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**Free Trade Agreement between People's Republic of China  
and India: Likely Impact and Its Implications to Asian  
Economic Community**

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**Abstract**

Open regionalism and trade cooperation between the world's two largest developing countries, the People's Republic of China (PRC) and India, can foster outward-oriented development and intra-regional trade based on comparative advantage and available factor endowments. In view of the recent wave of worldwide subregional and bilateral trade cooperation, and the recent suspension of Doha negotiations by the World Trade Organization, the opportunity costs of not moving toward greater trade integration between the PRC and India could be increasing. This paper presents the recent trends in the PRC-India trade and examines empirically the likely impact of their preferential and free trade agreements using Gravity Model under different comparative-static scenarios. It also discusses the implications of PRC-India trade cooperation on the formation of the Asian Economic Community.

**JEL Classification:** F1, F2, Q1, Q4, R4

**Key Words:** India, China, Economic Cooperation, Trade, Free Trade Agreement, Gravity Model, Asian Economic Community

## I. INTRODUCTION

With the failure of multilateral trade negotiations under the aegis of the World Trade Organization (WTO) in Cancun and Hong Kong Ministerial Conferences and collapse of negotiations on agriculture in the ministerial level talks in Geneva in July, the world has witnessed a recent wave of bilateral, trilateral, subregional, and regional trade and cooperation agreements (RTCAs) involving both developing and developed countries. These agreements have mushroomed in recent years, particularly since 1990. By July 2005, the WTO (and its predecessor, the General Agreement on Tariffs and Trade [GATT]),<sup>1</sup> had been notified of 330 agreements compared to 130 in January 1955. Of these, 180 are currently in force. Additional RTCAs are believed to be operational but are not yet notified.<sup>2</sup> The global trade talks were suspended in Geneva on 24 July 2006 after key players in WTO failed again to reach a consensus on agricultural subsidies and nonagricultural market access. The General Council of WTO, at its meeting on 27–28 July 2006, supported a recommendation by the Director General to suspend the negotiations on the Doha Development Agenda. This breakdown of WTO talks is likely to encourage more bilateral trading agreements worldwide, particularly in Asia to enhance intraregional trade through preferential and free trading arrangements in the sideline of the multilateral system.

Following the global trend, particularly the examples of the United States (US) and European Union (EU), Asia has also witnessed a shift in regional trade strategy from multilateral to subregional and bilateral trade agreements. Bilateral trade accords are on an upward trend over the years, marking a shift from the multilateral approach to regionalism. There are aggressive pursuits of these deals among Asian countries and between Asian and non-Asian countries. Around 175 bilateral and regional trade agreements are in existence or under negotiation compared to just a handful a decade ago.<sup>3</sup> While multilateralism is always favored by economists, there is a difference in opinion as to whether or not regionalism in the form of bilateral or subregional cooperation is a building block or a stumbling block for global free trade framework.

Subregional and bilateral regional economic cooperation and integration can help maximize the benefits of globalization while minimizing its risks. On a broader scale, the impetus for further regional integration in Asia is a result of the relatively slow progress in global multilateral trade talks, and the benefits of free trade agreements (FTAs) in Europe and the Americas. In view of the rapid integration activities in other regions and the risk of trade isolation, the opportunity costs of not accelerating subregional and bilateral regional integration are high for Asian countries.

If bilateral and subregional RTCAs are compatible with each other and with WTO agreements, these will be building blocks for worldwide multilateral agreements. Asian countries recognize that bilateral and subregional trade agreements can contribute towards accelerating regional and global liberalization and are building blocks within the framework of multilateral trading system and toward the formulation of an Asian community. In general, a subregional/bilateral

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<sup>1</sup> An organization that promoted international commerce and the reduction of trade barriers among member states from 1947–1994

<sup>2</sup> World Trade Organization website, [www.wto.org/english/thewto\\_e/whatis\\_e/tif\\_e/bey1\\_e.htm](http://www.wto.org/english/thewto_e/whatis_e/tif_e/bey1_e.htm).

<sup>3</sup> Estimated from Asian Development Bank's Free Trade Agreement Database: [aric.adb.org/index.php](http://aric.adb.org/index.php).

RTCA will contribute, through trade creation, to structural reforms in participating countries, which in turn will facilitate multilateral trading system. However, countries with strong reservation against openness of the domestic economy have to open their market to participating countries and to multilateral trading framework.

New economic dynamics are rising in Asia as a result of the emergence of the PRC and India as major economic powers. For sustainable development of the world economy, the PRC and India should be properly integrated into the Asian economy and simultaneously with the rest of the world. During the past 25 years, real gross domestic product (GDP) growth of the PRC has been on an average of more than 9% a year, whereas the growth of external trade was over 14%. Following its reforms that started in the early 1990s, India's growth rate was on an average around 7%–8% in recent years. Goldman Sach's study (Wilson and Purushotaman, 2003) concludes that the GDP of these two largest countries in Asia, the PRC and India will surpass those of other major industrialized economies of the world in the coming decades.

The PRC and India have strong historical and cultural links and share many similarities. They possess centuries-old civilizations and unique histories. After pursuing inward-oriented policies in the early years of their development, the PRC (since 1978) and India (since 1991) have increasingly deepened their economic integration and with the rest of the world. While the PRC has emerged as one of the world's fastest-growing economies, India's economy with a robust average annual growth rate of 6% in the 1990s is also showing healthy growth momentum. Bilateral trade and investment links between the two countries have grown rapidly over the past few years, suggesting the presence of complementarities and unexploited potentials (Bhattacharyay and De, 2005).

In spite of the odds and negative publicity about their bilateral relationship, which was taken hostage by political animosity for a long time, Indo-PRC relationship has turned 180 degrees. This is because of the paramount importance of economic factors, keeping the political interest in the back seat. The PRC and India have begun to slowly open their borders for trade and human traffic. After more than 44 years, on 7 July 2006, the PRC and India opened the famed Silk Road through Nathula Pass, an ancient trading route that once connected the PRC with India, West Asia, and Europe. This development becomes very important in the light of the recent opening of the Beijing-Tibet rail service. Located some 460 kilometers (km) from the Chinese city of Lhasa in Tibet, and 550 km from the Indian coastal city of Kolkata, the Pass will be an important trade route between the PRC and India. It will enhance bilateral trade between the two countries, particularly the border regions, thus helping the poor traders living in this area.

The strong economic tie-up between these two countries made the PRC, in 2004-2005, the third largest importer of India's goods next to the US and United Arab Emirates. This performance is spectacular compared to the state of almost nonexistence a few years back. During 2004-2005, the PRC's share in India's imports was 6.30%, the highest of all trading partners. From January to May 2005, PRC-Indian trade reached \$7.71 billion, which was more than the total trade in 2003. The trade was 41.1% higher than the same period last year. The PRC has made unbelievable progress in its market penetration in India surpassing all its past predictions. Currently, the PRC is also the largest exporter to Indian market surpassing the traditional alleys of the US and the United Kingdom. The PRC's exports to India amounted to \$3.09 billion, 65% up over the same period last year while imports stood at \$4.62 billion, 29% more during the same period last year. India became the 10th biggest trading nation of the PRC overtaking Canada.

Trade cooperation and integration between the PRC and India can foster outward-oriented development and generate economic and social benefits, which could also be a countervailing measure to withstand the excesses of economic globalization. In the age of mushrooming growth of regional trading blocs, there is no alternative to FTA, especially when multilateralism under the WTO is getting weaker because of divergence of opinions and lack of consensus among members. In comparison to the huge economies of the PRC and India, their bilateral trade is insignificant. Bilateral trade has increased but only accounts for a little more than 1% of PRC's total trade volume and more than 8% of India's trade. Therefore, a bilateral FTA has a huge potential. Furthermore, the PRC-India cooperation will build "bridges" and "linkages" between East and South Asia and could facilitate the formation of an Asian Economic Community. A PRC-India FTA would be the largest in the world as it would covers two-fifths of the world's population.

This article is organized into five sections. The first section deals with the trading trends and patterns of the PRC and India. The second section analyzes the prospects and feasibility of India-PRC FTA. The third section measures the likely impact of preferential trade agreement (PTA) and FTA between these two countries under different comparative-static scenarios and presents the gains and losses of both countries under different tariff-reduction scenarios. The fourth section discusses the implications of the India-PRC trade cooperation to the formation of an Asian Economic Community. The last section provides the concluding observations.

## **II. India's Trade with the PRC: Trends and Patterns**

The PRC's uninterrupted growth is characterized by higher productivity, lower wages, and exploitation of economies of scale among other parameters. PRC's GDP grew by 9.9% in 2005 due to buoyant domestic investments and exports. Its GDP is expected to double by 2010 and likely to quadruple by 2020 that would make it the world's third largest economic power.<sup>4</sup> The country accounts for 22.0% of the world's population.

As a result of 15 years of economic reform, India achieved an average GDP growth of around 8% during 2003–2005 with 8.1% growth in 2005. India is expected to grow at the rate of 8–8.5% during 2006–2010 (Asian Development Outlook, 2006). India accounts for only 2.4% of the world surface area but constitutes about 17% of world population. Almost one third of the world's poor people reside in this country. Therefore, increased integration of India with the rest of the world will have significant impact on the development of Asia and the world at large.

India-PRC trade has been growing very rapidly since the mid-1990s. In 1994–1995, India's export to the PRC was \$254.3 million, which grew to \$5,344.88 million during 2004–2005 registering an exponential growth of 35.60% per annum and a growth of 80.87% over 2003–2004. During this period, the growth of India's overall export was only 26.15% and the share of the PRC in India's total export was 6.64%. India's exports to the PRC have been growing at a much faster rate than its total trade, which roughly grew by 20.00% annually in dollars during the same period. India's imports from the PRC have shown similar increasing trend over the last 10 years. India's import from the PRC skyrocketed to \$6,768.92 million in 2004–2005 from \$761.04 million in 1994–1995, showing an annual exponential growth of 24.10% and an average growth of 67% over the previous years. Total trade between the PRC and India touched \$18.00 billion in 2005 and is expected to reach \$50 billion in the next 5 years (i.e., by 2010). Total trade between the two countries has been growing at an annual exponential rate of

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<sup>4</sup> [www.bilaterals.org/article.php3?id\\_article=2453](http://www.bilaterals.org/article.php3?id_article=2453), 10 August 2006.

28.13% between 1994–1995 and 2004–2005, which is much more than the growth rate of India's overall trade during this period.

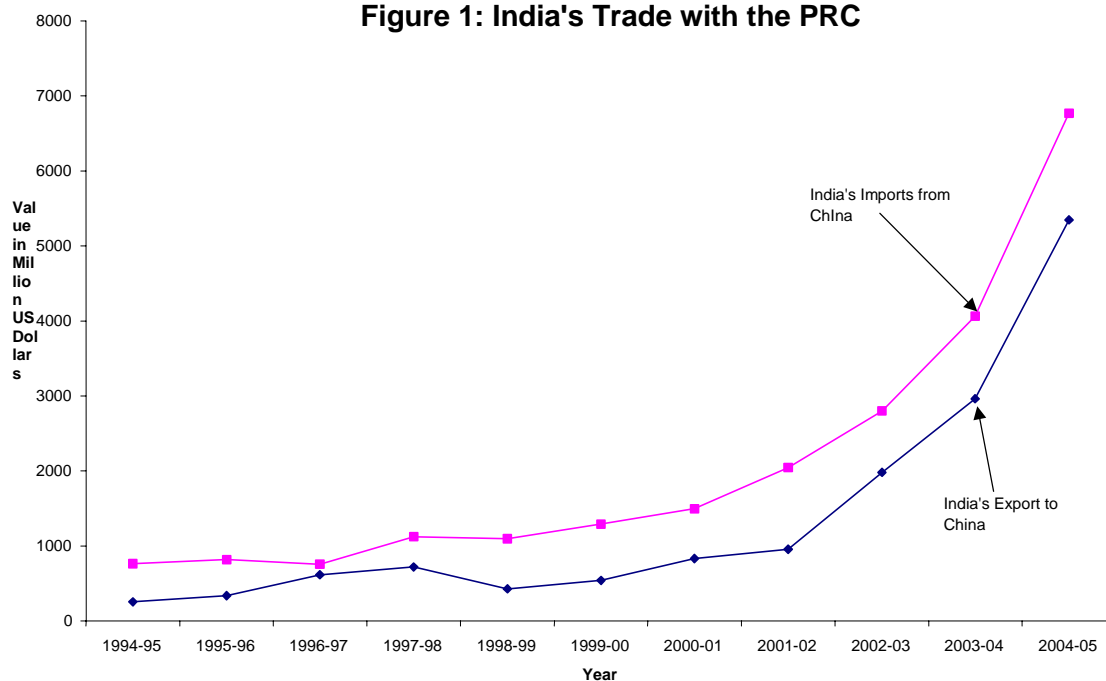
Another significant trend is that trade deficit between the PRC and India, which stood at \$1,424.04 million from \$1,101.04 million of the previous year, has also been increasing. Trade deficit, which has been increasing continuously over the years, was \$506.74 million in 1994–1995. If the growth rate of India's exports to the PRC is maintained at the present level, this gap is expected to narrow down. India's total trade to the PRC was \$12,113.8 million in 2004–2005, registering a growth of 72.85% over the previous year. PRC's share in India's total trade was 6.39% during the same period. India's trade to and from the PRC, its growth rates, and trade balance are shown in Table 2. The trends of India's trade to and from the PRC are also shown in Figure 1.

**Table 2: India's Trade with the PRC (Value in \$ Million)**

Year	India's Export to PRC	Rate of Growth	India's Imports from PRC	Rate of Growth	Total Trade	Growth of Total Trade	Trade Balance
1994–95	254.30		761.04		1015.34		-506.74
1995–96	333.20	31.03	813.19	6.85	1146.39	12.91	-479.99
1996–97	615.32	84.67	757.55	-6.84	1372.87	19.76	-142.23
1997–98	718.94	16.84	1120.70	47.94	1839.64	34.00	-401.76
1998–99	427.06	-40.60	1096.47	-2.16	1523.53	-17.18	-669.41
1999–00	539.41	26.31	1288.27	17.49	1827.68	19.96	-748.86
2000–01	830.03	53.88	1494.92	16.04	2324.95	27.21	-664.89
2001–02	955.19	15.08	2043.33	36.68	2998.52	28.97	-1088.14
2002–03	1980.61	107.35	2799.29	37.00	4779.90	59.41	-818.68
2003–04	2962.92	49.60	4063.96	45.18	7026.88	47.01	-1101.04
2004–05	5344.88	80.39	6768.92	66.56	12113.80	72.39	-1424.04

Source: Monthly Statistics of Foreign Trade of India - Directorate General of Commercial Intelligence & Statistics (DGCI&S), Government of India.

**Figure 1: India's Trade with the PRC**



India's exports of principal commodities to the PRC from 1998–1999 to 2004–2005 are shown in Table 3. Iron ore is the single largest item of India's exports to the PRC during 2004–2005 and the trend has been increasing over the years. This is the most important item in India's export basket followed by primary and semifinished iron and steel, which is the second largest of India's exports to PRC. Other major product/product categories of India's export basket to the PRC are plastic and linoleum products; processed minerals; inorganic/organic/agro chemicals; ores and minerals; drugs, pharmaceuticals, and fine chemicals; machinery and instruments; residual chemicals and allied products; nonferrous metals; marine products; cotton yarn, fabrics, and made-ups; etc.

**Table 3: India's Exports of Principal Commodities to the PRC  
(Value in \$ Million)**

<b>Name of the Commodities</b>	<b>1998–99</b>	<b>1999–00</b>	<b>2000–01</b>	<b>2001–02</b>	<b>2002–03</b>	<b>2003–04</b>	<b>2004–05</b>
Iron ore	87.77	81.43	130.16	207.56	409.37	825.74	2084.43
Primary and semifinished iron and steel	4.72	3.59	26.40	11.02	491.02	577.25	488.74
Plastic and linoleum products	6.28	25.36	103.11	141.95	177.92	306.44	438.90
Processed minerals	16.99	11.56	15.24	23.40	87.58	99.99	230.85
Inorganic/organic/agro chemicals	22.28	39.32	60.01	48.84	88.89	83.96	217.91
Other ores and minerals	39.93	65.47	73.15	113.81	154.30	128.88	192.48
Drugs, pharmaceuticals, and fine chemicals	42.68	46.01	58.56	80.37	93.02	102.53	106.33
Machinery and instruments	9.17	11.72	19.72	11.36	32.47	73.50	98.14
Residual chemicals and allied products	6.42	8.50	11.00	16.75	21.45	33.89	76.77
Nonferrous metals	0.10	0.08	17.99	2.85	21.20	43.53	65.42
Marine products	51.51	87.81	116.00	85.19	118.39	89.08	65.38
Cotton yarn, fabrics, made-ups, etc	40.73	56.05	71.54	75.06	64.04	74.11	64.92
Electronic goods	4.08	9.24	20.66	15.90	22.82	42.31	44.53
Castor oil	17.19	31.95	13.83	7.08	1.64	8.93	40.89
Oil meals	32.64	9.69	8.29	4.22	3.67	17.28	35.81
Finished leather	3.32	4.02	8.41	12.70	15.84	21.65	30.50
Manufactures of metals	3.79	1.41	10.57	11.50	32.31	27.90	28.95
Ferro alloys	2.00	0.54	0.15	4.54	3.93	6.20	28.44
Dyes, intermediaries, etc	3.41	3.31	8.59	11.29	20.08	66.20	18.63
Gems and jewelry	1.27	0.31	0.17	0.66	2.08	9.73	18.45
All commodities	427.06	539.41	830.03	955.19	1980.61	2962.92	5344.88

Source: Monthly Statistics of Foreign Trade of India - Directorate General of Commercial Intelligence & Statistics (DGCI&S), Government of India and Trade and Balance of Payment Statistics - Centre for Monitoring Indian Economy (CMIE), July 2005.

Table 4 shows India's imports of principal commodities from the PRC from 1998–1999 to 2004–2005. India's major import item from the PRC has been electronic goods. Import of this item has been consistently increasing over the period of the study. The second largest import items are coal, coke and lubricants. India imports substantial amount of coal from the PRC, which suddenly shot up at a very high level during 2004–2005, although it was modest in the early years. Organic chemicals are the third largest import items from the PRC in last several years. Other important import items are: nonelectrical machinery; electrical machinery; medical and pharmaceutical products; textile yarn, fabrics, and made-ups; silk yarn and fabrics; nonferrous metals; silver; iron and steel; inorganic chemicals; raw silk; nonmetallic manufactures; manmade filament/spun yarn/waste; metaliferrous ores and metal scrap; and others. The 20 major items in India's import basket from the PRC as listed in Table 4 cover more than 80% of India's imports from the PRC.



**Table 4: India's Imports of Principal Commodities from the PRC  
(Value in \$ Million)**

Name of the Commodities	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
Electronic goods	161.46	178.22	244.56	385.19	812.16	1384.44	2069.19
Coal, coke and lubricants	108.20	146.04	261.34	263.43	175.61	221.5	780.19
Organic chemicals	163.54	178.71	181.02	242.38	326.42	474.06	606.66
Nonelectrical machinery	48.92	53.04	60.49	72.14	105.69	184.38	424.43
Electrical machinery	20.60	28.58	46.34	59.98	72.30	101.70	211.23
Medical and pharmaceutical products	71.27	73.05	70.32	105.26	150.25	185.26	192.80
Other textile yarn, fabrics, made-ups	-	20.50	34.75	46.89	75.97	107.66	172.95
Silk yarn and fabrics	-	12.81	17.27	32.20	52.23	105.20	156.52
Nonferrous metals	52.27	49.01	41.89	54.53	46.23	86.82	145.13
Silver	-	20.16	8.30	94.41	121.21	58.42	138.62
Iron and steel	20.44	30.75	7.53	14.52	9.24	31.65	136.21
Inorganic chemicals	62.72	53.20	48.37	59.66	69.25	104.46	131.22
Raw silk	48.31	87.44	95.66	122.90	106.96	113.70	123.34
Non-metallic mineral manufactures	7.42	10.24	14.65	30.24	44.42	64.58	121.12
Man-made filament/spun yarn/waste	-	12.38	9.84	17.32	56.05	82.61	115.78
Metaliferrous ores and metal scrap	8.50	11.26	19.65	14.52	28.46	63.96	102.99
Professional instruments, optical goods, etc	18.85	23.37	23.38	55.31	80.49	90.01	99.32
Transport equipment	3.49	8.45	6.62	9.06	22.15	13.16	88.50
Manufacture of metals	12.04	15.38	17.77	31.14	32.69	55.34	88.07
All commodities	1096.47	1288.27	1494.92	2043.33	2799.29	4063.96	6768.92

Source: Monthly Statistics of Foreign Trade of India - DGCI&S, Government of India, and Trade and Balance of Payment Statistics - Centre for Monitoring Indian Economy (CMIE), July 2005.

### III. Prospect of PRC-India FTA

In June 2003, the PRC and India formed a Joint Study Group (JSG) to expand trade and economic cooperation between the two countries. The mandate of JSG was to recommend policy changes required to enhance bilateral economic cooperation and to present a report and recommendation on comprehensive trade and economic cooperation. On 21 March 2005, the JSG prepared a report on the India-PRC JSG on Comprehensive Trade and Economic Cooperation. It recommended a PRC-India Regional Trading Arrangement, covering trade of goods, services, and investments, identified common ground for trade and investment promotion and facilitation, and proposed measures for promoting economic cooperation in identified sectors. The JSG also recommended the appointment of a Joint Task Force (JTF) to study in detail the feasibility and benefits of the regional trading arrangement that may derive from PRC-India regional trading arrangement. A JTF has been set up and its first meeting was held in New Delhi on 13 March 2006 wherein its Terms of Reference were finalized to prepare a 5-year blueprint for enhanced bilateral cooperation to be presented to the two governments.

India is a founding member of the Bangkok Agreement since its inception in 1975, where the PRC has recently joined as the sixth member. The Bangkok Agreement has not achieved its desired success because of very low coverage of items offered for concession despite two

PTAs. Besides, the 13–30% margins of tariff preferences were small and the scope of the PTA was limited to tariff concessions with nontariff barriers kept outside its purview.

The PRC is much ahead of India in terms of degree of openness. This is because of PRC's incredible record of economic liberalization initiated in 1978, long before India's foray into economic reforms since 1991. Trade/GDP ratio of the PRC was 59.8% during 2004 compared with India's 25% during this period. Surprisingly, trade/GDP ratio of the US was only 20% during this period. In spite of all odds, Indo-PRC bilateral trade has grown at a faster rate, which stood at \$18 billion in 2005 with the objective of achieving \$50 billion in the next 5 years.

To enhance bilateral trade and promote economic cooperation, the PRC is very keen to conclude an FTA with India based on complementary and comparative advantage, the way India has concluded with the host of other countries (viz. Sri Lanka and partially with Thailand, Singapore). Despite this fact, the Indian Government has expressed reservation to conclude a bilateral FTA at this moment because of its high tariff wall in the domestic economy. The Indian business community feels that bilateral agreement is justified when there is a level playing field.

The business community has expressed apprehension that since India's tariff level is much higher than the PRC, any reduction in tariff will open the floodgate of cheaper imports from the PRC. On the other hand, PRC's tariffs are already fairly low vis-a-vis the rest of the world and are much lower than India. Therefore, Indian producers can expect no serious market benefits after an FTA. Any reduction in PRC's tariff will not increase India's exports to the former in a significant way. In 2004, PRC's simple mean tariff was 9.8% and weighted tariff was 6.0%, whereas the corresponding figures for India were 28.3% and 28.0%, respectively, during the same period. Apart from that, India's bound tariff is very high. It is 100% for primary goods, 150% for process goods, and 300% for edible oil. However, India has reduced its custom tariffs significantly in its successive budget proposals. Presently, peak tariff is 12.5%, nearer to the 12% level of the Association of Southeast Asian Nations (ASEAN). Despite this, India's average collection rate is among the highest in the world. Despite this, the average collection rate of India is among the highest in the world. Therefore, Indian exporters cannot expect significant market benefits after an FTA whereas Chinese producers can expect good gain from their exports, particularly in electronic goods and steel products. In terms of exports, the PRC is expected to get more benefit from the FTA. The rising PRC exports to India can be largely attributed to tariff cuts. At the same time, India can not levy anti-dumping duties on selected Chinese imports, such as chemicals.

India has a comparative advantage in services but significantly lags behind PRC in the manufacturing sector. India's strengths in software and services complement the hardware and manufacturing prowess of the PRC. Manufacturing goods accounts for only 17% of India's GDP, while the same constitutes more than 30% of PRC's GDP. It could be argued that India would be able to export services to the PRC. But services are usually protected by domestic and not trade barriers, and language could be a big problem for Indian exporters in this regard. International competitiveness of PRC's manufacturing sector (partly due to government subsidies to steel and textile industries) is of great concern to Indian industries. Furthermore, the yuan is still undervalued. In this situation, India needs to enhance its competitiveness in the manufacturing sector prior to tariff liberalization under the FTA coming into effect. In order to balance the adverse situation that Indian exporters—mostly belonging to the manufacturing sector—face, the FTA should focus on complementarity between the PRC and India. The PRC should open up its software and service sectors so that India can utilize its comparative advantage in the service sector, resulting in the balance of trade not being skewed towards the PRC. India can start exporting new services to meet the huge demand of the PRC market.

Trade policies of both India and the PRC are evolving toward deepening integration through regional trading arrangements as a complement to multilateral trading system under the auspices of the WTO. However, there is no official text of any pre-FTA agreement yet. Both countries are now aggressively concluding FTAs with neighboring countries and developing countries in other regions, such as Latin America and Africa. The PRC signed an FTA with Chile in November 2005 and is currently negotiating FTAs with eight countries/regions, such as the ASEAN, Australia, Iceland, Malaysia, New Zealand, Pakistan, Singapore, and Thailand. On the other hand, India signed PTAs with Afghanistan and Chile, a Comprehensive Economic Cooperation Agreement (CECA) with Singapore, and limited FTAs with Sri Lanka and Thailand. It is also negotiating six agreements with ASEAN, Bangladesh, Chile, Mauritius, Thailand, and *Mercado Común del Sur* (MERCOSUR).<sup>5</sup> The PRC is studying the feasibility of FTAs with India, Japan-PRC-South Korea (trilateral), Gulf Cooperation Council, and Southern African Customs Union (SACU) whereas India has proposed FTAs with Brazil-India-South Africa (trilateral), Egypt, PRC, Indonesia, Japan, South Korea, Malaysia, and SACU. The PRC signed the Closer Economic Partnership Arrangement with Hong Kong, China and Macao, China effective from 1 January 2004. Initial frameworks of agreements are now in place with the ASEAN, Australia, and New Zealand. As a result of these bilateral trade and cooperation agreements, the PRC and India are becoming more open, undertaking more domestic structural reforms, and creating open and competitive market environments.

The acrimonious relationship between the PRC and India due to their border dispute is now a thing of the past. The initiative to foster economic relations started after the Indian Prime Minister's visit to the PRC in June 2003. In a declaration, both countries expressed their intention for good bilateral relations through enhancing economic cooperation. In the area of trade, the PRC and India plan to take measures consistent with national laws and international obligations to remove impediments to bilateral trade and investment. Both countries have started discussing possible bilateral trade arrangement on preferential tariffs more than most favored nation tariffs on a wide range of products including paper, steel, chemicals, and food. The list includes 217 Indian exports and 188 Chinese exports facing lower-than-average tariffs in the other market.

The China Council for Promotion of International Trade, the largest trade and investment promotion organization of that country, called for expediting the process of an FTA. India is seriously interested to finalize a Bilateral Investment Promotion and Protection Agreement (BIPA) with the PRC but is still hesitant to sign an FTA. BIPA, a necessary precondition for an FTA, would give the PRC a most favored nation status and allow free repatriation and transfer of returns on investment. One of the problems delaying the signing of the proposed BIPA is the delay in amending the Foreign Exchange Management Act (FEMA), which contains restrictions on setting up a branch or liaison office in case of Chinese citizens.<sup>6</sup>

In view of the presence of substantial complementarities and unexploited potentials, a PTA/FTA in manufacturing, services, and investment will significantly enhance bilateral trade between the two countries. This will help poverty reduction in these countries, particularly in border regions, where a relatively high incidence of poverty exists. They can form a partnership by pooling financial and manpower resources to compete with other developing countries in the world market in several manufacturing and service areas, such as information technology (IT) services and textiles.

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<sup>5</sup> Southern Common Market.

<sup>6</sup> *Business Standard*, India, 8 August 2006. Available: [http://www.bilaterals.org/article.php3?id\\_article=5455](http://www.bilaterals.org/article.php3?id_article=5455).

Even if India becomes the 10<sup>th</sup> biggest trading nation of the PRC, in comparison to huge economies of the PRC and India, their bilateral trade is insignificant. Cross-border initiatives relating to trade facilitation and investment promotion can be instrumental in generating jobs, increasing trade and economic growth, and building the critical need of energy security. Therefore, the potential of a PTA/FTA is enormous and the opportunity cost of not moving toward greater trade cooperation is significant. In view of the comparative disadvantage of India's manufacturing sector, a much lower tariff structure in the PRC and its higher degree of openness, a PRC-India FTA trade cooperation should start with a PTA with reduced tariffs in a phased manner covering selected manufactured, services, and agricultural products over a longer time horizon. The ultimate goal should be an FTA with a free flow of goods, services, investment, labor, and capital.

The trade integration between the PRC and India can be stronger through private sector initiatives irrespective of whether an FTA is signed or not. In view of the recent trend of FTAs, the importance of a PRC-India FTA should not be viewed only economically but also politically. This FTA could also be a countervailing power to withstand the excesses of economic globalization

#### **IV. Assessing the Likely Impact of PTAs and FTA between the PRC and India**

Several studies are available on estimating the effects of regional trading blocs on intra-regional trade.<sup>7</sup> Raipuria and Mehta (1990), Naqvi and Samad (1992), Srinivasan (1994), and Srinivasan and Canonero (1993a and 1993b) made some noticeable attempts in this context. Raipuria and Mehta (1990) outlined the framework of an approach (Inter-country Link Model System) for analyzing the impact of trade cooperation in the region, along with a review of 21 models for analyzing bilateral trade. Bhattacharya (2004) studied the impact of a PTA between Bangladesh and India using the Gravity Model.

A number of different specifications of the Gravity Model have been used in the literature, depending mostly on the objective of the study, and the type of sample data. In most existing studies, the bilateral trade flows have been explained by variables like GNP (proxy for size of countries), GNP per capita (proxy for degree of development), and trade restrictive variables such as tariff and nontariff barriers, distance, adjacency, linguistic links, etc.

In this analysis, the impact of PTAs is measured under some hypothetical scenarios, i.e., the proportionate change in exports and imports of the PRC and India in dollar terms. A comparative static analysis of tariff reductions has been undertaken under different scenarios and its resultant effects on the increase in imports and exports of both the PRC and India. The objective of this analysis is to see costs and benefits (measured in terms of higher rates of growth of exports and imports) due to different PTAs and FTA to India and the PRC and trade potentials between these two countries. Four hypothetical scenarios in this study are as follows:

- (i) 25% across the board tariff cuts by the PRC and India;
- (ii) 50% across the board tariff cuts by these two countries;
- (iii) 75% across the board tariff cuts by the same countries;
- (iv) 100% tariff cuts, i.e., free trade between the PRC and India.

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<sup>7</sup> In most cases of regional blocs, experts have attempted to analyze the impact of preferential/free trade agreements on the economies of member (as well as nonmember) countries. For example, eight systematic attempts have been made to analyze the impact of North American Free Trade Area (NAFTA) as summarized by the Congressional Budget Office (1993) and United States International Trade Commission (USITC) (1992).

The results of the simulations obtained are only indicative because these are estimated values based on hypothetical scenarios under the proposed India-PRC economic integration by liberalizing economies through FTAs. However, these simulations do not consider the removal of nontariff barriers.

The analysis is based on elasticities estimated by Srinivasan and Canonero (S-C) using panel data. Frankel's estimation procedure is adopted in this model. The results of the simulations are not valid to any particular year. These are indicative due to reductions in tariffs under different hypothetical scenarios. Both tariffs and trade data used in this analysis are taken from TRAINS CD-ROM compiled by the United Nations Conference on Trade and Development. Trade and tariffs data are taken for 2004. In the case of both countries, simple mean tariffs rather than weighted tariffs were taken. The PRC's tariffs data were taken from World Development Indicators 2006 while India's tariffs data were taken from the customs tariff manual 2004–2005.

The analysis is based on the Gravity Model developed by Frankel, et al. (1993 and 1997) and extensively used by Safadi and Yeats (1993) in their analysis to estimate the likely impact of the formation of the North American Free Trade Area (NAFTA) on South Asia by considering other potential trading arrangements. Following the above methodology, S-C estimated the effects of PTAs in South Asian countries. In this study, the model adopted by S-C (1993, 1994, and 1997) was used, as follows:

$$\text{Log BTI}_{c,d,t} = a_0 + a_1 \log (\text{GNP}_{c,t} * \text{GNP}_{d,t}) + a_2 \log (\text{PCGNP}_{c,t} * \text{PCGNP}_{d,t}) + a_3 D_{c,d} + a_4 \log (1 + \text{TR}_{c,d}) + a_5 \log (1 + \text{TR}_{d,c}) + a_6 \log \text{REXRT}_{c,d,t} + e_{c,d,t}$$

and,  $e_{c,d,t} = u_c + v_d + w_t + \eta_{c,d,t}$ ,

where,

$\text{BTI}_{c,d,t}$	= Bilateral trade of commodity "l" between country "c" and country "d" at time "t."
$\text{GNP}_{c,t}$ (or $\text{GNP}_{d,t}$ )	= Gross National Product of country "c" ( or "d" ) at time t
$\text{PCGNP}_{c,t}$ (or, $\text{PCGNP}_{d,t}$ )	= Per capita Gross National Product of country "c" on country "d."
$D_{c,d}$	= Distance between relevant centers of "c" on country "d."
$\text{TR}_{c,d}$	= Tariff rate imposed by country "c" on country "d."
$\text{TR}_{d,c}$	= Tariff rate imposed by country "d" on country "c."
$\text{REXRT}_{c,d,t}$	= Real Effective Exchange Rate between countries "c" and "d," at time "t."
$u, v$	= country-specific effects
$w$	= temporal effects
$\eta$	= random effects

The essence of the Gravity Model is that the bilateral trade flow is positively related to the size of the two countries and inversely related to the distance between them. This follows the

concept of physical science, where gravity force is directly proportional to the mass of two bodies and inversely proportional to the distance between them.<sup>8</sup>

The higher the initial tariff level on trade between partners, the greater the final effect of reduction and elimination of tariffs. The result of the reduction in tariffs would be reflected in the increasing estimated values of  $a_4$  and  $a_5$ . However, tariff is only one among many factors that determine the impact of PTA on trade. It is to be noted, however, that the tariff  $T_p$  represents tariffs imposed by the PRC on its imports from India, whereas  $T_i$  represents tariffs imposed by India on its imports from the PRC. Since tariffs  $T_i$  are higher than  $T_p$ , the higher the coefficient of  $T_i$  in absolute values, the greater the impact of preferential arrangement. Secondly, since  $a_4$  and  $a_5$  are elasticities indicating the proportionate response of bilateral trade to changes in tariffs, the initial tariff levels as well as initial trade level are relevant in determining the absolute changes in trade in both the PRC and India following a PTA.

S-C used the cross-country data (of 21 trading countries/partners) overtime (i.e., 1968–91) to estimate the above gravity equation for nine commodity groups. The commodity groups were selected keeping in view the trade of South Asian countries. Further, the variance-component regression model was adopted to capture the spatial impact of individual countries ( $u$  and  $v$ ) and time period ( $t$ ).

The S-C elasticities are given in Table 5. Coefficient  $a_5$  is relevant in estimating gains from India's exports to the PRC at different levels of desegregation as well as total exports, whereas coefficient  $a_4$  is considered in estimating increase in India's imports from the PRC due to PTAs and FTA. The elasticities used in these simulations are much higher than expected. The reason is that these are not price elasticities but tariff elasticities showing the increase in demand due to reduced preferential tariffs. In case of trade between the PRC and India, the role of a price mechanism is not very important because the bilateral trade between these two countries is too small compared to their total trade to affect the price structure of these countries. Therefore, an increase in demand with respect to change in prices is not considered as it is almost meaningless in this region. In this case, the tariff rate is the most appropriate indicator to estimate the increase in trade due to reduction in tariff rather than on price. Elasticities  $(1+TR)$  are higher basically due to distance factor. It is also *a priori* true that price elasticity is inversely related to distance. If the distance is less, obviously elasticity is high.

While estimating the likely increase in India's imports from PRC in terms of value, a Variance Component Model is used. The entire commodities at 8-digit level are grouped into nine major groups. S-C undertook this exercise by using panel data. The groups and corresponding elasticities are shown in Table 5.

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<sup>8</sup> Smarzynska, Beata Kasia, *Resurrecting the Gravity Model: In Search of the Centre of International Trade*, Mimeo, Yale University, p.4.

**Table 5: Elasticities of Major Commodities**

Group No.	Commodity Groups	a <sub>4</sub>	a <sub>5</sub>
I	Total Trade	-3.90	-4.66
I	Coffee, tea, cocoa, and spices	-5.81	-0.43
II	Textile fiber	-15.38	-7.78
III	Fuels	-3.83	-8.15
IV	Non-fuel primaries (except covered in I and II)	-4.76	-6.00
V	Leather, dressed, fur, etc	-2.08	-2.73
VI	Textile yarn, fabrics, etc	-5.16	-4.31
VII	Machine and transport equipment	-3.45	-3.14
VIII	Clothing	-2.41	-10.03
IX	Other manufactures	-4.66	-4.77

Source: Srinivasan and Canonero, 1993.

Given the estimated parametric value of a<sub>4</sub> and a<sub>5</sub> from the fitted regression equations (of the nine commodity groups), and changes in tariff rates under different alternative scenarios, the percentage increase in import from d to c (i.e., from the PRC to India) and percentage increase in exports from c to d (i.e., India to the PRC) is estimated. The methodology is:

$$[ \exp \{ a_4 \log ((1+TR_{c,d})_1 / (1+TR_{c,d})_0) + \frac{1}{2} \sigma^2 \} - 1 ] * 100,$$

and increase of import of c from d (i.e., from the PRC to India)

$$[ \exp \{ a_5 \log ((1+TR_{d,c})_1 / (1+TR_{d,c})_0) + \frac{1}{2} \sigma^2 \} - 1 ] * 100$$

and increase of exports from c to d ( i.e., from India to the PRC),

where,

$$\sigma^2 = \sigma^2_{a_4 \log (1+TR_{c,d}) + a_5 \log (1+TR_{d,c})}$$

The results of the simulations obtained are only hypothetical and indicative because these are estimated assuming four scenarios of preferential tariff concessions. However, these simulations measure only gains from trade creation and do not consider gains from trade that may emerge from the liberalization of nontariff barriers, such as welfare improvement.

Since the PRC and India are yet to sign an FTA and neither have decided on the broad framework about how it should go, the gains and losses of bilateral trade due to a duty free arrangement cannot be estimated. Despite this, in a given situation, one can simulate the likely increase in bilateral exports and imports due to an FTA as well as the probable impact of PTAs and FTA. While simulating the impact of PTAs and FTA, the tariff data of the PRC at a disaggregated level or at least for broad categories of products whose impacts are being simulated, cannot be obtained. The PRC's tariff information was taken from the World Development Indicators 2006, where tariff has three categories. Simple mean tariffs for all

commodities, primary goods, and manufactured goods are used rather than weighted mean tariffs. Latest tariff data available for the PRC are for 2004. India's tariff data were taken from the Customs Tariff Manual of 2004–2005. For India, disaggregated level data at the 8-digit harmonized system (HS)<sup>9</sup> categories have been aggregated to 20 major categories of items for simulation purposes. Both India's exports to and imports from the PRC are taken from Monthly Statistics from Foreign Trade of India.

In this simulation exercise, four kinds of hypothetical scenarios are considered, such as both way tariff reduction of 25%, 50%, 75%, and 100% (completely duty free). Simulation results are very much consistent with a *priori* idea that the country whose tariffs are low will gain much and the country whose tariffs are high will gain much less. PRC's simple average mean tariff was 9.8% during 2004, whereas India's simple average mean tariff was 29.3%, i.e., 199% higher than India's mean tariffs. Such huge difference in tariff structure is reflected in the simulation results. If both the PRC and India go for PTAs and FTA, the likely increase in bilateral exports and imports are shown in Tables 6 and 7.

Table 6 shows a likely increase in India's exports to the PRC if PRC's existing tariffs are reduced by 25%, 50%, 75%, and 100% (i.e., duty free). It shows the simulation results of different PTAs and FTA. If the PRC reduces existing tariffs by 25%, India's total exports to the PRC will increase by \$610.22 million. If the extent of reduction is 50%, India's total exports to the PRC will increase by \$1,220.45 million, which will be \$1,850.67 million if the extent of reduction is 75% of the mean tariff. If the trade is completely duty free, India's total exports to the PRC will increase by \$2,440.90 million or 45.67% of India's total exports to the PRC. This simulation is based on India's exports during 2004. The same table also shows the simulation results in percentage terms. The percentage increase of India's exports to PRC's market will be 11.42, 22.83, 34.25, and 45.67 under different scenarios mentioned above. As mentioned in Table 3, iron ore; primary and semifinished iron and steel; plastic and linoleum products; processed minerals; inorganic/organic/agro chemicals; other ores and minerals; and drugs, pharmaceuticals, and fine chemicals are the seven major product groups in India's total export basket to the PRC. Simulations are undertaken for 20 major product groups/categories to estimate the likely impact of different PTAs and FTA on their exports to the PRC. The results show that export of these seven product groups will increase substantially but the percentage increase will remain the same as other product groups (Table 6). Although India's major export item to the PRC was iron ore during 2004, it is not sure whether India's supply will be fully elastic and responsive to price decline. The table also shows that in these seven major product groups, increase in exports will be 57.6% due to FTA compared to 45.67% of total exports. Even the rate of increase in exports is much higher in case of different PTAs. Major beneficiaries of PRC's PTAs and FTA are different types of ores and minerals, iron and steel, different items of iron and steel, and different items of drugs and pharmaceutical products in which India has more comparative advantage. Both value and percentage increase of India's major export items to PRC's market are shown in Table 7.

Table 7 shows the simulation results of likely increase in India's imports from the PRC due to PTAs and FTA. It is important to note that any kind of bilateral preferential tariffs and FTA will not make India gain much at this stage unless there is substantial change in investment regime, first to make India more competitive with the PRC and second, India can gain provided it lowers its tariffs and make them at par with the PRC. India's tariff data were taken from the Customs

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<sup>9</sup> HS is the harmonized system of tariff classification. India has adopted the HS since 1987. The Brussels' Common Customs Classification Nomenclature (CCCN) has been replaced by the HS. Now the HS has been accepted internationally except in a few countries like Pakistan.



Tariff Manual of 2004–2005. Tariff data of HS categories at 8-digit level were aggregated into average of product categories being simulated. During 2004–2005, India's average tariff on all commodities based on the World Development Indicators 2006 was 28.3. Other tariff information was taken from the Customs Tariff Manual. Table 7 shows that if India reduces 25% of its existing tariffs, its imports from the PRC will increase by 27.59%; in value terms the increase will be of \$1,865.37 million compared to the base value of \$6,760.42 million in 2004–2005.

**Table 6: Likely Increase in India's Imports from the PRC under Different PTAs and FTA. 2004–2005**  
(Value in \$ Million)

Name of the Commodities	Total Imports (\$ Million)	MFN Tariffs (2004–2005)	Increase in India's Imports ( Million US Dollars)				Increase in India's Imports (Percentage)			
			Scenario I	Scenario II	Scenario III	Scenario IV	Scenario I	Scenario II	Scenario III	Scenario IV
Electronic goods	2069.19	40.37	973.16	1946.32	2919.49	3892.65	47.03	94.06	141.09	188.12
Coal, coke, and lubricants	780.19	27.84	207.97	415.95	623.92	831.89	26.66	53.31	79.97	106.63
Organic chemicals	606.66	34.44	497.26	497.26	745.89	994.52	40.98	81.97	122.95	163.93
Nonelectrical machinery	424.43	40.37	147.78	295.57	443.35	591.13	34.82	69.64	104.46	139.28
Electrical machinery	211.23	40.37	73.55	147.10	220.65	294.19	34.82	69.64	104.46	139.28
Medical and pharmaceutical products	192.80	40.37	90.68	181.35	272.03	362.70	47.03	94.06	141.09	188.12
Other textile yarn, fabrics, made-ups	172.95	30.38	67.78	135.56	203.34	271.12	39.19	78.38	117.57	156.76
Silk yarn and fabrics	156.52	30.38	61.34	122.68	184.02	245.36	39.19	78.38	117.57	156.76
Nonferrous metals	145.13	34.44	59.48	118.96	178.44	237.92	40.98	81.97	122.95	163.93
Silver	138.62	20.40	33.65	67.30	100.95	134.61	24.28	48.55	72.83	97.10
Iron and steel	136.21	58.27	94.45	188.90	283.35	377.80	69.34	138.68	208.02	277.37
Inorganic chemicals	131.22	40.37	63.04	126.08	189.12	252.15	48.04	96.08	144.12	192.16
Raw silk	123.34	30.60	145.12	290.24	435.35	580.47	117.66	235.31	352.97	470.63
Non-metallic mineral manufactures	121.12	20.40	28.79	57.57	86.36	115.14	23.77	47.53	71.30	95.06
Man-made filament/spun yarn/waste	115.78	40.37	60.30	120.59	180.89	241.18	52.08	104.15	156.23	208.31
Metaliferrous ores and metal scrap	102.99	58.27	71.41	142.83	214.24	285.66	69.34	138.68	208.02	277.37
Professional instruments, optical goods, etc	99.32	40.37	46.71	93.42	140.13	186.84	47.03	94.06	141.09	188.12
Transport equipment	88.50	40.37	30.81	61.63	92.44	123.26	34.82	69.64	104.46	139.28
Metal manufactures	88.07	40.37	41.42	82.84	124.26	165.68	47.03	94.06	141.09	188.12
All commodities	6768.92	28.30	1867.71	3735.43	5603.14	7470.86	27.59	55.19	82.78	110.37

Note: MFN means "most favored nation" Tariff.

Source: Monthly Statistics of Foreign Trade of India - DGCI&S, Government of India, and Trade and Balance of Payment Statistics - CMIE, July 2005.

**Table 7: Likely Increase in India's Exports to the PRC under Different PTAs and FTA. 2004–2005**  
(Value in \$ Million)

Name of the Commodities	Total Exports (\$ Million)	Average Tariffs 2004	Increase in India's Exports (\$ Million)				Increase in India's Exports (Percentage)			
			Scenario I	Scenario II	Scenario III	Scenario IV	Scenario I	Scenario II	Scenario III	Scenario IV
Iron ore	2084.43	9.6	300.16	600.32	900.47	1200.63	14.40	28.80	43.20	57.60
Primary and semifinished iron and steel	488.74	9.6	70.38	140.76	211.14	281.51	14.40	28.80	43.20	57.60
Plastic and linoleum products	438.90	9.6	50.25	100.49	150.74	200.98	14.40	28.80	43.20	57.60
Processed minerals	230.85	9.6	33.24	66.48	99.73	132.97	14.40	28.80	43.20	57.60
Inorganic/organic/agro chemicals	217.91	9.6	31.38	62.76	94.14	125.52	14.40	28.80	43.20	57.60
Other ores and minerals	192.48	9.6	27.72	55.43	83.15	110.87	14.40	28.80	43.20	57.60
Drugs, pharmaceuticals, and fine chemicals	106.33	9.6	15.31	30.62	45.93	61.25	14.40	28.80	43.20	57.60
Machinery and instruments	98.14	9.5	7.32	14.64	21.96	29.28	7.46	14.92	22.37	29.83
Residual chemical and allied products	76.77	9.5	10.94	21.88	32.82	43.76	14.25	28.50	42.75	57.00
Nonferrous metals	65.42	9.6	9.42	18.84	28.26	37.68	14.40	28.80	43.20	57.60
Marine products	65.38	9.6	9.41	18.83	28.24	37.66	14.40	28.80	43.20	47.60
Cotton yarn, fabrics, made-ups, etc	64.92	9.5	6.65	13.29	19.94	26.58	10.24	20.47	30.71	40.95
Electronic goods	44.53	9.5	5.04	10.09	15.13	20.18	11.33	22.66	33.99	45.32
Castor oil	40.89	9.6	5.89	11.78	17.66	23.55	14.40	28.80	43.20	57.60
Oil meals	35.81	9.6	5.16	10.31	15.47	20.63	14.40	28.80	43.20	57.60
Finished leather	30.53	9.5	2.02	4.05	6.07	8.09	6.63	13.25	19.88	26.51
Manufacture of metals	28.95	9.5	3.28	6.56	9.84	13.12	11.33	22.66	33.99	45.32
Ferro alloys	28.44	9.6	4.10	8.19	12.29	16.38	14.40	28.80	43.20	57.60
Dyes, intermediaries, etc	18.63	9.6	2.68	5.37	8.05	10.73	14.40	28.80	43.20	57.60
Gems and jewelry	18.46	9.5	2.09	4.18	6.27	8.37	11.33	22.66	33.99	45.32
All commodities	5344.88	9.8	610.22	122.45	1850.67	2440.90	11.42	22.83	34.25	45.67

Source: Monthly Statistics of Foreign Trade of India - DGCI&S, Government of India, and Trade and Balance of Payment Statistics - CMIE, July 2005

If both the PRC and India decide to reduce tariffs by 50% on all commodities of their respective countries, India's imports from the PRC will increase by 55.19% (value terms at \$3,730.74 million), whereas India's exports to the PRC will increase by 22.83%. If both countries reduce bilateral tariffs by 75%, India's imports from the PRC will increase by 82.78%, whereas its exports to the latter's market will increase by only 34.25%. Finally, if both countries agreed to an FTA, maximum gains will accrue to the PRC because of its lower tariffs. If there is free trade between the PRC and India, the simulation results show that India's export to the PRC will increase by only 45.67%, whereas India's imports from the PRC will increase by 110.37%. This is precisely the reason why Indian businessmen have expressed strong reservation to bilateral FTA unless there is a level playing field. Although governments of both sides have not spelled out their plan for either PTAs or FTAs, it is more sensible to think that an FTA will be implemented in a phased manner rather than in one go. It may follow the model of the Indo-Sri Lanka Bilateral FTA, where India has removed tariffs on all its imports from Sri Lanka from 2004 with a small negative list, which has been pruned over the years. On the other hand, Sri Lanka will remove tariffs on all its imports from India by 31 December 2008, after India removed tariffs on all its imports from Sri Lanka. Since Sri Lanka's negative list is relatively large, it has given commitment to prune it progressively over the years.

Simulation results show the likely increase in India's exports to and imports from the PRC due to PTAs and FTA. The percentage is notional in the sense that increases in the value of exports and imports depend on the base values of both way trade. As stated earlier, during 2004–2005, India registered an export growth of 80.87% to the Chinese market, whereas its import growth was only 67.00%, which was much less than exports. Actual growth of trade will be more because of trade creation and trade diversion. Taking experience from the trade among countries of the South Asian Association for Regional Cooperation (SAARC) (Bhattacharya and Mehta, 2000), it is expected that if India and the PRC decide to go for free trade—apart from the items presently traded—a host of other new items, which were not traded earlier is expected to be traded between them. The percentage increase due to the different PTAs alone does not determine the shape of future trade between these two countries. Trade depends on many other factors other than tariffs. In the simulation, only a reduction of tariffs under *ceteris paribus* assumption is considered. Due to an FTA between the PRC and India, a likely increase in India's imports from the PRC will be highest in the following items/products categories: manufacture of metals; professional instruments and optical goods; metaliferrous ores and metal scrap; man-made filament and spun yarn; raw silk (highest increase i.e., 48% in case of an FTA); iron and steel; inorganic chemicals; etc. The entire picture of the likely increase in India's imports from the PRC due to the PTAs and FTA is shown in Table 7.

## **V. Implications to the Asian Economic Community**

The first East Asian summit of regional leaders of ASEAN countries—Australia, India, Japan, South Korea, and New Zealand—was held in Kuala Lumpur on 14 December 2005. In this summit, the above countries discussed the broad contours of a larger Asian Economic Community that will have a significant future impact in forming a larger trade block. On the occasion of the historic First East Asia Summit, the heads of state/government of the member countries of the ASEAN, Australia, and PRC, Republic of India, Japan, Republic of Korea, and New Zealand signed the Kuala Lumpur Declaration. The declaration highlights the importance of strengthening bilateral and

multilateral interaction and cooperation among participating countries of the summit and the world on issues of common interest to enhance peace and economic prosperity.

The declaration aims to: (i) foster strategic dialogue and promote cooperation in political and security issues to ensure that our countries can live in peace with one another and with the world in a just, democratic and harmonious environment; (ii) promote development, financial stability, energy security, economic integration and growth, eradicate poverty and narrow the development gap in East Asia, through technology transfer and infrastructure development, capacity building, good governance and humanitarian assistance, promoting financial links, trade and investment expansion and liberalization; and (iii) promote deeper cultural understanding, people-to-people contact and enhanced cooperation in uplifting the lives and well-being of our people to foster mutual trust and solidarity as well as promoting fields such as environmental protection, prevention of infectious diseases, and natural disaster mitigation.<sup>10</sup>

A larger open trade block is emerging in Asia with the PRC and India as the main drivers. These two countries would act as catalysts of a larger trade bloc intermesh together. The process has already started with both the PRC and India separately hooking into the ASEAN and jointly forming a bilateral FTA. An FTA between ASEAN and the PRC, Japan, South Korea, New Zealand, Australia, and India (East Asia FTA) is possible in the next 10 years. Australia and New Zealand have signed or are negotiating bilateral agreements with many ASEAN+4 countries (see Table 1).

Bilateral FTAs lay the foundation for open economies and contribute to the speeding up of the participating nations' FTA talks with other trade partners, subregional groupings, and multilateral trade talks. Asian countries recognize that bilateral and subregional trade agreements can contribute toward accelerating regional and global liberalization and can act as building blocks within the framework of multilateral trading system.

According to the WTO Secretariat (1995), "RTCAs can strengthen multilateralism by moving generally at a faster pace than the multilateral system, and sharing its goals represent a way of strengthening the latter. There had been a definite trend toward broader and faster market access liberalization of nontariff measures in RTCAs, in parallel to developments in the Multilateral Trading System. The positive effects of RTCAs on the integration of developing countries in the world economy are also noted". According to Ornelas (2005), RTCA's achieve more-or-less the same outcome as multilateral trading arrangements.

The India-PRC FTA will contribute to regional economic integration by injecting additional momentum into the establishment of the East Asian Free Trade Area. Since the PRC and India are two major emerging powers in the world, they should form an FTA to forge economic cooperation which will foster free, fair and rules-based market economies. India has a comparatively strong reservation against the openness of several sectors of the domestic economy. Similarly, the PRC has reservations in opening a few sectors. But under the proposed FTA, they have to open their market to each other, making them more open to participating countries of the proposed Asian community and also to multilateral trading framework. This FTA will induce domestic structural reforms and create open, competitive market environments in both countries, particularly for India. Other Asian countries will follow this example. With the fastest

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<sup>10</sup> ASEAN Secretariat Website, 2005, <http://www.aseansec.org/18098.htm>.

economic growth in the world, this partnership is bound to be successful. Encouraged by the success of an FTA between the PRC and India, other Asian countries may come forward. ASEAN countries are already negotiating FTAs with these two countries. There may be a rush to sign FTAs among the Asian countries. At this moment, ASEAN is driving the integration process in the Asian region, but with the emergence of the PRC and India as major economic powerhouses and relative stagnation faced by the most populous ASEAN country Indonesia, the ability of the ASEAN to serve as the engine of Asian integration has substantially diminished. In such a situation, the PRC and India can act as cohesive partners of an FTA that may be the engine of Asian growth.

An India-PRC FTA may act as a catalyst to strengthen multilateralism under the WTO and to the formation of an Asian community. This cooperation will build bridges and linkages between East and South Asia. It would also help remove barriers which have been delaying countries like Japan and India from signing FTAs with ASEAN. ASEAN is now engaged in five separate FTAs with Australia-New Zealand, India, Japan, Korea, and PRC.

The India-PRC partnership is “trade only” because of its focus on trade integration rather than on non-trade issues like labor standards, environmental standards, intellectual properties, and even restrictions on the use of capital controls, which are the integral parts of US FTA template, which US may eventually want to turn into a WTO forum. Under such multilateral environment, the Asian bloc will be stronger for its approach on “trade only” rather than other peripheral issues in which the US is very interested. This will give a strong bargaining position for the Asian bloc to counter the US template in the WTO negotiations, when they will bring new issues to the negotiating table.

As a part of the look-east policy, India has consciously integrated its economy with East Asia (ASEAN+PRC, Japan and South Korea) since the early 1990s. As a result, the share of East Asia in India's trade is increasing rapidly making it a more important trade partner compared to the EU or the US. India has also been very active in negotiating bilateral trade agreements, primarily with developing countries. It belongs to SAARC and Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), and Kunming Cooperation. India has signed limited FTAs with Sri Lanka (1998) and Thailand (2003). In addition, it signed a number of preferential trade/tariff agreements (tariff concession schemes) with countries/blocs such as Afghanistan, Chile, and MERCOSUR (consisting of Argentina, Brazil, Paraguay, and Uruguay). By the end of June 2005, India signed a CECA with Singapore, which is India's first "comprehensive" FTA. India expects to upgrade its pact with Sri Lanka to a CECA in 2006. Currently, bilateral negotiations are going on with Thailand, ASEAN, Gulf Cooperation Council, Bangladesh (revised and stronger trade agreement), and Mauritius. The government is in various stages of considering talks with the PRC, Egypt, Indonesia, Japan, Korea, Malaysia, and SACU. Under the India-ASEAN frame, the idea is to come up with an overall regional trade and investment agreement, including an FTA on goods, services and investment. After some debate—especially over rules of origin and the impact of ASEAN agricultural imports on Indian farmers—the India-ASEAN FTA is now set to be enforced on 1 January 2007. India is also part of the India-Brazil-South Africa (IBSA) triangle considering a trilateral FTA.<sup>11</sup>

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<sup>11</sup> [http://www.bilaterals.org/rubrique.php3?id\\_rubrique=88](http://www.bilaterals.org/rubrique.php3?id_rubrique=88).

The PRC has taken several bold steps in forming an Asian Economic Community. It has benefited immensely from the economic globalization since it became a member of the WTO on 10 December 2001. To extract more benefits from globalization, it has deepened domestic economic reforms and opened its economy further to the world. The PRC already signed deals with ASEAN, Pakistan, and Thailand (restricted to agriculture), and is talking to Chile, New Zealand, South Africa, and the countries of the Gulf Cooperation Council in the Middle East, which provide more than 40% of PRC's oil. The PRC has strong commitment to participate in the Asian economic unification. On 8 October 2003, the PRC formally signed the ASEAN Treaty of Amity and Cooperation (TAC) and became the first member nation outside Southeast Asia to sign said treaty. The PRC has played a leading role in all FTAs in the Asian region. It is the lead member of ASEAN+1, ASEAN+3, and ASEAN+3+India groupings. The country has been the main instrument in forming economic groupings with ASEAN, India, Japan and Korea. Through different summit level dialogues, ASEAN and four dialogue partners—the PRC, India, Japan, and Korea (ASEAN+4)—are all actively engaged in evolving the FTAs between their pairs. Through the complex web of FTA negotiations, the ASEAN+4 is expected to be a reality. The PRC-India PTA/FTA will facilitate the liberalization process. But Track II dialogue of the formation of ASEAN+4 is at the advance stage due to the cohesive nature of these economies in the Asian region.

In addition, the PRC and India are members of the Asia-Pacific Trade Agreement (APTA) under the Bangkok Agreement together with Bangladesh, India, Republic of Korea, Lao People's Democratic Republic, and Sri Lanka. The PRC ratified the Bangkok Agreement in January 2001 and continued to be a member since then. Thailand and the Philippines originally signed the agreement, but did not ratify it because of their commitment to the ASEAN. The PRC's presence in the Bangkok Agreement as the sixth member makes the group more vibrant. Intra-regional trade among countries of the Bangkok Agreement increased from 3.7% in 1990 to 5.2% in 2004. The Expert Group on the Bangkok Agreement met in 2001, where members suggested expanding their membership to developed countries of Asia, such as Australia, Japan, and New Zealand, to strengthen the Bangkok Agreement in view of their considerable share of world trade.<sup>12</sup>

The Asian Economic Community is getting into shape due to the integration of 14 of the largest and fastest-growing economies of Asia with vast complementarities. A potential trade bloc of ASEAN, Japan, PRC, India, and Korea (JACIK) is emerging as the third pole of the world economy, with a combined GNP of \$13 trillion, which is 30% of the world's total, much larger than the NAFTA or EU. The JACIK's exports will add up to \$1.37 trillion compared to \$1.2 trillion of NAFTA. The combined official reserves of the JACIK economies at \$1.3 trillion in 2002 are much larger than those of the US and the EU combined. Foreign exchange reserve of JACIK countries is more than \$2.5 trillion at present, which is obviously much more robust compared to the EU or NAFTA.

Welfare gains of the JACIK countries from the economic integration are enormous. Welfare gains in totality can be measured not only by liberalization of trade but also adopting measures to make capital freely mobile within the community, harmonizing customs procedures and product standards, and mechanisms to ensure an equitable

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<sup>12</sup> Kumar, N. and Bhattacharya, S.K., 2001, Extending Bangkok Agreement to the Developed Countries in the Asia Pacific Region: An Indian Perspective. Paper presented at the Expert Group Meeting on the Revitalization of the Bangkok Agreement, UNESCAP, 29–30 October.

distribution of gains. The study based on the computable general equilibrium model shows that trade liberalization among the JACIK countries in the framework of a regional trade agreement could generate efficiency gains worth \$147 billion. If a regional trade agreement is combined with investment liberalization and mobility of skilled manpower, the gains from integration will add up to \$210 billion representing more than 3% of GDP of the JACIK countries. What is more important in this scenario is that under a similar type of integration, welfare gains of the rest of the world would also improve by \$109 billion, suggesting that Asian economic integration is Pareto optimal.<sup>13</sup> In addition, certain portion of total available regional saving of \$2 trillion can be used to invest in regional infrastructure such as transport infrastructure, gas and oil pipelines, satellites and broadband cables, which can generate huge potential welfare gains that could add up to hundreds of billions of dollars because of the unutilized capacities existing in Japan, Korea, and other Asian countries in the areas of engineering, construction, and other infrastructure-related industries and service sectors.

Bhattacharyay (2006) discussed the future shape of RTCAs in Asia. The future shape of trade blocs will be based on consolidation and expansion of subregional groupings into a more cohesive arrangement, along with the establishment of common principles for a regional economic partnership to include broader areas of economic cooperation. Under the banner of the Asian Summit, it is expected that Australia, and New Zealand will join the ASEAN+4 group to make the ASEAN+6 group. Given that these 16 countries have trade links with each other, it makes sense to liberalize trade and the investment sectors further under the East Asian FTA.

In view of the high growth rates and large market sizes of some South Asian countries, countries such as Bangladesh, Pakistan, and Sri Lanka are also expected to join the trading block. Pakistan signed the Instrument of Accession to the Treaty of Amity and Cooperation in Southeast Asia, Jakarta, on 2 July 2004. Pakistan is negotiating RTCAs with the PRC, Malaysia, and Singapore. The next entrant to the trade block will be Pakistan. Sri Lanka has already signed RTCAs and proposed one with Singapore. Subsequently, other Asian countries will join in stages when they are ready. This will lead to a giant free trade area modeled on the NAFTA without a monetary union in the form of a single currency.

Japan is proposing an \$80 million to \$100 million fund over a 10-year period to establish a Comprehensive Economic Partnership in East Asia spanning 16 countries under the Nikai Initiative, which will foster closer economic linkages among the 10-member ASEAN, and PRC, Japan, and South Korea + India, Australia, and New Zealand. Japan's Ministry of Economy Trade and Industry formulated the Nikai Initiative, following the 11<sup>th</sup> ASEAN Summit in Kuala Lumpur last December (South Information Gateway, 2006).<sup>14</sup> A more formal East Asian Summit is expected to supersede the ASEAN+3 framework and underscore the region's seriousness in pursuing its goals to achieve an EU-style single Asian market and community by 2020. The proposed free trade area of Asian community would create a combined population (or a consumer base) of 3.1 billion people and combined GDP of almost \$10 trillion, or almost half of the world's population and a quarter of its GDP.

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<sup>13</sup> This simulation exercise is done by Sinha Roy, S. et al (2004), Complementarities and Potential of Intra-regional Transfers of Investment, Technology and Skills in Asia. In *Towards an Asian Economic Community: Vision of a New Asia*. Edited by Nagesh Kumar, RIS and ISEAS, New Delhi and Singapore, 123–55.

<sup>14</sup> [www.webevents.bernama.com/ssig/index.php?option=com\\_content&task=view&id=3085](http://www.webevents.bernama.com/ssig/index.php?option=com_content&task=view&id=3085).



## VI. Conclusion

Regional cooperation and integration in trade, investment, and infrastructure development can foster outward-oriented development and generate economic and social benefits. Integration will bring reduced transaction costs; greater productive infrastructure services; lower trade barriers; faster communication of ideas, goods and services; and rising capital flows. Integration requires a strong political will not only at the national level, but also at the regional level (Bhattacharyay and De, 2005). The environment for a PTA/FTA is better than ever between the PRC and India. The trade cooperation will improve the quality of life of common people in both countries. With the recent breakdown and suspension of the Doha negotiations and aggressive pursuit of these bilateral trade deals worldwide, the opportunity costs of not accelerating bilateral and regional integration are high for Asian economies, particularly for the fastest-growing, large, and neighboring countries like the PRC and India.

If bilateral and subregional RTCAs are compatible with each other and with the WTO agreements, then these will be building blocks for worldwide multilateral agreements. Asian countries recognize that bilateral and subregional trade agreements can contribute toward accelerating regional and global liberalization and can act as building blocks within the framework of multilateral trading system. PRC-India cooperation will build "bridges" and "linkages" between East and South Asia and could facilitate the formation of an Asian Economic Community.

The PRC and India are two largest and fastest-growing economies in Asia. An FTA between the PRC and India certainly goes in favor of the PRC and is disadvantageous to India at least in the short run. This is because of the high tariff regime in India and the low tariff regime in the PRC. An FTA between the PRC and India may affect the economic efficiency between these countries because they would exclude and discriminate against the countries accounting for nearly 99% of the world trade. This discrimination works particularly to the disadvantage of India because of its high tariff barriers. The PRC will gain from this process because of its much lesser tariff compared to India.

When India gives duty free access to the PRC, tariff revenue previously collected on its imports from the PRC turns into exports revenues for the exporting firms of the PRC, which is obviously very high because of the high tariff regime in India compared to that of the PRC. In this process, Chinese firms will be gain more compared to Indian exporters whereas Indian exporting firms have less to gain from the tariff free access in the PRC. Conversely, when the PRC gives duty free access to India, tariff revenue previously collected from India's imports turns into export revenues for the export firms of India, which is obviously very low because of lower tariffs in the PRC. Since tariffs in India are very high, Chinese exporting firms have more to gain from the duty free access to India while Indian exporting firms will gain much less from duty free access to the PRC because of the latter's very low tariffs. As a second best solution, increase in duty free imports from the PRC might translate at least partially to a reduction in consumer prices, which will be substantially high, compared to a reduction in prices to the Chinese consumers. Therefore, welfare gains of Indian consumers will be higher than welfare gains of Chinese consumers. As long as India continues to have higher tariffs than the PRC, the danger of potential losses from the transfer of tariff revenue to the Chinese

firms in the form of higher profits will remain. As Panagariya (2005) suggested that while thinking of an India-PRC FTA, India should remain committed to nondiscriminatory liberalization and make all out efforts to bring down its tariff to the PRC levels in 2–3 years.

To balance the adverse situation that Indian exporters mostly belonging to the manufacturing sector face. The FTA should focus on complementarity between the PRC and India. The PRC should open up its service sectors so that India can utilize its comparative advantage and balance of trade between them will not be skewed towards the PRC. India can start exporting new services to the PRC market. They can work together by pooling financial and manpower resources to form a partnership for competing with other developing countries in the world market in several manufacturing and service areas, such as IT services and textiles.

Trade integration between the PRC and India is going to be stronger through private sector initiatives irrespective of whether an FTA is signed or not. In view of the recent wave of FTAs, the importance of a PRC-India FTA should be viewed on economically and politically grounds. This FTA could also be a countervailing power to withstand the excesses of economic globalization.

The first step to create a vibrant regional trading bloc between the PRC and India is to move toward a PTA with reduced tariffs in a phased manner covering commonly agreed, selected, and manufactured services and agricultural products over a long time horizon and then to form FTAs. The ultimate goal should be an FTA with a free flow of goods, services, investment, labor, and capital.

While moving toward this objective, many complicated problems of other related arrangements will be faced. First is the definition of the “rules of origin” then harmonization of the rules of origin and other issues relating to investment regimes. According to Panagariya (2005), given the already operational regional arrangement in this region, this is bound to result in a “spaghetti bowl” type of phenomenon where, for a given product, there could be several different tariff rates depending on what origin is assigned to it. Another related problem is the harmonization of standards between the PRC and India and uniform certification procedures, which are vital to any kind of trade liberalization that lead to PTAs and FTA. A third problem is identifying a negative list of commodities of the respective countries and a detailed plan to prune it in a phased manner followed by the preparation of comprehensive national schedules of items to be offered for concession similar to the India-Sri Lanka FTA. This may not be an easy task when the tariff levels are asymmetrically distributed between these two countries.

In this paper, simulations are based on tariffs only on the basis of presumption that tariff is the only barrier to trade, and the success of an FTA depends on the removal of tariffs only. Therefore, every country should present a comprehensive list of concessions and offer items for duty free treatment. However, nontariff barriers existing in these two countries are not taken into account. It is to be noted that nontariff barriers are more trade restrictive and its distortion power is much more than tariffs. The success of an FTA depends on how the nontariff barriers to bilateral trade have been addressed and what measures each country is taking to remove such labyrinthine nontariff barriers to bilateral trade.

In this study, simulations have been done in a static framework. Simulations will give better result if the entire exercise is carried out in a dynamic framework. An attempt should also be made to estimate the welfare gains due to an FTA between the PRC and India. Future research should attempt to estimate trade potentials of these two countries by estimating stochastic frontier production function using Gravity Model, which provides an empirically tractable general equilibrium framework for bilateral trade flow analysis.

If bilateral and subregional RTAs are compatible with each other and with the WTO agreements, then these will serve as building blocks and contribute toward accelerating regional and global liberalization within the framework of multilateral trading system. An FTA will contribute, through trade creation, to structural reforms in participating countries. Economic integration of a country requires that it should open to foreign investment, adhere to flexible labor laws, and practice careful fiscal policies. Countries with strong reservation against openness of domestic economy have to open their market. Therefore, the PRC-India FTA will lay the foundation for more open economies, induce domestic structural reforms, and create open and competitive market environments in both countries, particularly in India. This example will be followed by other Asian countries. An India-PRC FTA may act as a catalyst to strengthen multilateralism under the WTO and to formation of the Asian Economic Community. This cooperation will build bridges and linkages between East and South Asia, which is crucial for the formation of the Asian community. A more formal East Asian Summit is expected to supersede the ASEAN+3 framework and underscore the region's seriousness in pursuing goals to achieve an EU-style single Asian market and community by 2020.

Finally, an advocacy of enhanced cooperation between the PRC and India does not imply any restriction upon multilateral WTO global trade framework or other existing regional cooperation in Asia and the rest of the world. Cooperation among major Asian countries is sustainable regardless of operation of other regional cooperation initiatives and should not be perceived as constraints in developing potential cooperation among Asian economies.

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