# Changing Terms of Trade with BRICS Nations: With Special Reference to China 

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## Abstract

To achieve this, we emphasize the importance of establishing a road map for intra BRICS economic cooperation. In this regard, we welcome the proposals for a "BRICS Economic Cooperation Strategy" and a "Framework of BRICS Closer Economic Partnership", which lay down steps to promote intra-BRICS economic, trade and investment cooperation. Based on the documents tabled and informed by the input of the BRICS Think Tanks Council (BTTC), we instruct our Sherpas to advance discussions with a view to submit their proposal for endorsement by the next BRICS Summit." Furthermore, as adopted in Fortaleza, the „Objective ${ }^{\text {ce }}$ of BRICS Trade and Investment Facilitation Plan states: "Taking fully into account the economic diversities among BRICS members, especially the work done in trade and investment facilitation in respective economies, this Action Plan is to provide a menu of suggested actions for the BRICS members, with the aim of further advancing the work in the area of trade and investment facilitation." At the Fortaleza Summit, the Leaders of the BRICS group of countries and their trade ministers have rightly underlined the importance of „tradee in taking forward the future agenda of their trade and economic cooperation. Together they account for almost 20 per cent of global trade and generating more than 40 per cent of global economic growth.

Keywords: BRICS, CAD, Global, Trade, BTTC.

### 1.1 Introduction

In 2008, four emerging economies, viz. Brazil, Russia, China and India, came together to form the BRIC group of countries. In 2010, South Africa, another emerging economy, joined this group, which came to known as the BRICS group. Together they account for almost 18 per cent of the world's economy. They have approximately 3 billion people, a combined nominal gross domestic product of US\$ 16.039 trillion and an estimated US\$ 4 trillion in combined foreign reserves. All are members of the G20 group of countries. In July 2014, the BRICS Leaders held their Sixth Summit in Fortaleza, Brazil. While they decided to form a New Development Bank, with an initial authorized capital of US\$ 100 billion to finance infrastructure and sustainable development projects and also created a Contingency Reserve Arrangement worth US\$ 100 billion, the Fortaleza Declaration underlined the importance of intra-BRICS trade and other areas of economic cooperation. Article 20 of the Fortaleza Declaration states: "We are committed to raise our economic cooperation to a qualitatively new level. To achieve this, we emphasize the importance of establishing a road map for intra BRICS economic cooperation. In this regard, we welcome the proposals for a "BRICS Economic Cooperation Strategy" and a "Framework of BRICS Closer Economic Partnership", which lay down steps to promote intra-BRICS economic, trade and investment cooperation. Based on the documents tabled and informed by the input of the BRICS Think Tanks Council (BTTC), we instruct our Sherpas to advance discussions with a yiew to submit their proposal for endorsement by the next BRICS Summit." Furthermore, as adopted in Fortaleza, the „Objectivec of BRICS Trade and Investment Facilitation Plan states: "Taking fully into account the economic diversities $\overline{\mathrm{a}} \overline{\bar{n}} \overline{\mathrm{~B}} \mathrm{BRICS}$ members, especially the work done in trade and investment facilitation in respective economies, this Action Plan is to provide a menu of suggested actions for the BRICS members, with the aim of further advancing the work in the area of trade and investment facilitation." At the Fortaleza Summit, the Leaders of the BRICS group of countries and their trade ministers have rightly underlined the importance of „trade ${ }^{c e}$ in taking forward the future agenda of their trade and economic cooperation. Together they account for almost 20 per cent of global trade and generating more than 40 per cent of global economic growth. Therefore, given the growing importance of trade among the BRICS group of countries, and that India's new trade policy is expected to be announced in August 2014, this Discussion Paper analyses the trends in trade between six pairs of BRCS countries (Brazil, Russia,

China and South Africa) and their implications for India. Other than trend analyses, Degrees of Similarity in Export Structures (Finger-Kreinin Index) and Relative Export Competitive Pressure Index (RECPI) are calculated to understand competitive strengths and weaknesses with direct competitors in respective markets. Revealed Comparative Advantage measures of the top ten products of Brazil, Russia, China and South Africa, and their comparison with those of India are also calculated to analyses trade similarities.

### 1.2 Review of Literature

Deepika Kumari and Neena Malhotra(2014) in their study "Trade-Led
Growth in India and China: A Comparative Analysis" state that the trade-led growth theory has received considerable attention over the decades with vast amount of literature devoted to analyse it empirically, particularly, in the case of export- led growth hypothesis. India and China are two large Asian Countries experiencing rapid growth during recent decades. Their study aims to examine the impact of exports and imports expansion on Economic Growth for India and China. The study concluded that China performed better as compared to India. The difference in performance between India and China is not simply because of timings of changes in policies but the speed of reforms, implementation of policies and nature of political governance also mattered.

Wani and Dhami (2013) in their paper "Indo-China Trade: Intensity and Potential for Future Trade" attempts to identify how the bilateral trade between India and China helps in growing their partnership for their mutual benefit in the coming time. The trends in the growth rate of China-India trade shows a huge potential focused on their political achievements.

Suresh (2012) in his paper "Exchange Rate Impact on Bilateral Trade between India and China" tries to find how Chinese Renminbi (RMB) impacts India,,s trade with China. The findings hold that appreciation in RMB will impact India"s trade, mainly with higher elasticity for imports.

### 1.3 Objective of study

$>$ To explore the current status of foreign trade of India with China.
$>$ To analysis the Net barter terms of Trade of India with China.
$>$ To suggest proper guideline for the improvement in Terms of Trade with China.

### 1.4 Research Design

### 1.4.1 Collection of data

This study is based on the secondary data which is collected from the Reserve bank of India, CSSO, NSSO, Ministry of Employment Govt. of India, etc.

### 1.4.2 Research Methodology

The Balance of Trade between India and each of the East Asian Countries has been calculated from the import and export values separately for the concerned time period. In order to calculate India's Net Barter Terms of Trade a certain procedure is followed. For calculating Net Barter Terms of Trade, we needed Unit Value Index of imports and exports. Thus, first of all, after analyzing the composition of India's trade with each of the East Asian Countries, the important items of imports and exports have been identified. On the basis of this, Unit Value Index of imports and exports with each of the East Asian country is calculated by taking up the top ten exports and imports commodities because these top ten commodities contribute around $90 \%$ of the total trade. Then the Net Barter Terms of Trade has been calculated for the time period between 2003-04 and 2013-14 taking 1999-2000 as the base year. The Net Barter Terms of Trade was calculated using the following formula:

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NTT = UVI (Exports) x 100
UVI (Imports)
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Where,

NTT is Commodity or Net Barter Terms of Trade

UVI stands for Unit Value of Index

### 1.5 Terms of Trade

Terms of Trade (TOT) implies the relative price of exports in terms of imports. I $n$ the case of bilateral and multilateral trade between countries, the Terms of Trade determine the rate of exchange of one good or service for another. It can be defined as the ratio of export prices to import prices. It can be understood as the amount of goods an economy can import against per unit of goods exported. Hence, relationship between the prices at which a country sells its exports and the prices paid for its imports can be termed as Terms of Trade.

A favourable Terms of Trade means the country concerned can buy more products, as the prices of imports fall relative to the prices of exports. The Terms of Trade may be influenced by the exchange rate because a rise in the value of a country's currency lowers the domestic prices of its imports and make its exports costlier.

## CHINA

In the tables given below, the Unit Value Index of Exports and Unit Value Index of Imports of India with China have been calculated; and the Net Barter Terms of Trade has been calculated through the resulting values:


| 6 | $\mathrm{P}_{\mathrm{t}}$ | COTTON. | 0.0025829 | 0.00178094 | 0.001916634 | 0.00117489 | 0.001265161 | 0.00146533 | 0.00161116 | 0.00160727 | 0.002125103 | 0.00228348 | 0.00210978 | 0.002325532 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $Q_{t}$ |  |  | 60451.3 | 45605.99 | 438093.37 | 599054.27 | 745546.2 | 242837.07 | 787466.87 | 889848.63 | 1760784.58 | 1616526.06 | 1648401.17 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 156.13 | 117.79 | 1131.51 | 1547.24 | 1925.60 | 627.20 | 2033.87 | 2298.30 | 4547.75 | 4175.16 | 4257.49 |
|  | $P_{t} Q_{t}$ |  |  | 107.66 | 87.41 | 514.71 | 757.9 | 1092.47 | 391.25 | 1265.67 | 1891.02 | 4020.71 | 3410.51 | 3833.41 |
|  | $\mathbf{P}_{\mathbf{t}} \mathrm{Q}_{\mathrm{t}} / \mathrm{P}_{\mathbf{o}} \mathrm{Q}_{\mathrm{t}}$ |  |  | 0.690 | 0.742 | 0.455 | 0.490 | $0.567$ | 0.624 | 0.622 | 0.823 | 0.884 | 0.817 | 0.900 |
| 7 | $\mathrm{P}_{\mathrm{t}}$ | NATURAL OR CULTURED <br> PEARLS,PRECIOUS OR SEMIPRECIOUS STONES,PRE.METALS,CLAD WITH PRE.METAL AND ARTCLS THEREOF;IMIT.JEWLRY;COIN. | 0.015968064 | 0.08782381 | 0.221455844 | 0.07572907 | 0.075016771 | 0.14960429 | 0.41909414 | 0.19126885 | 0.05919737 | 0.05151516 | 0.04663642 | 0.020282651 |
|  | $Q_{t}$ |  |  | 110.79 | 81.19 | 148.82 | 253.41 | 235.02 | 1764.52 | 2273.24 | 1405.13 | 2294.47 | 1880.29 | 6188.54 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 1.77 | 1.30 | 2.38 | 4.05 | 3.75 | 28.18 | 36.30 | 22.44 | 36.64 | 30.02 | 98.82 |
|  | $P_{t} Q_{t}$ |  |  | 9.73 | 17.98 | 11.27 | 19.01 | 35,16 | 739.5 | 434.8 | 83.18 | 118.2 | 87.69 | 125.52 |
|  | $P_{t} Q_{t} / P_{0} Q_{t}$ |  |  | 5.500 | 13.869 | 4.743 | 4.698 | 9.369 | 26.246 | 11.978 | 3.707 | 3.226 | 2.921 | 1.270 |
| 8 | $\mathrm{P}_{\mathrm{t}}$ | IRON AND STEEL | 0.000271559 | 0.0005346 | 0.000793323 | 0.00071082 | 0.000853888 | 0.00089598 | 0.0006829 | 0.00084982 | 0.000876672 | 0.00122354 | 0.00108269 | 0.001044965 |
|  | $Q_{t}$ |  |  | 1128940.21 | 833897.94 | 597520.62 | 560354.58 | 249816.76 | 528673.23 | 361419.01 | 853922.94 | 475081.62 | 277483.87 | 308096.35 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 306.56 | 226.44 | 162.26 | 152.16 | 67.84 | 143.56 | 98.14 | 231.88 | 129.01 | 75.35 | 83.66 |
|  | $P_{t} Q_{t}$ |  |  | 603.53 | 661.55 | 424.73 | 478.48 | 223.83 | 361.03 | 307.14 | 748.61 | 581.28 | 300.43 | 321.95 |
|  | $P_{t} Q_{t} / P_{0} Q_{t}$ |  |  | 1.969 | 2.921 | 2.618 | $3.144$ | 3.299 | 2.515 | 3.130 | 3.228 | 4.506 | 3.987 | 3.848 |
| 9 | $\mathrm{P}_{\mathrm{t}}$ | COPPER AND ARTICLES THEREOF. | 0.00 | 0.00205156 | 0.002918999 | 0.00372825 | 0.007034386 | 0.00512538 | 0.00351328 | 0.00631613 | 0.008471233 | 0.00875633 | 0.00859325 | 0.008011148 |
|  | $Q_{t}$ |  |  | 16626.39 | 22439.2 | 31521.49 | 76050.7 \} | 78318.1 | 33922.67 | 86234.77 | 316309.31 | 230682.26 | 234017.29 | 229893.38 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 47.21 | 63.72 | 89.51 | 215.95 | 222.39 | 96.33 | 244.87 | 898.19 | 655.05 | 664.52 | 652.81 |
|  | $P_{t} Q_{t}$ |  |  | 34.11 | 65.5 | 117.52 | 534.97 | 401.41 | 119.18 | 544.67 | 2679.53 | 2019.93 | 2010.97 | 1841.71 |
|  | $\mathbf{P}_{t} \mathbf{Q}_{\mathrm{t}} / \mathrm{P}_{\mathbf{o}} \mathrm{Q}_{\mathrm{t}}$ |  |  | 0.722 | 1.028 | 1.313 | 2.477 | 1.805 | 1.237 | 2.224 | 2.983 | 3.084 | 3.026 | 2.821 |
| 10 | $\mathrm{P}_{\mathrm{t}}$ | NUCLEAR REACTORS, BOILERS, MACHINERY AND MECHANICAL APPLIANCES; PARTS THEREOF. | $0.027147133$ | 0.01187899 | 0.012793296 | 0.0239399 | 0.017940402 | 0.01822226 | 0.02008572 | 0.00628749 | 0.01595569 | 0.01580738 | 0.02155641 | 0.019006624 |
|  | $Q_{t}$ |  |  | 5732.81 | 8266.83 | 5308.71 | 8707.72 | 12780.52 | 11438.97 | 48585.37 | 19593.01 | 24143.16 | 20172.65 | 25422.19 |
|  | $P_{0} Q_{t}$ |  |  | 155.63 | 224.42 | 144.12 | 236.39 | 346.95 | 310.54 | 1318.95 | 531.89 | 655.42 | 547.63 | 690.14 |
|  | $\mathrm{P}_{\mathrm{t}} \mathrm{Q}_{\mathrm{t}}$ |  |  | 68.1 | 105.76 | 127.09 | 156.22 | 232.89 | 229.76 | 305.48 | 312.62 | 381.64 | 434.85 | 483.19 |
|  | $P_{t} \mathrm{Q}_{\mathrm{t}} / \mathrm{P}_{\mathbf{o}} \mathrm{Q}_{\mathrm{t}}$ |  |  | $0.438$ | 0.471 | 0.882 | 0.661 | 0.671 | 0.740 | 0.232 | 0.588 | 0.582 | 0.794 | 0.700 |
|  |  | General Unit Value Index |  | 2.921 | 3.268 | 3.903 | 36.085 | 5.492 | 6.010 | 9.607 | 3.369 | 4.741 | 2.125 | 1.937 |

UNIT VALUE INDEX (IMPORTS) of INDIA with CHINA

| S.No |  | Commodity | $\mathrm{P}_{0}$ | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\mathrm{P}_{\mathrm{t}}$ | INORGANIC CHEMICALS; ORGANIC OR INORGANIC COMPOUNDS OF PRECIOUS METALS, OF RARE-EARTH METALS, OR RADI. ELEM. OR OF ISOTOPES. | 0.000634084 | 0.000734439 | 0.000930891 | 0.000842985 | 0:000657807 | 0.000836442 | 0.000927817 | 0.000688517 | 0.001018268 | 0.001038971 | 0.000955246 | 0.000949828 |
|  | $Q_{t}$ |  |  | 151162.94 | 160362.47 | 241522.66 | 436632.51 | 478730.23 | 602640.07 | 657413.34 | 523879.57 | 741493.25 | 719364.72 | 719708.92 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 95.85 | 101.68 | 153.14 | 276.86 | 303.55 | 382.12 | 416.85 | 332.18 | 470.17 | 456.13 | 456.35 |
|  | $P_{t} Q_{t}$ |  |  | 111.02 | 149.28 | 203.6 | 287.22 | 400.43 | 559.14 | 452.64 | 533.45 | 770.39 | 687.17 | 683.6 |
|  | $P_{t} Q_{t} / P_{0} Q_{t}$ |  |  | $1.158$ | 1.468 | 1.329 | 1.037 | 1.319 | 1.463 | 1.086 | 1.606 | 1.639 | 1.507 | 1.498 |
| 2 | $\mathrm{P}_{\mathrm{t}}$ | ORGANIC CHEMICALS | 0.00302891 | 0.003909342 | 0.004081094 | 0.004619627 | 0.003955727 | 0.004519724 | 0.005977709 | 0.004756203 | 0.005229548 | 0.004851716 | 0.005418804 | 0.005378563 |
|  | $Q_{t}$ |  |  | 164782.22 | 201600.34 | 283704.7 | 432057.07 | 527366.22 | 471921.61 | 632851.49 | 736855.29 | 863657.39 | 912884.12 | 1003323.8 |
|  | $P_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 499.11 | 610.63 | 859.32 | 1308.66 | 1597.34 | 1429.41 | 1916.85 | 2231.87 | 2615.94 | 2765.04 | 3038.98 |
|  | $P_{t} Q_{t}$ |  |  | 644.19 | 822.75 | 1,310.61 | 1,709.10 | 2,383.55 | 2,821.01 | 3,009.97 | 3,853.42 | 4,190.22 | 4,946.74 | 5,396.44 |
|  | $\mathrm{P}_{\mathrm{t}} \mathrm{Q}_{\mathrm{t}} / \mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 1.291 | 1.347 | 1.525 | 1.306 | 1.492 | 1.974 | 1.570 | 1.727 | 1.602 | 1.789 | 1.776 |
| 3 | $\mathrm{P}_{\mathrm{t}}$ | FERTILISERS. | 0.000125843 | 0.000198653 | 0.000333676 | 0.000338956 | 0.000278251 | 0.000386984 | 0.000775109 | 0.000342284 | 0.00041621 | 0.000499584 | 0.000474146 | 0.000373085 |
|  | $Q_{t}$ |  |  | 63678.94 | 9170.56 | 48383.86 | 438381.01 | 3067978.72 | 1178273.72 | 1172038.08 | 3645851.88 | 5077319.94 | 6326528.45 | 5161561.19 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 8.01 | 1.15 | 6.09 | 55.17 | 386.07 | 148.27 | 147.49 | 458.79 | 638.93 | 796.13 | 649.53 |
|  | $\mathrm{P}_{\mathrm{t}} \mathrm{Q}_{\mathrm{t}}$ |  |  | 12.65 | 3.06 | 16.4 | 121.98 | 1,187.26 | 913.29 | 401.17 | 1,517.44 | 2,536.55 | 2,999.70 | 1,925.70 |
|  | $\mathrm{P}_{\mathrm{t}} \mathrm{Q}_{\mathrm{t}} / \mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 1.579 | 2.652 | 2.694 | 2.211 | 3.075 | 6.159 | 2.720 | 3.307 | 3.970 | 3.768 | 2.965 |
| 4 | $\mathrm{P}_{\mathrm{t}}$ | PLASTIC AND ARTICLES THEREOF. | 0.001777728 | 0.001803514 | 0.001877383 | 0.001707092 | 10.001559596 | 0.001573363 | 0.001862105 | 0.001970568 | 0.001897546 | 0.003383171 | 0.002305586 | 0.002176925 |
|  | $Q_{t}$ |  |  | 30939.6 | 52402.74 | 109806.65 | 245076.23 | 399335.69 | 273862.08 | 262807.41 | 450956.18 | 374893.81 | 491809.89 | 606621.63 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 55.00 | 93.16 | 195.21 | 435.68 | 709.91 | 486.85 | 467.20 | 801.67 | 666.46 | 874.30 | 1078.40 |
|  | $\mathrm{P}_{\mathrm{t}} \mathrm{Q}_{\mathrm{t}}$ |  |  | 55.8 | 98.38 | 187.45 | 382.22 | 628.3 | 509.96 | 517.88 | 855.71 | 1,268.33 | 1,133.91 | 1,320.57 |
|  | $P_{t} Q_{t} / P_{0} Q_{t}$ |  |  | 1.015 | 1.056 | 0,960 | 0.877 | 0.885 | 1.047 | 1.108 | 1.067 | 1.903 | 1.297 | 1.225 |
| 5 | $\mathrm{P}_{\mathrm{t}}$ |  | 0.018701524 | 0.004762103 | 0.004932698 | 0.005182793 | 0.005955809 | 0.005353421 | 0.005492844 | 0.005737531 | 0.006378926 | 0.009289708 | 0.013253799 | 0.013194723 |
|  | $\mathrm{Q}_{\mathrm{t}}$ |  |  | 46471.07 | 61469.4 | 74313.21 | 56506.18 | 71416.01 | 67515.11 | 64278.52 | 56178.74 | 33349.81 | 22869.67 | 15973.81 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 869.08 | 1149.57 | 1389.77 | 1056.75 | 1335.59 | 1262.64 | 1202.11 | 1050.63 | 623.69 | 427.70 | 298.73 |
|  | $P_{t} Q_{t}$ |  |  | 221.3 | 303.21 | 385.15 | 336.54 | 382.32 | 370.85 | 368.8 | 358.36 | 309.81 | 303.11 | 210.77 |
|  | $P_{t} Q_{t} / P_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 0.255 | 0.264 | 0.277 | 0.318 | 0.286 | 0.294 | 0.307 | 0.341 | 0.497 | 0.709 | 0.706 |

UNIT VALUE INDEX (EXPORTS) of INDIA with CHINA

| s.no |  | Commodity | $\mathrm{P}_{0}$ | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\mathrm{P}_{\mathrm{t}}$ | SALT; SULPHUR; EARTHS AND STONE; PLASTERING MATERIALS, LIME AND CEMENT. | 0.000174248 | 0.000145 | 6.49339E-05 | 7.7975E-05 | 0,000178527 | 0.00012805 | 0.00013583 | 0.00012469 | 0.000110596 | 0.00013298 | 0.00010285 | 9.14255E-05 |
|  | $\mathrm{Q}_{\mathrm{t}}$ |  |  | 621359.44 | 2184837.09 | 1944843.46 | 1164809.55 | 1567410.15 | 2036476.23 | 2219915.49 | 3361256.83 | 3623920.78 | 5913254.6 | 7412700.3 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 108.27 | 380.69 | 338.87 | 202.96 | 273.11 | 354.84 | 386.80 | 585.67 | 631.43 | 1030.33 | 1291.59 |
|  | $P_{t} \mathrm{Q}_{\mathrm{t}}$ |  |  | 90.1 | 141.87 | 151.65 | 207.95 | 200.71 | 276.61 | 276.8 | 371.74 | 481.92 | 608.15 | 677.71 |
|  | $\mathrm{P}_{\mathrm{t}} \mathrm{Q}_{\mathrm{t}} / \mathrm{P}_{\mathbf{0}} \mathrm{Q}_{\mathrm{t}}$ |  |  | 0.832 | 0.373 | 0.448 | 1.025 | 0.735 | 0.780 | 0.716 | 0.635 | 0.763 | 0.590 | 0.525 |
| 2 | $\mathrm{P}_{\mathrm{t}}$ | ORES, SLAG AND ASH. | 0.000196324 | 0.0028402 | 0.001878714 | 0.00270868 | 0.000801827 | 0.00094902 | 0.00172479 | 0.0025944 | 0.002717674 | 0.00202966 | 0.00033875 | 0.000323999 |
|  | $\mathrm{Q}_{\mathrm{t}}$ |  |  | 305316.93 | 1558406.45 | 1279226.42 | 4763357.1 | 6519836.97 | 2793156.95 | 2146503.69 | 1754114.11 | 2277646.89 | 5601942.31 | 4847521.86 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 59.94 | 305.95 | 251.14 | 935.14 | 1279.97 | 548.35 | 421.40 | 344.37 | 446.36 | 1099.77 | 951.67 |
|  | $\mathrm{P}_{\mathrm{i}} \mathrm{Q}_{\mathrm{t}}$ |  |  | 867.16 | 2927.8 | 3465.01 | 3819.39 | 6187.48 | 4817.6 | 5570.04 | 4767.11 | 4614.72 | 1897.67 | 1570.59 |
|  | $\mathrm{P}_{\mathrm{t}} \mathrm{Q}_{\mathrm{t}} / \mathrm{P}_{\mathbf{0}} \mathrm{Q}_{\mathrm{t}}$ |  |  | 14.467 | 9.570 | 13.797 | 4.084 | 4.834 | 8.786 | 13.218 | 13.843 | 10.339 | 1.726 | 1.650 |
| 3 | $\mathrm{P}_{\mathrm{t}}$ | MINERAL FUELS, MINERAL OILS AND PRODUCTS OF THEIR DISTLLLATION; bituminous substances; Mineral WAXES | 0.00079824 | 0.00210877 | 0.000834688 | 0.00940905 | 0.272173004 | 0.02377769 | 0.01208628 | 0.04821967 | 0.003192992 | 0.01570619 | 0.00266573 | 0.002439525 |
|  | $Q_{\text {t }}$ |  |  | 35233.75 | 19552.22 | 1991.7 | 401.84 | 6806.8 | 9549.67 | 2114.49 | 258422.17 | 74696.04 | 122323.1 | 419294.67 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 28.12 | 15.61 | 1.59 | 0.32 | 5.43 | 7.62 | 1.69 | 206.28 | 59.63 | 97.64 | 334.70 |
|  | $\mathrm{P}_{\mathrm{t}} \mathrm{Q}_{\mathrm{t}}$ |  |  | 74.3 | 16.32 | 18.74 | 109.37 | 161.85 | 115.42 | 101.96 | 825.14 | 1173.19 | 326.08 | 1022.88 |
|  | $\mathrm{P}_{\mathrm{t}} \mathrm{Q}_{\mathrm{t}} / \mathrm{P}_{\mathbf{0}} \mathrm{Q}_{\mathrm{t}}$ |  |  | 2.642 | 1.046 | 11.787 | 340.966 | 29.788 | 15.141 | 60.407 | 4.000 | 19.676 | 3.340 | 3.056 |
| 4 | $\mathrm{P}_{\mathrm{t}}$ | ORGANIC CHEMICA | 0.001309117 | 0.00106059 | 0.001436877 | 0.00158188 | 0.001597267 | 0.00190943 | 0.00230349 | 0.00196474 | 0.002074245 | 0.00243689 | 0.00214276 | 0.002561722 |
|  | $\mathrm{Q}_{\mathrm{t}}$ |  |  | 208949.08 | 252213.71 | 290926.32 | 325142.79 | 327328.78 | 173119.74 | 259382.94 | 338344.83 | 370123.99 | 475852.66 | 358653.25 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 273.54 | 330.18 | 380.85 | 425.65 | 428.51 | 226.63 | 339.56 | 442.93 | 484.53 | 622.94 | 469.52 |
|  | $\mathrm{P}_{\mathrm{t}} \mathrm{Q}_{\mathrm{t}}$ |  |  | 221.61 | 362.4 | 460.21 | 519.34 | 625.01 | 398.78 | 509.62 | 701.81 | 901.95 | 1019.64 | 918.77 |
|  | $\mathrm{P}_{\mathrm{t}} \mathrm{Q}_{\mathrm{t}} / \mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 0.810 | 1.098 | 1:208 | 1.220 | 1.459 | 1.760 | 1.501 | 1.584 | 1.861 | 1.637 | 1.957 |
| 5 | $\mathrm{P}_{\mathrm{t}}$ | PLASTIC AND ARTICLES THEREOF. | 0.000591442 | 0.00067735 | 0.000923746 | 0.00104983 | 0.001233885 | 0.0014124 | 0.00134384 | 0.00120803 | 0.001359379 | 0.00147035 | 0.00142516 | 0.001561905 |
|  | $\mathrm{Q}_{\mathrm{t}}$ |  |  | 394022.7 | 432532.51 | 260812.57 | 348419.93 | 163742.54 | 108815.25 | 258453.72 | 294445.95 | 419592.95 | 441388.71 | 356852.64 |
|  | $\mathrm{P}_{0} \mathrm{Q}_{\mathrm{t}}$ |  |  | 233.04 | 255.82 | 154.25 | 206.07 | 96.84 | 64.36 | 152.86 | 173.91 | 248.16 | 261.05 | 211.06 |
|  | $P_{i} Q_{t}$ |  |  | 266.89 | 399.55 | 273.81 | 429.91 | 231.27 | 146.23 | 312.22 | 399.72 | 616.95 | 629.05 | 557.37 |
|  | $\mathrm{P}_{\mathrm{t}} \mathrm{Q}_{\mathrm{t}} / \mathrm{P}_{\mathbf{0}} \mathrm{Q}_{\mathrm{t}}$ |  |  | 1.145 | 1.562 | 1.775 | 2.086 | 2.388 | 2.272 | 2.043 | 2.298 | 2.486 | 2.410 | 2.641 |


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|  |  | $\left\|\begin{array}{c} \underset{\sim}{e} \\ \underset{\sim}{e} \end{array}\right\|$ | $\begin{aligned} & \stackrel{2}{7} \\ & \stackrel{y}{9} \\ & \underset{\sim}{2} \end{aligned}$ | $\stackrel{n}{4}$ |  |  | $\left\|\begin{array}{c} \tilde{m} \\ \underset{2}{2} \\ \stackrel{0}{6} \end{array}\right\|$ | $\left.\begin{gathered} \underset{\sim}{i} \\ \underset{\sim}{\infty} \\ \underset{\sim}{\infty} \end{gathered} \right\rvert\,$ | 若 |  | $\begin{aligned} & \hline \text { on } \\ & \text { on } \\ & \text { on } \\ & \text { స } \end{aligned}$ | $\left\|\begin{array}{c} \hat{a} \\ \dot{d} \\ \dot{c} \end{array}\right\|$ | $\begin{array}{\|l\|l} \text { n } \\ \stackrel{0}{\circ} \\ 0 \\ \end{array}$ | $\underset{\sim}{\underset{\sim}{n}}$ |  | $\begin{aligned} & \underset{\sim}{\omega} \\ & \underset{\sim}{\infty} \\ & \underset{\sim}{2} \end{aligned}$ | $\begin{array}{\|c} \stackrel{n}{n} \\ \underset{\sim}{\infty} \\ \underset{\sim}{\infty} \end{array}$ | $\begin{array}{\|c} \text { r } \\ \substack{1 \\ \hline} \end{array}$ | $\stackrel{\infty}{\stackrel{\infty}{7}}$ |  | $\begin{array}{\|l\|l} \text { 学 } \\ \stackrel{\rightharpoonup}{\mathrm{N}} \end{array}$ | $\begin{aligned} & \mathrm{Z} \\ & \text { 保 } \end{aligned}$ | $\stackrel{\rightharpoonup}{\stackrel{\rightharpoonup}{\circ}}$ | $\stackrel{\infty}{\underset{\sim}{N}}$ | － |
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|  |  | 苾 |  |  |  |  |  |  |  |  |  | 8 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  | PARTS AND ACCESSORIES THERE |  |  | 年1 |  | $E$ |  |  |
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## Table 1.3

India's Net Barter Terms of Trade with China
Base 1999-2000 = 100

| Year | UVI (Exports) | UVI (Imports) | Net Barter <br> Terms of Trade |
| :---: | ---: | ---: | ---: |
| $2003-04$ | 2.921 | 1.355 | 215.7 |
| $2004-05$ | 3.268 | 1.691 | 193.2 |
| $2005-06$ | 3.903 | 1.608 | 242.7 |
| $2006-07$ | 36.085 | 1.426 | 2529.8 |
| $2007-08$ | 5.492 | 1.878 | 292.4 |
| $2008-09$ | 6.010 | 2.290 | 262.5 |
| $2009-10$ | 9.607 | 1.571 | 611.5 |
| $2010-11$ | 4.369 | 1.599 | 210.6 |
| $2011-12$ | 2.125 | 1.851 | 256.2 |
| $2012-13$ | 1.937 | 1.772 | 119.9 |
| $2013-14$ |  | 1.633 | 118.6 |

Figure 1.1


India's Net Barter Terms of Trade with China was 215.7 in the year 2003-04. The Terms of Trade deteriorated in 2004-05 by $22 \%$ due to the high increase in prices of Organic and Inorganic Chemicals, Fertilizers, Vehicles, Articles of Iron and Steel in imports in that year.

In 2005-06, the Terms of Trade improved by $49 \%$ due to the increase in the prices of exports of Ores, Slag and Ash, Mineral Fuels and Mineral Oils, Plastic and its articles, Copper and its articles. The year 2006-07, showed a huge increase in Terms of Trade. This was due to the high increase in the prices of Mineral Fuels and Mineral Oils, which led to the improvement in Terms of Trade with $2287 \%$.

In 2008-09, the Terms of Trade deteriorated by $2237 \%$ as the prices of Mineral Fuels and Mineral Oils came down. In 2009-10, again there was increase in the prices of exports of Mineral Fuels and Mineral Oils, Ores, Slag and Ash, Iron and Steel, Copper and its articles; that led to the high improvement in Terms of Trade with $349 \%$ in that year.

The sudden fall in the exports prices of Salt, Sulphur, Lime and Cement, Mineral Fuels and Mineral Oils, Natural Pearls, Precious and Semi-Precious Stones in 2010-11; led to the deterioration in Terms of Trade by $401 \%$, but improved by $46 \%$ just the next year, i.e. 2011-12, due to the increase in the prices of exports of Mineral Fuel and Mineral Oils, Cotton, Copper and its articles and Iron and Steel in that year.

In 2013-14, the prices of exports of Copper and its articles, Nuclear Reactors, Boilers, Machinery and Mechanical Appliances, Natural Pearls, Precious and semi-Precious Stones fell and thus, the Terms of Trade deteriorated with $137 \%$ and further by $1 \%$ in 2013-14.

If we analyse, the trend of improvement or deterioration of India's Terms of Trade with China, we found that in most of the years in the span of these eleven years (2003-04 to 2013-14), the Terms of Trade have mostly showed an improvement. This is a good sign for India. Taking an exception of 2012-14, the Terms of Trade has been improving consistently. Thus it will be having a positive impact on India's trade with China.

### 1.6 Conclusion of the study

Thus, we can say that improving trade relations with China is profitable for India as India's Net Barter Terms of Trade is improving. This means that although India is facing deficits in Balance of Trade with some of the China, yet the Terms of Trade with all of them is improving. Although, India's imports are more than its exports in value terms; yet the prices of the items which India is importing from China is not increasing as fast as the prices of items of India's exports are increasing.

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