Analysis of Bilateral Trade Between Bangladesh and China

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Abstract

Bilateral trades between Bangladesh and China have stretched significantly in the recent years. Trade relationship in between these two countries is increasing with time again connection of Silk Road will give more boost to the economy of both the countries. In this paper our objective is to examine and compare the international trade between the two countries, especially, the changes in the bilateral trade and identifying major trends of trade. To elaborate the trade pattern, we use trade intensity, intra-industry trade (IIT) and revealed comparative advantages (RCA). Our findings have been use to locate the strong sectors of future cooperation between these two countries to make the economy stronger and also policy implications for future trade and economical progress.

Keywords: Bangladesh and China; Trade intensity; Intra-industry trade (IIT); Revealed comparative advantages (RCA)

1. Introduction

Since the establishment of diplomatic relations in 1975, China has become one of the Bangladesh's major development partners. Presently, the relations between two countries are largely characterized by ever broadening economic cooperation. China builds a successful socialist market economy and legal system by common interest practice. Both the countries are working together due to Globalization and economic liberalization. It's the globalization who is bringing every country close to each other. Trade liberalization is believed to improve economic growth and development through specialization advantage of the technology, natural resource, communications and technical workers. According to Gupta and Choudhry, Human welfare will be increased if the consumer able to consume more product at cheaper price (Gupta & Choudhry, 1997; World Bank, 2002).

China achieve remarkable success with the economical reform specially after 1990.Among all the Asian emerging country China became the biggest developing country in the world and also improve its living standard(Liu & Li,2014).China's export range got broadening because of sophisticated technology. China always maintains a good neighbourhood policy and relation with South Asian countries. South Asia is undoubtedly emerging as an important region in international relations. These countries face lot of struggles and conflicts even after gaining independence. Bangladesh is also one of the emerging countries from Asian region and always maintains a good relationship with China. It China's one of the closest neighbourhood who's border is only 100 kilometers over the Himalaya. Chinese Yunnan Province is also very close to Bangladesh. Since 2005 Bangladesh China gain a good momentum in trade and economic cooperation, Chinese Premier Wen Jibao's visit in April 2005, a 13-point Joint Communiqué on further strengthening of bilateral relations was signed, along with five agreements and two memorandums of understanding (MoUs). China also offered to assist Bangladesh in water management, nuclear energy, trade and investment, training of security and defence personnel, as well as infrastructural development .A wide range of agreements already signed by both the countries which includes agriculture, trade, transport and communications, energy, science and technology, and military cooperation. In the area of infrastructure development, trade and economy of Bangladesh China has significant contributions. 2015 marked the 40th anniversary of the establishment of diplomatic relations between this two. In past four decades, relations between china and Bangladesh had undergone a swift revolution. Trade between the two countries has grown rapidly, making China Bangladesh's largest trading partner, with the two-way trade accounting for about US$12 billion in 2014. In the last five years, imports from China grew at about 20 per cent and exports growth averaged at 40 per cent. A predicted calculation, considering exports and imports growth scenario, indicates that China-Bangladesh trade could reach US$ 30 billion. Sectors like textile and apparel, footwear are making Bangladesh famous in world economic market. In 2014, almost 7800 Bangladeshi products got approved by China to enter with no duty fee which is also great initiative by Chinese government for both countries' economical progress. Two countries signed almost 27 agreements in which China decide to invest $1.5 billion in Bangladesh sea port project then 1320MW coal power station worth around $28.7 billion dollar .They also relate seven Chinese state owned company with 13 Bangladeshi companies to boost the bilateral trade. For investing in a country both the country's need a very good relationship and political understanding which China-Bangladesh holds from past years.

The objective of this paper is to examine the trends of bilateral trade and economic cooperation between Bangladesh and China. A brief overview of the two economy also been discussed in this paper. Here we particularly discuss on trade analysis and development. We also calculate Intensity of Trade, Intra Industry Index

and Revealed Comparative Advantage of Bangladesh and China in different sectors to see the competitiveness between the countries and also to see the strong sectors of both the countries, which can indicate the future collaborating sectors of investments too.

2. Background

China and Bangladesh are two different economic countries with some common interest. Recent high growth in the two Asian countries was triggered by their economy. Since 1990 Chinese economy has climb up drastically, where as Bangladesh got a slow pace. In 1990 China and Bangladesh were almost in the same level in per capita GDP (Fig 1). Due to an earlier start and subsequently sustained growth, Chinese economy has climbed up faster than any other country specially Bangladesh. In 1990's Bangladesh's and Chinese per capita GDP based on PPP in Current US were $1290 and $1526 but in 2015 it became $3137 and $13572. So, the percentage change of GDP based on PPP in Current US dollar is 300% and 1365%. Though Bangladesh growth is much slower than China but still as a developing country they have a growth.
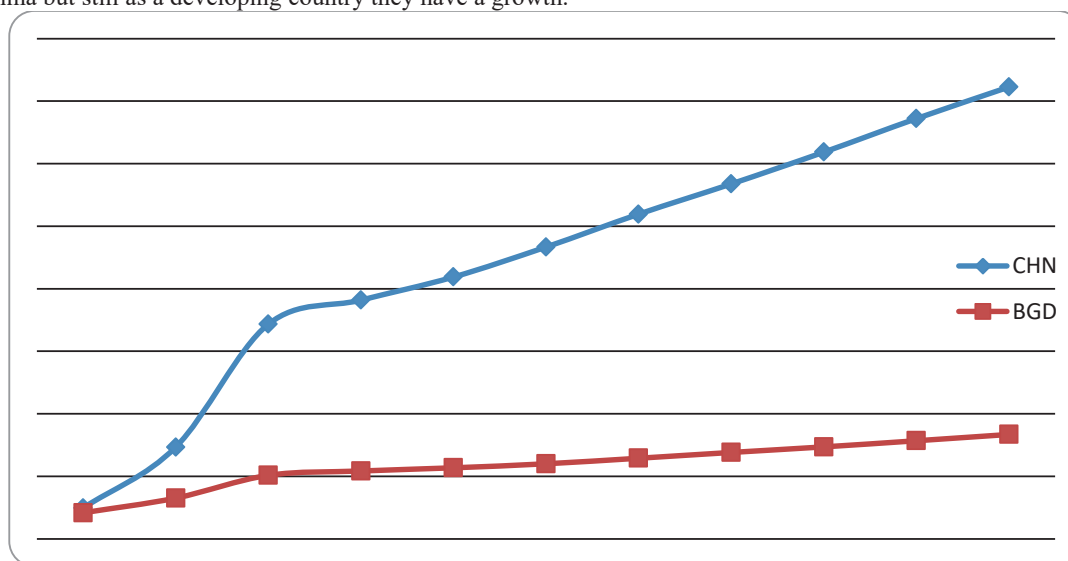

Fig.1. Per capita GDP based on PPP of Bangladesh and China in some selected years till 2015.Source: World development Indicator, accessed on 2017.

The economies of the two countries have some potential value. It's true China got the pace earlier but as a Developing country Bangladesh also have chance to get the pace like Chinese economy. The GDP shares percentage growths of the two countries are 0.27 and 15.22 in 2015 where it was 0.17 and 9.34 in 2010 (table: 1). In the middle from 2010 to 2015 China always maintain a good GDP share % change where as Bangladesh is much slower than China. On 2011 it was 0.17 % where China was 10.43% again on 2012 Bangladesh were 0.18% which almost the same as previous year but China got jumped to 11.56%. With the time Bangladesh is getting little pace but not much as it should. In 2015, Bangladesh GDP Share percentage becomes 0.26% where China stood on 15.22% which indicates the gape of both the economy.

Table 1: Bangladesh and China Economies: GDP Share (%)

	2010	2011	2012	2013	2014	2015
Bangladesh	0.176544	0.177283	0.180135	0.197127	0.223201	0.268344
China	9.342814	10.43616	11.56344	12.62645	13.53312	15.22018

Note: Data and source: World development indicator and author's own estimates using the real growth rate of the economies.
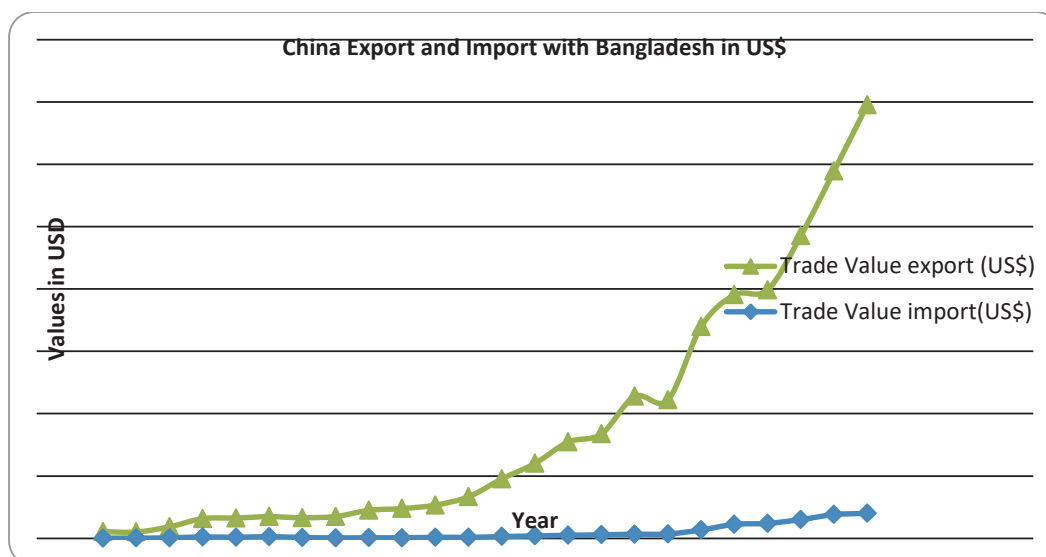
Fig 2.China Exports and Imports From Bangladesh from 1992-2015.Source:Data are extracted from United Nations Comtrade database SITC III(https://comtrade.un.org/data/, accessed June,2017).

After the year of 1990 Chinese economy rises drastically where Bangladesh remains almost same. Specially, after 2004 Chinese export with Bangladesh increased a lot which stands to $13.90 billion on 2015 from $1.90 billion. But on the other hand import didn't have any pace. The volume of import increase a little compares to export. In 2015 total import stands to $803.71 million where as it was $57 million on 2004.Its true import volume also increased but not as much as it should be. The trade between these neighboring Asian countries got pace and increasing with time though Bangladesh is facing huge trade deficit. Bangladesh and China's trade relation mostly dependent on Comparative advantages and mutual co operation. Recently, Bangladesh's goods are very famous in European and American market and also in China. China's technologically improvement from low labor goods sectors to high end product moves its market to Asian region. For that interest China increasing its import on some sectors.

Table 2: Total Merchandise trade between Bangladesh and China with World.

Year	Total Merchandise trade between Bangladesh and China with world							
	Bangladesh				China			
	Export to World	Percentage Changes	Import from World	Percentage Changes	Export to World	Percentage Changes	Import from World	Percentage Changes
2000	6389000000		8883000000		2.49203E+11		2.25094E+11	
2001	6080000000	-5%	9018000000	2%	2.66098E+11	7%	2.43553E+11	8%
2002	6149000000	1%	8592000000	-5%	3.25596E+11	22%	2.9517E+11	21%
2003	6990000000	14%	10434000000	21%	4.38228E+11	35%	4.1276E+11	40%
2004	8305000000	19%	12036000000	15%	5.93326E+11	35%	5.61229E+11	36%
2005	9297000000	12%	13889000000	15%	7.61953E+11	28%	6.59953E+11	18%
2006	11802240000	27%	16034000000	15%	9.68978E+11	27%	7.91461E+11	20%
2007	12453200000	6%	18596000000	16%	1.22046E+12	26%	9.56116E+11	21%
2008	15369600000	23%	23860000000	28%	1.43069E+12	17%	1.13257E+12	18%
2009	15082820000	-2%	21833000000	-8%	1.20161E+12	-16%	1.00592E+12	-11%
2010	19194400000	27%	27821200000	27%	1.57775E+12	31%	1.39625E+12	39%
2011	24439200000	27%	36213900000	30%	1.89838E+12	20%	1.74348E+12	25%
2012	25127070000	3%	34173100000	-6%	2.04871E+12	8%	1.81841E+12	4%
2013	29113510000	16%	37085100000	9%	2.20901E+12	8%	1.94999E+12	7%
2014	30405190000	4%	42267580000	14%	2.34229E+12	6%	1.95923E+12	0%
2015	32378700000	6%	39460400000	-7%	2.27347E+12	-3%	1.67957E+12	-14%

Source :WTO and Authors own calculations. http://stat.wto.org/StatisticalProgram/WsdbExport.aspx?Language=E

From Table 2 we can demonstrate the total merchandise export and import value of China and Bangladesh from year 2000 to 2015. In the year 2001 the percentage change of Bangladesh export to world is negative 5% where as import is 2% increase from previous year again on the Chinese side its 7% and 8% increase in compare to previous year. Then from 2002 to 2008 both the country's export import increase with time though on 2009 it decrease from previous year. Finally, if we compare the changes from year 2000 to 2015 then Bangladesh total merchandise export changes is almost 407% where as import is 344% changes again China stands to 812% and 646% . It seems that both the country's export and import increases a lot with time.

Methodology: This paper is consisting of data mostly downloaded from Un-Comtrade, WTO and Trademap. We took SITC III single and double digit data set for calculating intensity trade, Intra industry trade

and Revealed comparative advantages. We mostly calculate the data from year 2012 to most recent 2015. While analysing and downloading data for Bangladesh we fail to get direct data which might causes some result disruption. Data source were limited for which in some sectors we didn't able to analyse and calculate. Here,we firstly examined Sino-Bangla Bilateral trade for export and import. Then we calculated commodity shares in trade composition.Using bilateral trade data we calculate the indices of trade intensity. Next we calculate intra industry trade and finally we went for revealed comparative advantage.

3. Bangladesh-China bilateral trade:

Over the years, bilateral trade between China and Bangladesh is highly in favour of China. High volume of trade gap is the key challenges facing by both the country. Bangladesh has long been suffering from huge trade deficit with China from the beginning of bilateral trade relationship. To pick the momentum of both the country they have taken lots of steps over the years to build mutual and broadening relationship. In the coming time it may be expected that both the country will overcome their constraints and achieve a good momentum in trade relationship. Bangladesh exporters and policy makers are very much concern about the trade deficit which also might lead a positive signs too .A number of collaboration projects, connectivity of silk road and Asian Infrastructure Bank will give a boost to the bilateral co operation of both the country. Despite of healthy trade China has huge trade surplus. Soft loans, setting up vital economic and technical cooperation projects will be plus point for both the country.

a. **Composition of Trade:** According to Standard International Trade Classification (SITC revision 3) system, trade in between China and Bangladesh in some commodity groups has dominated bilateral trade. When we check with double digit HS code, top ten commodity those which exports to Bangladesh are Cotton, Machinery, electrical, man maid staple fibre, plastic, vehicle and furniture's. In 2012 total shares percentage of commodity cotton was 23% where it stands to 16% on 2015.Again in Machinery sectors it stands between 13-12% from 2012-2015.China's export to Bangladesh percentage wise in some sectors increased and some decreased. Sectors like Machinery (84), electrical (85), vehicles (87) maintain a steady momentum where as cotton (52) decreased.

Table 3: China-Bangladesh shares percentage by commodity in selected years (China exports to Bangladesh)

Commodity-wise Products		China Exports to Bangladesh			
		2012	2013	2014	2015
'52	Cotton	23%	22%	18%	16%
'84	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	13%	12%	13%	12%
'85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	10%	10%	10%	10%
'55	Man-made staple fibres	8%	7%	7%	6%
'72	Iron and steel	2%	1%	2%	5%
'60	Knitted or crocheted fabrics	4%	4%	4%	4%
'54	Man-made filaments; strip and the like of man-made textile materials	4%	4%	3%	4%
'39	Plastics and articles thereof	2%	3%	3%	3%
'87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	2%	3%	3%	3%
'94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; lamps and lighting fittings, not elsewhere specified or included; illuminated signs, illuminated nameplates and the like; prefabricated buildings	1%	1%	2%	2%

Table 4: China-Bangladesh shares by commodity in selected years (China imports from Bangladesh)

Code	Commodity Wise Products	China Imports from Bangladesh			
		2012	2013	2014	2015
'62	Articles of apparel and clothing accessories, not knitted or crocheted	19%	24%	25%	32%
'61	Articles of apparel and clothing accessories, knitted or crocheted	13%	15%	19%	21%
'53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	19%	15%	14%	13%
'03	Fish and crustaceans, molluscs and other aquatic invertebrates	10%	11%	9%	8%
'41	Raw hides and skins (other than furskins) and leather	9%	8%	7%	6%
'63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags	7%	6%	6%	5%
'39	Plastics and articles thereof	8%	5%	5%	3%
'90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	3%	3%	3%	2%
'12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	1%	2%	4%	2%
'64	Footwear, gaiters and the like; parts of such articles	1%	1%	1%	1%

China importing from Bangladesh the scenario is different. The percentage shares commodity wise products are increasing with years. In 2012, Articles of apparel and clothing accessories not knitted or crocheted and Articles of apparel and clothing accessories, knitted or crocheted both were 19% and 13% where on 2015 it increased to 32% and 21%. Other products like vegetable textile fibres, fish, raw hinds and skin, oil seeds and footwear has mixed scenario. The commodity shares by percentage of vegetable, textile fibres (53) decreased from 2012 to 2015. It stands to 13% from 19%. Again, sectors like Fish (03), Raw Hides (41) decreased a little in percentage shares where as sectors 63, 39, 90 and 64 remains the same during 2012 to 2015.

b.   Intensity of trade:

Trade between two nations can be measure using quite a lot of statistical method. Trade intensity index (Brown, 1949; Kojima, 1964) is one of them which mostly use by many scholars. Trade gets stronger if it takes place between two countries other than rest of the world because the barrier between two countries is less than considering whole world. Intensity of trade has two parts. First one is export intensity index (XII) and second one is, import intensity index (MII).They can be defined as:

$$MIIi = \frac{mij \; / \; Miw}{Xjw \; / (Xw - Xiw)}$$

Where XIIi is the country i's export intensity index, MIIi the country i's import intensity index, xij the country i's exports to country j, Xiw the country i's total exports to the world, Mjw the country j's total imports from the world, Mw the world total imports, Miw the country i's total imports from the world, mij the country i's imports from country j, Xjw the country j's total exports to the world, Xw the world total exports, and i and j represent China and Bangladesh, respectively.

In order to examine whether the bilateral trade between Bangladesh and China is strong or weak, we calculate export intensity index and import intensity index.Export and import intensity indices reflects the ration of the share of country i's trade with country j relative to the share of the world trade destined for country j. If the value of index is greater than 1 then it indicates strong that means the trade flow between the two countries are larger than expected. Similarly if the index is less than 1 then it represents that the trade between two countries are not enough. They should increase more to co operate with each other.

Table 5: Intensity of trade between China and Bangladesh

Export Intensity	2012	2013	2014	2015
China to Bangladesh	1.80658981	2.110966213	2.037991861	1.906912219
Bangladesh to China	0.18082280	0.192471882	0.243329813	0.223450058
Import Intensity				
China from Bangladesh	0.17827576	0.212217338	0.21431805	0.215275221
Bangladesh From China	1.61653151	1.75327908	2.270975282	1.561344495

Note and sources: Author's own estimates using data from UN Comtrade database SITC Recision III (https://comtrade.un.org/data/, accessed May 2017)

In table 5, Export intensity index of China is clearly showing that Bangladesh is importing a lot from China that means China is already exporting more than expected. From 2012 to 2015 the export intensity increased from 1.81 to 1.91. In the middle it crosses 2 which indicate higher export intensity of China. On the other hand,

Bangladesh is exporting less to China. Though with the year passed it increasing from 0.18 to 0.22.In 2012 it was 0.18 and it stands to 0.24 and 0.22 on 2014 and 2015 respectively. The index clearly indicating that Bangladesh is exporting less than that they should. While calculating import intensity index, we found the result vice-versa. Chinese import intensity index is 0.21 where Bangladesh's import intensity is 1.56 on 2015. It also indicates the huge trade deficit between the countries.

c. Intra-Industry trade:

Intra-industry index proposed by Grubel and Lloyd (1975). A large value of IIT implies larger trade between countries in the same commodity group. , which defined as

$$IITic = \frac{xic + mic - |xic - mic|}{xic + mic}$$

Where IITic represent the index of intra-industry trade for country i in commodity group c, X_{ic} signify exports of commodity group c by country i, and mic denotes the value of imports of commodity group c by country i. The value of IIT index is between 0 and 1. The closer to 1 means the country has intra industry trade in the specific sectors. Here we take the index greater than 0.5 is intra industry index.

Table 6: Intra-Industry Trade Indices, 2015

Code	product details	Xic(value of exports commodity group c by country i	Mic(value of imports commodity group c by country i	ITTic
62	Articles of apparel and clothing accessories, not knitted or crocheted	174585	180059	0.984565
42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles ...	134011	11049	0.152337
61	Articles of apparel and clothing accessories, knitted or crocheted	130679	9796	0.13947
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	95188	19692	0.342827
41	Raw hides and skins (other than furskins) and leather	53891	17938	0.499464
64	Footwear, gaiters and the like; parts of such articles	23199	71032	0.492386
39	Plastics and articles thereof	20671	229242	0.165426
63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags	19285	21153	0.953806
03	Fish and crustaceans, molluscs and other aquatic invertebrates	16723	83	0.009877
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal ...	9727	1595	0.281752
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical ...	5463	88154	0.11671
94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; ...	4783	46754	0.185614
26	Ores, slag and ash	3983	4336	0.957567
67	Prepared feathers and down and articles made of feathers or of down; artificial flowers; articles ...	3201	1723	0.699838
88	Aircraft, spacecraft, and parts thereof	2702	23610	0.205382
84	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	2029	1572766	0.002577
05	Products of animal origin, not elsewhere specified or included	1895	17720	0.193219
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television ...	1725	944648	0.003645
57	Carpets and other textile floor coverings	1622	772	0.644946
55	Man-made staple fibres	1499	852049	0.003512
44	Wood and articles of wood; wood charcoal	1400	8112	0.294365
87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	1377	127979	0.02129
52	Cotton	1249	2089481	0.001195

Note:IIT indices are based on the value of Bangladesh's export to China and Bangladesh Import from China.

In table 6, commodity group article of apparel and clothing (62), other made-up textile articles (63), ores, slag and ash (26), prepared feather and articles made of feathers (67) and carpets and other textile floor covering materials (57) are intra industry trade. Most of them cross 0.5 index value and among them commodity group 62, 63 and 26 got the highest index value which is close to one. Other 2 category 41 and 64 which are raw hides and skins and footwear almost came close to 0.5 index values.

4. Calculating of Competitiveness of Bangladesh and China using Revealed comparative advantage:

Revealed comparative advantage (RCA) is measure to compare the competitiveness of each country in trade on particular commodity group. It also can indicate the strong sectors of a country. RCA is the ratio of the exports of the commodity from source to total exports from the source, over the same ratio for the world (Fertő & Hubbard, 2002). The classical theory of comparative advantage free trade would lead to world economic prosperity by the gains of exchange. Comparative advantage is an important concept of the world economic theory .International trades specialization determinant is comparative advantage. Before Blassa Liesner was the first one who introduced revealed comparative advantage measurement. Later on Blassa and Bela developed it and mostly recognized in world economic indicator. RCA mostly explains about a countries production capability. If a country produce a good at lower relative cost than other countries then are strong in that sector. Pragmatically to identify countries strong or weak sectors of export then we calculate RCA.

$$RCA_{ic} = \frac{x_{ic} / X_{iw}}{x_{cw} / X_w}$$

Where RCA_{ic} is the revealed comparative advantage of country i of commodity group c., The value of i the number of country which can be from 1 to n numbers, again c the number of commodity group which implies from 1 to m number of products. x_{ic} the value of exports of commodity group c by country i, X_{iw} denotes total exports by country i, x_{cw} denotes the value of world exports of commodity group c , and X_w denotes the value of total world exports.

When RCA_{ic} value is greater than unity then it implies to country i has comparative advantage on commodity group c. The value of RCA can be range from $-\infty$ to $+\infty$, it can be less than to as much higher as it can be. The higher the value is the stronger the commodity group is.

Table 7: Comparative advantage indices

SITC code	Description	China		Bangladesh	
		2012	2015	2012	2015
0	Food and live animals	0.458593525	0.422068891	0.416499305	0.390244558
1	Beverages and tobacco	0.168547503	0.177905448	0.335973964	0.286437449
2	Crude materials, inedible, except fuels	0.178996686	0.181787316	0.460537994	0.275256337
3	Mineral fuels, lubricants and related materials	0.092258931	0.123150842	0.111151598	0.056445372
4	Animal and vegetable oils, fats and waxes	0.049760659	0.059409683	0.079988125	0.115232846
5	Chemicals and related products, n.e.s.	0.541746433	0.523398088	0.059256961	0.039645897
6	Manufactured goods classified chiefly by material	1.365279407	1.400230815	0.808365811	0.538425029
7	Machinery and transport equipment	1.488071147	1.308832779	0.044319237	0.035032475
8	Miscellaneous manufactured articles	2.442635755	2.068320211	7.610745967	7.056793093
9	Commodities and transactions not classified elsewhere in the SITC	0.013022041	0.015504016	0.173972102	0.000282042
61	LEATHER, LEATHER GOODS	0.557612984	0.54410874	9.663127309	5.990455281
62	RUBBER MANUFACTURES, NES	1.265764536	1.094239659	0.034748383	0.021669682
63	CORK, WOOD MANUFACTURES	1.652158027	1.497429764	0.011431503	0.021025625
64	PAPER,PAPERBOARD,ETC.	0.738880658	0.865003094	0.116409384	0.096736313
65	TEXTILE YARN,FABRIC,ETC.	2.99031201	2.67290728	4.83289813	2.867144421
66	NON-METAL.MINERAL MANFCT	1.239426898	1.244136069	0.098951192	0.066223191
67	IRON AND STEEL	1.016529689	1.238190674	0.053356125	0.02825795
68	NON-FERROUS METALS	0.544623724	0.56827811	0.024639873	0.027235189
69	METALS MANUFACTURES,NES	1.807590314	1.739439029	0.046603795	0.039763823
81	PREFAB BUILDGS,FTTNG ETC	3.302943675	3.695107582	0.030144117	0.003507701
82	FURNITURE,BEDDING,ETC.	3.243308775	2.628421787	0.116046636	0.122653654
83	TRAVEL GOODS,HANDBGS ETC	4.114274413	3.346303755	0.433266555	1.295137455
84	CLOTHING AND ACCESSORIES	3.372139711	2.720591815	34.21973775	29.91958146
85	FOOTWEAR	3.661919068	2.933386936	2.260176395	2.741620218
87	SCIENTIFIC EQUIPMENT NES	1.324956085	1.083084564	0.002320275	0.013523026
88	PHOTO.APPARAT.NES;CLOCKS	1.125042529	1.019581704	0.202803678	0.158513398
89	MISC MANUFACTRED GOODS NES	2.138689096	1.734542088	0.094958281	0.103821402

Note and sources:Author's own estimates using data from UN Comtrade database SITC III(https://comtrade.un.org/data/,accessed May 2017).

To calculate RCA between China and Bangladesh we first took SITC III single digit data and from there we found that for China commodity group 6, 7 and 8 came strongest among all. The values are greater than unities which are 1.36, 1.48 and 2.88. For Bangladesh only group 8 is strong for both 2012 and 2015 data. Later on we took double digit data for group 6 and 8 to elaborate more about the sectors. On 2012 and 2015, China showing less comparative advantage on commodity group 61 (Leather, leather goods) where the value is   0.557612984 and 0.54410874 respectively. In the same sector Bangladesh showing very impressive data which is 9.663127309 and 5.990455281 on year 2012 and 2015 respectively. Though from 2012 to 2015 the value

decreases but still it has strong capabilities in this sector. Again the commodity group 62, 63, 66, 67, 68, 69, 81, 82, 83, 87, 88 and 89 the RCA value for China is greater than unity where as Bangladesh is less. These commodity group China is all the time strong from year 2012 and 2015. On the other hand, commodity group 61, 65, 84 and 85 (paper, paperboard, textile yarn, fabric, clothing and accessories and footwear) Bangladesh is much stronger than China which means they have comparative advantage. Though the sector of footwear China also has comparative advantage but still overall these sectors are in Bangladesh's hand.

From the data, the overall outcome is Bangladesh should improve its comparative advantage to seize the global market share and improve export. There are many sectors where Bangladesh can improve its infrastructure which will lead to export oriented market. In some sectors the RCA is almost close to China but it doesn't mean that they are competing with them because China's ongoing industrial restructuring in manufacturing sectors and environmental policy changes so middle class consumer will grow in Chinese economy.

5. Summary and Conclusions:

China is enjoying economic growth in the past decade .Bangladesh as an emerging Asian country also having a pace in recent years. This growth creates a good image in world economy for both the country. Though Bangladesh is far behind but still for some of its sectors globally they are getting reputation as well .From table 2, by exhibiting the value of export and import is we can see its increasing with years. Bangladesh exports to world stands almost to $32378700000 from $6389000000 from year 2000 to 2015. Again Imports from World also increases with time. For China from Year 2000 to 2015 both export and import increased drastically. On 2015 exports stands to $ 2.27347E+12 from $2.49203E+11 which was on 2000. Again import also increase a lot with time.

The value Trade intensity clearly showing that Bangladesh is not doing enough export to China as they should. Again import intensity of China is also justifying that they can increase import from Bangladesh to maintain the trade relationship. From table 5, the value of trade intensity showing straightly above 1 for China export Intensity to Bangladesh. Import intensity for Bangladesh from China also showing over the value of unity. Which clearly indicates that China already having good business with Bangladesh or we can say Bangladesh already importing a lot from China. But on the other hand, Bangladesh to China export intensity showing different scenario, Bangladesh is exporting less than they should have. Again China is importing less than they should have .So, there is a greater opportunity for both the country to increase their business and progress economically. While calculating intra industry trade we found some sectors which falls under intra industry trade. Sector like Articles of apparel and clothing accessories, made-up textiles articles, worn clothing's, ores, slag and ash are found under intra industry trade. Some of the sectors like footwear's, raw hinds and skins also have chances to get upward.

By Revealed comparative advantage we found the strong sectors of Bangladesh in which both the country can co operate and increase their trade relationship. There are some sectors like garments apparels, footwear's, fish-crustacean-molluscs and other aquatic invertebrates, raw hides and skins, plastic products, ores –slag an ash, optical-photo-technical and medical apparatus, oil seeds, cotton, electrical and electronic equipments, furniture which can be improved and can have a positive impact on bilateral trade relationship between these two countries. Duty free import of Machinery's which are using for production is also giving advantage to Bangladesh's economic progress. Other product which are mainly importing by Bangladesh are cotton, machinery, electrical and electronic equipments, manmade staple fibers, knitted or crocheted fabric, manmade filaments, plastics, vehicles other than railway, special woven or tufted fabric – lace – tapestry, articles of iron or steel, articles of apparel-accessories, fertilizers, organic chemicals, iron and steel, Power gape, economical distance between this two country shows that there is no competitiveness in between. While calculating RCA, we found there are some sectors which indicate that Bangladesh is competitor to China but if we consider the economic condition both the country's situation is not same. China is very strong compare to Bangladesh again China also facing disadvantage in some sectors where they need help from other countries. There are lot of sectors in which China were strong but with economical progress is losing their grip on it. So, to maintain the grip on those sectors they need to invest or work with new countries or market from which one can be Bangladesh. Bangladesh is a very small country with high work force population which can be use by China as well. Moreover by collaborating and creating infrastructure both the country can enjoy the fruits of global trade benefit and have a win win situation. Largely homogenous society, abundant supply of discipline workforce, active encouragement for foreign direct investment, bilateral agreement with almost 31 countries will give more benefit to Bangladesh.

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