India-China-South Asia Trade Relations (1990-2014): A Comparative Analysis

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Abstract: Bilateral Revealed Comparative Advantage (BRCA) and Constant Market Share Analysis (CMSA) have been used to study the nature and trend of trade flows in the region. A commodity level analysis of trade data has been done in the study using SITC and HS data from United Nations for the period of 1990-2014. It was found that; South Asian exports to India and China is more because of expansion Effect, while India's export to China and China's exports to India is more because of Competitiveness Effect during the period 1990-2014; India and South Asia have different export specialization structure in their export basket to China and China and South Asia also have different specialization in their exports to India as China has specialisation in four SITC products while South Asia has specialisation in just one SITC product; India has stronger trade ties with Sri Lanka, Nepal, Bhutan, Maldives compared to China and China has stronger trade ties with Pakistan and Bangladesh compared to India; India is more competitive than China in overall South Asian market in the sectors; Animal, Chemicals, Food Products, Fuels, Minerals, Vegetables and Transport. China is more competitive than India in overall South Asian market in the sectors; Footwear, Glass, Hides & Skin, Machine & Electronics, Metals, Plastic & Rubber, Textile & Clothing, Wood and Others. Almost same is the distribution of sectors between India and China if compared in the rest of world. India & China are more Export Competitive in the rest of the world than in South Asian countries; China is more competitive than India in South Asian countries like, Pakistan, Bangladesh, Sri Lanka and Maldives except Nepal and Bhutan where India is more Export Competitive than China

Keywords: BRCA, CMSA, Trade, China, India, South Asia.

I. INTRODUCTION

Growing South Asian market has almost become a battle field especially for the two strongest economic players in the region, India and China. India being a part of South Asian region would naturally want to remain the strongest political and economic power in the region but its rivalry with Pakistan has lately given a lot of space to India's nearest economic rival China both to politically interfere in the regional politics and establish its strong economic presence in the region. China had undoubtedly been remarkably visible in the South Asian markets since 1990s and now Chinese presence is being strongly felt in the political sphere in the region. There are both the arguments in the literature; one, that China is entering into South Asian geopolitics more actively in search for markets and two, that it is using its economic statecraft to make its geopolitical and strategic position stronger in the region. China's changing foreign policy in the region from being an inward to extra-outward might change the economic and political equations in South Asia. Otherwise a silent nation on the global conflicts comes on the forefront to maintain peace in Afghanistan and doesn't even hesitate to sit with the biggest rival, the United States in the Quadrilateral Coordination Group (QCG) to facilitate peace and reconciliation in Afghanistan. China knows that, eventually, long-term stability in Afghanistan, that has become a safe haven for Chinese Uighur militant groups, will allow it to make huge investments in a badly war trodden economy and build railways, roads, electricity, and water projects in the country as part of its Silk Road Economic Belt. China is already a major investor in Afghanistan, through projects like the Mes Aynak copper mine - a 3.5 Billion US Dollar project in Logar province run by a Chinese state-owned enterprise - the largest direct foreign investment in Afghanistan's history.

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China has become very active in Sri Lanka's market too; China's FDI to Sri Lanka reached 403.5 Million US Dollar in 2014 from just 4.1 Million US Dollar in 2010. For China, Sri Lanka stands as an important node in the Maritime Silk Road, the maritime component of Beijing's broader One Belt, One Road initiative to improve infrastructure and connectivity across Asia. Colombo Port City project, a 1.4 Billion US Dollar Chinese initiative is the largest in Sri Lanka's history. China has also been seeking to woo Bangladesh that comes within India's traditional sphere of influence. Bangladeshi and Chinese firms have signed 13.6 billion US Dollar in trade and investment deals on the sidelines of President Xi Jinping's brief tour to the South Asian nation. The deals are in addition to 20 billion US Dollar in loan agreements that the two governments signed. The two nations also signed an agreement to conduct a feasibility study on a China-Bangladesh free trade agreement. Dhaka has been so far reluctant to sign a bilateral FTA with China and instead sought unilateral duty-free and quota-free access for its products in the Chinese market.

China already has an FTA with Pakistan, an important player in the South Asian Economy and Politics. Now when we look at China's economic presence in the South Asian region; we see that China's exports to South Asian countries have increased with a Compound Annual Growth Rate of around 25% in the last 15 years from merely 4.2 billion US Dollar in 2001 to 94.3 billion US Dollar in 2015. With rise in China's exports to South Asian countries, South Asia has been falling deep into Trade Deficit; South Asia had a Trade deficit of just 1.9 billion US Dollar with China in the year 2001 that has gone up to 77.4 billion US Dollar in 2015. Out of the total Chinese export to South Asia, 62% goes to India alone, 17% to Pakistan, 15% to Bangladesh, 5% to Sri Lanka and rest four countries, namely Nepal, Afghanistan, Maldives and Bhutan together account for just 1% of the China's total exports to South Asia in the year 2015.

India has the highest share in China's exports to South Asia but China's exports to Bangladesh and Pakistan is more significant than its export to India because China's export to Bangladesh and Pakistan is more concentrated and specialized and suggest less scope for diversion according to Trade Intensity Index. Now when we compare the competitiveness of China's exports to South Asian countries at commodity level (HS-Six Digit) with the help of Normalized Bilateral Revealed Comparative Advantage (BRCA), we find that Bhutan, which has very less share of total exports, has the highest percentage of commodities (86%) in its basket that have comparative advantage for China, followed by India with 64%, Bangladesh & Pakistan both with 61%. Together All the South Asian countries account just 4% of China's total exports to world in 2015 and it was even lesser in 2001 with just around 2%. So economically South Asian countries are not very important for China, especially smaller countries of the region like Nepal, Afghanistan, Maldives and Bhutan but strategically they might be important because of their locations on the trade route or because of the geopolitics.

India China trade was among the fastest growing bilateral trade not just in South Asia but in the world in last decades. It had already crossed the figure of 71 billion US dollar in the year 20142. This whole trade actually grew in a very short period of about 20 years; India China bilateral trade was just 0.5 billion US dollar in the year 19903. Today, China has reached to the position of India's number one trading partner and India is among the top ten trading partners of China. Along with this, India China bilateral trade volumes have grown faster than any of the other partner's trade with China. Thus, India and China are heading towards becoming mutually important and beneficial trading partners not just for each other but also for the neighboring nations that fall in the supply chain of this bilateral trade.

There is a lot of scope and opportunities in the India China bilateral trade relations to grow further and reach new heights in the near future. India China trade lane is forecasted by PwC^4 to be among the top 5 trade lanes in 2030 while today it is nowhere in the top 25 air and sea trade lanes of the world.⁵

II. LITERATURE REVIEW

High volumes and growth of trade between India and China may lead many neighboring nations in South Asia to have suspicion about it and regard it as something harmful for their economies seeing the geopolitics in the region. If we see it in an economic perspective, growing India China bilateral trade has been proved to be a positive indicator for the trade of all South Asian countries. When we study the nature of India China trade, we find that the trade volumes are not being diverted to this trade lane from any other lanes in the region; this trend is purely based on trade creation and

² United Nations Commodity Trade Statistics Database

³ Ibid

⁴ PwC is a renowned global business research and consulting firm with offices in 148 countries of the world.

⁵ http://www.pwc.com/en_GR/gr/publications/assets/future-of-world-trade.pdf

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competitiveness. Swapan K. Bhattacharya and Biswa N. Bhattacharya argue "India China trade may build bridges between East and South Asia"⁶. Another well known researcher, Arvind Panagariya states "Outstanding growth of India China trade is a positive indication for India-China Free Trade Area and India-China Free Trade Area would probably be the best starting point to create an Asian bloc"⁷.

Some researchers believe that India and China being among the strongest players would always have conflict of interest in the region to strengthen their economic presence and establish political strength. Shao Chuan Leng states; "India and China face potential conflicts being rivals for leadership in Asia. Different forms of government in both the countries are among the reasons of potential conflict. Another reason is cited that they have conflicting trade interests in the region".⁸

The region of South Asia is very important for both India and China. The two countries would always try to maintain their diplomatic as well as economic relations with their neighbors. Ye Hailin⁹ (2008) argues that China is trying to strengthen its relations with South Asian economies and wants to deepen cooperation in many fields because China wants to maintain its relations with South Asia in the same way as it maintained with East Asia, Southeast Asia, Europe and North America. The economic relation between China and South Asian countries has been getting even better.

Shri Prakash¹⁰ (1994) 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 trading nation shows totally a different picture, where each nation is getting advantage out of trade and exchange.

Yeongseop Rhee, Barry Eichengreen and Hui Tong¹¹ (2007) made an analysis of the impact of China's growth on the exports of its neighbors in Asia. They argued that China's exports have got the tendency to crowd out the exports of other countries in Asia mainly for the consumer goods and that too by less developed Asian countries who are exporting homogeneous products. Also, China's imports have got a strong tendency to suck up imports coming from the neighbors. This has a direct effect mainly in the markets of capital goods and intermediate goods and that too by relatively advanced Asian economies.

Swapan K. Bhattacharya and Biswa N. Bhattacharyay¹² (2007) revealed with the help of Trade Intensity Indices that regional integration and trade cooperation between India and China can increase the developments that are based on trade and can further expand the trade within the region by using complementarities and comparative advantage. Jeevika Weerahewa and Karl Meilke¹³ (2007) numerically estimate the welfare impacts of a probable India China Free Trade Agreement and other regional integrations that are still proposed with the help of GTAP model and suggest that India China FTA would have very small change of welfare to rest of the South Asian countries. J. Mohan Malik¹⁴ (2001) argues that China always demonstrates its determination to continue its involvement in South Asian region and to assure its friends that India China relations would not improve at the cost of its relations with them.

Sumitra Chishti (2000) concludes that quantitatively South Asian countries and China do not have any significant economic relationships, except the fact that the period of 1990s has seen high growth of trade between India and China. There are also some other economic relations such as investment and transfer of technology, especially with India. Aid

⁶ Bhattacharaya, Swapan K. and Bhattacharaya Biswa N. "Gains and Losses of India-China Trade Cooperation-A Gravity Model Impact Analysis", CESIFO Working Paper No. 1970 (April, 2007), Centre for Economic Studies and the Ifo Institute for Economic Research

⁷ Panagariya, Arvind. "India and China: Trade and Foreign Investment" SCID Working Paper 302 (2006), Stanford Center for International Development, Stanford University, CA 94305, USA

⁸ Leng, Shao Chuan "India and China", Far Eastern Survey, May, 1952, American Institute of Pacific Relations

⁹ Hailin, Ye. "*China and South Asian relations in a new perspective*" Institute of Asia-Pacific Studies, Chinese Academy of Social Sciences (2008).

¹⁰ Prakash, Shri. "Economic Dimensions of Sino-Indian Relations" China Report, A journal of East Asian Studies (1994). Sage Publications, New Delhi

¹¹ Eichengreen, Barry. Rhee, Yeongseop. & Tong, Hui. "China and the Exports of Other Asian Countries" Review of World Economics (2007), Springer.

¹² Bhattacharaya, Swapan K. and Bhattacharaya Biswa N. "Gains and Losses of India-China Trade Cooperation-A Gravity Model Impact Analysis" CESIFO Working Paper No. 1970 (April, 2007), Centre for Economic Studies and the Ifo Institute for Economic Research

¹³ Weerahewa, Jeevika. Meilke, Karl. "Indo-China Trade Relationships: Implications for the South Asian Economies" IATRC, Beijing (2007)

¹⁴ Malik, J. Mohan. "South Asia in China's Foreign Relations" Pacifica Review (February, 2001), Carfax Publishing

relationship has also been established between China, Pakistan and Nepal. The South Asian countries also do not depend significantly on China, especially as an export market. Therefore, cooperation in trade may have relevance for China and SAARC only in the long run, since there is a potential.

A commodity level analysis of trade data has been done in this study using HS data at level 2 and SITC data with Revision 3 from United Nations Commodity Trade Data Base for the period of 1990 to 2015. The year 1990 has been taken due to its historical importance as the liberalization was initiated in the same year in India. South Asian countries were selected for the study as India is a South Asian country and the objective of the research was to understand the nature of India and China's trade with the neighboring countries. South Asian countries cover Pakistan, Sri Lanka, Nepal, Bangladesh, Bhutan and Maldives along with India.

III. METHODOLOGY

Following three major statistical tools have been used in the paper to find out the results;

A. Constant Market Share Analysis:

Constant Market Share Analysis (CMSA) has been used to analyze the trade pattern of all regional trade with India and China. 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 the 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 elasticity, cross price elasticity, 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 $[(Xi - X_0)/X_0]$, which is the ordinary measure for growth rate for exports. Since

$$X_1 = S_1 M_1$$

 $X_0 = S_0 M_0$

It follows that

 $X_{1} - X_{0} = S_{1}M_{1} - S_{0} (M_{1} - M_{0})$ $X_{1} - X_{0} = S_{1}M_{1} - S_{0}M_{0} + S_{0}M_{1} - S_{0}M_{1}$ $X_{1} - X_{0} = S_{0} (M_{1} - M_{0}) + M_{1} (S_{1} - S_{0})$

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

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$$\frac{X_1 - X_0}{X_0} = \frac{S_0(M_1 - M_0)}{S_0 M_0} + \frac{M_1(S_1 - S_0)}{S_0 M_0}$$

By simple algebraic formulation, it can shown that

$$\frac{X_1 - X_0}{X_0} = \frac{M_1 - M_0}{M_0} + \frac{S_1 - S_0}{S_0} \left(\frac{1 + M_1 - M_0}{M_0}\right)$$

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

$$x = \frac{X_1 - X_0}{X_0}$$
$$m = \frac{M_1 - M_0}{M_0}$$
$$s = \frac{S_1 - S_0}{S_0}$$

We arrived at the desired result

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

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 exportable products, become 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_0) while the latter examines how the trade share has changed, everything else being constant.

B. Market Concentration and Commodity Export Specialization Model:

The main 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 questions like, '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

$$\frac{X_n}{X_t} = a + a_1 GCI_t$$

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

$$= 100 \sqrt{\sum \left(\frac{y^n}{y}\right)^2}$$

 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 α_1 is significant, then the nth commodity group is specialized as an export good to target country. Otherwise, that particular commodity group is being traded by country of origin to the world at large, of which target country is just a part.

C. Bilateral Revealed comparative Advantage (BRCA)

Revealed comparative Advantage shows the competitiveness of the product in countries export compared to products share in world export.

Bilateral RCA: Competitiveness of country i in a specific market

$$BRCA_{ij}^{k} = \left(\frac{x_{ij}^{k}}{X_{ij}}\right) / \left(\frac{x_{wj}^{k}}{X_{wj}}\right)$$

Normalized RCA = (RCA-1)/(RCA+1)

Revealed comparative advantage indices reveals which industries a country has a comparative advantage in producing goods from. The revealed comparative advantage index developed by Balassa (Balassa, 1967) assumes that a country's comparative advantage is revealed by its exports to the world. Comparative advantage depends on pre-trade relative prices. Principal determinants of these unobservable relative prices are resource and factor endowments, stages of industrialization (that is level of technology), and demand (Ariff, Mohamed and Tan EuChye, 1992). Differences in these determinants across countries lead to differences in autarky relative prices across countries. When countries trade, they export the goods in which they have comparative advantage and import those in which they have comparative disadvantage.

IV. RESULTS

It was found that India China trade is growing because their products are needed and demanded in each other's market and they have the capacity and capability to produce the commodities that are consumed in each other's market. On the other hand, trade between India and South Asian countries is based on expansion; since trade around the world is increasing these trades are also increasing, there is nothing special about these trade lanes. In the same way trade between China and South Asian countries is based on expansion. There is no specific demand for their products in each other's market for most of the years of study period.

It has been found with the help of Constant Market Share Analysis that India China trade is based mainly on the competition during the period 1990-2014 as it can be seen in the Tables 1.1 & 1.2 that in most of the years Competitiveness Effect is found to be more than Market Expansion Effect. It implies that trade between India and China is taking place because they have the ability to compete with other countries in the international market for their products. This can also be said that India's exports to China and China's exports to India is taking place at a high growth due more to their own ability to increase their market share in the partner country through factors within their own control, rather than due to the improvements in the market situation of the partner country.

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South Asian (excluding India) countries' trade with China is based mainly on expansion as it can be seen in the Table: 1.3 that for most of the years, especially in the recent years Market Expansion Effect is greater than Competitiveness Effect. It implies that South Asian countries are exporting their products to China not due to their ability to compete with other exporting countries to China rather due to the expansion of China's market for imports. Since Chinese demand for imports is increasing, they are importing more from around the world and South Asian (excluding India) happened to be an exporter of intermediate goods to fulfill Chinese demand for import due to the expansion.

Also it can be seen in the Table: 1.4 that South Asian exports to India is based on Market Expansion rather than Competitiveness for most of the years during the period 1990-2014. Due to the large size of Indian Economy, it is importing a lot of products from many exporting countries around the world and South Asian countries have just happened to be one of those exporting countries. South Asia does not have the ability to compete with other countries and make its own share in Indian market through economic factors that are within their own control independent of political factors and bilateral & multilateral tie ups.

Now, it can be easily derived from the above arguments and analysis that since the nature of India China trade is different from the nature of South Asian countries' trade relations with India & China, India-China trade's upward or downward changing trend should not have much of effects at the overall level on the South Asian countries' trade with these two nations.

Period	1=Comp>Expan 0=Comp≤Expan	Period	1=Comp>Expan 0=Comp≤Expan	Period	1=Comp>Expan 0=Comp≤Expan
1990-91	1	1998-99	0	2006-07	1
1991-92	1	1999-00	0	2007-08	1
1992-93	1	2000-01	1	2008-09	0
1993-94	0	2001-02	0	2009-10	0
1994-95	0	2002-03	1	2010-11	0
1995-96	1	2003-04	1	2011-12	0
1996-97	1	2004-05	0	2012-13	0
1997-98	1	2005-06	0	2013-14	0

 Table 1.1: Constant Market Share Analysis Results (Indian Exports to China)

Source: United Nations Commodity Trade Data Base

Period	1=Comp>Expan 0=Comp≤Expan	Period	1=Comp>Expan 0=Comp≤Expan	Period	1=Comp>Expan 0=Comp≤Expan
1990-91	0	1998-99	0	2006-07	1
1991-92	1	1999-00	1	2007-08	0
1992-93	1	2000-01	1	2008-09	1
1993-94	1	2001-02	1	2009-10	0
1994-95	0	2002-03	0	2010-11	0
1995-96	0	2003-04	1	2011-12	0
1996-97	1	2004-05	0	2012-13	1
1997-98	1	2005-06	1	2013-14	1

Source: United Nations Commodity Trade Data Base

 Table 1.3: Constant Market Share Analysis Results (South Asian Exports to China)

Period	1=Comp>Expan 0=Comp≤Expan	Period	1=Comp>Expan 0=Comp≤Expan	Period	1=Comp>Expan 0=Comp≤Expan
1990-91	1	1998-99	0	2006-07	0
1991-92	0	1999-00	0	2007-08	0
1992-93	0	2000-01	0	2008-09	1
1993-94	1	2001-02	0	2009-10	0
1994-95	1	2002-03	0	2010-11	0
1995-96	1	2003-04	0	2011-12	1
1996-97	1	2004-05	1	2012-13	0
1997-98	0	2005-06	0	2013-14	0

Source: United Nations Commodity Trade Data Base

Period	1=Comp>Expan 0=Comp≤Expan	Period	1=Comp>Expan 0=Comp≤Expan	Period	1=Comp>Expan 0=Comp≤Expan
1990-91	1	1998-99	0	2006-07	0
1991-92	1	1999-00	1	2007-08	0
1992-93	0	2000-01	1	2008-09	0
1993-94	1	2001-02	0	2009-10	0
1994-95	0	2002-03	0	2010-11	0
1995-96	0	2003-04	0	2011-12	0
1996-97	0	2004-05	0	2012-13	0
1997-98	1	2005-06	0	2013-14	1

Table 1.4: Constant Market Share Analysis (South Asian Exports to India)

Source: United Nations Commodity Trade Data Base

The overall trade data shows that the trade between India and China 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.

	Commodities Specialized						
Commodities with SITC Revision- 3	India China	to	China to India	SA India	to	SA China	to
a. Food and live animals (SITC0)						☆	
b. Beverages and tobacco (SITC1)							
c. Crude materials, inedible except fuel (SITC2)	☆		☆	☆	•	☆	
d. Mineral fuels, lubricants, and related materials(SITC3)							
e. Animal and Vegetable oils and fats (SITC4)	\$						
f. Chemicals and related products (SITC5)			\bigstar				
g. Manufactured goods (SITC6)							
h. Machinery and transport equipment (SITC7)			☆				
i. Miscellaneous manufactured articles (SITC8)							
j. Commodities and transactions n.e.s. (SITC9)			*				

Table 2: Results of Market Concentration and Commodity Export Specialization Model

Source: Analysis of United Nations Commodity Trade Data

Table 2 shows the result of the model; India is "specialized" in the following exports to China: crude materials, inedible except fuel (SITC 2) and animal and vegetable oil and fats (SITC 4). Products other than SITC 2 & 4, however, have no effect on the export composition. 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 1, 3, 5, 6, 7, 8 and 9 would still be traded elsewhere.

In Contrast, exports classified under SITC 2 and 4 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.

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China is specialized in exporting SITC 2, 5, 7, 9 that is these commodities are produced in China especially to be exported to India and if the Indian market stops importing or consuming these products, Chinese 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 India is the best market to sell those products.

South Asian (excluding India) countries' specialization of exports to China is SITC 0 & 2. It explains that South Asian countries' export specialisation is different from India's export specialisation to China. In the same way, South Asian (excluding India) countries' specialization of exports to India is only for the commodity classified under SITC 2 which means that nature of South Asian countries' export to India is too much different from China's export specialisation to India and that South Asian countries' export to China is too much different from India's export specialisation to China.

Countries		products with ve Advantage	% of Commodities with Comparative Advantage		
	India	China	India	China	
Pakistan	723	1978	17%	47%	
Bangladesh	1287	1935	30%	46%	
Sri Lanka	986	1606	23%	38%	
Bhutan	601	170	45%	13%	
Nepal	1509	738	37%	19%	
Maldives	537	650	21%	26%	
South Asia	1470	2066	30%	42%	
World	1931	2670	40%	56%	

Table 3.1: India-China Exports Competitiveness in South Asian Countries (BRCA Results)

Source: Analysis of WITS Data

Table 3.1 shows that if we compare the number of commodities with advantage, China is more competitive than India in South Asian countries like, Pakistan, Bangladesh, Sri Lanka and Maldives except Nepal and Bhutan where India is more Export Competitive than China. Also that India & China are more Export Competitive in the rest of the world than in South Asian countries.

Sectors	No. of Exported	Products	-	oducts with e Advantage	% of Com Comparative	
	India	China	India	China	India	China
Animal	223	228	59	14	26%	6%
Chemicals	736	717	288	246	39%	34%
Food Products	199	205	66	19	33%	9%
Footwear	48	47	5	35	10%	74%
Fuels	41	40	18	6	44%	15%
Glass	183	183	51	102	28%	56%
Hides & Skin	61	60	5	17	8%	28%
Machine & Electronics	773	768	182	421	24%	55%
Metals	540	538	190	287	35%	53%
Minerals	88	86	40	6	45%	7%
Others	352	346	44	196	13%	57%
Plastic & Rubber	210	210	63	99	30%	47%
Textile & Clothing	786	785	245	476	31%	61%
Transport	119	118	46	41	39%	35%
Vegetables	328	320	116	30	35%	9%
Wood	226	225	52	71	23%	32%
Total	4913	4876	1470	2066	30%	42%

 Table 3.2: India-China Exports Competitiveness in South Asia (BRCA Results)

Source: Analysis of WITS Data

Table 3.2 shows that India is more competitive than China in overall South Asian market in the sectors; Animal, Chemicals, Food Products, Fuels, Minerals, Vegetables and Transport as it has higher ratio of products with comparative

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advantage among the total products that is being exported by India to these countries. In the same way, China is more competitive than India in overall South Asian market in the sectors; Footwear, Glass, Hides & Skin, Machine & Electronics, Metals, Plastic & Rubber, Textile & Clothing, Wood and Others. Almost same is the distribution of sectors between India and China if compared in the rest of world.

V. CONCLUSION

It was found with the help of Constant Market Share Analysis (CMSA) that India China trade is the only trade lane among the trade lanes analyzed in this study that is mainly based upon competitiveness effect. Rest of the trade relations in the region such as India-South Asia and China-South Asia are based mostly on expansion effects that is these trades are taking place due to the factors which are not under the control of the exporters.

Export Specialization and Market Concentration Model differentiates between the Specialized and Non-Specialized commodities of export for an exporter. It was found that India, China and South Asian countries (excluding India) have got export specialization in different commodities and this minimizes the competition among them at the overall level.

Growing China's exports to India requires more production in China and to produce more goods to fill the demand of Indian market, China requires more of raw material and intermediate goods that are partially imported from South Asian countries. Indirectly, the high volumes of Indian imports from China have positive effect on South Asian and countries' exports to China.

India has stronger trade ties with Sri Lanka, Nepal, Bhutan, Maldives compared to China and China has stronger trade ties with Pakistan and Bangladesh compared to India. Also that China is more competitive than India in South Asian countries like, Pakistan, Bangladesh, Sri Lanka and Maldives except Nepal and Bhutan where India is more Export Competitive than China. India & China are more Export Competitive in the rest of the world than in South Asian countries

India is more competitive than China in overall South Asian market in the sectors; Animal, Chemicals, Food Products, Fuels, Minerals, Vegetables and Transport. China is more competitive than India in overall South Asian market in the sectors; Footwear, Glass, Hides & Skin, Machine & Electronics, Metals, Plastic & Rubber, Textile & Clothing, Wood and Others. Almost same is the distribution of sectors between India and China if compared in the rest of world.

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