

**IDSJ Working Paper 167**

**India China Bilateral Relations**

Dragon and Elephant's Engagements

**Surjit Singh**

**May 2013**

The purpose of the Working Paper is to provide an opportunity to IDSJ faculty, visiting faculty, and research staff to sound out their ideas and research work before publication and to get feedback and comments. They can be cited or quoted only with full acknowledgment and bearing in mind that they are being circulated in preliminary form to encourage discussion and comments before publication.

May 2013

**Institute of Development Studies**

8-B, Jhalana Institutional Area

Jaipur-302 004 (India)

Phone : 91-141-2705726 / 2706457 / 2705348

Fax : : 91-141-2705348

E-Mail : [idsj@dataone.in](mailto:idsj@dataone.in)

visit us at : [www.idsj.org](http://www.idsj.org)

Printed at : Kumar & Company, Jaipur  
Ph. : 2375909

# India China Bilateral Relations

## Dragon and Elephant's Engagements

Surjit Singh

### 1. Introduction

India and China are the two major economies in the region and the world over. As per the World Trade Organisation's (WTO's) Trade Profiles 2011, China is the largest merchandise exporter and the second largest importer in the world in 2010 (WTO 2011). It thus became the second largest merchandise trader in 2011 after the US. China was the largest foreign direct investment (FDI) recipient (105.7 billion US\$ in 2010) and its trend is upward moving. The rising foreign reserves forced the Chinese government to initiate the 'go-out' (*Zouchuqu*) strategy. This led to overseas direct investment rise to 68.8 billion US\$ in 2010 from just 1.9 billion US\$ in 1999 (Kalirajan *et al.* 2010). China remained a net services importer in 2011, while India registered a positive balance, with the value of exports exceeding imports (WTO, 2012b)<sup>1</sup> Along with increasing trade and investment, significant structural change also took place in the trade and investment sphere<sup>2</sup>. On the other hand, India slowly moved, since 1991, away from a strategy of industrialization through import-substitution and public sector production to a more open, market-oriented trade and investment regime. Last two decades has seen use of a wide array of trade policy measures to protect domestic producers from foreign competition, to regulate domestic production and, at the same time, to promote exports, renders the import and export regime unduly complex. Despite these complexities, India's merchandise trade has risen from 30 percent of gross domestic product (GDP) in 2005-06 to 40 percent of its GDP in 2009-10<sup>3</sup>. India and China have increasingly participated in the global economy. However, they have been developing their own trade relations. Over the years they have recognized the importance of engaging themselves in the educational, cultural and economic spheres. Officially, India and China resumed trade in 1978. In 1984, the two sides signed the Most Favored Nation (MFN) Agreement. India-China bilateral trade has grown significantly since 2000, making China as India's largest trading partner in goods, replacing the United States of America. India and China have historically also traded and the most important was silk route taken by merchants and travelers from Changan in China to Asia and the west. The silk route has had a unique role in foreign trade and political relations, stretching far beyond the bounds of Asia itself. It has left its mark on the development of civilizations on both sides of the continent. Though, the route has merely fallen into disuse; its story is far from over. With the latest developments, and the changes in political and economic systems, one may yet see international trade once again, on a scale greater than older times, the modern modes of transport replacing the camels and horses of the past, the information highway replacing the messenger pigeons of the past, and the synergetic multi-cultural research replacing the warring cross-cultural suppressions. The silk route was not a trade route that existed solely for the purpose of trading in silk; many other commodities were

also traded, from gold and ivory to exotic animals and plants. Of all the precious goods crossing this area, silk was perhaps the most remarkable for the people of the west. For this reason, the Romans saw the trade route to the East as a route for silk rather than the other goods that were traded. Amartya Sen says that dealings between India and China are stunted in many ways. Rich cultural links that once existed long ago, from the study of eclipses to Buddhist chanting, but hardly anyone remembers that today. Indians envy China's economic rise, but console themselves by pointing out that it is no democracy in China. Aside from displays of fraternity at summits, during the G20 meeting in Mexico on June 18-19, 2012 China seems not to think much about India at all (*The Economist* 2012). And yet a huge shift has taken place in the make-up of Indian trade. When India began to liberalise its economy in 1991, the west still dominated the world economy, and it was to the west that India turned for trade. China's rise has now changed everything- for India, too. China is now its third-largest trading partner in goods, and the biggest if Hong Kong is included. For China's East Asian neighbors, a dominant trade with China is a given, but Indians are still trying to digest the development. Rising trade with China has been good for India. This paper looks at the India China trade relations, their commercial policies and trade balances.

## **2. The Economies**

China initiated modernisation process with a modest economic base. 36 percent of global Gross Domestic Product (GDP) accrued in China in the early 19th century. After 1820 China rapidly lost ground because of various domestic reasons (Maddison 1998). In 1979, its GDP was \$177 billion (at 2002 prices) and per capita income was \$183. This GDP largely came from agriculture and stark poverty stared at it. The World Bank estimates that in the more than two decades since reforms started, average income per capita in China has quadrupled, while more than 270 million people have been lifted out of poverty (Chen and Wang 2001). From 1978 to 2004, GDP growth in China averaged nearly 10 percent, the highest rate of any country in the world for the same period (Qin *et al.*, 2006; Yusuf, Nabeshima and Perkins 2006). Deng Xiaoping vision put the economy on a different path in 1978 (Singh 1995; 1998; 2007). By the end of 2004, China's GDP was \$1.65 trillion with \$1268 per capita income. It is now the second largest economy after Japan in South East Asia. China is perhaps one-sixth as large as the United States in current dollars, and that India is one-sixteenth as large (Winters and Yusuf 2007). Any economic shock arising from Germany or Japan or USA will have higher impact compared to one emanating from China and the least from India. Looking at growth of output and income, China and India have performed very strongly since 1995 in comparison to other large economies of the world (table 1). China accounted for 13 percent of the world growth in output over 1995-2004 when India merely accounted for 3 percent. The USA accounted for 33 percent when its much higher starting share in 1995 offsets its slower growth rate. The 2020 projections put China second only to the USA in terms of contribution to world growth. India is projected to have a slower growth rate during 2005-20 compared to 1995-2004, but marginally higher contribution to world growth. Amongst the two Asian giants, China outscores. It may be noted here that these two countries are projected to account for 10.3 percent of world GDP in 2020; a significant increase from 6.4 percent contribution. However, emerging economies' growth rates are typically more volatile than industrial countries' rates and as these countries become bigger, volatility would affect others strongly (Winters and Yusuf 2007).

**Table 1: Gross Domestic Products (%)**

Economies	Share of World GDP (2004\$ & exchange rates)		Average Annual Real Growth Rates		Average Contribution to World Growth	
	2004	2020	1995-2004	2005-2020	1995-2004	2005-2020
China	4.7	7.9	9.1	6.6	12.8	15.8
India	1.7	2.4	6.1	5.5	3.2	4.1
USA	28.4	28.5	3.3	3.2	33.1	28.1
Japan	11.2	8.8	1.2	1.6	5.3	4.6
Germany	6.6	5.4	1.5	1.9	3.0	3.3
Brazil	1.5	1.5	2.4	3.6	1.5	1.7
World	100	100	3.0	3.2	100	100

Source: *World Bank Indicators*.

## 2. Economic Relations: Initial Steps

India and China began normalising relations in the mid-1970s. They initiated a process of dialogue. This enabled both countries to explore the feasibility of trade ties and identify areas of common economic interest. At Beijing's persistent initiative, which proposed all-round improvement of ties while setting aside resolution of the border dispute to a later date, both the nations gradually started to build economic and trade ties to develop improved bilateral relations. This coincided with the launch of China's Four Modernisations Programme and enunciation of its policy of ensuring a 'peaceful neighbourhood environment'. The driver for improved economic relations with India, including through various mechanisms like the 'Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation' (BIMSTEC) and the trans-national rail and road transportation, was the imperative to promote the lagging economies of China's hinterland south-western provinces and secure for them easily accessible export markets in South and South East Asia. These imperatives remain. In 1984, India and China concluded a Trade Agreement which accorded both countries Most Favoured Nation (MFN) status. An active bilateral relationship began developing in 1992 and it had made satisfactory progress by 1994. In 1994, the two countries signed a Double Taxation Avoidance Agreement. A filip was given to the process when both India and China became Dialogue Partners in the Association of South East Asian Nations (ASEAN). The trend continued with both countries signing the Bangkok Agreement in 2003 and deciding to offer some trade preferences to each other. According to the Agreement, China extended concessions on 217 products exported from India while India reciprocated by offering concessions on 188 products exported by China. They also agreed to initiate open border trade along the silk route and expressed interest in participating in a multilateral trade system as per WTO commitments.

Both the countries also reached an agreement on Sikkim in 2003, Beijing agreed to India's suggestion about opening trading posts in Yadong/ Nathu La. India had first proposed opening of a border trading post at Yadong during the seventh Joint Working Group meeting held in Beijing in July 1994. Yadong/ Nathu La were finally opened on July 6, 2006. Prior to opening of Yadong/ Nathu La in 2006 by China, it had constructed an all-weather two-lane highway up to Yadong as well as permanent trading huts, customs buildings and check posts. Plans are afoot to extend the railway from Lhasa to Yadong by 2015. This would facilitate transportation of goods and passengers. China's construction activity suggests that Beijing is planning to develop Yadong as a major trade port and it would be the ruote for supply of goods to Sikkim, Bhutan, and India's northeast as well as onwards via sea to Bangladesh and Myanmar. Yadong is apparently poised to become a container port<sup>4</sup>.

### **3.1 Institutional Framework of Bilateral Relations**

There have been several institutional mechanisms for India's economic and commercial engagement with China. India-China Joint Economic Group on Economic Relations and Trade, Science and Technology (JEG) is a ministerial-level dialogue mechanism established in 1988 during the visit of former Prime Minister Rajiv Gandhi to China. A Joint Study Group (JSG) was set up after Prime Minister Vajpayee's visit to China in June 2003 to examine the potential complementarities between the two countries in expanded trade and economic cooperation. As a follow up, a Joint Task Force (JTF) was set up to study the feasibility of India-China Regional Trading Arrangement. JTF submitted its report in October 2007. There are also Joint Working groups on trade, agriculture and energy. India and China concluded their inaugural Strategic Economic Dialogue (SED) in Beijing and on December 16, 2010, both countries agreed to set up the India-China Strategic and Economic Dialogue (SED) when Chinese Premier Wen Jiabao visited India. The forum was the result of an arrangement decided in the Joint Communiqué of India and China. The first SED took place in Beijing on September 26, 2011. In terms of diplomatic practice this is only the second such dialogue format that China has with any country<sup>5</sup>.

The India-China SED mechanism is a reflection of the two countries' desire to deepen and elevate the current levels of exchange and interaction. Clearly, the SED dialogue format widens the ambit of interaction. The SED also comes as an acknowledgement from both sides to correct the growing burden of trade deficit that India carries (US \$20 billion for 2010) in its trade relationship with its largest trading partner, China, and address issues relating to market access for Indian companies in China in competitive sectors such as pharma and IT, as also the hurdles Chinese companies face in expansion of operations in India. India's trade with China is expected to progress towards a goal to cross the US \$100 billion target by 2015.

*India-China Strategic and Economic Dialogue (SED):* During Chinese Premier Wen Jiabao's visit to India in December 2010, India and China agreed to set up the Strategic and Economic Dialogue mechanism. The SED is a forum for both sides to discuss strategic macro-economic issues impacting both nations as a result of the changing international economic and financial landscape, to share their individual best practices and in handling challenging domestic economic issues and to identify specific fields for enhancing cooperation, learning and experience sharing. At the SED, the Indian side was led by Mr. Montek Singh Ahluwalia, Deputy Chairman, Planning Commission<sup>6</sup>, while the Chinese side by Mr. Zhang Ping, Chairman, National Development and Reforms Commission (NDRC).

*SEDs:* The first India-China SED meeting was held in Beijing during September 26-27, 2011. The first SED discussed the issues included introduction to the 12th plan priorities of the two countries, monetary and fiscal policies, investment policies, policies on energy conservation and environment protection etc. in both the countries. The two sides constituted five Working Groups on policy coordination, infrastructure, energy, environment protection and high technology<sup>7</sup>. At the end of the official meetings both sides signed the Agreed Minutes of the first SED. In the context of a tenuous global recovery, the initiative to deepen investment cooperation as also to communicate on macro-economic policymaking also serves to address extra-regional economic challenges.

The second meeting of SED was held on November 26, 2012 in New Delhi. During the meeting, the two sides discussed a wide range of topics including greater cooperation at the global level,

strengthening communication on macro-economic policies, deepening and expanding trade and investment and promoting bilateral cooperation in the financial and infrastructure sectors. The proposals and recommendations made by the five Working Groups were considered during the second Dialogue and directions were given for their future activities. The two sides agreed that given the current global economic situation it was important to raise the level of economic engagement between India and China. The signed Government-to-Government and business MoUs are detailed in box 1.

Thus, apart from the overall focus on deepening bilateral investment cooperation, there is a stress on promoting cooperation in energy efficiency and conservation techniques as well as environmental protection towards sustainable development. One of the key outcomes of the discussions was the decision to enhance cooperation in infrastructure, especially in the railway sector. It is mooted that Chinese expertise and technology would be sought in building six high-speed rail corridors in India. This proposed project, for instance, serves multiple purposes. Firstly, road transport has overtaken railways as far as its share of the freight and passenger market is concerned (road transport accounts for about 65 percent and 90 percent respectively, of the freight and passenger market in India). Rail transport, specifically within the electrically powered, dedicated freight corridors (DFC) and using High-speed rail (HSR), would address the burden of greenhouse gas emissions both directly (no diesel locomotives) and indirectly (preference for HSR would keep many vehicles off the road as well). The laying of additional lines, electrification of existing track and installation of new physical infrastructure would generate employment and growth, both in the rollout stage and eventually when towns on these HSR lines are able to develop new business opportunities with the changed circumstances of time and distance between two nodal points. China's bullet trains were launched in 2007 and within a few years China has built the world's largest high-speed rail network. While corruption and safety in the Chinese execution of HSR has been pointed out, the exact nature of Chinese participation in the Indian execution of DFC and HSR is yet to be seen.

China and India have similar problems to tackle (stabilizing the economy, ensuring distributional equity, fulfilling social needs in health, education, etc., and managing the current promising levels of growth). The current SED mechanism, once it evolves further, would be an indispensable asset both for target setting and for sharing "lessons learnt" from individual growth experiences. It is understandable that India and China need time to shape the form, content and composition of this dialogue mechanism. The India-China SED is qualitatively different from the US-China S&ED as of now. The latter has a wider radius of interaction (16 agency heads from the United States including senior military representatives from the Pentagon and US forces in Hawaii as well as from the Chinese side participated in the recent meeting). Eventually, there could be efforts to supplement a more evolved version of the India-China SED towards an "S&ED" (strategic and economic dialogue). All efforts should be made to enrich the agenda of the SED mechanism both as a concept and in practical ways. There could be sub-dialogues on regions, which are perceived to be arenas of competitive contention (Africa and the South China Sea, for instance). The SED should eventually create a greater interface at the sub-national level by including other arenas of cooperation (defense, academics, general tourism, medical tourism, sports, and cultural interaction) involving wider exchange at the level of people. The SED thus reflects significant elevation of dyadic ties. India and China have also demonstrated that they are capable of scaling up their level of engagement confidently, even as differences on issues

such as the border, stapled visas, Tibet, the China-Pakistan equation, the India-US partnership, suspicion over movement and activity in the South China Sea and the Indian Ocean, remain. The SED is now poised to be an annual event on the India-China diplomatic calendar.

*Joint Economic Group:* India-China Joint Economic Group on Economic Relations and Trade, Science and Technology (JEG) is a ministerial-level dialogue mechanism established in 1988 during the visit of former Prime Minister Rajiv Gandhi to China. JEG has so far met nine times between September 18-20, 1989 and August 27, 2012<sup>8</sup>. Indian Minister of Commerce & Industry and Commerce Minister of People's Republic of China jointly chaired the ninth JEG.

*Civil Aviation:* The MoU signed during Premier Wen Jiabao's visit to India during April 9-12, 2005 provided for major liberalization of air links between India and China with multiple designations of carriers and an open skies policy for cargo, an increase in capacity entitlements, more points of call and an increase in the number of intermediary and beyond points. According to the Memorandum, the designated airlines of both parties are entitled to have unlimited third, fourth and fifth freedom traffic rights with unlimited capacity entitlement for dedicated cargo services. In terms of frequency, the liberalized civil aviation agreement allows for 42 flights a week. The airlines were left to utilize this capacity. Enhanced number of flights is to be a function of commercial viability and availability of aircrafts. Presently, five-air service operators- Air China (5 per week), China Eastern (8 per week), China Southern (3 per week), Air India (4 per week), and Ethiopian Airways (4 per week) are currently operating a total of 24 flights between China and India every week. These flights link Beijing-New Delhi; Guangzhou-New Delhi, Shanghai-New Delhi, Mumbai-Shanghai, Kunming-Kolkata and Chengdu-Bengaluru. Shanghai Airlines is keen to operate flights to India. In September 2010, the Ministry of Foreign Affairs, People's Republic of China had authorized Hainan Airways to operate direct flights between India and China as per the 1988 ASA concluded between the two countries in Beijing.

The latest development in India China relations is the visit of Chinese Premier Li Keqiang during May 19-21, 2013. This is the first foreign visit of Premier Li after taking over and immediately after the Depsang incursion by Chinese troops. China's India engagement stems from Chinese domestic compulsions and tremors in the ASEAN neighbourhood. The Sino- Indian relations have to be charted beyond the parameters of proposed Border Defence Cooperation Agreement. China is facing a gridlock in its economic relations with Myanmar to Japan. Lot is also happening in China's relations with Japan, Philippines, Vietnam, Myanmar and other ASEAN countries and in this scenario, India-China economic relations appears to be guided by 'economic first' and security considerations. China is looking beyond Himalaya, counter- balancing the American 'pivot' to smoothening ties across ASEAN (Vishwanath 2013). From Chinese perspective India is a unique market. The large trade surplus that China runs with India is similar to the nature of the trade balance it has with Europe and North America. But it is different from China's trade balances with Japan, South Korea, Taiwan and Southeast Asian countries like Malaysia, the Philippines and Thailand. China runs large trade deficits with these countries. These trade deficits are unlike Angola, Congo, Libya, and South Africa, or Latin American countries like Brazil, Chile and Peru. These deficits are the results of resource-driven trade with China importing large energy and primary resources from these countries. Similar deficits are observed with some countries in the Middle-east, especially Saudi Arabia. China's deficits with countries like Northeast Asia and Southeast Asia are driven by large imports of intermediates and semi-finished products

like parts and components that are assembled and transformed into shape in China for onward exports. An important destination of these exports is India. As per Chinese statistics, China's trade surplus with India is about \$29 billion followed by \$24 billion with United Arab Emirates and \$23 billion with Vietnam. Further amongst the top ten trading partners of China, the surplus with India is lower than those with the US (\$259 billion), The UK (\$39 billion) and the Netherlands (\$62 billion). Also China does not depend on India for sourcing parts and components and intermediates as it does on Japan, South Korea, Taiwan and Thailand. It is also not dependent on India for procuring resources like it does on Latin American, African and Middle East countries except for fine ores and raw cotton. Then Indian market shows proclivity to absorb Chinese manufactures in a broad-based fashion like American and British markets. China sees India as a country that can yield high returns on long-term investments.

During the visit the two sides signed three memorandums of understanding to facilitate exports of the items identified as priority by India. It is hoped that it would help in reducing the trade gap and bring down impediments to Indian exports to China. The memorandum of understanding signed between the Pharmaceuticals Export Promotion Council of India (Pharmaexcil) and China Chamber of Commerce for Import and Export of Medicines and Health Products (CCCMHPIE) hopes to open Chinese market which is one of the largest markets for low cost generic medicines. It would provide easier registration norms facilities. The average imports of medicinal and pharmaceutical products from China during the last five years were \$4332.7 million vis-a-vis exports from India of \$692.44 million. The memorandum of understanding signed between the Export Inspection Council of India (EIC) and Chinese General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) on trade and safety of feed and feed ingredients would help exports of rapeseed oil to China, which was stopped due to chemicals found in the packaging in 2012. India sees lot of opportunity for buffalo meat exports to China with signing the memorandum of understanding signed between the Chinese General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) and Indian Agricultural and Processed Food Products Export Development Authority (APEDA). China had earlier stopped bovine meat import from India due to concerns about Foot and Mouth Disease. India has assured China that it follows scientific management and accepts international standards. It is expected that India's export of bovine meat to China could touch \$1.0 billion in the next two years. India's exports of animal products stood at Rs.151090 million in 2011-12 out of which buffalo meat accounted for Rs.137250 million (91%). Sheep/goat meat exports were valued at Rs.2550 million. In 2011-12, India's meat exports were put at more than Rs.180000 million of which bovine meat was more than Rs.160000 million (89%). The sharp fall in fishery exports from India to China following imposition of new testing requirements would get boost with signing of the memorandum of understanding between the Chinese General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) and Marine Products Export Development Authority (MPEDA). China would accept the quality certificates given by MPEDA that could lower compliance costs and boost exports. In order to enhance people-to-people contact, both the countries have also signed agreements to facilitate cooperation and linkages between cities and states/ provinces and an agreement on conducting the Kailash-Mansarovar Yatra (pilgrimage) every year between May and September. Agreement to facilitate smooth communications China to assist India in renting wireless sets and local SIM cards for those going on the pilgrimage. The two sides also discussed extending of transmission lines in the area of energy security. China and India have

agreed to set up working group to strengthen cooperation on trans-border rivers. China is to step up communication on hydrological information, which would help India manage the flooding of the Brahmaputra better. On the sidelines, IL&FS signed memorandum of understanding with ICBS (Asia), the Hong Kong based subsidiary of Industrial and Commercial Bank of China for board level cooperation in infrastructure project development services and financial services.

Auto sector is another area where Chinese companies are coming. Already Chinese automakers have been making inroads into India either through partners such as General Motors' or Force Motors and Premier or by establishing wholly-owned subsidiaries (Great Wall Motors and Beiqi Foton). SAIC Motor Corporation has given GM India a solid financial footing by buying a 50 percent stake in 2009 for Rs.23500 million when GMs US-based parent had filed for chapter 11 bankruptcy, though in October 2012, GM bought back 43 percent stakes. Beiqi Foton has invested Rs.16760 million in Chakan near Pune for commercial vehicles. They however, face an uphill task in selling products to India's demanding consumers, who are not only price-sensitive but also seek higher standards of quality. Chinese labour projects in India face visa problems. There is need for relaxation visa regime for skilled Chinese manpower for certain projects.

Indian companies are looking forward to easy credit available from Chinese banks. Already Reliance has gain from these deals (secured \$1.1 billion loans from three Chinese banks to finance purchase of equipment for its Sasan ultra mega power project) and now Essar group is trying to ink deal with Chinese bank and Oil and gas producer and distributor to tap billion dollar funds. It had set up base in China in 2003 with \$27 billion. Indian companies have dabbled in dim sum bonds (bonds denominated in renminbi issued outside China by both Chinese and non-Chinese companies). IDBI bank was the first to raise about \$100 million through dim sums in 2011. In the past Indian companies, especially in the power and telecom sectors have risen in opposition to any red flags waved by any agency in both the countries.

#### **4. Commercial Policies**

In this section, we look at the liberalization of trade and investment regimes role in these two economies. The key commercial policies include import liberalization; export promotion measures and FDI policies. The policies are summarized in table 2 & 3. India had inward looking policies till 1991 and has been slower than China in reforming. It also has a habit of tap- on and tap- off policy strategies. However, the switch in commercial policies has played a significant role in the trade performance of both the countries. China opened its door in late 1970s with major reform coming in India in 1991. The difference in timing of changes in commercial policies in both the countries has made the difference in performance and outcomes. China had a more comprehensive approach to attracting export-oriented FDI, actively facilitated the technological upgrading of exports through FDI, reduced import tariffs and the dispersion of tariffs in a more systematic manner. It typically managed a more predictable and transparent real effective exchange rate (REER), and pursued more comprehensive liberalization in goods and services provisions in its FTAs with Asia's developing countries. In the recent years, India has attempted to put in place appropriate commercial policies, particularly with respect to attracting export-oriented FDI and liberalizing tariffs. India has attempted ambitious FTA negotiations with developed countries, which could provide market access and FDI inflows among other benefits.

**Box 1: Agreements Signed Between India and China**

No.	Name of the Agreement/ MoU/ Protocol	Date
1	Agreement between the Republic of India and the People's Republic of China on Trade and Intercourse between the Tibet region of China and India	29-04-1954
2	Trade Agreement between the Republic of India and the People's Republic of China	14-10-1954
3	Notes Exchanged between China and India on the Question of Transit of Chinese Commodities to the Tibet Region of China via India	14-10-1954
4	Protocol between the Government of India and China regarding the handing over of Postal, Telegraph and Public Telephone Services in the Tibet Region of China	01-04-1955
5	Trade Agreement between the Government of India and the Government of PRC	15-08-1984
6	Agreement between the Government of the PRC and the Government of the Republic of India relating to Civil Air Transport	22-12-1988
7	Protocol between the Republic of India and the People's Republic of China on Resumption of Border Trade between the Tibet region of China and India	1988
8	Trade protocol between the Government of India and the Government of PRC for the period 20th September 1989 to 19th September 1990	20-09-1989
9	Trade protocol between the Government of India and the Government of PRC for the Calendar year 1992	13-12-1991
10	MoU between the Government of the Republic of India and the Government of PRC on Resumption of Border Trade	13-12-1991
11	Protocol between the Government of the Republic of India and the Government of PRC on Entry and Exit procedures for Border Trade	1992
12	Work plan for 1992-93 under the MoU on Cooperation in Agriculture between the Ministry of Agriculture of the Republic of India and the Ministry of Agriculture of the PRC	1992
13	MoU between the Office of the Comptroller and Auditor General, Republic of India and the Audit Administration, PRC	15-01-1992
14	Protocol between Government of India and PRC on custom regulation, Banking arrangements and related matters for border trade	1992
15	MoU on Cooperation in Agriculture between the Ministry of Agriculture of the Republic of India and the Ministry of Agriculture of PRC	11-04-1992
16	Protocol between the Government of the Republic of India and the PRC for Extension of Border Trade across Shipki La Pass	07-09-1993
17	Agreement between the Ministry of Information and Broadcasting of the Republic of India and the Ministry of Radio, Film, Television of the PRC on Radio and Television Cooperation	07-09-1993
18	MoU between Government of India and PRC on Cooperation in the field of Geology and Mineral Resources	1993
19	Trade Protocol between the Government of the PRC and Government of Republic of India for 1994-95	15-06-1994
20	Agreement between the Government of the PRC and Government of Republic of India for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income	18-07-1994
21	MoU between Reserve Bank of India and the People's Bank of China on Banking Cooperation.	22-10-1994
22	Agreement between India and China on Maritime Transport	29-11-1996
23	Agreement of Cooperation between Doordarshan of India and China Central Television	02-06-1997
24	Memorandum of Understanding on Cooperation in the field of Steel between Government of India and Government of the PRC	22-02-2000
25	Memorandum of Understanding on co-operation in the field of Information Technology	2000
26	Memorandum of Understanding on co-operation in the field of Labor (employment services, vocational training and social security)	2000
27	MoU on the application of Phytosanitary Measures between Ministry of Agriculture, Republic of India and State General Administration of the PRC for Quality Supervision and Inspection and Quarantine	14-01-2002
28	Agreement of the Rep. of India and the Government of PRC on cooperation in the field of Tourism	14-01-2002
29	MoU on the "Implementation Plan for Organized Group Travel by Chinese Citizens to India" on December 8, 2002	08-12-2002
30	MoU between the government of the Republic of India and the Government of the PRC on Expanding Border Trade	23-06-2003
31	Protocol of Phytosanitary Requirements for Exporting Mangoes from India to China between the Ministry of Agriculture of the Republic of India and the General Administration of Quality Supervision Inspection & Quarantine of the PRC	23-06-2003

32	MoU between Ministry of Information and Broadcasting of the Republic of India and the State Administration of Radio, Film & Television of the PRC	21-07-2004
33	Report of India-China Joint Study Group on Comprehensive Trade and Economic Cooperation	11-04-2005
34	MoU on the launch of the India-China Financial Dialogue	11-04-2005
35	Protocol of Phytosanitary requirements for the export of Grape from India to China	11-04-2005
36	Protocol of Phytosanitary requirements for export of Bitter Gourds from India to China	11-04-2005
37	Agreement on Mutual Administrative Assistance and cooperation in customs matters	11-04-2005
38	MoU on Civil Aviation	11-04-2005
39	Protocol on India-China Film Cooperation Commission	11-04-2005
40	MoU between the Ministry of Land and Resources of the PRC and the Ministry of Mines of the Republic of India on Cooperation in Mining Sector	15-09-2005
41	MoU for Enhancing cooperation in the field of oil and natural gas	12-01-2006
42	MoU on Cooperation between the Ministry of Agriculture of the PRC and The Ministry of Agriculture of the Republic of India in the Field of Agriculture	28-03-2006
43	Protocol on Phytosanitary Requirements for Exporting Rice from India to China	21-11-2006
44	MoU on Inspection of Export Cargo (Iron Ore)	21-11-2006
45	MoU between the Indian Council of Agricultural Research and the Chinese Academy of Agricultural Sciences	21-11-2006
46	MoU between Forward Markets Commission of India and China Securities Regulatory Commission regarding Commodity Futures Regulatory Cooperation	21-11-2006
47	Agreement on Bilateral Investment Protection and Promotion	21-11-2006
48	MoU on undertaking Joint exploration and Production and acquisition of Oil and Natural Gas Resources in Third Countries	17-12-2006
49	MoU for Cooperation between the Planning Commission of India and National Development and Reform Commission of the PRC	14-01-2008
50	MoU on Cooperation between Ministry of Railways, India and Ministry of Railways, PRC	14-01-2008
51	MoU between Ministry of Housing and Urban Poverty Alleviation of India and Ministry of Construction, PRC	14-01-2008
52	MoU on Scientific Cooperation between Geological Survey of India and China Geological Survey in Geosciences	14-01-2008
53	MoU between NABARD and Agricultural Development Bank of China on Mutual Cooperation	14-01-2008
54	Protocol of Phytosanitary Requirements for the Export of Tobacco leaves from India to China between the General Administration of Quality Supervision, Inspection and Quarantine of the PRC and the Ministry of Agriculture of the Republic of India	14-01-2008
55	MoU of the Joint Economic Group between the Ministry of Commerce and Industry, Government of Republic of India and the Ministry of Commerce, Government of the PRC on Expansion of Trade and Economic Cooperation	19-01-2010
56	MoU between Reserve Bank of India and China Banking Regulatory Commission	16-12-2010
57	MoU between Export Import Bank of India and China Development Bank Corporation	16-12-2010
58	Agreed Minutes of the 1st India-China Strategic and Economic Dialogue	26-09-2011
59	Agreed Minutes of the 1st India-China Strategic and Economic Dialogue	26-11-2012
60	Memorandum of Understanding between the Planning Commission of the Government of the Republic of India and National Development and Reform Commission of the Government of the People's Republic of China on Undertaking Joint Studies	26-11-2012
61	Memorandum of Understanding between the Bureau of Energy Efficiency, Ministry of Power, Government of the Republic of India and National Development and Reform Commission of the Government of the People's Republic of China on Enhancing Cooperation in the Field of Energy Efficiency	26-11-2012
62	Memorandum of Understanding between the Ministry of Railways of the Government of the Republic of India and Ministry of Railways of the Government of the People's Republic of China on enhancing technical cooperation in the railway sector	26-11-2012
63	Memorandum of Understanding between the National Association of Software and Services Companies (NASSCOM), India and the China Software Industry Association (CSIA) on Enhancing Cooperation in the IT/ ITES Sector	26-11-2012
64	MoUs were signed between Reliance Power and Guangdone Mingyang Wind Power Industry Group Co., Ltd. for a 2,500 MW renewable energy project envisaging an investment of US\$3 billion with project financing from China Development Bank	26-11-2012

65.	Lanco Group entered into an agreement with China Development Bank for financing US\$600 billion Anpara Phase-II Power Projects (4x660MW)	21.11.2012
66.	Lanco Group signed MoU worth US\$98 million with Zhejiang Feida for the Amarkantak Power Project. Power sector-related MoU deals with Zhongtian S&T for manufacturing electric conductors and transmission lines in Andhra Pradesh for \$20 million	26.11.2012
67.	NIIT and Province of Hainan joined hand to set up an IT technology park in Hainan with an investment of \$ 800 million.	26-11-2012
68.	MoU for multi-city 'Waste to Energy' projects on 'build operate and transfer' (BOT) between Ramky Enviro Engineers and Sanfeng Environmental Industries. Project will take off in New Delhi, Mumbai and Hyderabad and Chennai at an investment of \$384 million	26-11-2012
69.	Uttam Galva Steel signed a engineering, procurement and construction contract for Phase-II of a steel plant with China Metallurgical Group Corporation Overseas Ltd	26-11-2012
70.	MoU for export of buffalo meat from India to China signed between Chinese General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) and Indian Agricultural and Processed Food Products Export Development Authority (APEDA)	20-05-2013
71.	MoU between the Marine Products Export Development Authority (MPEDA) and Chinese General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) on cooperation for import and export of fishery products	20-05-2013
72.	MoU between the Pharmaceuticals Export Promotion Council of India (Pharmaexcil) and China Chamber of Commerce for Import and Export of Medicines and Health Products (CCCMHPIE)	20-05-2013
72.	MoU between the Export Inspection Council of India (EIC) and Chinese General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) on trade and safety of feed and feed ingredients	20-05-2013
73.	Agreement signed to facilitate cooperation and linkages between cities and states/ provinces	20-05-2013
74.	Agreement signed on conducting the Kailash-Mansarovar Yatra (pilgrimage) every year between May and September. Agreement to facilitate smooth communications China to assist India in renting wireless sets and local SIM cards for those going on the pilgrimage.	20-05-2013
75.	Agreed to set up working group to strengthen cooperation on trans-border rivers.	20-05-2013

Source: Compiled from Ministry of External Affairs sources and newspapers.

#### 4.1 Foreign Direct Investment

Table 4 reveals that despite various measures to attract FDI and promote exports, FDI flows into China were modest in the first decade or so of reforms. The annual average FDI inflows amounted to US\$1.6 billion during 1978-1990 and were largely destined for the four special economic zones (SEZs). From early 1990s onward, China attracted record levels of FDI with inflows touching US\$54.0 billion per year during 1991-2010. The period 2003-2010 saw annual FDI inflow of US\$81.5 billion, which were more than double during 1991-2002. Cumulative FDI inflows into China touched US\$1098.7 billion during 1978-2010. This made China second largest FDI receiving country after the US. The global financial crisis did slow down the inflow a little bit, during 2009, but in 2010 FDI inflow touched US\$105.7 billion. The source of this high FDI inflow is from overseas Chinese investors in Hong Kong, China; Taipei, China; and Macao, China (they accounted for 42%). Another 21.2 percent came from other East Asian countries- Japan, South Korea and the ASEAN countries. Thus, China gained not only in capital inflows but also in terms of access to marketing channels, world-class technologies and organizational methods. FDI was central to the rise of low technology, labor-intensive exports like textiles, garments and footwear in the initial period of reforms. The 1991s surge in FDI led to rapid technological upgrading from manufactures into more complex activities like electronics and automotives. China invested much more than India in R&D and manpower (Singh 2012; 2013).

**Table 2: Commercial Policies: Timing and Features**

China	India
<b>Attracting Export Oriented Foreign Direct Investment (FDI)</b>	
<ul style="list-style-type: none"> <li>• Passage of an export processing law –1979</li> <li>• Adoption of a dualistic trade regime that promoted exports via FDI (mid-1980s)</li> <li>• Eased regulations on the entry and operation of foreign enterprises through the Sino-Foreign Equity Joint Venture Law of 1979, Sino-Foreign Cooperative Joint Venture Law of 1986, and the Wholly Foreign Owned Enterprise Law of 1988</li> <li>• Creation of Special Economic Zones (SEZs) (1980s)               <ul style="list-style-type: none"> <li>• Introduction of tax incentives and facilitation of financing to channel FDI toward SEZs</li> <li>• Liberalization of labor regulations in SEZs ensuring relatively low wages and ample supply of skilled workers</li> </ul> </li> <li>• Formalization of a study drawback system to ensure duty-free access to materials used in export processing (1987 onward)</li> </ul>	<ul style="list-style-type: none"> <li>• Gradual liberalization of restrictions on foreign ownership through a system of automatic clearance for FDI proposals and the opening up of a new sectors to foreign ownership (e.g. mining, banking, telecommunications) (1991 onward)</li> <li>• Permission of 100% foreign ownership in manufacturing sectors (1991 onward)</li> <li>• Passage of a Special Economic Zones Act to promote exports more systematically (2005)</li> </ul>
<b>Import Liberalization</b>	
<ul style="list-style-type: none"> <li>• Passage of a customs regulation to rationalize tariff schedules (1985)</li> <li>• Liberalization of the system of export licensing and quotas (from covering two-thirds of exports in 1991 to only 8% in 1999)</li> <li>• Implementation of tariff reductions implemented following the adoption of a socialist market (1992 onward)</li> <li>• Further reforms to import control regime implemented as part of WTO accession in 2001</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction of a package of trade and investment reforms (1991)</li> <li>• Abolition of import licensing on machinery and raw materials (1991)</li> <li>• India, as signatory to the GATT became a founding member of the WTO on January 1, 1995</li> <li>• Abolition of licensing on consumer goods (2001)</li> </ul>
<b>Exchange Rate Management</b>	
<ul style="list-style-type: none"> <li>• Devaluation of domestic currency and move to currency convertibility of account transactions (1997)</li> <li>• Adoption of a managed floating exchange rate (mid 2005 onward)</li> </ul>	<ul style="list-style-type: none"> <li>• Unification of the dual exchange rate system and commencement of current account convertibility (1994)</li> <li>• Maintenance of a depreciated exchange rate</li> </ul>
<b>FTA Strategies</b>	
<ul style="list-style-type: none"> <li>• Accession to its free trade agreement (FTA), the Asia-Pacific Trade Agreement (2001)</li> <li>• Signing of the Association of Southeast Asian Nations (ASEAN)- PRC FTA (2005)</li> <li>• 11 FTAs in effect as of April 2011 including bilateral agreements with Thailand; Hong Kong, China; Macao, China; Chile; New Zealand; Pakistan; Singapore; Peru; Taipei China</li> </ul>	<ul style="list-style-type: none"> <li>• Signing of its First FTA, the Asia-Pacific Trade Agreement (1976)</li> <li>• Signing of the South Asian FTA (2006)</li> <li>• 11 FTAs in effect as of April 2001 including bilateral agreements with Sri Lanka; Nepal; Afghanistan; Singapore; Bhutan; Chile; Republic of Korea; a plurilateral agreement with Latin American countries and PRC</li> </ul>

Source: Adapted from Wignaraja (2011).

**Table 3: Trade Policies: China and India (2010)**

	India		China	
	Final Bound	Applied 2010	Final Bound	Applied 2011
<i>Simple average of import duties</i>				
All goods	48.7	12.6	10.0	9.6
Agricultural goods (AOA)	113.1	31.4	15.7	15.6
Non-agricultural goods	34.6	9.8	9.2	8.7
Non ad-valorem duties (% of total tariff lines)	5.3	5.0	0.0	0.5
MFN duty free imports (% , 2010)				
In agricultural goods		21.3		0.9
In Non-agricultural goods		19.2		46.9
Services sector with GATS commitments		37		93

Source: WTO (2012a).

**Table 4: FDI (current \$ billion)**

Items	China	India	Items	China	India	Items	China	India
Total FDI inflows	1098.7	191.3	<b>FDI inflows (% of GDP)</b>			Share of MNCs in exports (%)		
<b>Annual average FDI inflows</b>			1991-1995	3.8	0.2	(most recent estimate)	55	< 10
1978-1990	1.6	0.1	2004-2010	2.6	2.0	Total outward FDI (1995-2009)	182.0	73.1
1991-2010	54.0	9.5	2008	2.4	3.4	Annual average outward FDI		
1991-2002	35.6	2.5	2009	2.0	2.8	1995-2005	3.8	1.0
2003-2010	81.5	20.0	2010	1.9	1.5	2006-2009	38.6	16.7
2008	108.3	41.6				2008	52.2	18.5
2009	95.0	34.6				2009	48.0	14.9
2010	105.7	21.0						

Source: Computed from Issues of SIA Bulletin; www.fdicchina.com and oecd.org & Wignaraja (2011).

In case of India, the post 1991 reforms had significant impact on India's profile as an international investment destination. Between 1978-1990 and 1991-2010, the average annual FDI inflows increased from a mere US\$100 million to an unprecedented US\$9.5 billion. This however also shows a notable lag between the enactment of policy reforms and major FDI inflows. Annual average FDI inflows increased from US\$2.5 billion to US\$20 billion between 1991-2002 and 2003-2010. The peak was reached in 2008 at US\$41.6 billion. However, global financial crisis exerted a significant negative effect on inward investment and FDI inflows declined to US\$34.6 billion in 2009 and remained depressed at US\$21.0 billion in 2010. Cumulative FDI inflows amounted to US\$191.3 billion in 1978-2010 with US\$155.3 billion of inflows in the 1991-2010 periods.

Trade between the two countries is growing. What is the situation of investments between the two nations? Table 5 shows that realized FDI during 2000 to 2010. Indian government approved investment worth US\$231.6 million between 1991 and 2004. The actual inflow has been though a mere US\$0.63 million. But, Chinese sources report that of the 97 Chinese proposals for foreign collaboration in India till 2003, the actual inflows in areas like metallurgy, transport, telecom, electrical equipment and financial sector stood at US\$20.3 million (China include investments coming from Hong Kong while India treats them separately). It is observed that maximum FDI from China came in 2009 while FDI from India to China went in 2008. Besides, across the years flow of FDI from India to China far exceeded flow of FDI from China to India. As per the figures released by China's Ministry of Commerce, cumulative Chinese investments into India till December 2011 stood at US\$ 575.70 million when the cumulative Indian investments into China stood at US\$ 441.70 million.

**Table 5: FDI between China and India (\$ million)**

Year	FDI from China to India	FDI from India to China	Year	FDI from China to India	FDI from India to China
2000	0.02	10.44	2006	0.70	52.39
2001	0.01	11.97	2007	0.25	34.04
2002	0.01	30.57	2008	7.30	88.05
2003	0.70	15.93	2009	41.41	55.20
2004	0.46	19.48	2010	1.04	48.60
2005	1.82	21.40			

Source: www.oecd.org.

India is trying to bridge the trade deficit with China and varieties of steps have been taken. The result is that Chief Executive Officers (CEOs) of large Chinese companies have begun a serious dialogue with Indian state governments like Gujarat (it is becoming a big investment destination

and manufacturing base). Companies look at the infrastructure, road, rail, air and port connectivity, uninterrupted power supply which most find in Gujarat. Besides, skilled manpower is another asset that attracts companies. Chinese companies like auto majors, infrastructure giants, and heavy engineering firms, companies in the field of equipment, power, renewable energy and textiles are working out strategies to invest in Gujarat. Cotton production of Gujarat is a source of attraction for textile industries of China and this investment would reduce cost on transportation of raw material as well as finished products that they sell in various markets of Asia, Gulf countries and Europe. Maharashtra is another state where a leading Chinese construction equipment company, SANY has invested US\$70 million employing 460 locals (in Pune city). The firm is expected to double its investment (<http://www.sanygroup.com/abroad/india>). Exim Bank of India reckons that ten Chinese firms have or are building plants in India, and 100 firms have offices in India<sup>9</sup>. Despite the usual cold sweats foreigners have about India (nightmarish red tape, a cultural gap), Chinese executives agree that more local production will take place. Owner of a solar-equipment firm says that as a global company, it has to manufacture locally. ZTE, a telecoms concern, employs mainly locals and is producing more in India. Huawei, its India problems notwithstanding, is building a new research campus in Bangalore. Huawei has also plans to invest in a telecom equipment manufacturing facility in Chennai. As per the Chinese consul in Mumbai, Chinese firms are mustard-keen to invest in infrastructure, if also a little daunted (*The Economist* 2012). Recent FDI in retail sector and government of India's announcement of US\$1 trillion infrastructure investment does provide a good opportunity for Chinese companies to increase their direct investment in India. This would give them higher returns than buying American treasury bonds.

China invested US\$ 16 million in 2007 when this figure was US\$ 49.1 million in 2008. China's non-financial investment in India in 2010 was US\$ 33 million, which stood at US\$ 95.90 million in 2011. The cumulative investments till December 2011 were US\$ 575.70 million. During January- October 2012, China's investment in India was US\$ 25.2 million. Thus, by October end 2012, cumulative investments were US\$ 657 million<sup>10</sup>. On the other hand, Indian investments in China in 2006 were US\$ 52 million and in 2007, US\$ 34 million were invested in 78 projects, which in 2008 stood at US\$ 257 million in 92 projects. In 2010, India's FDI in China in 77 projects was US\$ 55 million. In 2011, India's FDI in China in 130 projects was investment of US\$ 42.17 million. The cumulative investment of India till December 2011 in 723 projects was US\$ 441.70 million. During January- October 2012, India had set up 40 new enterprises in China, recording a decline of 47.4 percent year to year. The actual utilized foreign capital stood at US\$ 29.69 million, recording an increase of almost 48 percent year to year. The cumulative investments till October 2012 were US\$ 470 million dollars with a total of 763 non-financial direct investment projects set up by India in China.

Besides, project contracts signed by Chinese in India in 2007 were US\$ 4.56 billion that had turnover realized of US\$ 1.99 billion. In 2008, the contract signed amounted to US\$12.9 billion and the realized turnover was US\$ 4.3 billion. In 2010, the contract signed amounted to US\$ 6.9 billion and the realized turnover was US\$ 5.8 billion. During January to December 2011, contracts were signed worth US\$ 14.06 billion and the realized turnover was US\$ 7.44billion. The cumulative value of contractual Chinese investment in projects till December 2011 was US\$ 55.61 billion. The overall turnover realized from these projects till December 2011 was about US\$ 26.82 billion. The period, January- June 2012, saw new signed contract between India and China amounting to US\$ 1.98 billion, recording a decline of 83.2 percent year to year but the

realized turnover stood at US\$ 2.95 billion, recording a decline of almost 25 percent year to year. By the end of June 2012, the total value of contracts entered into between India and China was US\$ 57.59 billion with realized turnover of US\$ 29.78 billion<sup>11</sup>.

China has more favorable investment and business climate (table 6). It has thus attracted significantly higher investments from India. Total Indian investments approved by China between 1996 and 2004 stood at US\$965 million. By 2003, India had invested US\$79.1 million in 101 projects in China. In 2003 alone Indian companies invested US\$15.9 million in 30 projects. Investment of Indian multinationals has concentrated in IT services and pharmaceuticals<sup>12</sup>.

Thus, with the growth in bilateral trade between India and China in the last few years, many Indian companies have started setting up Chinese operations to service both their Indian and MNC clientele in China. Indian enterprises that operate in China either as representative offices, wholly owned foreign enterprises or joint ventures with Chinese companies are into manufacturing (pharmaceuticals, refractories, laminated tubes, auto-components, wind energy etc.), IT and IT-enabled services (including IT education, software solutions, and specific software products), trading, banking and allied activities<sup>13</sup>. The Indian trading community is primarily confined to major port cities such as Guangzhou and Shenzhen; they are also present in large numbers in places where the Chinese have set up warehouses and wholesale markets such as Yiwu. Most of the Indian companies have a presence in Shanghai, while a few Indian companies have set up offices in Beijing. Some of the prominent Indian companies in China include Dr. Reddy's Laboratories, Aurobindo Pharma, NIIT, Bharat Forge, Infosys, TCS, APTECH, Wipro, Mahindra Satyam, Dr. Reddy's, Essel Packaging, Reliance Industries, SUNDARAM Fasteners, Mahindra & Mahindra, TATA Sons, Binani Cements, etc. In the field of banking, ten Indian banks have set up operations in China. State Bank of India (Shanghai), Bank of India (Shenzhen), Canara Bank (Shanghai) and Bank of Baroda (Guangzhou) have branch offices, while others (Punjab National Bank, UCO Bank, Allahabad Bank, Indian Overseas Bank, Union Bank of India etc.) have representative offices. Apart from Public Sector Banks, private banks such as Axis bank and ICICI Bank also have representative offices in China.

**Table 6: Infrastructure, Business Regulation and Technology**

Indicators	Year	China	India
Infrastructure spending (% of GDP)	2008	11	6
Quality of overall infrastructure	2010-11	72	91
Quality of roads	2010-11	53	90
Quality of electricity supply	2010-11	52	110
<b>Patents granted by patent office</b>			
Residents	2010	79767	1725
Non-Residents	2010	55343	4443
Total	2010	135110	6168
<b>Ease of doing business index</b>			
<b>(1= most business friendly regulations)</b>			
Starting a business	2010	151	165
Registering property	2010	38	94
Enforcing contracts	2010	15	182
Closing a business	2010	68	134
R&D expenditure (% of GDP)	1996	0.6	0.7
	2007	1.5	0.8
Researchers in R&D (per million people)	1996	448	154
	2007/2008	1071	137

Source: WTO (2012b) and Wignaraja (2011).

## 5. Commodity Trade

India- China total trade in goods in 2011 stood at US\$ 73.90 billion, recording an increase of almost 20 percent. India's main exports to China are less iniquitous raw materials, mainly minerals and cotton<sup>14</sup>. India's exports to China in 2011 reached US\$ 23.41 billion, recording a growth of more than 23 percent when compared to 2010. Iron ores, cotton & yarn, fabric, copper, precious stones, organic chemicals, plastic, salt, sulfur, earth & stone, machinery, reactors, boilers continued to dominate the Indian export basket. China's exports to India in 2011 reached US\$ 50.49 billion, recording an increase of 23.5 percent compared to 2010. Nuclear reactors, boilers, machinery, etc, electric machinery, sound equipment, etc., organic chemicals, fertilizers, articles of iron or steel, iron and steel dominated the Indian import basket from China<sup>15</sup>. The trade deficit for India in 2011 stood at US\$ 27.08 billion. India was the 11th largest trading partner of China in 2011, comprising a share of 2.03 percent in the overall trade of China; 7th largest export destination for China in 2011, comprising a share of 2.66 percent of total Chinese exports to the world and 16th largest exporter to China, comprising a share of 1.34 percent in the total imports by China. Chinese firms have often strived to win such business. Pan Song of Shanghai Electric, which makes power equipment for Reliance, among others, recounts years of hard slog in India (*The Economist* 2012). Meanwhile, India does not produce much that China wants to buy. Further, India is prone to protectionist impulses. No bilateral free-trade agreement exists, and India often flirts with slapping duties on Chinese imports, most recently of power equipment. The Indian sales of Huawei, a telecoms firm, fell by half after it was hit with anti-dumping duties and labelled a security risk. Chinese firms complain of trouble with visas. More hopefully, India wants to boost its exports to China. At the G20 summit in 2012, India struck a deal to sell more rice. India is interested in having better access to China for leading firms in industries including drugs, carmaking and IT. Most already have a presence, if only for procurement. Yet what is good for Indian multinationals may not generate jobs or foreign exchange for India. Tata Sons, with the biggest China operation, mainly sells Range Rover cars, made in Britain, and IT services, largely employing local Chinese staff.

And so the trade deficit looks likely to stay. Yet China could do more to help finance it, if given the chance. More loans from Chinese banks would be good- so far India has been wary, with only one Chinese bank allowed to have a branch there. More foreign direct investment would be helpful. More often, India seems to regard FDI as the gift of western multinationals alone. India needs outside capital, and expertise in manufacturing and infrastructure. China must invest its surplus funds abroad, ideally not just in government bonds- as mostly happens in America- and ideally in countries that are not about to go belly up, as may happen in Europe. Chinese investment in India is an idea whose time has come, if only the two sides can conquer a legacy of mistrust" (*The Economist* 2012).

Table 7 shows the expansion of aggregate exports and imports of goods and services between 1978 and 2010. The ratios of exports and imports to GDP are normally used as proxies for openness, though the latter also reflects the availability of foreign exchange. What emerges from the table 6 includes:

- (i) China's earlier and swifter adoption of trade liberalization is highlighted by a comparison between its ratio of exports of goods and services to GDP and ratio of imports of goods and services to GDP with India's ratios. Both the countries were at similar low levels of

openness in 1978- ratios of exports and imports to GDP of around 6 percent- 7 percent. This reflects on history of restrictive trade regimes and state control. China adopted greater trade liberalization and its ratios of exports and imports to GDP more than doubled between 1978 and 1991. On the other hand, Indian ratios of exports and imports to GDP showed little change. Even after opening up in 1991, India showed modest increase in its openness between 1991 and 1998. However, significant change occurred between 1998 and 2008. China maintained its openness throughout the 1990s. There was rise in ratios of exports and imports to GDP between 1998 and 2008. By 2008, the China was considerably more open than India (in terms of exports of goods and services). However, there was little difference in terms of imports- to- GDP ratios. In 2008, China's ratios of exports to GDP was 36 percent as against 22.7 percent in case of India. While ratios of imports to GDP in 2008 were much more similar to each other: 28.5 percent for China and 28.0 percent for India. This indicated that China was relatively more open than India over several decades. India has no doubt made progress, more so since the late 1990s.

- (ii) Because GDP of China has expanded faster than that of India's since the 1970s, the trade-to-GDP ratios understate the spectacular growth of China's trade. This is truly reflected by dollar value of exports and shares of world exports. In 1978, the both the countries had about the same level of exports of goods and services, as well as similar world shares of exports- China exported US\$9.8 billion worth of goods and services, while India recorded US\$8.6 billion worth exports of goods and services. This amounted to 0.6 percent of world exports of goods and services. By 2008, China's exports of goods and services touched staggering US\$1.6 trillion or 8.0 percent of world's exports. India lagged behind at US\$263 billion (1.3% share).
- (iii) It is observed that trade of both the countries has been resilient in the wake of the global financial crisis. In 2009, exports of goods and services in China declined to US\$1.3 trillion when exports of goods and services of India increased slightly to US\$270 billion. In 2010, again both observed a sharp rebound in exports of goods and services- rose to US\$1.7 trillion in China and US\$326 billion in case of India. These were higher than the 2008 levels in both the countries. One can only underscore the importance of large dynamic domestic markets, competitive export capabilities, and the growing importance of South-South trade cooperation (see for details, Wignaraja and Lazaro 2010).
- (iv) Due to greater decline in exports of developed countries than both these countries during the global financial crisis and a sluggish response thereafter, the shares of China and India in world exports increased to 11.8 percent and 2.2 percent respectively. WTO report that the China's 2010 share in world exports placed it in among the leading exporters in the world. The USA led with 12.1 percent global share. China followed it and then came Germany (10.1%) and Japan (6.1%)<sup>16</sup>. In 2010, the ratio of exports to GDP increased to 31.8 percent for China and 22.9 percent for India. A similar rise in ratio imports to GDP is observed in both the countries.

China's performance is largely driven by exports of manufacturing goods. During 1995-2008, China's manufactured export grew a rate of 26.7 percent (current US\$), which was twice as fast as Indian growth of 15.4 percent. Strikingly China increased its share of the world's manufactured exports from 0.5 percent to 10.8 percent between 1985 and 2008. Compared to it, India's share increased from 0.5 percent to just 1.3 percent during the same period.

During 2005-2011, China's merchandise exports grew annually by 12 percent, while India's growth was higher at 12.5 percent. In case of merchandise imports, China observed a growth rate of 11.5 percent compared India's growth rate of 14.0 percent. It is also striking that in 1948, China's share in world's merchandise exports was mere 0.9 percent that increased to 10.7 percent in 2011; it almost doubled since 2003 and increased five times over 1993. In case of India, the share rather declined from 2.2 percent in 1948 to 1.7 percent in 2011 (WTO 2012b). China ranked first in merchandise exports in the world while India stood 19<sup>th</sup> in 2011. In 1948, China's share in world's merchandise imports was mere 0.6 percent that increased to 9.7 percent in 2011; it was 5.4 percent in 2003 and 2.7 percent in 1993. In case of India, the share has remained constant, 2.3 percent in 1948 and 2.6 percent in 2011. China ranked second in merchandise imports in the world while India 12<sup>th</sup> in 2011. Considering exports of commercial services, China ranked 4<sup>th</sup> (share of 4.4%) while India stood 8<sup>th</sup> (share of 3.3%) in the world. However, in case of imports of commercial services, China ranked 3<sup>th</sup> (share of 6.0%) while India stood 7<sup>th</sup> (share of 3.1%) in the world in 2011 (WTO 2012b). Finally, China has trade to GDP ratio (2009-2011) of 53.2 compared India's ratio of 48.1. Also trade per capita in China's case (2009-2011) is \$2417 and it is \$641 in case of India. These differences between the two countries are largely due to composition of trade. For instance, shares of manufactures, agricultural products and fuels and mining products in case of China's exports are 93.3, 3.4 and 3.1 percent while in case of India the corresponding shares are 61.7, 11.3 and 23.7 percent respectively in 2011. Shares of manufactures, agricultural products and fuels and mining products in case of China's imports are 59.2, 8.3 and 29.6 percent while in case of India the corresponding shares are 41.4, 4.9 and 39.6 percent respectively in 2011. The distribution of commercial services exports in case of China's exports are transportation (19.5%), travel (26.6%) and other commercial services (53.9%) while in case of India the corresponding shares are 12.8, 12.8 and 74.4 percent respectively in 2011. The distribution of commercial services imports in case of China's exports are transportation (34%), travel (30.6%) and other commercial services (35.3%) while in case of India the corresponding shares are 46.0, 11.2 and 42.9 percent respectively in 2011.

### **5.1 Chinese Exports to India**

In 2001, India's share in total Chinese exports to the world was 0.71 percent that improved to 2.21 percent in 2008 and touched 2.66 percent in 2011 to drop to 2.33 percent in 2012 (Table 8). In 2001, the share of exports to India in Chinese world exports was: silk (21.90%), impregnated, coated or laminated textile fabric (9.32%), organic chemical (8.22%), cork and articles of cork (6.92%), salt, sulphur, earth, stone, plaster, lime and cement (5.25%), mineral fuels, oils, distillation (3.15%), tanning, dyeing extracts, tannins, derives, pigments etc (2.91%), precious metal compound, isotopes (2.20%), fertilizers (1.98%), coffee, tea, mate and spices (1.50%), glass and glassware (1.48%), vegetable textile fibres nes, paper yarn, woven fabric (1.47%), ores, slag and ash (1.45%), pearls, precious stones, metals, coins, etc (1.41%), zinc and articles thereof (1.41%), inorganic chemicals, miscellaneous chemical products (1.30%), wadding, felt, non-wovens, yarns, twine, cordage, etc (1.23%), lead and articles thereof (1.23%), residues, wastes of food industry, animal fodder (1.11%) and products of animal origin, nes (1.00%).

Organic chemicals share was 8.22 percent in 2001, which stood at 12.98 percent in 2009, but declined to 11.77 percent in 2012. Fertilizers have become very important commodity that China exports to India, as China's fertilizer exports to India constituted mere 1.98 percent of Chinese fertilizer exports to the world in 2001 and this percentage increased to 19.80 in 2007 and touched 44.73 percent in 2011 and 40.97 percent in 2012.

**Table 7: Exports and Imports of Goods and Services (1978-2010)**

Items	1978	1985	1991	1998	2008	2009	2010
<b>% of GDP (China)</b>							
<i>Exports of goods and services</i>	6.6	9.9	20.8	20.3	36.8	26.7	31.8
Goods exports		8.2	15.5	18.0	33.2	24.1	25.4
Services exports		1.0	1.8	2.3	3.4	2.6	3.1
<i>Imports of goods and services</i>	7.1	14.1	17.2	16.0	28.5	22.3	28.9
Goods imports		12.5	13.2	13.4	24.8	19.1	25.4
Services imports		0.8	1.1	2.6	3.7	3.2	3.5
<b>% of the World (China)</b>							
<i>Exports of goods and services</i>	0.6	1.3	1.7	3.0	8.0	8.4	11.0
Goods exports		1.3	1.7	3.3	9.1	9.8	12.8
Services exports		0.7	0.8	1.7	3.8	3.7	4.9
<i>Imports of goods and services</i>	0.7	1.8	1.4	2.4	6.4	7.2	10.3
Goods imports		2.0	1.4	2.5	6.9	7.9	11.6
Services imports		0.6	0.4	1.9	4.5	4.9	5.9
Exports of goods and services (current \$ billion)	9.8	30.5	78.9	207.4	1581.7	1333.3	1748.0
Imports of goods and services (current \$ billion)	10.5	43.1	65.3	163.6	1232.8	1113.3	1587.0
<b>% of GDP (India)</b>							
<i>Exports of goods and services</i>	6.4	5.3	8.6	11.1	22.7	20.6	22.9
Goods exports	4.8	4.1	6.8	8.2	16.2	12.8	15.2
Services exports	1.2	1.5	1.8	2.8	8.9	6.9	7.7
<i>Imports of goods and services</i>	6.6	7.7	8.6	12.8	28.0	25.3	30.9
Goods imports	5.5	6.6	7.9	10.8	27.2	18.9	22.7
Services imports	1.2	1.7	2.2	3.5	4.9	6.2	8.2
<b>% of the World (India)</b>							
<i>Exports of goods and services</i>	0.6	0.5	0.5	0.7	1.3	1.7	2.0
Goods exports	0.5	0.5	.05	.06	1.2	1.4	1.7
Services exports	0.6	0.8	0.5	0.8	2.7	2.6	3.2
<i>Imports of goods and services</i>	0.6	0.7	0.5	0.8	1.7	2.1	2.8
Goods imports	0.6	0.8	0.6	0.8	2.0	2.1	2.7
Services imports	0.5	0.9	0.6	1.0	1.6	2.5	3.6
Exports of goods and services (current \$ billion)	8.6	12.2	23.0	46.4	262.8	268.7	326.0
Imports of goods and services (current \$ billion)	9.0	17.8	23.0	53.4	324.8	330.8	440.0

Source: World Bank Indicators and WTO (2011).

**Table 8: Top Five Commodities' Share (Chinese Exports to India) (%)**

Items	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Electric, electronic equipment	13.193	21.131	19.675	24.264	20.143	24.956	29.156	26.516	29.588	23.820	21.275	21.043
Organic chemicals	19.927	20.338	19.056	13.543	13.304	11.733	10.003	9.638	10.001	9.981	9.150	9.965
Silk	9.549	8.216	7.159	6.042	4.759							
Machinery, nuclear reactors, boilers, etc	8.291	7.473	8.935	12.821	17.274	18.659	17.601	22.026	25.502	23.680	24.408	23.295
Mineral fuels, oils, distillation products, etc	13.941	7.078	7.048	7.713	5.696							
Articles of iron or steel						4.908	4.924	3.814	3.909		4.276	3.775
Iron and steel						4.182	6.078	5.488	2.002	4.960		
Fertilizers										4.721	7.013	6.223

Source: computed from UN COMTRADE statistics.

In 2001, the share of top five commodities in Chinese exports to India constituted 61.9 percent while in 2002, the share was 64.24 percent, in 2003, the share was 61.87 percent, in 2004, the share was 64.38 percent, in 2005, the share was 61.176 percent, in 2006, the share was 64.44 percent, in 2007, the share was 67.76 percent, in 2008, the share was 67.48 percent, in 2009, the share was 71.0 percent, in 2010, the share was 67.16 percent, in 2011, the share was 66.12 percent and in 2012, the share was 64.3 percent. Thus, since 2001 Chinese exports to India are concentrated in few commodities. However, fertilizer exports have gained importance (Figure 1).

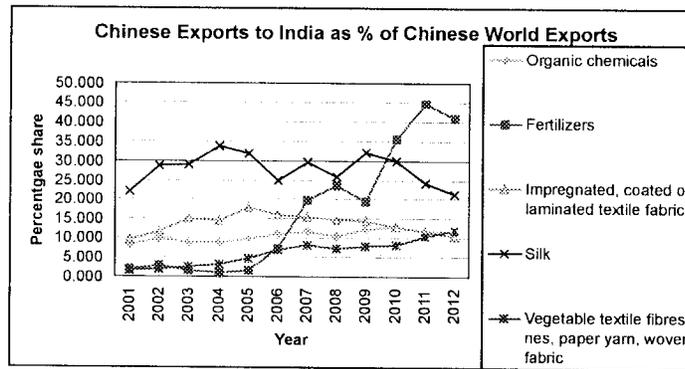


Figure 1: Top Five Commodities

## 6.2 India's Exports to China

Indian exports to China had been limited to raw materials. Ores, slag and ash (27.07%), plastics and articles thereof (12.39%), organic chemicals (10.84%), fish, crustaceans, mollusks, aquatic invertebrates nes (9.89%) and cotton (8.07%) in 2001 and the share of top five commodities in Indian exports to China constituted 68.26 percent. In 2002, the share of top five commodities in Indian exports to China constituted 66.27 percent and the commodities were: ores, slag and ash (25.46%), plastics and articles thereof (9.48%), organic chemicals (10.33%), fish, crustaceans, mollusks, aquatic invertebrates nes (6.99%) and iron and steel (14.01%). In 2003, the share of top five commodities in Indian exports to China constituted 70.17 percent and the commodities were: ores, slag and ash (22.47%), plastics and articles thereof (7.82%), organic chemicals (7.53%), fish, crustaceans, mollusks, aquatic invertebrates nes (3.42%) and iron and steel (28.92%). In 2004, the share of top five commodities in Indian exports to China constituted 76.22 percent and the commodities were: ores, slag and ash (44.18%), plastics and articles thereof (9.25%), organic chemicals (7.57%), inorganic chemicals, precious metals compound, isotopes (4.37%) and iron and steel (10.86%). In 2005, the share of top five commodities in Indian exports to China constituted 80.26 percent and the commodities were: ores, slag and ash (55.08%), plastics and articles thereof (4.71%), organic chemicals (6.06%), inorganic chemicals, precious metals compound, isotopes (4.23%) and iron and steel (10.18%). In 2006, the share of top five commodities in Indian exports to China constituted 72.09 percent and the commodities were: ores, slag and ash (46.17%), cotton (8.995%), plastics and articles thereof (5.13%), organic chemicals (6.62%) and iron and steel (5.17%). In 2007, the share of top five commodities in Indian exports to China constituted 76.73 percent and the commodities were: ores, slag and ash (51.72%), cotton (9.86%), organic chemicals (6.44%), copper and articles thereof (5.13%) and iron and steel (3.59%). In 2008, the share of top five commodities in Indian exports to China constituted 75.56 percent and the commodities were: ores, slag and ash (57.75%), cotton (7.72%), organic chemicals (4.52%), slat, sulphur, earth, stone, plaster, lime and cement (2.91%) and commodities nes (2.66%). In 2009, the share of top five commodities in Indian exports to China constituted 70.62 percent and the commodities were: ores, slag and ash (45.48%), pearl, precious stones, metals, coins etc (10.72%), cotton (5.96%), organic chemicals (4.40%) and iron and steel (4.06%). In 2010, the share of top five commodities in Indian exports to China constituted 77.88 percent and the commodities were: ores, slag and ash (36.40%), copper and articles thereof (20.81%), cotton (12.08%), organic chemicals (4.35%) and iron and steel (4.24%).

In 2011, the share of top five commodities in Indian exports to China constituted 68.46 percent and the commodities were: ores, slag and ash (25.69%), minerals fuels, oils, distillation products, etc (9.68%), copper and articles thereof (11.19%), cotton (16.75%) and organic chemicals (5.15%).

It is observed that list of top ten sources of India's imports was topped by United Kingdom in 2001 which by 2012 was taken up by China (table 9). China was at 7th position in 2011. USA has relegated to 5th position from 3rd position over this period. UAE, Saudi Arabia, Iraq and Kuwait have become important source of imports is largely due to oil imports.

**Table 9: India's Top Sources of Imports**

Rank	2001	2012	Rank	2001	2012
1	United Kingdom	China	6	Germany	Iraq
2	Switzerland	UAE	7	China	Kuwait
3	United States	Switzerland	8	Singapore	Germany
4	Belgium	Saudi Arabia	9	Malaysia	Australia
5	Japan	USA	10	Australia	Indonesia

Source: UN COMTRADE statistics.

### 5.3 Trade Intensities

Studies show that during 1995-2010 China's export intensity index with respect to India is about 1 and India's import intensity index with respect to China is also about 1 (Kalirajan *et al* 2010). This together indicates that China has been an important source of imports for India from the middle of 2000s. On the other hand, India's export intensity index with respect to China and China's import intensity index with respect to India are less than 1. This means that on an average India is not exporting more to China than the world does. India has not been producing enough of what China wants.

### 5.4 Trade Complementarity

Table 10 provides trade complementarity indexes for both the countries from 1995 to 2010. It shows that the exports of China to India are increasingly becoming complementary or matching with the imports of India, as the index is increasing over time. On the other hand, the exports of India to China do not appear to be as strong complementary with the imports of China and the index is stagnant overtime. Thus, we find that though the export pattern of China matches the import pattern of India, the converse does not appear to be true. This is supported by India's low export intensity index with respect to China and China's low import intensity index with respect to India (Kalirajan *et al* 2010).

**Table 10: China and India: Trade Complementarity**

Year	Reporting Country	Partner Country	Trade Complementarity Index	Reporting Country	Partner Country	Trade Complementarity Index
1995	China	India	35.0495	India	China	34.7653
2000	China	India	39.4311	India	China	36.9155
2005	China	India	38.9896	India	China	37.6446
2006	China	India	39.6483	India	China	37.7492
2007	China	India	42.4792	India	China	36.7443
2008	China	India	43.0673	India	China	38.5221
2009	China	India	44.0103	India	China	39.7018
2010	China	India	43.5153	India	China	38.6280

Source: Adapted from Kalirajan *et al* (2010).

### 5.5 Trade Balance

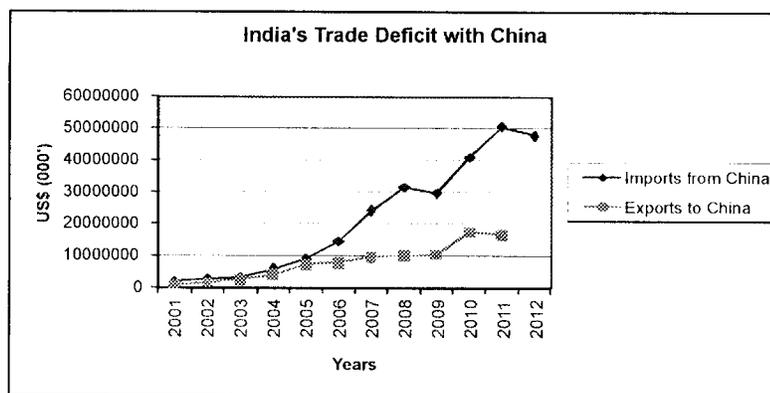
Finally, in 2001 China exported goods of value \$1895.833 million that went up to \$47745.207 million by 2012. Till 2008, Chinese exports to India grew in volume when they touched \$31585.381 million. The global financial crisis affected the Chinese exports to India as they fell to \$29666.560 million but recovered in 2009 to touch \$40913.958 million in 2010 and then reached \$50536.416 million in 2011. However, 2012 observed a decline. The annual growth rate of Chinese exports to India has witnessed fluctuations over the year, but the maximum growth was observed in 2004 over 2003. On the other hand, India's exports to China stood at \$922.542 million in 2001 that increased to \$16717.786 million by 2011. Indian exports to China have not been affected by global financial crisis, but declined in 2011 over 2010 by 4.14 percent. The annual growth rate of Indian exports to China has witnessed fluctuations over the year, but the maximum growth was observed in 2005 over 2004. India thus, has adverse trade balance with China (table 11 and figure 2). In 2001, the trade deficit stood at US\$973.291 million, which rose to \$33818.63 million in 2011 and reportedly at \$40 million (about 2% of GDP) in 2012. For India, this is disconcerting. For every dollar's worth of exports to China, India imports three, almost. China accounts for a fifth of India's overall trade deficit with the world, over half if oil imports are excluded. Given India's balance-of-payments woes- the weakened rupee- even Chinese businessmen worry that the discrepancy in bilateral trade is unhealthy. And it may grow larger as it growing.

Table 11: Total Exports (US\$ 000')

Year	China's Exports to India	% growth	India's Export to China	% growth	Trade balance
2001	1895833	-	922542		973291
2002	2671164	40.90	1531604	66.02	1139560
2003	3343225	25.16	2567162	67.61	776063
2004	5936008	77.55	4098514	59.65	1837494
2005	8934277	50.51	7183792	75.28	1750485
2006	14581297	63.21	7829168	8.98	6752129
2007	24051380	64.95	9491978	21.24	14559402
2008	31585381	31.32	10093927	6.34	21491454
2009	29666560	-6.08	10370052	2.74	19296508
2010	40913958	37.91	17439991	68.18	23473967
2011	50536416	23.52	16717786	-4.14	33818630
2012	47745207	-5.52			

Source: UN COMTRADE statistics.

Figure 2



## 6. Conclusions

The large economies of Asia should strengthen their trade links further as both have typical strengths which must be synergized. India has strong science and engineering capabilities centered in chemical and software areas and is becoming world's service centre for software development and back office offshore outsourcing. It is also becoming centre of innovation for MNCs and has observed significant growth rate of 6-8 percent last decade. It has large critical mass of educated, skilled, and knowledgeable workers and has network of successful Indians in US and Europe providing links to markets, technology, and finance. On the other hand, China has high economic growth, large internal market, large supply of excess labor that will continue to give it low wage advantage. China is becoming world's manufacturing base. It has high savings and investment rate and moving rapidly up from labor intensive to more technology intensive exports. China has critical mass in R&D, decreases its competitiveness and making strong investments in education and training. India and China together constitute 1/3rd of the total world population and 1/4th of world's skilled labor force. They are two future economies to reckon with. For sustainable trade relationship between the two nations, it is imperative that they move from competition to cooperation. As 20th century was US century, 21st century would be Asian century where the two nations would lead.

However, border trade has been slow due to the meagre facilities provided on Indian side of the border. Slow growth of trade has, in fact, provided an opportunity for development of infrastructure on the Indian side and this must be taken advantage of. The road linking Gangtok with Nathu La is a narrow needs to be upgraded and another road link added. Properly connected, Sikkim and Nathu La could develop as high-end tourism and adventure destinations. Before opening, it is essential that the transport infrastructure of Sikkim be developed. It is only once India has appropriate infrastructure in place that its businessmen, traders and commercial enterprises can compete effectively with their Chinese counterparts, that border trade should be broadened and deregulated.

Finally, bilateral trade is set to develop further as India continues to invest heavily in infrastructure and power generation. China, in turn, is looking at securing sub-contracts for the infrastructure sector and expanding its already substantial profile in the telecommunications sector. Its huge foreign exchange reserves give it the capacity to invest in these sectors. It has also been proposing the establishment of Free Trade Zones and High Tech Parks and increased access for its civil aviation industry. While bilateral trade is very unbalanced in China's favour, Indian IT and pharmaceutical companies have been encouraged by Beijing and are active in China. Both these sectors have been identified by China as ones where India leads and China needs to catch up. Efforts are being made to woo India's bio- tech sector. China can gain from expertise and participation by Indian entities in the banking, outsourcing and legal sectors. Regrettably bilateral trade primarily comprises the export of raw natural resources like iron ore. India has also opened other resources like potassium, bauxite and rare earths for export without assessing the utility of these scarce resources for India future needs. A review is essential on which items need to be controlled, where exports need to be capped, and which require regulation. It is expected that gap in trade and investment performance between the two countries may narrow overtime, but the dominance of PRC in manufactures is likely to continue for quite sometime. Both these countries face a new and more uncertain world economic environment. Future would depend up on how these countries cope with the risk of protectionism, manage exchange rate issues;

increase the use of FTAs by businesses, and implements complementary policies. However, the future holds for them and they need to work together in economic spheres.

#### Acknowledgement

The present paper is the revised version of the paper presented in CASS-ICSSR joint Seminar on "Sino-Indian Cooperation: New Opportunities and New Ideas" organized by National Institute of International Strategy, CASS, Beijing during April 17-18, 2013. I am grateful to ICSSR for providing me this opportunity and the participants for comments.

#### Notes

1. China exporters commercial services worth \$182 billion while imported services worth \$ 237 billion. On the other hand, India exported commercial services valued at \$ 137 billion and imported such services valued \$ 124 billion in 2011 (WTO 2012b).
2. Labor- intensive textile and apparel dominating China's foreign trade has shifted to relatively capital-intensive sectors like machinery and transport equipment.
3. The share of manufactures in India's exports has remained stable over the years. The share of primary products, however, declined from 34% to 33% between 2005-06 and 2009-10. Fuel products and machinery and transport equipment are the main Indian exports followed by chemicals.
4. See, Ministry of External Affairs website. With opening of Nathu La to large-scale trade, there would be an influx of Chinese goods. Fear is that cheap consumer items would flood local markets and heavy items and goods would be shipped in for transport to other destinations in India or for re-export. Indian traders and companies would suffer. The low prices of Chinese goods mean there would be low margins for intermediaries. Indian companies and traders would also be unable to sell their products to China.
5. The other exercise is between China and the United States in the form of the US-China Strategic and Economic Dialogue (S&ED), established by President Obama and Chinese President Hu Jintao in April 2009, and which has already undertaken three rounds of talks as an annual exercise.
6. It is a unique format to enhance inter-ministerial coordination wherein representatives from nine ministries were part of the meet.
7. It included detailed deliberations in three working groups on Investment and Infrastructure led by the Chairman of Railway Board, Water Management led by Secretary, Ministry of Water Resources and Energy Efficiency led by Director General, Bureau of Energy Efficiency. Seven thematic areas were taken up for deliberations in the SED viz., world economic situation; respective domestic macro-economic situations; mid- and long-term development plans; improving investment environment; energy efficiency and conservation, and environmental protection; infrastructure cooperation and water efficiency.
8. First Session, New Delhi (September 18-20, 1989); Second Session, Beijing (February 06, 1991); Third Session, New Delhi (December 09, 1991); Fourth Session, Beijing (January 04, 1993); Fifth Session, New Delhi (June 13, 1994); Sixth Session, Beijing (February 19-20, 2000); Seventh Session, New Delhi (March 16, 2006); Eighth Session, Beijing (January 29, 2010) and Ninth Session, New Delhi (August 27, 2012).
9. Many large Chinese state-owned companies in the field of machinery and infrastructure construction have projects in India and have opened project offices in India. These include Sinosteel, Shougang International, Baoshan Iron & Steel Ltd, Sany Heavy Industry Ltd, Chongqing Lifan Industry Ltd., China Dongfang International, Sino Hydro Corporation etc. Many Chinese electronic, IT and hardware manufacturing companies including Huawei Technologies, ZTE, TCL, Haier etc. are also having operations in India. A large number of Chinese companies including Shanghai Electric, Harbin Electric, Dongfang Electric, Shenyang Electric etc. are involved in EPC projects in the power sector. Chinese automobile major Beijing Automotive Industry Corporation (BAIC) has plans to invest US\$ 250 million in an auto plant in Pune. TBEA a Xinjiang-based transformer manufacturer would invest in a manufacturing facility in Gujarat.
10. China's non-financial direct investment in India approved or registered by Ministry of Commerce, People's Republic of China.
11. Ministry of Commerce, People's Republic of China. For a start, the little manufacturing India has tended to be quite high-end. As Chinese firms shift to more complex forms of production, they will make life harder for Indian firms. It is pointed out that China has won a third of the Indian transformer market and is giving locals "a bloody nose".
12. Tata Consultancy Services (TCS) entered China in 2002 and recorded annual growth rate of 25 to 30% and by 2014 intend to employ 5000 workers. TCS is providing services to large state owned enterprises, financial institutions and city governments. Seven large Chinese banks are serviced by TCS (Bank of China Ltd., Huaxia Bank Co Ltd., Guangdong Rural Credit Cooperative). Shanghai Foreign Exchange Centre uses newly developed

trading system built by TCS. Building IT architecture and applications platforms for newly developed 'intelligent' cities in China's fast growing urbanization process is a new growth engine for TCS. TCS will be investing US\$6 million to establish a lab in Singapore to fuel research and development in intelligent city applications, where cloud-based technologies will be introduced to improve operational efficiency and save money (Kalirajan *et al* 2010; *The Economist* 2012).

13. The economic relationship took off after 2003 and by 2009 March, at least 90 Indian companies had established offices in China. The lead was taken by the IT sector, which saw business opportunities, with some representation from the pharmaceuticals and automotive sectors.
14. But this may not continue successfully in future. In the past fews the rivers flowing down to Goa on India's west coast have teamed with barges carrying iron ore bound for China. Yet a crackdown in late 2011 on illegal mining has seen volumes fall by a fifth, says Goa Barge Owners' Association. In March 2012, India briefly banned cotton exports because of fears of shortages.
15. It mainly imports Chinese capital goods, with firms benefiting from cheap and decent gear. The giant Reliance Group has bought kit for power stations and telecoms networks- partly paid for with competitive Chinese loans.
16. It is reported that in 2010, the PRC's merchandise exports (\$1580 billion) were larger than the US (\$1280 billion). However, the US is a larger services exporter (\$515 billion) than the PRC (\$170 billion) Source: WTO (2011). The PRC is also the leading exporter among the BRICS nations, which includes Brazil (1.6%), Russia (3.0%) and India (2.2%).

### References

- Chen, S and Y. Wang (2001) *China's Growth and Poverty Reduction: Recent Trends between 1990-1999* World Bank Policy Research Working Paper No.2651, Washington, D.C.
- Dimaranan, Betina, Elena Lanchovichina and Will Martin (2007) *China, India and the Future of the World Economy* Policy Research Working paper 4043, The World Bank Development Research Group, August.
- Gerhauer, Klaus, Yoshihiro Iwasaki and VB Tulasidhar eds. (2010) *Resurging Asian Giants: Lessons from the People's Republic of China and India* Manila: ADB.
- Iwasaki, Yoshihiro (2010) "Lessons from the People's Republic of China and India" in Klaus Gerhauer, Yoshihiro Iwasaki and VB Tulasidhar eds. (2010) *Resurging Asian Giants: Lessons from the People's Republic of China and India* Manila: ADB (chapter 1).
- Kalirajan, Kaliappa, Yapi Wang, Miaojie Yu and Kanhaiya Singh (2010) "China and India: A Comparative Analysis of Trade and Investment Performance" (available at [http://mjyu.ccer.edu.cn/EABER\\_Routledge%20chapter\\_2.pdf](http://mjyu.ccer.edu.cn/EABER_Routledge%20chapter_2.pdf)) accessed on 27/3/2013.
- Maddison, Angus (1998) *Chinese Economic Performance in the Long Run* Organisation for Economic Co-operation and Development, Paris. Also see Maddison, Angus (2001) *The World Economy: A Millennial Perspective* OECD.
- Qin, Duo *et al.* (2006) *Income Disparity and Economic Growth: Evidence from People's Republic of China* ERD Working Paper Series No.84 ADB, Manila, October ([www.adb.org/documents/ERD/Working\\_papers/WP084.pdf](http://www.adb.org/documents/ERD/Working_papers/WP084.pdf)) used March 19, 2013.
- Singh, Surjit (1995) "Trends in Chinese Economy" *China Report* October- December :
- Singh, Surjit (1998) "Economic Reforms and State Enterprises in China" *China Report* April-June : 199-212.
- Singh, Surjit (2007) "Financial Sector in China: Issues and Challenges" in Sudhakar Reddy ed. *Economic Reforms in India and China: Emerging Issues and Challenges* New Delhi: Sage Publications, chapter 10.
- Singh, Surjit (2012) "Innovations: Finance, Employment and Social Security" in an *International Seminar on Innovations and Contemporary Development* Punjabi University, Patiala, November 16-17. Also as Institute of Development Studies Jaipur Working Paper January 2013, No. 163.
- Singh, Surjit (2013) "India and Knowledge Economy: Prospects for Development" in an International Conference on *Human Development and Knowledge Economy*, Punjabi University, Patiala, February 19-20. Also as Institute of Development Studies Jaipur Working Paper March 2013, No. 165.
- The Economist (2012) "India and China: Friend, Enemy, Rival, Investor: How can India make its Economic Relations with China Less Lopsided" June 30 (<http://www.economist.com/node/21557764>) accessed on 22/03/2013.
- Vishwanath, Anurag (2103), 'Charting the Course of Sino-Indian Relations' *Business Line*, May 20.
- Wang, Dashu (2010) "An Overview of India's Growth and Development" in Klaus Gerhauer, Yoshihiro Iwasaki and VB Tulasidhar eds. (2010) *Resurging Asian Giants: Lessons from the People's Republic of China and India* Manila: ADB (chapter 7).

Wignaraja, Ganeshan (2011) "The People's Republic of China and India: Commercial Policies in the Giants" ADB Working Paper Series on Regional Economic Integration, No.83 (June), Asian Development Bank, Manila ([http://aric.adb.org/pdf/workingpaper/WP83\\_Wignaraj\\_The\\_PRC\\_and\\_India.pdf](http://aric.adb.org/pdf/workingpaper/WP83_Wignaraj_The_PRC_and_India.pdf)) accessed on 20/03/2013).

Wignaraja, Ganeshan and D. Lazaro (2010) "North-South Vs. South-South Asian FTAs : Trends, Compatibilities and Ways Forward" UNU-CRIs working papers W-2010/3, Bruges, Belgium : UN University Institute on Comparative Regional Integration Studies.

Winters, L. Alan and Shahid Yusuf eds. (2007) *Dancing with Giants: China, India and the Global Economy* The World Bank and Institute of Policy Studies.

World Trade Organization - WTO (2011) *Trade Policy Review: India* Geneva: WTO.

WTO (2012a), *Trade Profiles 2012* Geneva ([www.wto.org/statistics](http://www.wto.org/statistics)).

WTO (2012b), *International Trade Statistics 2012* Geneva ([www.wto.org/statistics](http://www.wto.org/statistics)).

Yusuf, Shahid and Kaoru Nabeshima (2006) *China's Development Priorities* The World Bank: Washington DC.

Yusuf, Shahid, Kaoru Nabeshima and Dwight H. Perkins (2006) *Under New Ownership: Privatizing China's State-owned Enterprises* The World Bank and Stanford University Press.

**Appendix Table 2: Manufactured Exports from China and India: 1985 and 2008**

Commodities	Growth rate %(1985-2008)	Share of National Manufactured Exports (%)	1985	2008
<b>China</b>		<b>China</b>		
Manufactures	26.7	Resource-based	38.9	8.5
Resource-baseds	18.6	Low Tech	43.7	26.8
Low Tech	24.2	Medium Tech	12.2	37.0
Medium Tech	33.3	High Tech	5.2	27.7
High Tech	36.2			
<b>India</b>		<b>India</b>		
Manufactures	15.4			
Resource-based	14.6	Resource-based	40.6	35.0
Low Tech	13.7	Low Tech	45.3	31.8
Medium Tech	20.2	Medium Tech	10.0	24.9
High Tech	18.3	High Tech	4.1	8.3
		Share of World Manufactured Exports		
		Manufactures	0.5	10.8
		Resource-baseds	0.8	3.5
		Low Tech	1.2	18.1
		Medium Tech	0.1	10.6
		High Tech	0.1	14.3
		<b>India</b>		
		Manufactures	0.5	1.3
		Resource-baseds	0.9	1.7
		Low Tech	1.2	2.5
		Medium Tech	0.1	0.8
		High Tech	0.1	0.5

Source: Wignaraja (2011).