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INDO-CHINA TRADE RELATIONS: PRESENT TRENDS AND FUTURE PROSPECTS

Salahuddin Ayyub*

Abstract

India and China started opening up in the International market very late. They were in-ward looking economies in the beginning. But when they realized the importance of trade, they also opened up. The nature of both the economies changed from an in-ward looking economies to an out-ward looking and a lot of trade took place between the two nations. Constant Market Share Analysis has been used to find out the result from the trade data. It has been proved empirically that bilateral trade has given advantage to both the nations and still there is a lot of potential in both the countries to increase their bilateral trade. There are few commodities which are produced in India just to be exported to China and there are some products in China also which are produced to be sold in India only. So they have specific demand and supply relation for each other. The most important observation made in the paper is that, the trade between India and China is not of the nature that it is increasing because the world trade is increasing; instead, there are some commodities which are being traded by India and China for each other only because they are demanded in each other's country. And the volume of trade of those commodities is increasing because the demand for them is increasing in the other country, not because of the increase in the world trade volume. If those commodities are not traded with each other, they will find it difficult to sell it anywhere else in the international market.

Keywords : *Constant Market Share Analysis, Market Concentration and Commodity Export Specialization, Regression.*

Introduction

India and China, with huge population, big market size and a large area of the world, are very important in the international economic, political and security sphere. And their bilateral relations, especially economic relations are much more important for the world and for them as well.

Both the countries have a very old history. Their history goes back to 2nd century

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B.C. over the past 2000 years or so; people of both countries have been keeping friendly contacts with each making up what the other lacks. They have a very long history of friendship and cultural exchange. The high Himalayas lie between the two countries but this could never stop the interaction of people from both sides. Most of the time in the history, they have been facing similar conditions having common economic and political problems and challenges.

When we look at the very recent past we see that both the countries were colonized in the same age and both of them fought for freedom and after independence both the countries faced the challenge of Imperialism posed by developed countries or the West. Today they have similar economic condition, with high population, poor economic base, and imbalanced regional development. They shoulder the same mission of developing the economy, eradicating poverty and transforming the traditional society into a modern one, with high industrialization and high international trade and investment.

China began opening to the outside world in the late 70s of the last century, India started opening up in the late 80s. Today both of them are heading in the same direction with similar speed but different achievements.

The Chinese and Indian growth rates were similar during 1952-70, but the Chinese rate of growth has accelerated since the reforms. Maddison's estimates show that the Chinese GDP grew annually at 4.4% during 1952-78, and 7.5% during the period 1978-95; per capita GDP grew at 2.3% and 6%, respectively, during the same periods. In India, on the other hand, per capita GDP grew at an annual rate of only 1.7% and 2.8%, respectively.¹ However, the annual Indian growth rate increased from the mid-1990s onward: in 1998 and 1999 it was rather close to China's. This evidence suggests that, in principle, it is feasible for India to close the gap. But what prevents India from doing so? Apart from low savings and investment rates, much lower FDI and exports, other factors explaining slow growth are India's greater dependence on subsistence agriculture, the poor performance of the organized industrial sector, especially since the mid-1980s, and less effective decentralization of economic decision making.

In China, much faster growth can be explained by several economic and institutional factors: more favorable initial conditions, high capital accumulation backed by large savings, high and growing FDI inflows, high literacy rates, greater homogeneity of the Chinese society, a larger stock of inherited agricultural assets created under the communes, a larger and richer expatriate Chinese community, and the country's proximity to Hong Kong.²

Although there is a difference in the levels of development and growth between the two countries, India and China being developing countries face the common challenges of market protection and domestic production's security and it is thought by the experts that they can serve their interests much better if they come together on a platform with all other developing and under developed countries.

"Evidence for both China and India shows that trade liberalization and openness

1. Maddison, *Chinese Economic Performance*, P.56

2. Ashok Guha, "Economic Reform in India and China: What Each Can Learn from the Other," *Journal of Asian Economics* (1993), pp. 333-45.

can enhance growth, as is indicated by an increase in exports-to-GDP ratios and growth in trade”.³

India and China are considered to be the two of the most important countries among developing nations. They are said to be the key players of the Asian Economy. They are economically and politically much more strong than other developing countries and their economies are growing faster than any other country in the group.

Keeping these things in view, it can be observed easily that their bilateral economic and political relation becomes very important for the whole world and together India and China can play a big role in the world economy. But this is also a fact that these two countries did not always have good relations. Some times in the past they had bitter relations also on the issues of boundary and territorial reasons.

At a time in 1960s they had fought two wars. And today when territories are becoming less important than the area of the market and Economic strength, the economic relation between countries became very important and friendship, peace and tranquility were considered to be more beneficial for both of them to survive in the international sphere. *Tarun Khanna*⁴ says “the rhetoric in both countries has shifted from political tensions on the border to lifting the millions of people in both countries out of poverty”. Now they have such a strong interdependence that the bilateral trade volume scored a historical high of 13 billion US dollars in 2004 as merely 260 million dollars in 1990, fulfilling ahead the target of 20 billion dollars.

India China trade relations are the most important part of bilateral relations between India and China. In the bilateral trade of India and China, most of the time China has got trade surplus but from a temporary decline in the influx of Chinese imports in the Indian markets, the scenario was changed many times and India was enjoying a positive balance of trade with China. The India China trade relations are regulated by the India China Joint Business Council (JBC), which ensures a free exchange of products and services between the two nations.

It has been believed and expressed by the government of both the countries on different occasion that they cannot grow fast in isolation from each other; perhaps if they cooperate with each other both of them will get the advantage.

Chinese Vice- President, Hu Jintao says in his speech in 2000, “China cannot achieve development in isolation from Asia, and Asia cannot realize prosperity without China. It is a consistent policy of the Chinese Government to strengthen the good neighborly and friendly relations with its surrounding countries”.

Once again during his visit to India in November, 2006 he said “Asia will dominate the next century if China and India can strengthen their trade and business links”.⁵

Establishing diplomatic relations in 1950, China and India signed two major trade

3. *Tun-oy Woo*, “*Foreign Trade and Investment Policies in the Post-Deng Era*,” *China in the Post-Deng Era*, ed. *Joseph Y. S. Cheng* (Chinese University Press, 1998), pp. 363-424.

4. *Professor at Harvard Business School*.

5. *Bhattacharaya, Swapan K.* “*Gains and Losses of India-China Trade Cooperation*”, *CESIFO Working Paper No. 1970*, (April, 2007). P.22.

agreements in 1951 and 1984 respectively. Statistics show that bilateral trade volume has reached one height after another since 1995. The Bilateral trade volume between the two countries topped 3.6 billion dollars in 2001, 4.95 billion in 2002, 7.6 billion in 2003 and 13 billion in 2004.

Experts believe that both China and India have advantages in developing bilateral trade and economic cooperation of various forms, China can do a good job in exporting to India more electric equipments, machinery, pharmaceuticals and chemicals, while India has a bright prospect in exporting to China more automobile replacement parts, IT products, drugs, and farm produce.

Number of studies have been done on the Economic and political relations of the two countries. Some believe that India and China have been rivals from the very beginning and they will be so in the future as well, and they say that recent developments in the relations are temporary and they are bound to stand against each other in the future when their interests will clash at any point of time. On the other side there are number of scholars who believe that now both the countries are moving towards peaceful relations and this relation will be strengthened more in the future, because they believe that now both the countries have realized that it is beneficial for them to keep friendly relations with each other. Some of the studies which are done on the India China relations are cited below-

Shao Chuan Leng in his study, "India and China" states that India and China both desire to continue a tradition of friendship but it faces potential conflicts between the rivals for leadership in Asia due to different forms of government in both the countries and their conflicting trade interests in Southeast Asia.

Nimmi Kurian in his book "Emerging China and India's Policy Options" writes that Politics plays a big role in the bilateral trade and economic relations between two countries. India and China turn out to be competitive or cooperative depending upon their need of time. Today their policy for each other is of competitive-cooperation.

Prof. Shri Prakash in his paper, "Sino-India", goes against the traditional argument that Chinese trade expansion would always be at the cost of the other Asian countries, especially at the cost of India's interest. He says that commodity composition of these nations shows totally a different picture, where each nation is getting advantage out of trade and exchange. He says that, China is specialized in manufacturing and India is better in services, together they can build a huge market.

Prof. Shri Prakash in his paper, "Potential of India-China Economic Relations", states that with the China's joining of WTO, bilateral trade between India and China has accelerated due to lower tariffs. Although these two countries are competitors in few fields but there are many areas, where they can do better by cooperation. The nature of their production shows that there is a huge potential for bilateral trade and development.

Wang Hongyu in his paper on "Sino- Indian Relations; Present and Future" explains that today India and China are coming closer because it is in their political and economic interest. After Cold war it was believed that the International Politics can only be stopped from becoming a unipolar system if they come together and make a front. He explains that, there are number of areas where India and China can become more

efficient if they cooperate and make strong exchanges.

Professor Khalid Mahmud has written a paper with the title “Sino-Indian Relations: Future Prospects-Friendship, rivalry or Contention”, which is published in the journal, *Regional Studies*, 2007. He states that today both India and China have put back the issues of boundaries and political disputes against each other and are more concerned about the economic cooperation and development. He further states that this economic cooperation is a short term policy of both the countries, they happened to be rivals in reality and in the long run they can fight for Hegemony in Asia and even the boundary issues can come up in future. So today the relations are being regulated by economic forces and in the future these forces can turn into politics.

J. Mohan Malik in his research paper on “China – India Relations in the Post-Soviet Era: The continuing Rivalry” writes that the softness in Sino Indian relations is not going to remain for long, the two sides are poised for rivalry for regional dominance and influence in the multipolar world of the 21st century. China’s ambitions as a global and regional power and as a Third World standard bearer bring it into competition with India’s similar ambitions. Also, both the countries need west for its capital, market and technology, more than they need each other. He further says that neither Indian nor Chinese defense planners can rule out the possibility of a renewed confrontation.

John W. Garver in his paper “The Indian Factor in Recent Sino-Soviet Relations” explains the reasons why China strengthened its relations with India. First reason is the recognition of India’s clear pre-eminence in south Asia. Second is the reappraisal of India’s relation with the Soviet Union. And thirdly, there are economic considerations. So according to him, Economic factors have played a role in improving political relations between India and China.

Vidhan Pathak in his paper, “India’s Energy Diplomacy in Francophone Africa: Competitive-Cooperation with China”, explains that India and China have to compete with Strong Developed countries in the International Energy production market. They can survive in the market only if they come together and work jointly on different projects, as was done recently in Africa. He says that although India and China are new in the International Energy market, but together they can compete with well established countries.

P.R. Kumaraswamy in his paper “India’s Energy Cooperation with China: The Slippery Side” which is published in 2007 in *China Report*, states that China’s cooperation with India in the energy sector is very diplomatic in its nature. With regard to countries that have tensions with the US such as Iran, Syria and Sudan, the Chinese oil companies would more than happy to cooperate with India. He says that China’s energy cooperation with India will not be across the board but will primarily be influenced by the American factor. Wherever US factor is not involved, China would use its power and influence to elbow out India.

Most common argument encountered in the literature is that the success or failure of the relations between the two countries will depend on the political will of both sides and the perception of each other as allies or rivals. A very few studies have been done which highlight the economic reasons of the growing relations. An attempt has been made in this paper to find out the real economic relations and nature of trade

between India and China during different phases of history with a special focus on the years between 1990-2005, when both India and China were following policies of trade liberalization and the possibilities of promoting bilateral trade between the two countries.

Pattern of India-China Trade

With reference to Table 1, two immediate observations can be made on India China trade. First, trade between the two countries has been small relative to totals. In 1990, total trade of India with China was less than 1 percent of its total trade. Indian exports to China was just \$17,940,190, while India's exports to the world was \$17,940,183,040 and Indian imports from China was of the value \$32,881,756 while Indian imports from the world was equal to the value \$23,799,150,592.

In the same way China's trade with India was very low as compare to its total trade with the world. China's trade with India was .04 percent of total China's trade in 1990.

But trade between India and China has been increasing, so is the percentage share of Indo-China trade in the total trade of both the countries with the world. The percentage share of India's trade with China went up to 7% of India's total trade in 2005. In the same way China's trade with India increased to 1.25% in 2005 which was only 0.04 % in 1990.

Second, during the period 1990-2005, the trade between the two countries is mostly in favour of China except for the years 1991 and 1992. The balance of trade between India and China has been increasing continuously in favour of China. It was \$14,941,560 in 1990 and went up to \$4,126,107,489 in 2005.

Although the two countries are neighbors, their trade relations are very weak as compared to their trade relations with other countries which are very far from them. Here comes the question that this weak trade relation is explained with political relations of both the countries or it is so due to the economic factors?

Table: 1—India's Trade with China, 1990-2005

<i>U.S. Dollar (\$)</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>
Indian exports to China	17,940,196	48,269,976	157,847,009	279,054,592	254,219,312	331,691,648	614,775,496	718,123,072
Indian exports to the world	17,940,183,040	17,899,886,592	20,711,291,014	22,236,917,760	26,330,005,504	31,698,567,168	33,468,591,194	34,793,750,528
percentage share	0.1	0.2697	0.7621	1.2549	0.9655	1.0464	1.8369	2.0639
Indian imports from China	32,881,756	20,960,224	140,806,284	299,427,616	757,266,944	810,135,104	756,521,641	1,110,555,520
Indian imports from the world	23,799,150,592	19,509,415,936	24,452,408,029	23,304,073,216	28,654,737,408	36,592,062,464	39,112,814,392	41,429,430,272
Percentage share	0.1382	0.1074	0.5758	1.2849	2.6427	2.214	1.9342	2.6806
Balance of trade	-14,941,560	27,309,752	17,040,725	-20,373,024	-503,047,632	-478,443,456	-141,746,145	-392,432,448
India's total trade with China	50,821,952	69,230,200	298,653,293	578,482,208	1,011,486,256	1,141,826,752	1,371,297,137	1,828,678,592
India's total trade with the world	41,739,333,632	37,409,302,528	45,163,699,043	45,540,990,976	54,984,742,912	68,290,629,632	72,581,405,586	76,223,180,800
Percentage share	0.1218	0.1851	0.6613	1.2702	1.8396	1.672	1.8893	2.3991

Source: www.comtrade.un.org

Table: 2—India's Trade with China, 1990-2005

<i>U.S. Dollar (\$)</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
Indian exports to China	427,006,208	538,366,851	844,149,250	962,357,532	1,966,172,416	2,918,799,137	5,300,803,490	6,785,069,990
Indian exports to the world	33,207,324,672	36,671,914,156	45,249,594,326	44,306,497,063	52,471,439,360	63,035,533,926	79,834,064,105	103,404,167,142
percentage share	1.2859	1.4681	1.8655	2.172	3.7471	4.6304	6.6398	6.5617
Indian imports from China	1,097,686,400	1,287,182,259	1,527,513,101	2,057,847,839	2,779,142,656	4,004,562,997	6,711,653,926	10,911,177,479
Indian imports from the world	42,424,950,784	49,713,483,913	51,377,295,905	51,908,474,689	61,118,148,608	77,202,405,606	108,247,954,259	149,749,965,726
Percentage share	2.5874	2.5892	2.9731	3.9644	4.5472	5.1871	6.2003	7.2863
Balance of trade	-670,680,192	-748,815,408	-683,363,851	-1,095,490,307	-812,970,240	-1,085,763,860	-1,410,850,436	-4,126,107,489
India's total trade with China	1,524,692,608	1,825,549,110	2,371,662,351	3,020,205,371	4,745,315,072	6,923,362,134	12,012,457,416	17,696,247,469
India's total trade with the world	75,632,275,456	86,385,398,069	96,626,890,231	96,214,971,752	113,589,587,968	140,237,939,532	188,082,018,364	253,154,132,868
Percentage share	2.0159	2.1133	2.4545	3.139	4.1776	4.9369	6.3868	6.9903

Source: www.comtrade.un.org

Table: 2.1—China's trade with India, 1990-2005

<i>U.S. Dollar (\$)</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>
China's export to India	32,881,756	20,960,224	140,806,284	299,427,616	757,266,944	810,135,104	756,521,641	1,110,555,520
China's export to the world	62,091,391,501	71,842,514,590	84,940,015,164	91,743,948,346	121,006,259,433	148,779,499,983	151,047,461,759	182,791,584,798
Percentage share	0.053	0.0292	0.1658	0.3264	0.6258	0.5445	0.5009	0.6076
China's imports from India	17,940,196	48,269,976	157,847,009	279,054,592	254,219,312	331,691,648	614,775,496	718,123,072
China's imports from the world	53,345,121,297	63,790,621,602	80,585,300,523	103,958,939,693	115,613,601,803	132,083,499,604	138,832,734,845	142,370,324,066
Percentage share	0.0336	0.0757	0.1959	0.2684	0.2199	0.2511	0.4428	0.5044
Balance of trade	14,941,560	-27,309,752	-17,040,725	20,373,024	503,047,632	478,443,456	141,746,145	392,432,448
China's total trade with India	50,821,952	69,230,200	298,653,293	578,482,208	1,011,486,256	1,141,826,752	1,371,297,137	1,828,678,592
China's total trade with the world	115,436,512,798	135,633,136,192	165,525,315,687	195,702,888,039	236,619,861,236	280,862,999,587	289,880,196,604	325,161,908,864
Percentage share	0.044	0.051	0.1804	0.2956	0.4275	0.4065	0.4731	0.5624

Source: www.comtrade.un.org

Table: 2.2—China's trade with India, 1990-2005

<i>U.S. Dollar (\$)</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
China's export to India	1,097,686,400	1,287,182,259	1,527,513,101	2,057,847,839	2,779,142,656	4,004,562,997	6,711,653,926	10,911,177,479
China's export to the world	183,808,987,822	194,930,778,542	249,202,551,015	266,098,208,590	325,595,969,765	438,227,767,355	593,325,581,430	761,953,409,531
Percentage share	0.5972	0.6603	0.613	0.7733	0.8536	0.9138	1.1312	1.432
China's imports from India	427,006,208	538,366,851	844,149,250	962,357,532	1,966,172,416	2,918,799,137	5,300,803,490	6,785,069,990
China's imports from the world	140,236,765,269	165,699,066,576	225,093,731,030	243,552,880,618	295,170,104,110	412,759,796,407	561,228,747,993	659,952,762,119
Percentage share	0.3045	0.3249	0.375	0.3951	0.6661	0.7071	0.9445	1.0281
Balance of trade	670,680,192	748,815,408	683,363,851	1,095,490,307	812,970,240	1,085,763,860	1,410,850,436	4,126,107,489
China's total trade with India	1,524,692,608	1,825,549,110	2,371,662,351	3,020,205,371	4,745,315,072	6,923,362,134	12,012,457,416	17,696,247,469
China's total trade with the world	324,045,753,091	360,629,845,118	474,296,282,045	509,651,089,208	620,766,073,875	850,987,563,762	1,154,554,329,423	1,421,906,171,650
Percentage share	0.4705	0.5062	0.5	0.5926	0.7644	0.8136	1.0404	1.2445

Source: www.comtrade.un.org

Table: 3—China's exports to India, 1990-2005*(In percentage)*

<i>Period</i>	<i>Export growth</i>	<i>Market expansion effect</i>	<i>Competitiveness effect</i>
1990-91	-36.26	-18.02	-18.23
1991-92	571.78	25.34	546.44
1992-93	112.65	-4.70	117.35
1993-94	152.90	22.96	129.94
1994-95	6.98	27.70	-20.72
1995-96	-6.62	6.89	-13.51
1996-97	46.80	5.92	40.87
1997-98	-1.16	2.40	-3.56
<i>Period</i>	<i>Export growth</i>	<i>Market expansion effect</i>	<i>Competitiveness effect</i>
1998-99	17.26	17.18	0.08
1999-00	18.67	3.35	15.32
2000-01	34.72	1.03	33.68
2001-02	35.05	17.74	17.31
2002-03	44.09	26.32	17.78
2003-04	67.60	40.21	27.39
2004-05	62.57	38.34	24.23

*Source: Compiled from UN Commtrade data***Table: 4—India's exports to China, 1990-2005***(In percentage)*

<i>Period</i>	<i>Export growth</i>	<i>Market expansion effect</i>	<i>Competitiveness effect</i>
1990-91	169.06	19.58	149.48
1991-92	227.01	26.33	200.68
1992-93	76.79	29.00	47.78
1993-94	-8.90	11.21	-20.11
1994-95	30.47	14.25	16.23
1995-96	85.35	5.11	80.24
1996-97	16.81	2.55	14.26
1997-98	-40.54	-1.50	-39.04
1998-99	26.08	18.16	7.92
1999-00	56.80	35.84	20.95
2000-01	14.00	8.20	5.80
2001-02	104.31	21.19	83.11
2002-03	48.45	39.84	8.61
2003-04	81.61	35.97	45.64
2004-05	28.00	17.59	10.41

Source: Compiled from UN Commtrade data

Methodology

1. Constant Market Share Analysis

We analyze the trade pattern of India China with the help of ‘Constant Market Share Analysis’. It’s a method, which has been widely applied to many country and regional studies. In its most simple form, the model decomposes export growth into two components: (1) the effect of the increase in total world trade, that is, the expansion effect; (2) the effect of increased competitiveness and therefore the ability to capture a larger share of the markets in the base year, that is, the competitiveness effect.

The first component represents what a country’s growth in exports would have been if it had maintained its export share. The second represents any additional export growth due to changes in relative competitiveness. The competitiveness effect can be further decomposed into a market share growth effect and an interaction effect.

The expansion effect is usually determined by exogenous factors outside the control of exporting countries. Among these factors are, growth of income in destination markets, income elasticities, cross price elasticities, and relative price changes involving complements and substitutes. The competitiveness effect is largely determined by endogenous factors internal to the focus country. Among them are changes in the production level, internal demand, export incentives, and so forth.

In a two-country framework, the export of one country is necessarily the import of the other. Thus, the value of trade is determined by the equality of export supply and import demand. In analyzing the behavior of a country’s export, it is necessary to look at both the supply and demand sides.

The constant-market-share model is an attempt along this line, where a country’s export is dependent on total imports of the foreign country (demand side variable) and its own share of world exports (supply side variable). Algebraically, we denote the above as:

X_i = export value of home country to the foreign country at time i .

S_i = share of the home (exporting) country to the foreign country’s total world imports at time i .

M_i = total world imports of foreign country at time i

By definition,

$X_i = S_i M_i$ for all i

Our concern is to express exports in terms of percentage growth and decompose the sources of growth. To do this, we arbitrarily set $i = 0$ as the “initial” time period and $i = 1$ as the end period. The end in view is to determine an expansion for $[(X_1 - X_0)/X_0]$, which is the ordinary measure for growth rate for exports. Since

$$(1) X_1 = S_1 M_1$$

$$(2) X_0 = S_0 M_0$$

It follows that

$$(3) X_1 - X_0 = S_1 M_1 - S_0 (M_1 - M_0)$$

$$(3') X_1 - X_0 = S_1 M_1 - S_0 M_0 + S_0 M_1 - S_0 M_1$$

$$(3'') X_1 - X_0 = S_0 (M_1 - M_0) + M_1 (S_1 - S_0)$$

Dividing the left hand expression by X_0 and the right hand by S_0M_0 , we get

$$(4) \quad X_1 - X_0 / X_0 = S_0 (M_1 - M_0) / S_0 M_0 + M_1 (S_1 - S_0) / S_0 M_0$$

By simple algebraic formulation, it can shown that

$$(5) \quad X_1 - X_0 / X_0 = M_1 - M_0 / M_0 + S_1 - S_0 / S_0 [1 + M_1 - M_0 / M_0]$$

All the entries are now expressed in growth form. Letting the lower case letters x , m , and s represent their respective growth rates,

$$x = X_1 - X_0 / X_0$$

$$m = M_1 - M_0 / M_0$$

$$s = S_1 - S_0 / S_0$$

We arrived at the desired result

$$(6) \quad x = m + s (1 + m)$$

Where,

x = export growth

m = market expansion effect

$s (1+m)$ = competitive effect

s = market share growth

sm = interaction effect

We generalize equation (6) to take into account an analysis over t number of years.

Then,

$$(7) \quad x/t = m/t + s/t (1+m)$$

if for example, the relevant time frame is 1980 –85, then $t=5$. For the yearly based analysis, $t=1$ and hence, equation (7) reduces into equation (6).

The particular idea that must be remembered is that export growth translates into the interplay between the importing country's world import behavior and the exporting country's ability to have its exportables be part of the total imports of the other country.

In analyzing the former, the *ceteris paribus* condition holds, including the initial level of trade share ($S?$) while the latter examines how the trade share has changed, every thing else being constant.

Results in the Table: 3 show that export rates are positive for most of the years except for the years 1994 and 1998. In most of the years, the competitiveness effect is greater than the market expansion effect.

The trend revealed by the decomposition of the export growth implies that trade between India and China had not been attributable wholly to political considerations alone. India is able to trade with China on the basis of her ability to compete with other countries. It can also be said that increases in Indian exports to China was due more to the Indian ability to increase its market share through factors within its control rather than to improvements in the market situation in China.

After examining the behaviour of Indian exports, we proceed to examine the behaviour of Chinese exports. Chinese exports to India reveal essentially the same pattern. Table: 4 shows that Chinese export growth are attributed more to the competitiveness of Chinese products than to the increase of Indian imports. The fact that China exhibited the same pattern reinforces the assertion that trade has not been based entirely on political concessions but on competitive strength as well.

2. Market Concentration and Commodity Export Specialization Model

The objective of this model is to determine whether the goods country A exports into country B is based on A's ability to export these goods to B *per se*, or whether country A exports these goods to the world based on her ability and that country B just happens to demand A's exports to the world. This is an important point to make since it answers the question: Does India export goods to China because they are of special interest to the Chinese specifically, or does the India exports these goods to the world, and China happens to be one of its buyers?

The question is answered by examining two ratios: the first ratio is the share of each commodity group to total exports of a country to the world and the second ratio is the proportion of each commodity group in the total exports of the home country to the foreign country. In a sense, if changes in the first ratio are significantly responsive to changes in the second, then, the goods in question are being "export-tailored" or "concentrated" by the exporting country to the importing country and not upon the world *per se*.

The regression equation used is

$$X_n/X_t = a_0 + a_1 GCI_t$$

Where,

X_n = exports of the nth commodity group of country A to the world, where
n = SITC 0 to 9

X_t = total exports of country A to the world

GCI_t = geographic concentration index at time t
= $100 \sqrt{(\bar{a} - \bar{a})^2}$

γ^n = exports of country a to country B of commodity group n, where

n = SITC 0 to 9

γ = total exports of country A to country B.

If the regression coefficient a_1 is significant, then the nth commodity group is specialized as an export good to china. Otherwise, that particular commodity group is being traded by India to the world at large, of which china is just a part.

Product Composition

The indication, based admittedly on a cursory analysis using a very simple technique that India-China trade did not rely entirely on politics, may need to be qualified as we examine the product composition of trade more closely. For this we turn to the commodity composition of India-China trade, based on the ten commodity groups of the single-digit Standard International Trade Classification (SITC). These are: food and live animals, chiefly for food (SITC 0); beverages and tobacco (SITC 1); crude materials, inedible except fuels (SITC 2); mineral fuels, lubricants, and related materials (SITC 3); animal and vegetable oil, fats and waxes (SITC 4); chemicals and related products not elsewhere specified (SITC 5); manufactured goods classified by material (SITC 6); machinery and transport equipment (SITC 7); miscellaneous manufactured articles (SITC 8); and commodities and transactions not classified according to kind

(SITC 9).

In 1990, products classified under SITC 1 and 2 had the biggest share of exports from India to China. And products classified under SITC (2, 5, 6, & 7) were the main imports from China. Crude materials were the most traded products between the two countries. Things changed in the coming two three years, and India emphasized more on the production of manufactured commodities and as a result in the year 1993 SITC 6 had the biggest share of exports from India to China.

In the coming years, things changed and India concentrated mainly on the agricultural products and China's concentration was mostly towards manufactured goods, machinery and equipments. This is the reason that when we look at the current data from 1995 to 2005, we see that China has exported mainly the commodities, classified under the category SITC 5, 6, and 7. And India's exports to China are mainly of the products classified under SITC 2.

The products classified under SITC 5 are exported from both sides but China has surplus of exports in this category.

The overall data shows that the trade between the two countries is concentrated mainly in few products. China's exports are concentrated mainly on chemicals, manufactured goods and machinery that are SITC (5, 6, & 7). And India exports mainly Crude materials, Chemicals and manufactured commodities that is SITC (2, 5, & 6).

The composition of Indian exports to China leads us to the question; Does India export certain goods to China because they are of special interest to the Chinese or does it export solely because these products are in demand and China happens to be one of its markets? To answer this question, we shall resort to the market concentration and commodity export specialization model.

The model regresses two ratios: the first ratio is the share of each commodity group to total Indian exports to the world and the second ratio, the proportion each commodity group takes up of the total Indian exports to China. The first ratio is the commodity concentration index while the second is the geographic concentration index. In a sense, if changes in the first ratio are significantly responsive to changes in the second, then, the goods in question are being "export-tailored" or "concentrated" by India to China and not the world at large. This specialization would mean that the share of certain product lines relative to total Indian exports would increase as the trade with China increases in scale. However, if changes in the first ratio are not significantly related to the second, then the goods in question are not specialized for China. Rather, the goods are for the world at large, of which China happens to be a part. The model of course assumes that the higher the concentration of exports, the higher the geographic concentration.

Table 5 gives the result of the model. India is "specialized" in the following exports to China: crude materials, inedible except fuel (SITC 2), animal and vegetable oil and fats (SITC 4), and chemicals and related products (SITC 5). Products classified under SITC 1, 8, and 9, however, have no effect on the export composition.

While it is evident that products classified under SITC 8 and 9 had average share of exports to China, the trading of these commodities was done not so much because China was the trade partner but because India primarily sold these products to the

world and China was just the part of the world to import the commodities. Even in the absence therefore of economic ties with China, products classified under SITC 8 and 9 would still be traded elsewhere.

In Contrast, exports classified under SITC 2, 4, and 5 were traded not because India trades these products to the world but because China is the market. India would find difficulty in marketing these products if trade ties with China were to be suddenly broken. These commodities are produced especially to be exported to China and if the Chinese market stops importing or consuming these products, Indian producer would find it difficult to switch their export to other countries because these products are not demanded so badly anywhere else in the world or China is the best market to sell those products.

Table: 5
Market Concentration and Commodity Export Specialization of
India, 1990-2005

A. Products specialized in	
1. Crude materials, inedible except fuel	SITC2
2. Animal and Vegetable oils and fats	SITC4
3. Chemicals and related products	SITC5
B. Products not specialized in	
1. Food and live animals	SITC0
2. Mineral fuels, lubricants, and related materials	SITC3
3. Manufactured goods	SITC6
4. Machinery and transport equipment	SITC7
C. Products with no effect on export composition	
1. Beverages and tobacco	SITC1
2. Miscellaneous manufactured articles	SITC8
3. Commodities and transactions n.e.s.	SITC9

Source: Analysis of the data from UN Commtrade

Future Prospects: Trade between India and China is increasing year by year, and it is poised for a major leap forward and has doubled from US \$38 billion in 2009 to \$74 billion in 2011, in a period of just two years. The demand for each other's products is increasing in both the countries and producers and consumers in both the countries are getting more access to the products of the other country. The trade is opening up day by day and India is planning to give China the Market Economy Status (MES) very soon. Once they make a free trade agreement the trade volume between them will touch the sky. Since both the countries are developing their infrastructure very fast it can be recommended to India to capitalize on the growing demand of construction industry in China for products like iron ore, slag, ash, plastic and linoleum. While the demand for steel is strong in China, both due to the booming housing and industry construction, China is also emerging as a big importer of aluminum, especially for its communication and transport infrastructure. India can get a huge chance here to export a lot of raw material and final goods related to construction. Also the restructuring of China's textile sector could result in new opportunities for India to increase the exports

of cotton yarn and fabrics to China.

As of now the nature of trade between India and China doesn't go in favour of China because the exports of India to China mainly comprises of a few goods like ores, slag, and ash, which is not an ideal situation for a country. The exported commodities from India to China are needed to be of various nature and Indian exporters are supposed to look for the opportunity of export to China in the fields other than the conventional exports.

In any discussion of the growing economic integration between India and China, it is important to remember also that trade is only one of the two major economic ties that bind nations. The other is investment. At present, investment links between the two countries are relatively modest. Haier and Huawei have significant presence in India. Similarly, Bharat Forge, TCS, and Infosys are building a noteworthy presence in China. There is still a lot of potential also in the area of investment relations between the two nations.

Conclusion

Both India and China started opening up in the International market very late. They were in-ward looking economies in the beginning. But when they realized the pattern of growth and development in the developed countries and the nature of advantage those countries were getting out of trade, they also decided to start trade relations with more countries. The nature of both the economies changed from an in-ward looking economies to an out-working looking. China had the lead in this opening up, because they had realized this fact few years earlier than India. Once they started having trade with the rest of the world, neighbors of China took it as a challenge for them and started thinking in this area. Just after around ten years India also opened its economy to the world and attracted a lot of foreign money into the country and trade volume of India started increasing.

Now some experts believed that India's place in the International market is a challenge for China and India and China are rivals in the International sphere. They are competitors in the International Market and in Asian markets as well. And the relation between the two will always be of rivalry. But I believe that although they are competitors in few fields in the international market, they have a lot of potential for enhancing their bilateral economic ties. Their bilateral trade relation is proved to be useful for both the nations. The trade volume is increasing day by day and the expected trade volume is 30 Billion US \$ in till the end of 2009. India is going to be the biggest trade partner of China and China and India are both interested in finalizing a Free Trade Agreement very soon.

It has been proved empirically that bilateral trade has given advantage to both the nations and still there is a lot of potential in both the countries to increase their bilateral trade. This is because there are many agro and milk food products which either China at present imports from other countries or the demand for which will increase as real per capita incomes and purchasing power of the Chinese people increases or they look for more variety and better quality consumption. In sectors like software, once more Indians learn Chinese and in pharmaceuticals, etc where India had a competitive edge, the potential for increase in exports from India is large. There are few commodities

which are produced in India just to be exported to China and there are some products in China also which are produced to be sold in India only. So they have specific demand and supply relation for each other. If a close study is done on a large scale, they can find few more products of concentrated demand.

Also India China relation is important for the whole world, if they make agreements and come together in the international market as a producer of the commodities which are mostly being produced by the developed nations, they can be a strong competitors with the developed nations. And they have potential to make many more examples of their ties in African oil producing agreement.

There is no doubt that the political relations are important for them and it plays a role to strengthen their economic relations but this is not only the political relations, which decides their trade relations, there are other determinants to the bilateral trade.

The most important observation made here is that, the trade between India and China is not of the nature that it is increasing because the world trade is increasing; instead, there are some commodities which are being traded by India and China for each other only because they are demanded in each other's country. And the volume of trade of those commodities is increasing because the demand for them is increasing in the other country, not because of the increase in the world trade volume. If those commodities are not traded with each other, they will find it difficult to sell it anywhere else in the international market.

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