 8426 8429 OR 8430 (HS 84314990)	32987
16	PORTABLE HANDHELD COMPUTERS NOT MORE THAN 10KG WITH AT LEAST CPU KEYBOARD & A DISPLAY (NMB) (HS 84713010)	30490
17	OTHER GAS TURBINES OF POWER NOT OVER 5000KW (NMB) (HS 84118100)	26740
18	OTHER TOOL HOLDERS & SELF OPENING DIE HEADS FOR OTHER MACHINE TOOLS OF HEADINGS 8456 TO 8465 (HS 84661090)	23525
19	AIRCRAFT ENGINES OF SPARK IGNITION RECIPROCATING OR ROTARY INTERNAL COMBUSTION PISTON (NMB) (HS 84071000)	23296
20	OTHER BEARINGS (HS 84828000)	22033

21	OTHER PARTS FOR OTHER COMPRESSION IGNITION INTERNAL COMBUSTION PISTON ENGINES NES (HS 84099979)	21314
22	SPHERICAL ROLLER BEARINGS (HS 84823000)	20369
23	PROPRIETARY FORMAT STORAGE DEVICES (NMB) (HS 84717050)	19494
24	OTHER AUTOMATIC SEWING MACHINES EXCL HOUSEHOLD TYPE & BOOK SEWING MACHINES OF HEADING 8440 (NMB) (HS 84522100)	18091
25	OTHER MACHINERY PARTS NOT CONTAINING ELECTRICAL CONNECTORS INSULATORS COILS CONTACTS OR OTHER ELECTRICAL FEATURES NES IN CHAP 84 (HS 84879000)	17852
26	OTHER UNITS OF AUTOMATIC DATA PROCESSING MACHINES (NMB) (HS 84718090)	17327
27	PARTS FOR OTHER GAS TURBINES (HS 84119900)	15925
28	LASER PRINTERS (NMB) (HS 84433230)	15632
29	SHIPS DERRICKS & OTHER CRANES & OTHER TRUCKS FITTED WITH CRANE SELF-PROPELLED NOT ON TYRES (NMB) (HS 84264900)	15570
30	OTHER STORAGE UNITS (NMB) (HS 84717099)	14503
31	CONTROL & ADAPTOR UNITS OF AUTOMATIC DATA PROCESSING MACHINES (NMB) (HS 84718010)	12124
32	OTHER COMPUTER INPUT OR OUTPUT UNITS (NMB) (HS 84716090)	11961
33	OTHER PARTS OF PUMPS OR COMPRESSORS (HS 84149019)	11485
34	AUTOMATED BACKUP SYSTEMS (NMB) (HS 84717091)	10779
35	PARTS OF OTHER ELECTRICALLY OPERATED MACHINES (HS 84799030)	10652
36	OTHER PRINTERS OR COPYING MACHINES CAPABLE OF CONNECTING TO AN AUTOMATIC DATA PROCESSING MACHINE OR NETWORK (NMB) (HS 84433290)	8950
37	OPTICAL CHARACTER READERS DOCUMENT OR IMAGE SCANNERS (NMB) (HS 84719020)	8879
38	OTHER MACHINES & MECHANICAL APPLIANCES HAVING INDIVIDUAL FUNCTIONS NES NON-ELECTRICALLY OPERATED (NMB) (HS 84798940)	8529
	TOTAL DOMESTIC EXPORTS(CHAPTER 84)	11,02,313
	TOTAL RE-EXPORTS(CHAPTER 84)	15,52,066
	TOTAL EXPORTS(CHAPTER 84)	26,54,379
	%SHARE OF DOMESTIC EXPORTS(CH 84 IN EXPORTS OF CH 84)	41.53
	% SHARE OF RE-EXPORTS (CH 84 IN EXPORTS OF CH 84)	58.47
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 84) IN TOTAL EXPORTS	7.56
	% SHARE OF RE-EXPORTS (CH 84 IN TOTAL EXPORTS)	10.64

Source: IE Singapore

Note: 1 S\$ =0.73 US\$ & 1 US\$=1.36 S\$

**Table A.2.5: India's imports of Organic chemicals from Singapore (HS 29)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2008-09	2009-10	2011-12	2013-14	2014-15	2015-16	
29011000	Saturated acyclic hydrocarbons	17.3	19.1	34.1	21.8	21.1	12.9	EH,NT-1
29023000	Toluene	20.3	43.5	46.6	149.4	141.9	120.5	B, NT-1
29024100	O-xylene	16.8	2.4		34.6	15.6	10.9	B, ST
29024300	P-xylene	90.2	118.0	165.8	251.0	146.3	102.0	A, NT-1
29025000	Styrene	199.7	151.8	258.4	473.7	364.2	349.7	EH,NT-1
29051220	Isopropyl alcohol	7.6	2.6	8.9	18.0	10.9	8.3	E, ST
29051300	Saturated butan-1-ol(n-butyl alcohol)			0.7	13.4	16.5	7.1	C, NT-1
29051620	2-ethyl hexanol				3.7	24.8	12.1	C, NT-1
29051990	Other saturated monohydric alcohols	0.3	7.2	8.1	8.4	10.8	9.8	E
29053100	Ethylene glycol (ethanediol)	2.9	12.6	14.6	93.8	97.7	65.4	B, ST
29053200	Prppylene glycol (propane-1,2-diol)	13.5	15.4	18.7	23.9	21.7	18.8	E, ST
29071110	Phenol,pure carbolic acid	7.7	0.0	0.1	27.0	31.6	14.0	E, ST
29141100	Acetone	8.9	10.9	18.0	13.6	10.3	4.7	X, EL
29152100	Acetic acid	122.7	94.6	88.0	70.9	78.5	64.5	E, ST
29153200	Vinyl acetate	36.1	44.7	76.9	113.7	145.1	106.5	X,NT-1
29153300	N-butyl acetate	6.6	7.5	17.5	18.6	20.4	14.2	B, NT-1
29156010	Butanoic acids,their salts and estrs	4.6	4.8	8.3	13.7	17.0	16.7	B, NT-1
29161100	Acrylic acid and its salts	0.9	2.9	5.2	6.0	5.3	3.2	EH, ST
29161210	Butyl acrylate	25.5	36.7	75.4	55.7	45.8	29.9	EH, ST
29161290	Other esters of acrylic acid	3.1	7.0	6.3	6.9	5.8	2.7	EH, ST
29161400	Esters of methacrylic acid	14.9	29.6	48.9	64.4	61.9	59.1	EH, EL
29171200	Adipic acid its salts and esters	1.2	1.0	5.3	0.1	0.0	0.0	B, NT-1
29173960	Isophthalic acid	3.5	3.2	4.5	11.1			A, ST
29291010	Phenyl isocyanate	5.8	4.2	13.1	29.7	29.1	17.7	B, NT-1
29304000	Methionine	1.8	2.3	2.3	0.1	22.8	78.9	C, NT-1
29420090	Other diloxanidefuroate, cimetidine, famotidine nes	8.4	10.9	6.3	8.0	7.6	0.8	A, NT-1
Total of Top Imports from Singapore		620.2	632.8	931.9	1531.2	1352.6	1130.4	
Total imports from Singapore		671.1	681.5	991.4	1607.1	1428.3	1190.2	
Share of Top imports to Total imports		92.4	92.8	94.0	95.3	94.7	95.0	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.5(a) : Singapore's Annual Domestic & Re-Exports to India (Chapter 29)**

Value in S\$ Thousands

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS:	
1	STYRENE (TNE) (HS 29025000)	477333
2	TOLUENE (TNE) (HS 29023000)	152447
3	VINYL ACETATE (KGM) (HS 29153200)	135808
4	P-XYLENE (TNE) (HS 29024300)	127542
5	ETHYLENE GLYCOL (KGM) (HS 29053100)	101840
6	METHYL METHACRYLATE (KGM) (HS 29161410)	80787
7	PROPYLENE GLYCOL (KGM) (HS 29053200)	31989
8	ESTERS OF ACRYLIC ACID (KGM) (HS 29161200)	51232
9	OTHER COMPOUNDS WITH AN UNFUSED PYRIDINE RING (KGM) (HS 29333990)	2667
10	BUTANOIC & PENTANOIC ACIDS THEIR SALTS & ESTERS (KGM) (HS 29156000)	23093
11	N-BUTYL ACETATE (KGM) (HS 29153300)	17786
12	PHENOL (HYDROXYBENZENE) & ITS SALTS (KGM) (HS 29071100)	17688
13	OCTANOL & ISOMERS THEREOF (KGM) (HS 29051600)	17059
14	O-XYLENE (TNE) (HS 29024100)	16924
15	OTHER COMPOUNDS WITH AN UNFUSED FURAN RING (KGM) (HS 29321900)	16561
16	OTHER ORGANO-SULPHUR COMPOUNDS (KGM) (HS 29309090)	4
	RE-EXPORTS:	
1	OTHER COMPOUNDS WITH AN UNFUSED PYRIDINE RING (KGM) (HS 29333990)	42980
2	PROPYLENE GLYCOL (KGM) (HS 29053200)	29987
3	OTHER ORGANO-SULPHUR COMPOUNDS (KGM) (HS 29309090)	16223
4	OTHER AMINO ACIDS EXCL THOSE WITH OVER ONE KIND OF OXYGEN FUNCTION THEIR ESTERS & SALTS THEREOF (KGM) (HS 29224990)	10988
5	OTHER NUCLEIC ACIDS & THEIR SALTS & OTHER HETEROCYCLIC COMPOUNDS (KGM) (HS 29349990)	9157
6	NUCLEIC ACID & ITS SALTS (KGM) (HS 29349910)	8656
7	OTHER PROVITAMINS & VITAMINS DERIVATIVES THEREOF USED MAINLY AS VITAMINS & INTERMIXTURES OF FOREGOING (KGM) (HS 29369000)	8493
8	LACTONES (KGM) (HS 29322000)	8407
	TOTAL DOMESTIC EXPORTS(CHAPPTER 29)	12,70,760
	TOTAL RE-EXPORTS(CHAPTER 29)	1,34,891
	TOTAL EXPORTS(CHAPTER 29)	14,05,651
	%SHARE OF DOMESTIC EXPORTS(CH 29 IN EXPORTS OF CH 29)	90.40
	% SHARE OF RE-EXPORTS (CH 29 IN EXPORTS OF CH 29)	9.60
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 29) IN TOTAL EXPORTS	8.71
	% SHARE OF RE-EXPORTS (CH 29) IN TOTAL EXPORTS	0.92

**Table A.2.6: India's imports of Electrical Machinery and Equipments from Singapore (HS 85)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2008-09	2009-10	2011-12	2013-14	2014-15	2015-16	
8501	Electric motors and generators(excl generating sets)	23.5	8.2	5.2	2.7	3.7	2.7	B, NT-1i
8502	Electric generating sets and rotary converters	45.8	17.5	7.1	2.8	2.1	6.4	B, NT-1ii
8504	Electrical transformers, static converters (for example, rectifiers) and inductors	38.6	27.3	38.7	46.3	43.3	45.6	B, NT-1iii
8506	Primary cells and primary batteries	19.5	11.9	7.5	3.0	2.8	2.5	D, NT-2iv
8517	Electrical apparatus for line telephony/telegraphy, incl telephon sets with corded handset carrier-current line system; videophone	316.8	253.8	235.3	208.2	228.0	485.6	EHv
8523	Prepared unrecorded media for sound recording/similar recording of other phenomena, other than products of ch.37	213.4	272.6	123.0	79.5	70.7	62.0	EHvi
8525	Transmission apparatus for radio, telephony etc w/n incorporating reception apparatus/sound recording/reproducing apparatus; tv cameras	21.8	14.4	14.5	11.5	14.4	22.4	EHvii
8528	Reception apparatus, wh/ not incorporating radiobroadcast receivers/sound/video recording/ reproducing apparatus, video monitors	33.5	41.5	40.4	25.1	23.3	26.2	Aviii
8529	Parts suitable for use solely or principally with apparatus of headings nos 8525 to 8528	28.5	15.4	22.9	20.0	16.6	9.5	A, NT-1ix
8531	Electric sound/visual signaling apparatus (e.g. bells sirens etc.) Other than those of heading no. 8512/8530	13.7	11.2	11.2	11.5	13.3	11.6	E, STx
8532	Electrical capacitors fixed, variable/adjustable (pre-set)	63.3	44.7	121.9	38.4	36.5	38.2	EH, NT-1
8533	Electrical resistors (incl rheostats and potentiometers) other than heating resistors	15.1	18.6	12.7	12.0	11.2	10.9	EH, NT-1

8536	Electrical apparatus for switching/ prtctng electrical circuits etc.(e.g. switches relays etc.) For a voltage not exceeding 1000 volts	46.1	33.8	45.1	46.0	56.6	58.7	B, NT-2xi
8538	Parts suitable for use solely/ principally with the apparatus ofhdg no.8535,8536/8537	15.2	8.5	22.2	21.9	23.9	30.5	B, NT-1xii
8541	Diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices, including pho	75.7	59.8	91.5	80.2	75.4	73.5	EH,NT-1
8542	Electronic integrated circuits andmicro-assmbls	284.5	222.4	362.9	270.5	198.8	175.2	EHxiii
8543	Elctrl mchns and apprts,hvng individual fncns n.e.s.in this chapter	29.0	15.3	26.7	23.7	22.0	21.5	Bxiv
8544	Insulated (including enamelled oranodised) wire, cable (includingco-axial cable) and other insulatedelectric	34.1	24.4	29.6	21.9	22.0	19.2	xv
Total of Top Imports from Singapore		1318.1	1101.2	1218.4	925.1	864.7	1102.2	
Total imports from Singapore		1398.4	1152.9	1271.5	970.5	907.2	1139.3	
Share of Top imports to Total imports		94.3	95.5	95.8	95.3	95.3	96.7	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2. 6 (a): Singapore's Annual Domestic & Re-Exports to India (Chapter 85)**

Value in S\$ Thousands

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS:	
1	OTHER PARTS FOR ELECTRICAL MACHINES & APPARATUS HAVING INDIVIDUAL FUNCTIONS NES (HS 85439090)	80,925
2	OTHER ELECTRONIC INTEGRATED CIRCUITS (MIL) (HS 85423900)	62,595
3	PARTS OF DIODES TRANSISTORS PHOTOSENSITIVE SEMICON DEVICES LIGHT EMITTING DIODES MOUNTED PIEZO-ELECTRIC CRYSTALS (HS 85419000)	33,713
4	OTHER MACHINES FOR RECEPTION CONVERSION & TRANSMISSION OR REGENERATION OF VOICE IMAGES OR OTHER DATA NES (NMB) (HS 85176299)	24,117
5	PROCESSORS & CONTROLLERS CONVERTERS LOGIC CIRCUITS AMPLIFIERS CLOCK TIMING CIRCUITS OR OTHER CIRCUITS (MIL) (HS 85423100)	32,259
6	OTHER APPARATUS FOR CARRIER CURRENT LINE SYSTEMS OR FOR DIGITAL LINE SYSTEMS (NMB) (HS 85176249)	2,360
7	CONTROL & ADAPTOR UNITS INCL GATEWAYS BRIDGES & ROUTERS (NMB) (HS 85176221)	21,414
8	OTHER PARTS FOR GOODS OF HEADINGS 8525 TO 8528 NES (HS 85299099)	1,996
9	PARTS OF ELECTRONIC INTEGRATED CIRCUITS (HS 85429000)	47,190
10	TELEPHONES FOR CELLULAR NETWORKS OR FOR OTHER WIRELESS NETWORKS (NMB) (HS 85171200)	1,706
11	OTHER PARTS OF GOODS FOR HEADING 8517 NES (NMB) (HS 85177099)	12,360
12	OTHER UNITS OF AUTOMATIC DATA PROCESSING MACHINES OTHER THAN THOSE OF HEADING 8471 (NMB) (HS 85176229)	10,471
13	TRANSISTORS WITH DISSIPATION RATE OF 1 W OR MORE EXCL PHOTOSENSITIVE TYPE (NMB) (HS 85412900)	2,647
14	OTHER STATIC CONVERTERS (NMB) (HS 85044090)	4,040
15	OTHER DIGITAL CAMERAS (NMB) (HS 85258050)	2,184
16	OTHER COLOUR MONITORS SOLELY USED IN AUTOMATIC DATA PROCESSING SYSTEM OF HEADING 8471 (NMB) (HS 85285120)	1,490
17	OTHER RECEPTION APPARATUS NES (NMB) (HS 85176900)	7,346
18	OTHER PARTS FOR USE SOLELY WITH APPARATUS OF HEADING 8535 8536 OR 8537 FOR A VOLTAGE OVER 1KV (HS 85389029)	5,536
19	MEMORIES (MIL) (HS 85423200)	19,502
20	COLOUR TELEVISION RECEIVERS LCD LED OR FLAT PANEL DISPLAY TYPE NOT BATTERY OPERATED (NMB) (HS 85287292)	1,509
21	OTHER TRANSMISSION APPARATUS NES (NMB) (HS 85176269)	2,260
22	OTHER ELECTRIC APPARATUS FOR SWITCHING ETC FOR A VOLTAGE NOT OVER 1KV & FOR A CURRENT OF 16A OR MORE (HS 85369099)	2,073
23	LIGHT EMITTING DIODES (NMB) (HS 85414010)	2,586
24	DIODES EXCL PHOTOSENSITIVE OR LIGHT EMITTING DIODES (NMB) (HS 85411000)	2,417
25	PARTS OF CONTROL & ADAPTOR UNITS (NMB) (HS 85177010)	2,476
26	OTHER LITHIUM ION ACCUMULATORS NES (NMB) (HS 85076090)	430
27	OTHER PARTS OF ELECTRIC SOUND OR VISUAL SIGNALLING APPARATUS (HS 85319090)	2,514
28	OTHER ELECTRICAL APPARATUS FOR SWITCHING PROTECTING OR CONNECTING ELECTRICAL CIRCUITS FOR A VOLTAGE OVER 1KV (HS 85359090)	2,894
	RE-EXPORTS:	

1	OTHER PARTS FOR ELECTRICAL MACHINES & APPARATUS HAVING INDIVIDUAL FUNCTIONS NES (HS 85439090)	2,97,784
2	OTHER ELECTRONIC INTEGRATED CIRCUITS (MIL) (HS 85423900)	2,39,080
3	OTHER MACHINES FOR RECEPTION CONVERSION & TRANSMISSION OR REGENERATION OF VOICE IMAGES OR OTHER DATA NES (NMB) (HS 85176299)	1,52,209
4	PARTS OF DIODES TRANSISTORS PHOTOSENSITIVE SEMICON DEVICES LIGHT EMITTING DIODES MOUNTED PIEZO-ELECTRIC CRYSTALS (HS 85419000)	1,50,731
5	OTHER APPARATUS FOR CARRIER CURRENT LINE SYSTEMS OR FOR DIGITAL LINE SYSTEMS (NMB) (HS 85176249)	1,29,323
6	PROCESSORS & CONTROLLERS CONVERTERS LOGIC CIRCUITS AMPLIFIERS CLOCK TIMING CIRCUITS OR OTHER CIRCUITS (MIL) (HS 85423100)	1,29,037
7	CONTROL & ADAPTOR UNITS INCL GATEWAYS BRIDGES & ROUTERS (NMB) (HS 85176221)	1,05,204
8	OTHER PARTS FOR GOODS OF HEADINGS 8525 TO 8528 NES (HS 85299099)	95,001
9	TELEPHONES FOR CELLULAR NETWORKS OR FOR OTHER WIRELESS NETWORKS (NMB) (HS 85171200)	89,413
10	OTHER PARTS OF GOODS FOR HEADING 8517 NES (NMB) (HS 85177099)	48,544
11	OTHER UNITS OF AUTOMATIC DATA PROCESSING MACHINES OTHER THAN THOSE OF HEADING 8471 (NMB) (HS 85176229)	48,331
12	PARTS OF ELECTRONIC INTEGRATED CIRCUITS (HS 85429000)	47,281
13	TRANSISTORS WITH DISSIPATION RATE OF 1 W OR MORE EXCL PHOTOSENSITIVE TYPE (NMB) (HS 85412900)	41,849
14	OTHER STATIC CONVERTERS (NMB) (HS 85044090)	38,876
15	OTHER DIGITAL CAMERAS (NMB) (HS 85258050)	34,326
16	OTHER COLOUR MONITORS SOLELY USED IN AUTOMATIC DATA PROCESSING SYSTEM OF HEADING 8471 (NMB) (HS 85285120)	33,062
17	OTHER RECEPTION APPARATUS NES (NMB) (HS 85176900)	26,339
18	OTHER PARTS FOR USE SOLELY WITH APPARATUS OF HEADING 8535 8536 OR 8537 FOR A VOLTAGE OVER 1KV (HS 85389029)	26,027
19	COLOUR TELEVISION RECEIVERS LCD LED OR FLAT PANEL DISPLAY TYPE NOT BATTERY OPERATED (NMB) (HS 85287292)	24,727
20	OTHER TRANSMISSION APPARATUS NES (NMB) (HS 85176269)	22,862
21	OTHER ELECTRIC APPARATUS FOR SWITCHING ETC FOR A VOLTAGE NOT OVER 1KV & FOR A CURRENT OF 16A OR MORE (HS 85369099)	21,893
22	LIGHT EMITTING DIODES (NMB) (HS 85414010)	19,905
23	DIODES EXCL PHOTOSENSITIVE OR LIGHT EMITTING DIODES (NMB) (HS 85411000)	19,352
24	PARTS OF CONTROL & ADAPTOR UNITS (NMB) (HS 85177010)	19,127
25	OTHER LITHIUM ION ACCUMULATORS NES (NMB) (HS 85076090)	17,899
26	OTHER PARTS OF ELECTRIC SOUND OR VISUAL SIGNALLING APPARATUS (HS 85319090)	15,359
27	OTHER ELECTRICAL APPARATUS FOR SWITCHING PROTECTING OR CONNECTING ELECTRICAL CIRCUITS FOR A VOLTAGE OVER 1KV (HS 85359090)	14,712
28	PARTS FOR FLAT PANEL DISPLAYS (HS 85299094)	14,474
29	OTHER TELEPHONE SETS NES (NMB) (HS 85171800)	14,290
30	OTHER LEAD ACID ELECTRIC ACCUMULATORS OF A HEIGHT EXCL TERMINALS & HANDLES OVER 130MM BUT NOT OVER 230MM (NMB) (HS 85072093)	13,332
31	OTHER FIXED CAPACITORS CERAMIC DIELECTRIC MULTILAYER (KGM) (HS 85322400)	13,292
32	OTHER ELECTRICAL APPARATUS FOR ELECTRIC CONTROL & DISTRIBUTION OF ELECTRICITY FOR A VOLTAGE NOT OVER 1KV NES (HS 85371099)	12,537
33	TRANSMISSION & RECEPTION APPARATUS FOR SIMULTANEOUS INTERPRETATION AT MULTILINGUAL CONFERENCES (NMB) (HS 85176252)	12,487
34	ELECTRONIC AC SWITCHES FOR OPTICALLY COUPLED INPUT OR OUTPUT CIRCUITS & ELECTRONIC SWITCHES ETC FOR A VOLTAGE NOT OVER 1KV & FOR A CURRENT OF LESS THAN 16A (HS 85365051)	12,313

35	AMPLIFIERS (MIL) (HS 85423300)	11,814
36	RADIO BROADCAST RECEIVERS COMBINED WITH SOUND RECORDING OR REPRODUCING APPARATUS OPERATE WITH EXTERNAL POWER USED IN MOTOR VEHICLES (NMB) (HS 85272100)	10,544
37	OTHER PCB ASSEMBLED OF GOODS OF HEADING 8517 NES (NMB) (HS 85177039)	10,178
38	MEMORIES (MIL) (HS 85423200)	10,176
39	OTHER SWITCHES FOR A VOLTAGE NOT OVER 1KV NES (HS 85365099)	10,134
40	OTHER PARTS & ACCESSORIES SUITABLE FOR USE SOLELY WITH THE APPARATUS OF HEADINGS 8519 TO 8521 (HS 85229099)	9,920
41	OTHER PARTS FOR USE SOLELY WITH MACHINES OF HEADING 8501 OR 8502 (HS 85030090)	9,350
42	RELAYS FOR A VOLTAGE OVER 60V BUT NOT OVER 1KV (HS 85364990)	9,293
43	PARTS FOR TELEVISION RECEIVERS (HS 85299091)	8,716
44	OTHER FIXED CAPACITORS OF OTHER MATERIALS (KGM) (HS 85322900)	8,552
	TOTAL DOMESTIC EXPORTS(CHAPPTER 85)	3,93,010
	TOTAL RE-EXPORTS(CHAPTER 85)	20,99,655
	TOTAL EXPORTS(CHAPTER 85)	24,92,665
	%SHARE OF DOMESTIC EXPORTS(CH 85) IN EXPORTS OF CH 85	15.77
	% SHARE OF RE-EXPORTS (CH 85) IN EXPORTS OF CH 85	84.23
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 85) IN TOTAL EXPORTS	2.69
	% SHARE OF RE-EXPORTS (CH 85) IN TOTAL EXPORTS	14.39

Source: IE Singapore

**Table A.2.7: India's imports of Mineral Fuels from Singapore (HS 27)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2008-09	2011-12	2013-14	2014-15	2015-16	
27075000	Other aromatic hydrocarbon mixtures of which 65 percent or more by vol (including losses) distill at 250 deg.c. by the ASTM	1.0	2.6	10.4	32.1	32.4	21.7	C, NT-1
27079900	Other oil and oil products of distillation of high temp. Coal tar,	8.9	6.4	7.1	1.3	8.7	0.6	X, NT-1
27101111	*Special boiling point motor spirits (other than benzene, toluene) with nominal boiling point range 55-115°C		72.1	112.7				X, EL
27101113	*Other special boiling point motor spirits (other than benzene, toluene and toluene)			53.5				X, EL
27101219	Motor Spirit: Other		104.7	169.9	252.1	169.1	352.2	X, EL
27101220	Natural gasoline liquid (NGL)			16.8		46.2	40.8	EL
27101290	Other			1.8	12.0	0.3	14.7	X, EL
27101910	Superior kerosene oil (SKO)		673.8	545.5		27.9		X, EL
27101920	Aviation turbine fuel (ATF)		0.0	68.5	21.2	114.7	114.2	X, EL
27101930	High speed diesel (HSD)		956.4	1045.7	4.0	8.7	2.0	X, EL
27101950	Fuel oil		103.6	86.7	45.0	60.7	53.4	X, EL
27101960	Base oil		113.6	175.6	148.1	157.4	131.4	X, EL
27101980	Lubricating oil		8.9	27.1	14.6	5.0	4.8	X, EL
27101990	Other petroleum oils and oils obtained from bituminous minerals n.e.s		33.2	37.3	11.8	25.4	24.7	X, EL
27111300	Liquefied butanes		44.6	6.4			0.5	C, NT-1
27139000	Other residues of petroleum oils/ of oils obtained from bituminous minerals		0.7			6.3	17.3	X, EL
Total of Top Imports from Singapore		9.9	2120.6	2365.1	542.2	662.8	778.4	
Total imports from Singapore		10.5	2175.0	2388.5	552.3	667.8	781.1	
Share of Top imports to Total imports		93.9	97.5	99.0	98.2	99.3	99.7	

Source: DGCIS, Ministry of Commerce and Industry, Government of India B

**Table A.2.7(a): Singapore's Annual Domestic & Re-Exports to India (Chapter 27)**

Value in S\$ Thousands

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS:	
1	MOTOR SPIRIT OF RON 90 & ABOVE BUT UNDER RON 97 UNLEADED (TNE) (HS 27101214)	3,87,888
2	AVIATION TURBINE FUEL WITH A FLASH POINT OF 23 DEGREES OR MORE (TNE) (HS 27101981)	1,72,640
3	LUBRICATING OIL FEEDSTOCK (TNE) (HS 27101941)	1,41,472
4	MOTOR SPIRIT OF RON UNDER 90 UNLEADED (TNE) (HS 27101216)	94,246
5	FUEL OILS (TNE) (HS 27101979)	53,298
6	NAPHTHA REFORMATES & OTHER PREPARATIONS OF A KIND FOR BLENDING INTO MOTOR SPIRITS (TNE) (HS 27101270)	33,464
7	OTHER AROMATIC HYDROCARBON MIXTURES OF WHICH 65% OR MORE BY VOL DISTILLS AT 250 DEGREE BY THE ASTM D 86 METHOD (TNE) (HS 27075000)	23,375
8	LOW AROMATIC SOLVENTS WITH WEIGHT LESS THAN 1% AROMATIC CONTENT (TNE) (HS 27101250)	21,682
9	AUTOMOTIVE DIESEL FUEL (TNE) (HS 27101971)	19,557
	RE-EXPORTS:	
1	LUBRICATING OIL FEEDSTOCK (TNE) (HS 27101941)	38,021
2	FUEL OILS (TNE) (HS 27101979)	17,311
3	AVIATION TURBINE FUEL WITH A FLASH POINT OF 23 DEGREES OR MORE (TNE) (HS 27101981)	16,451
	TOTAL DOMESTIC EXPORTS(CHAPTER 27)	9,47,622
	TOTAL RE-EXPORTS(CHAPTER 27)	71,783
	TOTAL EXPORTS(CHAPTER 27)	10,19,405
	%SHARE OF DOMESTIC EXPORTS(CH 27) IN EXPORTS OF CH 27	92.96
	% SHARE OF RE-EXPORTS (CH 27 IN EXPORTS OF CH 27	7.04
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 27 IN TOTAL EXPORTS	6.50
	% SHARE OF RE-EXPORTS (CH 27) IN TOTAL EXPORTS	0.49

Source: IE Singapore.

**Table A.2. 8: India's imports of Plastic and articles thereof from Singapore (HS 39)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2008-09	2009-10	2011-12	2013-14	2014-15	2015-16	
39011010	Linear low density polyethylene (lldpe)	18.8	33.5	42.2	84.5	113.5	67.8	D, ST
39011090	Other polyethylene having a specific gravity < 0.94	1.6	4.7	7.1	13.2	17.7	13.3	D, ST
39012000	Polyethylene having a specific gravity 0.94 / more	7.7	4.0	4.5	5.2	32.6	16.4	D, ST
39019010	Linear medium density polyethylene (lmdpe)		0.5	1.7	1.8	1.1	3.3	D, ST
39019090	Other polymers of ethylene in primary forms	1.3	2.3	14.4	109.8	195.3	174.0	D, ST
39021000	Polypropylene	48.8	40.5	51.3	48.2	76.6	90.6	D, ST
39023000	Propylene copolymers	10.4	14.6	56.5	68.4	103.2	96.5	D, ST
39029000	Other polymers of propylene in primary forms	6.3	6.1	4.0	6.6	6.2	6.0	D, NT-2
39031990	Other polystyrenes	1.9	3.5	12.8	15.8	12.5	7.3	D, ST
39039090	Other polymers of styrene in primary forms	1.0	1.3	3.3	5.5	5.9	3.3	X, ST
39053000	Polyvinyl alcohol w/n hydrolysed acetate groups	16.0	13.8	11.7	12.1	15.0	16.8	C, NT-1
39061090	Other polymethylmethacrylates	1.1	4.9	10.2	9.5	1.7	4.2	E, ST
39069010	Acrylic resins	4.8	1.9	7.6	1.0	14.1	10.1	B, ST
39069090	Other acrylic polymers in primary forms excl. Poly (methyl methacrylate)	2.2	5.1	8.3	13.9	10.4	15.5	B, ST
39072010	Poly (ether alcohols)	20.1	20.7	41.4	53.2	69.3	68.3	C, NT-1
39072090	Other polyethers	2.8	2.8	14.4	46.0	43.4	36.0	C, NT-1
39074000	Polycarbonates	11.7	16.2	38.0	32.9	23.8	21.2	EH, NT-2
39079990	Other polyesters (saturated)	2.4	2.6	7.4	14.0	15.4	18.2	D, NT-2
39081010	Nylon moulding powder	0.8	0.5	0.4	0.9	0.9	0.5	D, ST
39081090	Others	4.7	7.8	13.6	7.8	7.6	8.9	D, ST
39095000	Polyurethanes	1.2	1.2	9.7	21.5	24.4	35.6	B, NT-1
39199090	Other self-adhesive tapes	3.1	3.5	3.9	5.2	4.0	4.5	E, ST
39209959	Retro reflective sheeting other			0.1	9.5	12.1	14.4	X, EL
39269099	Other articles of plastic	6.4	11.5	6.9	6.2	6.9	7.7	E, ST
Total of Top Imports from Singapore		175.2	203.3	371.4	592.4	813.6	740.3	
Total imports from Singapore		213.3	243.2	419.5	619.3	836.8	762.7	
Share of Top imports to Total imports		82.1	83.6	88.5	95.7	97.2	97.1	

Source: DGCI, Ministry of Commerce and Industry, Government of India line

**Table A.2.8(a): Singapore's Annual Domestic & Re-Exports to India (Chapter 39)  
value in S\$ Thousands**

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS:	
1	OTHER POLYMERS OF ETHYLENE IN OTHER PRIMARY FORMS (TNE) (HS 39019090)	3,23,229
2	PROPYLENE COPOLYMERS IN OTHER PRIMARY FORMS (TNE) (HS 39023090)	1,62,964
3	OTHER POLYETHERS IN PRIMARY FORMS (TNE) (HS 39072090)	1,48,580
4	POLYPROPYLENE IN OTHER PRIMARY FORMS (TNE) (HS 39021090)	1,06,487
5	POLYURETHANES IN PRIMARY FORMS (TNE) (HS 39095000)	76,357
6	OTHER ACRYLIC POLYMERS IN OTHER PRIMARY FORMS (TNE) (HS 39069099)	41,212
7	POLYCARBONATES IN PRIMARY FORMS (TNE) (HS 39074000)	30,951
8	POLYETHYLENE OF SPECIFIC GRAVITY 0.94 OR MORE (TNE) (HS 39012000)	27,864
9	SELF-ADHESIVE PLATES SHEETS FILM FOIL TAPE STRIP & OTHER FLAT SHAPES OF OTHER PLASTICS IN ROLLS OF WIDTH OVER 200MM OR OTHER FORMS (TNE) (HS 39199090)	27,544
10	OTHER POLYESTERS SATURATED IN OTHER PRIMARY FORMS (TNE) (HS 39079990)	24,390
11	LINEAR LOW DENSITY POLYETHYLENE IN OTHER PRIMARY FORMS (TNE) (HS 39011092)	22,805
12	POLY(VINYL ALCOHOL) IN OTHER PRIMARY FORMS (TNE) (HS 39053090)	22,165
	RE-EXPORTS:	
1	OTHER VINYL POLYMERS INCL OF VINYL ESTERS IN OTHER PRIMARY FORMS (TNE) (HS 39059990)	37,533
2	OTHER POLYMERS OF ETHYLENE IN OTHER PRIMARY FORMS (TNE) (HS 39019090)	31,809
3	OTHER POLYMERS OF STYRENE IN OTHER PRIMARY FORMS (TNE) (HS 39039099)	11,690
4	SELF-ADHESIVE PLATES SHEETS FILM FOIL TAPE STRIP & OTHER FLAT SHAPES OF VINYL CHLORIDE POLYMERS IN ROLLS OF WIDTH OVER 200MM OR OTHER FORMS (TNE) (HS 39199010)	11,351
5	POLYETHYLENE OF SPECIFIC GRAVITY 0.94 OR MORE (TNE) (HS 39012000)	11,004
	TOTAL DOMESTIC EXPORTS(CHAPTER 39)	10,14,548
	TOTAL RE-EXPORTS(CHAPTER 39)	1,03,387
	TOTAL EXPORTS(CHAPTER 39)	11,17,935
	%SHARE OF DOMESTIC EXPORTS(CH 39) IN EXPORTS OF CH 39	90.75
	% SHARE OF RE-EXPORTS (CH 39 IN EXPORTS OF CH 39	9.25
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 39 IN TOTAL EXPORTS	6.95
	% SHARE OF RE-EXPORTS (CH 39) IN TOTAL EXPORTS	0.70

Source: IE Singapore

**Table A.2.9: India's imports of Ships, boats and floating structures from Singapore (HS 89)**

HS Code	Description	Imports from Singapore (in US\$ million)					
		2004-05	2008-09	2009-10	2013-14	2014-15	2015-16
89011040	Barges	6.6	28.9	3.2	41.8	1.0	2.8
89012000	Tankers			15.9	0.3	17.8	106.1
89019000	Other vessels for transport of goods and other vessels for transport of persons and goods	51.5	252.2	109.4	56.9	14.3	16.6
89040000	Tugs and pusher craft	28.1	146.2	198.3	137.6	23.1	122.0
89051000	Dredgers		51.6		26.5	3.7	
89052000	Floating/submersible drilling/production platforms	54.6	119.1	212.6	309.2	147.5	118.7
89059090	Light-vessels, fire-floats, dredgers, floating cranes, and other vessels the navigability of which is subsidiary to their main function; floating docks; floating or submersible drilling or production platforms: Other	25.0	117.2	103.0	111.7	24.4	136.2
89069000	Other under hdng 8906	0.7	23.2	103.5			0.1
Total of Top Imports from Singapore		166.4	738.4	745.8	683.9	231.8	502.4
Total imports from Singapore		173.0	750.5	760.7	698.8	246.2	526.7
Share of Top imports to Total imports		96.2	98.4	98.0	97.9	94.2	95.4

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.10: India's imports of Optical and other instruments from Singapore (HS 90)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2008-09	2009-10	2013-14	2014-15	2015-16	
9011	Compnd optcl microscopes,incl those for mcrophotogrphy, mcrocenmtgrphy/microprjctn	0.14	1.2	1.59	2.13	3.02	4.19	EH,NT-1
9012	Microscopes other than optical microscopes; diffraction apparatus	0.65	1.2	0.87	0.73	0.85	4.05	A, NT-1
9014	Direction finding compasses; other navigational instruments and appliances	0.12	0.8	0.34	0.22	3.17	0.02	A, NT-1
9015	Surveying, hydrographic, oceanographic, hydrological, meteorological/geophysical instruments and appliances, excl compass	1.17	23.01	4.05	6.48	21.06	17.1	A, EL
9018	Instrmnts and applncs used in mdcl,surgcl, dntl/vtrnry scncs,incl scntgrphc apprts elctro-mdcl apprts and sight-tstng ins	16.69	50.31	62.33	53.24	51.48	39.54	A,NT-1
9021	Orthpdc aplncs, artfcl prats of th body;hrngaid and other appliances which are warn/crrd/ implntd in the body to cmpnst dfct/d	2.86	10.86	8.61	16.57	19.13	13.9	A, NT-1

9022	Other appliances of heading 9021 bta/gma radiations incl radiothrypy aprpts,x-ray tube and gnrtrs,hgh tnsn gnrtrs,scr	3.63	8.43	9.81	9.7	9.74	16.44	B, NT-1
9025	Hydrometers and smlr floating instruments, thermometers, pyrometers etc, rcdng/nt and any combination of these instruments	0.96	4.3	5.25	3.54	4.84	4.87	B, NT-1
9026	Instruments and apparatus for measuring/checking the flow, level, pressure/other variables of liquid/gases excl apparatus of hdg 9014,9015,9028/90	7.91	40.24	20.81	9.8	4.67	4.79	EH,NT-1
9027	Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectr	18.21	57.4	55.42	88.07	118.8	120.9	EH,NT-1
9028	Gas, lqd/electricity supply/production meters, incl calibrating meters therefor	4.32	0.98	0.61	0.55	1.01	0.97	A, NT-1
9030	Oscilscps and othr instrmnts and aprts fr msrngchkgng elctrcl quntts,instrmnts and aprts fr msrng/dtctng alpha,bta,gma,x-ray	14.13	8.04	18.76	11.89	15.05	15.2	B, NT-1
9031	Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this	7.41	19.67	13.23	14.21	13.21	13.85	EH,NT-1
9032	Automatic regulating/controlling instruments and apparatus	16.59	39.86	22.16	40.72	52.59	53.09	A, NT-2
9033	Parts and accessories for machines, appliances, instruments/apparatus of chapter 90,nes	4.98	8.04	21.87	9.33	7.84	10.53	B, NT-1
Total of Top Imports from Singapore		99.77	274.3	245.7	267.2	326.4	319.4	
Total imports from Singapore		110.76	292.3	263.1	287.7	339.3	330.9	
Share of Top imports to Total imports		90.08	93.72	93.38	92.86	96.20	96.51	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2. 10(a): Singapore's Annual Domestic & Re-Exports to India (Chapter 90)**

Value in S\$ Thousands

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS:	
1	CHROMATOGRAPHS & ELECTROPHORESIS INSTRUMENTS ELECTRICALLY OPERATED (NMB) (HS 90272010)	68,373
2	PARTS & ACCESSORIES INCL PRINTED CIRCUIT ASSEMBLIES OF 90.27 EXCL SMOKE OR GAS ANALYSIS APPARATUS & MICROTOMES (HS 90279010)	52,085
3	SPECTROMETERS SPECTROPHOTOMETERS & SPECTROGRAPHS USING OPTICAL RADIATIONS ELECTRICALLY OPERATED (NMB) (HS 90273010)	42,562
4	OTHER AUTOMATIC REGULATING OR CONTROLLING NON-ELECTRICAL OPERATED INSTRUMENTS OR APPARATUS NES (NMB) (HS 90328990)	35,356
5	OTHER APPARATUS INCL PARTS & ACCESSORIES BASED ON XRAY ALPHA BETA GAMMA RADIATION (HS 90229090)	33,099
6	OTHER APPLIANCES WORN CARRIED OR IMPLANTED IN THE BODY FOR COMPENSATING DEFECT OR DISABILITY (HS 90219000)	28,361
7	OTHER INSTRUMENTS & APPARATUS PHYSICAL OR CHEMICAL ANALYSIS OR MEASURING VISCOSITY POROSITY EXPANSION SURFACE TENSION OR THE LIKE OR QUANTITIES OF HEAT SOUND OR LIGHT ELECTRICALLY OPERATED (NMB) (HS 90278030)	26,691
8	NON DISPOSABLE SYRINGES (HS 90183190)	23,283
9	OTHER ELECTRO-DIAGNOSTIC APPARATUS (HS 90181900)	17,890
10	OTHER SURVEYING HYDROGRAPHIC OCEANOGRAPHIC HYDROLOGICAL METEOROLOGICAL & GEOPHYSICAL INSTRUMENTS & APPLIANCES (NMB) (HS 90158090)	16,851
11	NON-ELECTRONIC MEDICAL SURGICAL OR VETERINARY INSTRUMENTS & APPLIANCES NES (HS 90189090)	5,094
12	PARTS & ACCESSORIES FOR GAS OR SMOKE ANALYSIS APPARATUS OR MICROTOMES NOT ELECTRICALLY OPERATED (HS 90279099)	3,029
	RE-EXPORTS:	
1	NON-ELECTRONIC MEDICAL SURGICAL OR VETERINARY INSTRUMENTS & APPLIANCES NES (HS 90189090)	89,152
2	PARTS & ACCESSORIES INCL PRINTED CIRCUIT ASSEMBLIES OF 90.27 EXCL SMOKE OR GAS ANALYSIS APPARATUS & MICROTOMES (HS 90279010)	41,671
3	PARTS & ACCESSORIES FOR GAS OR SMOKE ANALYSIS APPARATUS OR MICROTOMES NOT ELECTRICALLY OPERATED (HS 90279099)	32,306
4	OTHER APPARATUS INCL PARTS & ACCESSORIES BASED ON XRAY ALPHA BETA GAMMA RADIATION (HS 90229090)	31,238
5	CHROMATOGRAPHS & ELECTROPHORESIS INSTRUMENTS ELECTRICALLY OPERATED (NMB) (HS 90272010)	29,737
6	NON DISPOSABLE SYRINGES (HS 90183190)	23,283
7	SPECTROMETERS SPECTROPHOTOMETERS & SPECTROGRAPHS USING OPTICAL RADIATIONS ELECTRICALLY OPERATED (NMB) (HS 90273010)	22,485
8	OTHER ELECTRO-DIAGNOSTIC APPARATUS (HS 90181900)	17,139
9	OTHER SURVEYING HYDROGRAPHIC OCEANOGRAPHIC HYDROLOGICAL METEOROLOGICAL & GEOPHYSICAL INSTRUMENTS & APPLIANCES (NMB) (HS 90158090)	15,835
10	PARTS & ACCESSORIES OF NOT ELECTRICALLY OPERATED GOODS NES (HS 90329090)	14,477
11	LIQUID CRYSTAL DEVICES NOT ARTICLES SPECIFICALLY PROVIDED IN OTHER HEADINGS (NMB) (HS 90138020)	12,231

12	OTHER INSTRUMENTS & APPARATUS PHYSICAL OR CHEMICAL ANALYSIS OR MEASURING VISCOSITY POROSITY EXPANSION SURFACE TENSION OR THE LIKE OR QUANTITIES OF HEAT SOUND OR LIGHT ELECTRICALLY OPERATED (NMB) (HS 90278030)	10,257
13	PARTS & ACCESSORIES FOR CAMERAS OF SUBHEADINGS 90064000 TO 90065300 (HS 90069130)	9,361
14	PARTS & ACCESSORIES FOR GAS OR SMOKE ANALYSIS APPARATUS OR MICROTOMES ELECTRICALLY OPERATED (HS 90279091)	9,100
15	ELECTRONIC INSTRUMENTS & APPLIANCES USED IN MEDICAL SURGICAL OR VETERINARY (HS 90189030)	8,660
	TOTAL DOMESTIC EXPORTS(CHAPTER 90	3,52,674
	TOTAL RE-EXPORTS(CHAPTER 90	3,66,932
	TOTAL EXPORTS(CHAPTER 90	7,19,606
	%SHARE OF DOMESTIC EXPORTS(CH 90 IN EXPORTS OF CH 90	49
	% SHARE OF RE-EXPORTS (CH 90 IN EXPORTS OF CH 90	51
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 90) IN TOTAL EXPORTS	2.42
	% SHARE OF RE-EXPORTS (CH 90) IN TOTAL EXPORTS	2.52

Source: IE Singapore.

**Table A.2.11: India's imports of Iron and steel from Singapore of (HS 72)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2008-09	2010-11	2013-14	2014-15	2015-16	
72029300	Ferro-niobium		0.8	2.6	5.1	1.3	1.7	X,NT-1
72042110	Empty or discharged cartridges of stain less steel of all bores and sizes	5.0	0.1				0.1	C, NT-1
72042190	Other waste and scrap of stainless steel	22.0	22.1	37.7	42.7	64.6	44.1	C, NT-1
72044900	Other waste and scrap	28.3	30.1	26.7	37.4	87.1	106.9	C, NT-1
72091510	Plates of flat rolled products in coils not further worked then cold rolled of thickness >=3mm			1.1	6.9	4.7	0.0	X,NT-1
72121090	Others	0.0	2.3	1.0	1.2	1.0	0.9	X,NT-1
72122090	Other flat-rolled products of iron/non alloy steel of width < 600mm electcly plated /coated with zinc	0.2	1.7	1.7	1.2	0.6	0.4	C, NT-1
72142090	Others			0.0		42.2	46.5	X,NT-1
72149990	Others				3.4	0.0	2.9	X,NT-1
72193490	Cold rolled products of stainless steel of a thickness>=0.5mm but < 1mm of othr types		0.2	0.0		7.6	9.1	X,NT-1
72251920	Flat-rolled products of silicon electrical steel other than grain oriented: cold rolled			0.0	3.7	1.4	0.2	N/A
72259900	Other flat-rolled products of other alloy-steel		4.1	7.9	0.1		0.1	X,NT-1
	Total of Top Imports from Singapore	55.5	61.3	78.8	101.7	210.4	212.8	
	Total imports from Singapore	65.7	89.3	102.1	112.4	226.2	233.8	
	Share of Top imports to Total imports	84.5	68.7	77.2	90.4	93.0	91.0	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.11(a): Singapore's Annual Domestic & Re-Exports To India (Chapter 72)**

Value in S\$ Thousands

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS	
1	OTHER WASTE & SCRAP OF IRON & STEEL (TNE) (HS 72044900)	92,098
2	BARS & RODS CONTAINING INDENTATIONS RIBS OR OTHER DEFORMATIONS PRODUCED DURING ROLLING OR TWISTED AFTER ROLLING OF CIRCULAR CROSS SECTION CONTAINING BY WEIGHT LESS THAN 0.6% OF CARBON FOR CONCRETE REINFORCEMENT OF IRON OR NON-ALLOY STEEL (HS 72142031)	71,057
3	WASTE & SCRAP OF STAINLESS STEEL (TNE) (HS 72042100)	57,323
	RE-EXPORTS:	
1	FERRO NIOBIUM ALLOY (TNE) (HS 72029300)	50,877
2	FLAT COLD ROLLED PRODUCTS OF WIDTH OF 600MM OR MORE WITH THICKNESS OVER 1MM BUT LESS THAN 3MM STAINLESS STEEL (TNE) (HS 72193300)	10,515
	TOTAL DOMESTIC EXPORTS(CHAPTER 72	2,20,478
	TOTAL RE-EXPORTS(CHAPTER 72	61,392
	TOTAL EXPORTS(CHAPTER 72	2,81,870
	%SHARE OF DOMESTIC EXPORTS(CH 72) IN EXPORTS OF CH 72	78.22
	% SHARE OF RE-EXPORTS (CH 72) IN EXPORTS OF CH 72	21.78
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 72) IN TOTAL EXPORTS	1.51
	% SHARE OF RE-EXPORTS (CH 72) IN TOTAL EXPORTS	0.42

Source: IE Singapore.

**Table A.2.12: India's imports of Nickel and articles thereof from Singapore of (HS 75)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2008-09	2009-10	2013-14	2014-15	2015-16	
75021000	Nickel,not alloyed	3.5	3.9	6.8	11.4	355.1	199.3	A, NT-1
75051220	Bars,rods and profiles of nickel alloys		0.0	0.1	9.8	0.2	0.0	X,NT-1
75061000	Plates,sheets,foil etc of nickel,not alloyed						6.3	X,NT-1
Total of Top Imports from Singapore		3.5	3.9	6.9	21.2	355.3	205.5	
Total imports from Singapore		4.4	4.1	8.1	21.6	356.5	206.6	
Share of Top imports to Total imports		80.4	95.2	84.6	97.9	99.7	99.5	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.12 (a): Singapore's Annual Domestic & Re-Exports to India (Chapter 75)**

Value in S\$ Thousands

S. NO	CHAPTER	2015
1	UNWROUGHT NICKEL NOT ALLOYED (KGM) (HS 75021000)	4,23,989
2	UNWROUGHT NICKEL ALLOYS (KGM) (HS 75022000)	41,956
3	TOTAL( CHAPTER 75)	4,65,945
4	TOTAL RE-XPORTS(CHAPTER 75)	4,65,945
5	TOTAL DOMESTIC EXPORTS(CHAPTER 75)	0
6	TOTAL EXPORTS (ALL CHAPTERS)	14587393
7	% SHARE OF CHAPTER 75 IN TOTAL EXPORTS	3.19

Source: IE Singapore.

**Table A.2.13: India's imports of Gems and Jewelry from Singapore of (HS 71)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2008-09	2009-10	2013-14	2014-15	2015-16	
71023100	Non-industrial diamonds unworked/ simply sawn cleaved or bruted		1.3	1.8	92.0	180.0	85.9	X,NT-1
71023910	Diamond(other than industrial diamond)cut or otherwise worked but not mounted or set	19.6	57.7	68.2	17.5	38.7	1.6	A, NT-1
71031011	Emeralds,uncut		0.0		11.3		1.8	A, NT-1
71031012	Ruby and sapphire,uncut					3.3	10.8	A, NT-1
71069100	Unwrought silver		2.6		9.1	2.2	3.1	X,NT-1
71081200	Other non-monetary unwrought forms of gold	10.9	25.5	28.2	31.7	68.9	69.2	B, NT-1
71081300	Other non-monetary semi manufactured forms of gold	1.9	2.4	1.6	2.0	1.1	0.4	B, NT-1
71131910	Jewelry of gold unset		0.3	0.3	22.5	10.2	0.9	A, NT-1
71131930	Jewelry of gold set with diamond	0.0	7.1	0.0	3.9	0.3	0.3	A, NT-1
71159090	Other articles of precious metal/ rolled gold	2.3		0.0	0.0			B, NT-1
Total of Top Imports from Singapore		34.7	96.8	100.0	190.1	304.6	173.9	
Total imports from Singapore		39.5	102.0	106.9	192.7	313.2	180.7	
Share of Top imports to Total imports		88.0	94.9	93.6	98.7	97.3	96.2	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.13 (a) : Singapore's Annual Domestic & Re-Exports To India (Chapter 7)**

Value in S\$ Thousands

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS	
1	ARTICLES OF JEWELLERY OF OTHER PRECIOUS METAL (HS 71131990)	19,509
2	WORKED NON-INDUSTRIAL DIAMONDS NOT MOUNTED OR SET (HS 71023900)	43,673
3	NON-MONETARY GOLD IN OTHER UNWROUGHT FORMS (KGM) (HS 71081200)	372
4	OTHER SYNTHETIC OR RECONSTRUCTED PRECIOUS OR SEMI-PRECIOUS STONES NOT STRUNG MOUNTED OR SET OR TEMPORARILY STRUNG FOR CONVENIENCE OF TRANSPORT (HS 71049000)	28,944
5	UNWROUGHT SILVER (KGM) (HS 71069100)	1,487
	RE-EXPORTS:	
1	NON-INDUSTRIAL DIAMONDS UNWORKED OR SIMPLY SAWN CLEAVED OR BRUTED NOT MOUNTED OR SET (HS 71023100)	1,91,790
2	NON-MONETARY GOLD IN OTHER UNWROUGHT FORMS (KGM) (HS 71081200)	48,215
3	ARTICLES OF JEWELLERY OF OTHER PRECIOUS METAL (HS 71131990)	46,261
4	UNWROUGHT SILVER (KGM) (HS 71069100)	17,481
5	OTHER UNWORKED SIMPLY SAWN OR ROUGHLY SHAPED PRECIOUS STONES NOT STRUNG MOUNTED OR SET OR TEMPORARILY STRUNG FOR CONVENIENCE OF TRANSPORT (HS 71031090)	14,413
6	WORKED NON-INDUSTRIAL DIAMONDS NOT MOUNTED OR SET (HS 71023900)	12,506
7	OTHER WORKED RUBIES NOT STRUNG MOUNTED OR SET OR TEMPORARILY STRUNG FOR CONVENIENCE OF TRANSPORT (HS 71039110)	9,682
	TOTAL DOMESTIC EXPORTS(CHAPTER 71)	93,985
	TOTAL RE-EXPORTS(CHAPTER 71)	3,40,348
	TOTAL EXPORTS(CHAPTER 71)	4,34,333
	%SHARE OF DOMESTIC EXPORTS(CH 71) IN EXPORTS OF CH 71	21.64
	% SHARE OF RE-EXPORTS (CH 71) IN EXPORTS OF CH 71	78.36
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 71) IN TOTAL EXPORTS	0.64
	% SHARE OF RE-EXPORTS (CH 71) IN TOTAL EXPORTS	2.33

Source: IE Singapore

**Table A.2.14: India's imports of Miscellaneous chemical products from Singapore of (HS 38)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2008-09	2009-10	2013-14	2014-15	2015-16	
38019000	Other (graphite based preparations)		0.0	1.5	0.0	0.1	0.3	A, NT-1
38085000	Aldrin	0.1	0.2	0.5	0.2	0.2	0.3	E
38089199	Other insecticides	1.3	0.8	1.4	16.5	16.3	1.3	E
38089990	Other similar products n.e.s.	1.0	0.2	0.5	7.6	27.4	8.0	X
38099200	Preparations of a kind used in the paper industry	0.8	1.5	1.8	7.9	8.1	6.7	A, NT-1
38099390	Other finishing agents, dye carriers and other preparations used in leather industry or like n.e.s.	0.5	3.0	3.0	4.7	4.2	3.8	X, ST
38111900	Other anti-knock preparation	1.9	2.8	1.0	7.5	9.3	11.5	A, NT-1
38112100	Additives for lubricating oils containing oils obtained from petroleum and bituminous minerals	4.6	7.6	12.3	41.5	32.5	39.6	A, NT-1
38112900	Other additives for lubricating oils	2.0	4.8	10.3	15.1	8.1	9.5	A, NT-1
38119000	Other prepared additives anti-corrosive preparations and other prepared additives	3.6	6.9	7.2	7.5	16.2	9.2	A, NT-1
38122090	Other comp. Plasticisers for rubber/plastic	0.7	0.4	0.6	5.1	5.6	1.1	A, EL
38123090	Rubber chemical- n.e.s.(e.g. blowing agent)	2.9	5.3	3.3	3.2	5.3	6.0	A, NT-1
38140010	Organic composite solvents and thinners	2.3	3.7	2.6	3.6	4.1	2.6	A, NT-1
38159000	Other reaction initiators etc	0.9	0.8	0.5	12.2	7.5	7.9	EH, NT-1
38180090	Others	1.0	1.6	0.0	1.9	0.7	0.1	EH, NT-1
38220019	Other for medical diagnosis	0.1	1.2	0.8	5.4	2.4	7.3	A, NT-1
38220090	Others	1.1	3.0	3.8	6.9	9.3	12.6	A, NT-1
38249026	Oil well chemical	2.6	15.5	9.1	17.3	11.5	2.6	A, NT-1
38249090	Binders for foundry	2.0	3.1	4.9	11.1	13.8	40.0	A, NT-1
Total of Top Imports from Singapore		29.2	62.3	65.3	175.4	182.5	170.4	
Total imports from Singapore		35.0	75.6	73.5	186.7	191.2	176.0	
Share of Top imports to Total imports		83.6	82.3	88.8	93.9	95.4	96.8	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.14(a): Singapore's Annual Domestic & Re-Exports To India Chapter 38)**

Value in S\$ Thousands

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS	
1	ADDITIVES FOR LUBRICATING OIL CONTAINING PETROLEUM OR OILS FROM BITUMINOUS MINERALS NOT FOR RETAIL (KGM) (HS 38112190)	84,372
2	OTHER DIAGNOSTIC OR LABORATORY REAGENTS EXCL THAT OF 3002 OR 3006 & CERTIFIED REFERENCE MATERIALS (KGM) (HS 38220090)	10,711
3	OTHER CHEMICAL PRODUCTS & PREPARATIONS OF THE CHEMICAL OR ALLIED INDUSTRIES NES OR INCL (KGM) (HS 38249099)	38,622
4	INSECTICIDES NOT SPECIFIED IN SUBHEADING NOTE 1 OF CHAP 38 NOT IN AEROSOL CONTAINERS & NOT HAVING DEODORISING FUNCTION (KGM) (HS 38089199)	18,102
	RE-EXPORTS:	
1	OTHER DIAGNOSTIC OR LABORATORY REAGENTS EXCL THAT OF 3002 OR 3006 & CERTIFIED REFERENCE MATERIALS (KGM) (HS 38220090)	45787
2	OTHER CHEMICAL PRODUCTS & PREPARATIONS OF THE CHEMICAL OR ALLIED INDUSTRIES NES OR INCL (KGM) (HS 38249099)	10930
3	OTHER SUPPORTED CATALYSTS (KGM) (HS 38151900)	9957
	TOTAL DOMESTIC EXPORTS(CHAPTER 38)	1,51,807
	TOTAL RE-EXPORTS(CHAPTER 38)	56,717
	TOTAL EXPORTS(CHAPTER 38)	2,08,524
	%SHARE OF DOMESTIC EXPORTS(CH 38) IN EXPORTS OF CH 38	72.80
	% SHARE OF RE-EXPORTS (CH 38) IN EXPORTS OF CH 38	27.20
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 38) IN TOTAL EXPORTS	1.04
	% SHARE OF RE-EXPORTS (CH 38) IN TOTAL EXPORTS	0.39

Source: IE Singapore

**Table A.2.15: India's imports of Aircraft, spacecraft, and parts thereof from Singapore of (HS 88)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2008-09	2009-10	2012-13	2014-15	2015-16	
88021100	Helicopters of an unladen wt<=2000 kg	1.4	6.8					A, NT-1
88023000	Airplanes and other aircraft, of an unladen weight >2000 kg but not exceeding 15000 kg		17.5					EH,NT-1
88024000	Airplanes and other aircraft, of an unladen weight exceeding 15000 kg		52.7					EH,NT-1
88026000	Spacecraft (incl satellites and suborbital) spacecraft launch vehicles					7.2	46.2	A, NT-1
88033000	Other parts of airplanes/ helicopters	44.3	62.7	69.8	28.1	35.3	31.0	EH,NT-1
Total of Top Imports from Singapore		45.7	139.6	69.8	28.1	42.5	77.2	
Total imports from Singapore		46.1	153.4	72.5	28.7	42.7	77.7	
Share of Top imports to Total imports		99.1	91.0	96.4	98.0	99.6	99.5	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.15 (a): Singapore's Domestic & Re-Exports to India (Chapter 88)**

		Value in S\$ Thousands
S.NO	CHAPTER	2015
	DOMESTIC EXPORTS:	
1	OTHER PARTS OF AEROPLANES OR HELICOPTERS (HS 88033000)	13451
	RE-EXPORTS:	
1	OTHER PARTS OF AEROPLANES OR HELICOPTERS (HS 88033000)	1,94,922
	TOTAL DOMESTIC EXPORTS(CHAPTER 88)	13,451
	TOTAL RE-EXPORTS(CHAPTER 88)	1,94,922
	TOTAL EXPORTS(CHAPTER 88)	2,08,373
	%SHARE OF DOMESTIC EXPORTS(CH 88 IN EXPORTS OF CH 88	6.46
	% SHARE OF RE-EXPORTS (CH 88 IN EXPORTS OF CH 88	93.54
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 88) IN TOTAL EXPORTS	0.09
	%SHARE OF RE- EXPORTS(CH 89) IN TOTAL EXPORTS	1.34

Source: IE Singapore

**Table A.2.16: India's imports of Rubber and articles thereof from Singapore of (HS 40)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2008-09	2009-10	2013-14	2014-15	2015-16	
40021990	Others synthetic rubber and pactice derived from oils in "primary" forms/in plates sheets etc mixtures excl. Latex	0.3	0.2	0.3	0.3	2.3	3.7	X,NT-1
40022000	Butadiene rubber (BR)	0.0	0.6		0.2	0.5	4.8	X,NT-1
40023100	Isobutene-isoprene(butyl) rubber (IIR)	0.6	0.2	0.1	2.4	6.1	9.4	X,NT-1
40023900	Halo-isobutene-isoprene rubber (ciir/biir)	0.3	0.1	0.4	0.3	1.7	6.1	X,NT-1
40029990	Synthetic rubber syntax,not nes.	2.1	0.3	0.0	0.1	0.2	0.2	X,NT-1
40092100	Tubes,pipes and hoses of vulcanised rubber reinforced/ otherwise combined only with metal materials without fittings	0.4	1.0	0.3	0.9	1.1	0.9	B, NT-2
40094200	Tubes,pipes,and hoses of vulcnedrubr reinforced otherwise combined with other mataterials with fittings	0.3	0.7	0.6	0.9	0.8	1.1	X, ST
40103991	Endless flat belt	0.6	0.2	0.0	0.0			B, NT-1
40103999	Trnsmnblt/bltng other than flat blt/ply blt where ruby compd more than 25% by wt.	0.6	0.4	0.8	0.7	1.4	0.6	B, NT-1
40149090	Other articles of othrhygnc and phrmctartcls	0.1	0.4	0.7	2.5	0.8	1.0	B, NT-1
40169320	Rubber ring(o-ring)	0.7	0.7	0.9	1.3	0.9	0.8	X, ST
40169330	Rubber seals(oil seals,etc)	0.9	0.8	0.5	0.7	0.9	0.5	X, ST
40169340	Gaskets	0.5	1.0	0.4	0.8	0.9	0.5	X, ST
40169350	Washers	0.0	0.1	0.1	0.0	0.0	0.0	X, ST
40169390	Other articles of gaskets washers and other seal	0.7	3.4	1.5	1.5	1.6	1.6	X, ST
40169980	Stoppers	0.8	2.5	2.8	9.4	9.5	11.8	X, ST
40169990	Others articles of vulcanised rubber excl. Mats/gaskets and other inflatable articles	1.3	4.1	3.6	3.7	4.2	4.8	E, ST
Total of Top Imports from Singapore		10.3	16.7	12.8	25.8	32.7	47.7	
Total imports from Singapore		16.2	21.6	20.6	31.2	36.7	51.7	
Share of Top imports to Total imports		63.6	77.3	62.2	82.9	89.3	92.3	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.16 (a): Singapore's Domestic & Re-Exports To India (Chapter 40)**

Value in S\$ Thousands

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS:	
1	HALO-ISOBUTENE-ISOPRENE RUBBER IN OTHER FORMS (TNE) (HS 40023990)	263
2	OTHER HYGIENIC OR PHARMACEUTICAL ARTICLES OF VULCANISED RUBBER EXCL HARD RUBBER (HS 40149090)	19364
3	BUTADIENE RUBBER IN PRIMARY FORMS (TNE) (HS 40022010)	3140
	RE-EXPORTS:	
1	HALO-ISOBUTENE-ISOPRENE RUBBER IN OTHER FORMS (TNE) (HS 40023990)	46,724
2	BUTADIENE RUBBER IN PRIMARY FORMS (TNE) (HS 40022010)	13,976
	TOTAL DOMESTIC EXPORTS(CHAPTER 40)	22,767
	TOTAL RE-EXPORTS(CHAPTER40)	60,700
	TOTAL EXPORTS(CHAPTER 40)	83,467
	%SHARE OF DOMESTIC EXPORTS(CH 40) IN EXPORTS OF CH 40	27.28
	% SHARE OF RE-EXPORTS (CH40) IN EXPORTS OF CH 40	72.72
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 40) IN TOTAL EXPORTS	0.57
	%SHARE OF RE- EXPORTS(CH 40) IN TOTAL EXPORTS	0.41

Source: IE Singapore

**Table A.2.17: India's imports of Aluminum and articles thereof from Singapore of (HS 76)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	
76011010	Aluminum ingots-not alloyed	0.4	3.8	2.5	2.7	0.9	3.3	X, EL
76012010	Aluminum ingots -alloyed	0.3	0.1	4.4	3.4		4.3	X,NT-1
76020010	Aluminum scrap covered by ISRI code tablet, tabloid, taboo, taint/ tabor, take, talap, talcred, taldack, taldon	18.9	23.8	27.6	20.0	27.2	32.5	C, NT-1
76072090	Other backed aluminum foil	3.1	7.5	6.3	6.8	5.2	4.0	C, NT-1
76109090	Other structures and parts of structures of aluminum n.e.s.	1.1	0.8	0.2	0.3	0.2	0.3	X,NT-1
76169990	Others articles of aluminum n.e.s.	1.0	0.8	0.8	0.7	0.7	1.5	C, NT-1
Total of Top Imports from Singapore		24.8	36.7	41.8	33.8	34.0	45.8	
Total imports from Singapore		27.7	39.8	44.6	38.3	35.5	48.2	
Share of Top imports to Total imports		89.7	92.1	93.8	88.3	95.9	95.1	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.17 (a): Singapore's Domestic & Re-Exports To India (Chapter 76)**

Value in S\$ Thousands

S.NO	CHAPTER	2015
1	DOMESTIC EXPORTS:	
2	ALUMINIUM WASTE OR SCRAP (TNE) (HS 76020000)	40,825
3	RE-EXPORTS:	
4	UNWROUGHT ALUMINIUM NOT ALLOYED (TNE) (HS 76011000)	35,978
5	TOTAL DOMESTIC EXPORTS(CHAPTER 76)	40,825
6	TOTAL RE-EXPORTS(CHAPTER76)	35,978
7	TOTAL EXPORTS(CHAPTER 76)	76,803
8	%SHARE OF DOMESTIC EXPORTS(CH 76) IN EXPORTS OF CH 76	53.16
9	% SHARE OF RE-EXPORTS (CH76) IN EXPORTS OF CH 76	46.84
10	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
11	%SHARE OF DOMESTIC EXPORTS(CH 76) IN TOTAL EXPORTS	0.27
12	% SHARE OF RE-EXPORTS (CH76) IN TOTAL EXPORTS	0.25

*Source:* IE Singapore

**Table A.2.18.: India's imports of Tanning or dyeing extracts from Singapore of (HS 32)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2009-10	2010-11	2013-14	2014-15	2015-16	
32041519	Other vat yellow		0.0		0.3	0.8	1.5	B, NT-1
32041551	Vat blue 1(synthetic indigo)			0.1	1.2	1.0	9.7	B, NT-1
32041559	Other vat blue	0.0	0.0	0.1	9.5	17.7	12.8	B, NT-1
32041599	Other vat dyes		0.0			0.2	1.1	B, NT-1
32041690	Other reactive	0.1	0.7	0.4	0.5	0.4	0.3	A, NT-1
32061110	Pearlsntpigmnt (titanium dioxide coated micaceous and lustre pearl pigment)	1.4	6.3	3.2	3.8	1.4	0.3	C, NT-1
32061190	Pearlsnt pigment coated with other pearl pigment	2.3	0.4	2.1	0.1	0.8	0.8	B, NT-1
32061900	Otherclrng matter containing <80% titaniumdioxide	0.5	0.3	0.2	2.4	0.7	0.2	B, NT-1
32064990	Other preparations	0.2	0.7	0.8	0.2	0.6	0.9	X, EL
32081090	Others based on polyesters	0.4	0.1	0.3	1.7	1.2	0.3	C, NT-1
32082090	Other paint varnish based on acrylic/vnylplymr	0.6	2.1	2.2	0.7	0.5	0.9	C, NT-1
32089090	Other paint varnish(inclenml and lacquer) based on synthetic polymer/chmly mdfdnatrlplymrnes	1.3	1.7	5.1	2.2	1.9	1.7	C, NT-1
32091090	Other paints bsd on acrylic/vnylplymr	0.4	2.6	0.8	0.1	0.3	0.2	C, NT-1
32099090	Other paint varnishes (inclenml and laqurs) based on other synthetic polymers etcn.e.s.;	7.6	3.5	2.0	2.2	2.3	2.5	D, NT-2
32100090	Other paint varnish incl enamel lacquers and distemper prepared water pigment for finishing lethrn.e.s.	0.1	0.2	0.3	1.1	0.6	0.2	X, EL
32151990	Other printing ink and printers colors	1.8	0.6	0.5	1.4	3.5	3.9	C, NT-1
32159090	Other ink n.e.s	1.1	0.7	1.2	1.3	0.6	2.7	C, NT-1
Total of Top Imports from Singapore		17.5	20.0	19.3	28.7	34.4	39.9	
Total imports from Singapore		21.4	25.2	24.4	32.8	38.4	43.4	
Share of Top imports to Total imports		81.7	79.4	79.0	87.5	89.4	91.8	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.18 (a) : Singapore's Domestic & Re-Exports to India (Chapter 32)**

Value in S\$ Thousands

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS:	
1	PIGMENTS WITH 80% OR MORE BY WEIGHT OF TITANIUM DIOXIDE CALCULATED ON THE DRY MATTER (KGM) (HS 32061110)	11
2	VAT DYES & PREPARATIONS BASED THEREON (KGM) (HS 32041500)	34887
	RE-EXPORTS:	
1	PIGMENTS WITH 80% OR MORE BY WEIGHT OF TITANIUM DIOXIDE CALCULATED ON THE DRY MATTER (KGM) (HS 32061110)	38,902
	TOTAL DOMESTIC EXPORTS(CHAPTER 32)	34,898
	TOTAL RE-EXPORTS(CHAPTER 32)	38,902
	TOTAL EXPORTS(CHAPTER 32)	73,800
	%SHARE OF DOMESTIC EXPORTS(CH 32) IN EXPORTS OF CH 32	47.29
	% SHARE OF RE-EXPORTS (CH 32) IN EXPORTS OF CH 32	52.71
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 32) IN TOTAL EXPORTS	0.24
	%SHARE OF RE- EXPORTS(CH 32) IN TOTAL EXPORTS	0.27

Source: IE Singapore

**Table A.2.19: India's imports of Articles of iron and steel from Singapore of (HS 73)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2009-10	2011-12	2013-14	2014-15	2015-16	
73041190	Other	1.1	0.3	0.3	0.4	1.4	0.3	C
73041990	Other		1.0	1.6	0.4	0.0	0.0	N/A
73042390	Other	0.3	2.9	2.4	6.0	2.3		C
73042990	Other	1.1	3.7	18.2	1.9	0.6	0.0	C, NT-1
73049000	Other seamless tubes/pipes and hollow profiles	1.6	1.8	0.8	0.4	0.8	1.1	C, NT-1
73059029	Erw precision tubes made up of other			1.3	0.0			X,NT-1
73059099	Non erw precision tubes made up of other		0.0	1.3	0.1	0.0		X,NT-1
73062919	Other	2.6	0.3	2.3	3.5	0.2	2.0	X
73063090	Other,welded,of circular cross-section, made up of non-alloy steel tube/pipes	0.2	0.7	0.0		0.1	1.3	X,NT-1
73079190	Non-galvanised	0.4	0.4	1.5	0.1	0.2	0.1	X,NT-1
73079290	Non-galvanised	0.0	0.1	0.5	0.1	0.3	0.0	X,NT-1
73079910	Galvanised	0.0	0.2	1.3	0.0	0.0	0.0	X,NT-1
73079990	Non-galvanised	1.6	3.9	3.9	4.0	2.9	1.1	X,NT-1
73089090	Other structure and parts of structures of iron and steel(excl floating structures)	0.0	0.6	1.7	0.7	2.8	0.7	A, NT-1
73101090	Others	0.0	0.3	0.1	0.3	1.7	2.0	A, NT-1
73102910	Tin plate containers	0.0	2.4	0.6	0.0			A, NT-1
73110090	Other pressure containers for transport or storage of compressed gases	0.6	0.1	0.2	1.2	0.1	0.3	A, NT-1
73121020	Wire ropes,galvanised	0.1	0.0	0.1	0.1	1.6	0.0	A, NT-1
73121090	Others(e.g.transmission belting)	0.1	0.3	0.3	3.1	0.3	4.0	A, NT-1
73129000	Plaited band,slings and like of iron or steel ntelectrcally insulated	0.1	0.4	2.0	1.4	0.6	0.2	A, NT-1
73151290	Others of other articulated link chain	0.1	0.2	0.5	1.9	0.1	0.0	A, NT-1
73181190	Other threaded coach screws	0.2	0.3	1.1	0.9	0.9	0.5	A, NT-1
73181500	Other screws and bolts w/n with nuts or washers threaded	1.2	1.9	2.4	2.6	2.9	6.5	A, ST
73181600	Threaded nuts	0.3	0.5	1.1	1.0	1.1	0.8	A, NT-1
73181900	Other threaded articles	1.3	0.6	0.8	0.8	0.6	1.7	A, ST
73182990	Other non-threaded articles n.e.s.	0.4	1.7	3.9	2.7	3.3	2.9	A, NT-1
73209090	Others of other springs of iron/steel	0.2	0.7	1.0	1.4	1.9	2.3	A, EL
73261100	Grinding balls and similar artcls for mills,forged or stamped but not further worked		1.5	0.4	0.1			X,NT-1
73261990	Others of other articles of forged or stamped but not further worked	0.1	3.6	0.5	0.2	0.3	0.2	A, NT-1
73262090	Other articles of iron or steel wire for other use		0.7	0.9	0.8	1.1	0.3	A, NT-1
73269020	Belt fasteners for machinery belts							A, ST
73269080	Parts ofships,floating structure and vessels (incl rudder,steering etc)	0.2	2.2	0.8	7.5	0.6	0.7	A, ST
73269099	All other articles of iron/steel nes other steering or rudder equipment for ships and boats, n.e.s.	10.8	2.1	5.4	5.9	19.7	6.6	A, ST
Total of Top Imports from Singapore		24.6	35.3	59.1	49.5	48.2	35.7	
Total imports from Singapore		32.8	44.7	75.8	56.4	55.5	41.3	
Share of Top imports to Total imports		74.94	78.90	77.90	87.8	86.76	86.49	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.20: India's imports of Cocoa and cocoa preparations from Singapore of (HS 18)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2008-09	2011-12	2013-14	2014-15	2015-16	
18040000	Cocoa butter fat and oil	0.5	0.7	0.2	6.8	11.2	9.5	A, NT-2
18050000	Cocoa powder not containing sugar/sweetening material	0.5	0.3	0.9	0.7	1.3	4.8	A, NT-2
18062000	Other food preparation containing cocoa in blocks/ slabs weighing>2kg/in liquid,paste,powder,granular/ other bulkform in containers etc of a content	0.1	0.5	4.7	5.6	7.0	12.3	D, NT-2
18069010	Chocolate and chocolate products	1.1	2.8	7.5	0.0	0.0		X, EL
Total of Top Imports from Singapore		2.2	4.3	13.3	13.2	19.4	26.5	
Total imports from Singapore		2.2	5.6	14.0	13.6	19.7	28.8	
Share of Top imports to Total imports		99.5	77.0	94.7	96.6	98.6	92.2	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.21: India's imports of Printed books and other printed products from Singapore of (HS 49)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2008-09	2009-10	2011-12	2014-15	2015-16	
49011010	Printed books	3.5	10.6	5.7	6.4	6.9	3.7	A, NT-1
49019900	Other printed books etc of hd no. 4901	6.6	11.5	8.1	14.0	6.9	7.1	A, ST
49060000	Plans and drawings for architectural, engineering, industrial, commercial, topographical,and similar prps;hand-written texts	0.1		2.9	0.0			EH,NT-1
49070010	Unused postage rev of similar stamps of curny/ newissu having face value	1.2	1.7	0.1		0.0	0.1	C, NT-1
49070020	Bank notes	7.5	0.5	0.9	1.0	1.7	4.2	C, NT-1
49070030	Documents of title conveying the right to use information technology software	120.5	51.3	5.2	186.5	2.6	1.8	A, NT-1
49070090	Other title document	1.9	0.4	0.1	0.6	0.1	0.1	C, NT-1
49119910	Hardcopy(printed)of computer software	16.5	5.1	0.0	16.3	0.7	0.3	A, NT-1
49119920	Plan/drawing for engg/ industry/commercial/ similar purpose produced by computer/ similar device.	1.9	0.0					A, NT-1
49119990	Others	14.1	0.7	0.2	0.7	1.0	1.9	A, NT-1
Total of Top Imports from Singapore		173.9	81.8	23.2	225.4	19.9	19.2	
Total imports from Singapore		175.5	83.7	24.5	226.3	22.3	21.9	
Share of Top imports to Total imports		99.1	97.8	94.7	99.6	89.1	87.7	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.21(a) : Singapore's Domestic & Re-Exports To India (Chapter 49)**

Value In S\$ Thousand

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS:	
1	OTHER PRINTED MATTER NES (HS 49119990)	7589
	RE-EXPORTS:	
1	OTHER PRINTED MATTER NES (HS 49119990)	20,758
	TOTAL DOMESTIC EXPORTS(CHAPTER 49)	7589
	TOTAL RE-EXPORTS(CHAPTER49)	20,758
	TOTAL EXPORTS(CHAPTER 49)	28,347
	%SHARE OF DOMESTIC EXPORTS(CH 49) IN EXPORTS OF CH 49	26.772
	% SHARE OF RE-EXPORTS (CH49) IN EXPORTS OF CH 49	73.23
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 49) IN TOTAL EXPORTS	0.052
	%SHARE OF RE- EXPORTS(CH 49) IN TOTAL EXPORTS	0.142

Source: IE Singapore

**Table A.2.22 India's imports of Essential oils and resinoids from Singapore of (HS 33)**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2009-10	2012-13	2013-14	2014-15	2015-16	
33012934	Patchouli oil	1.0	1.0	1.5	2.4	3.4	3.4	A, ST
33021010	Synthetic flavoring essences	0.5	1.1	1.0	0.9	1.1	0.8	A, ST
33021090	Other mixture of odorifrsubstances of a kind used in food/drink industries	0.0	0.4	1.8	1.2	1.0	0.8	A, ST
33029011	Synthetic perfumery compounds	1.9	3.4	5.1	2.1	2.5	3.1	E, ST
33029019	Other mixture of aromatic chemicals andessential oil	0.0	1.5	0.9	1.5	1.0	0.8	E, ST
33029090	Other mixtures of odorifrsubstancesn.e.s.	0.9	6.9	3.8	2.6	3.0	2.4	E, ST
33030090	Other perfume and toilet waters	0.2	1.2	3.7	1.8	0.9	5.3	X, ST
33049990	Others	0.1	0.1	0.6	0.6	2.7	0.3	X,NT-1
33073090	Other perfumed bath salts and other bath preparation	0.0	0.1	0.5	0.4	0.4	0.6	X,NT-2
33074100	Agarbatti" and other odoriferous preparations whichoperate by burning	0.1	0.2	0.3	0.2	0.1	0.1	X, ST
Total of Top Imports from Singapore		4.7	15.8	19.1	13.5	16.0	17.6	
Total imports from Singapore		5.8	20.1	22.9	15.2	17.4	19.4	
Share of Top imports to Total imports		81.2	78.4	83.5	88.5	91.7	91.0	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.22 (a): Singapore's Annual Domestic & Re-Exports To India (Chapter 33)**

Value In S\$ Thousand

S.NO	CHAPTER	2015
1	RE-EXPORTS: PERFUMES & TOILET WATERS (HS 33030000)	9,806
	TOTAL ( CHAPTER 33)	9,806
	TOTAL RE-XPORTS(CHAPTER 33	9,806
	TOTAL DOMESTIC EXPORTS(CHAPTER 33)	0
	TOTAL EXPORTS (ALL CHPATERS)	14587393
	% SHARE OF CHAPTER 33 IN TOTAL EXPORTS	0.07

Source: IE Singapore

**Table A.2.23: India's imports of Man-made filaments (HS 54) from Singapore**

HS Code	Description	Imports from Singapore (in US\$ million)						Category
		2004-05	2008-09	2012-13	2013-14	2014-15	2015-16	
54023910	Poly propylene filament yarn	1.6	0.1	0.0				X, ST
54023990	Other	1.9	1.6	0.2				X, ST
54024400	Elastomeric		2.6	9.4	14.1	19.4	19.0	X, EL
54024900	Other	0.8	1.8					D, NT-2
54026910	P.V.A. filament yarn	0.7	0.7					X, ST
54026990	Others(excluding thread)	1.2	2.6	0.1	0.0		0.0	X, ST
Total of Top Imports from Singapore		6.2	9.3	9.7	14.2	19.4	19.0	
Total imports from Singapore		6.8	9.8	10.2	14.6	19.7	19.1	
Share of Top imports to Total imports		90.3	95.0	95.0	97.3	98.5	99.2	

Source: DGCIS, Ministry of Commerce and Industry, Government of India

**Table A.2.23 (a): Singapore's Domestic & Re-Exports to India (Chapter 54)**

Value In S\$ Thousand

S.NO	CHAPTER	2015
	DOMESTIC EXPORTS:	
1	OTHER ELASTOMERIC YARN SINGLE UNTWISTED OR A TWIST NOT OVER 50 TURNS PER METRE NOT FOR RETAIL (KGM) (HS 54024400)	27767
	TOTAL DOMESTIC EXPORTS(CHAPTER 54)	27767
	TOTAL RE-EXPORTS(CHAPTER54)	0
	TOTAL EXPORTS(CHAPTER 54)	27767
	TOTAL EXPORTS(ALL CHAPTERS)	145,87,393
	%SHARE OF DOMESTIC EXPORTS(CH 54) IN TOTAL EXPORTS	0.190

Source: IE Singapore

**Table A.2.24: List of products from Singapore on which Anti Dumping duties have been imposed**

S.No.	Product Name	Product Code	Date	Type	Present Status
1	1,1,1,2-Tetrafluoroetha or R-134 a	29033919	10-05-2011	Definitive	Sunset Review (SSR) initiated on 10-04-2015
2	Acetone	29141100	19-01-2011	Definitive	SSR initiated on 7-04-2015 (Extended till 11-06-2015)
3	Acrylic Fibre	550130	05-07-2010	Definitive	In force
4	Caustic Soda	281511 & 281512	31-08-2012	Definitive	In force
5	Cold Rolled Flat Products of Stainless Steel	7219	24-11-2009	Definitive	SSR initiated on 17-04-2014 (Extended till 16-10-2015)
6	Flexible Slabstock Polyol	390720, 390791 and 390799	19-09-2012	Definitive (Withdrawn)	Duty withdrawn w.e.f 13-01-2014
7	Melamine	29336100	01-06-2012	Benchmark/reference form	In force
8	Pentaerythritol	290542	05-03-2008	Definitive	Applicant withdrew their application in respect of Japan (continued in case of Chinese Taipei)
9	Phenol	29071110 and 27079900	08-10-2010	Definitive	SSR initiated on 09-04-2015 (Extended till 17-06-2015)
10	Phthalic Anhydride	29173500	09-05-2014	AD investigation started	Time for AD investigation and notifying the final findings extended up to 8-11-2015
11	Polyvinyl Chloride (PVC) Suspension Grade	39042210	04-04-2014	Definitive	In force

Source: Ministry of Commerce and Industry, Government of India

**Table A.3: Details Of Top Fdi Inflows Received From Singapore (Remittance-Wise)**  
*(Through Indian Companies, from January 2000 to December 2015)*

Sl. No	Name of Indian Company	FDI Route	Name of Foreign Collaborator	RBI Regional Office	Item of Manufacture	Amount of FDI Inflows	
						(In Rs crore)	(In US\$ million)
1	BHARTI AIRTEL LTD	RBI	three pillars singapore pte ltd	NEW DELHI	TELEPHONE COMMUNICATION SERVICES	6,795.58	1,113.77
2	TRIGUNA HOSPITALITY VENTURES (INDIA) PVT	FIPB	APHV INDIA INVESTCO. PVT LTD	NEW DELHI	Activities of holding companies	5,670.21	871.56
3	TRIGUNA HOSPITALITY VENTURES (INDIA) PVT	FIPB	AAPC SINGAPORE PTE LTD	NEW DELHI	Activities of holding companies	5,040.59	774.78
4	GLAXOSMITHKLINE CONSUMER HEALTHCARE LTD	RBI	GLAXOSMITHKLINE PTE LTD	REGION NOT INDICATED	MFG OF HEALTHCARE PRODUCTS	4,804.70	883.61
5	JASPER INFOTECH PVT LTD	RBI	Starfish I Pte Ltd.	NEW DELHI	Other information technology and computer service activities n.e.c	3,612.86	566.28
6	RECKITT BENCKISER INVESTMENTS INDIA PVT	FIPB	RECKITT BENCKISER (SINGAPORE) PTE LTD	NEW DELHI	OTHER FINANCIAL SERVICES N.E.C	3,274.90	730.13
7	FLIPKART INTERNET PVT LTD	RBI	FLIPKART MARKETPLACE PRIVATE LIMITED	BANGALORE	Other information technology and computer service activities n.e.c	3,266.45	526.53
8	FLIPKART INDIA PRIVATE LIMITED	RBI	Flipkart Private Limited	BANGALORE	WHOLESALE TRADE IN HOUSEHOLD EQUIPMENT, APPLIANCES N.E.C.	2,424.24	395.20
9	RELOGISTICS INFRASTRUCTURE P. LTD.	RBI	BIOMETRIX MARKETING P. LTD.	MUMBAI	BOTTLING OF NATURAL GAS OR LIQUIFIED PETROLEUM GAS	1,851.91	458.89
10	ONE 97 COMMUNICATIONS LIMITED	RBI	ALIPAY SINGAPORE E-COMMERCE PTE LTD	NEW DELHI	Other information service activities n.e.c.	1,831.48	275.02
11	DLF ASSETS LTD	RBI	DAL SINGAPORE INVESTMENTS PTE LTD	NEW DELHI	CONSTRUCTION	1,794.59	387.37
12	AAA GLOBAL VENTURES PVT LTD	RBI	BARCLAYS BANK PLC	MUMBAI	FINANCIAL LEASING COMPANIES ACTIVITIES.	1,711.24	368.35
13	FLIPKART INTERNET PVT LTD	RBI	FLIPKART MARKETPLACE PRIVATE LIMITED	BANGALORE	Other information service activities n.e.c.	1,632.04	250.86

14	ESSEL MINING & INDUSTRIES LTD	RBI	SURYA ABHA INVESTMENT PTE. LTD.	KOLKATA	Mining of iron ores	1,606.50	242.61
15	ESSEL MINING INDUSTRIES LTD.	RBI	SURYA ABHA INVESTEMENT PTE.	KOLKATA	MINING OF IRON ORE	1,496.00	378.62
16	INSITEL SERVICES PVT LTD	RBI	SSA FUND (SINGAPORE) PTE. LIMITED	NEW DELHI	Wholesale of telephone, mobile phone and communications equipment and parts	1,474.89	222.73
17	INSITEL SERVICES PVT LTD	RBI	SSA FUND (SINGAPORE) PTE. LTD.	NEW DELHI	Wholesale of telephone, mobile phone and communications equipment and parts	1,414.55	213.62
18	LPCUBE SYSTEMS (I) P. LTD.	RBI	VIDHYA JAYARAMAN	CHENNAI	DATAPROCESSING SOFTWARE DEVELOPMENT AND COMPUTER CONSULTANCY SERVICES	1,406.25	328.27
19	GLAXO SMITHKLINE PHARMACEUTICALS LTD	RBI	GLAXO SMITHKLINE PTE LTD	REGION NOT INDICATED	MFG OF PHARMA PRODUCTS	1,354.48	228.39
20	HINDUSTAN COCO-COLA HOLDINGS PVT LTD	FIPB	HINDUSTAN COCA-COLA OVERSEAS HOLDING PT	MUMBAI	INVESTMENT RESEARCH AND COUNSELLING ACTIVITIES	1,334.18	273.21
21	HINDUSTAN COCO-COLA HOLDINGS PVT LTD	FIPB	HINDUSTAN COCA-COLA OVERSEAS HOLDING PTE	MUMBAI	INVESTMENT RESEARCH AND COUNSELLING ACTIVITIES	1,334.18	273.21
22	KOTAK MAHINDRA BANK LTD	RBI	HELICONIA PTE LTD	MUMBAI	BANKING ACTIVITIES, INCLUDING FINANCIAL SERVICES	1,296.00	221.93
23	CRISIL LIMITED	RBI	MCGRAW-HILL ASIAN HOLDINGS (SINGAPORE) P	REGION NOT INDICATED	POLICY ADVISORY	1,285.39	212.97
24	HINDUSTAN COCO-COLA HOLDINGS PVT LTD	FIPB	HINDUSTAN COCA-COLA OVERSEAS HOLDINGS PT	MUMBAI	OTHER BUSINESS SERVICES NOT ELSEWHERE CLASSIFIED OR INCLUDED	1,281.19	288.75
25	FLIPKART INDIA PRIVATE LIMITED	RBI	FLIPKART LIMITED	BANGALORE	Other non-specialised wholesale trade n.e.c.	1,266.69	204.18
<b>Grand Total</b>						<b>60,261.10</b>	<b>10,690.85</b>

Source: Extracted from the SIA Newsletter- Annual Issue 2015



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