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# AN ANALYSIS OF THE EXPORT COMPETITIVENESS OF BRIC

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## Abstract

The paper attempts to evaluate the export competitiveness of BRIC for merchandise trade, covering the period from 1997 to 2013. The study analyses the structure of the Revealed Comparative Advantage (RCA) at Section, Chapter and Product levels. This study further investigates the RCA of BRIC for different types of classification at the product level, i.e. Trade classification, UNCTAD classification and WTO classification. According to trade classification, Brazil, Russia and India enjoy RCA for the export of Ricardo products (products which use natural resources for their production). For Heckscher-Ohlin products (produced with standard technology with low R&D intensity), India and China show competitiveness mainly due to abundant labour endowment. However, among the group, only China depicts RCA in the export of product cycle products (technology intensive with high R&D intensity) because of FDI which helped China to gain RCA since 2005. UNCTAD classification suggests that all other BRIC members, excluding China, enjoy export competitiveness for primary goods. Moreover, BRIC invariably shows export competitiveness for low-technology skill-based products. However, none of the member countries of BRIC exhibit advantage in exporting medium and high-technology skill-based products, excluding China, since 2003. As per WTO Classification, BRIC lost its export competitiveness for agricultural products from 2003 onwards. However, Brazil maintains its comparative advantage for agricultural, raw material and intermediate products. India and China retain their competitiveness for consumer products. As far as capital goods are concerned, China is the only country in the group that began to gain competitiveness from 2003 onwards.

*Keywords:* Trade, Revealed Comparative Advantage, Competitiveness

*JEL Codes:* F10, F14

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# Authors are solely responsible for any remaining errors.

## 1. INTRODUCTION

Brazil, Russia, India and China (BRIC) are a group of countries that have experienced rapid economic growth in GDP. Simultaneously, their contribution to world trade also increased considerably in the last decade. BRIC's share in world exports was less than 8 percent in the year 2001 but it reached to 22 percent in 2013. The remarkable fact is BRIC's export contribution to world exports exceeded its share of world imports. With the growing exports of BRIC in world trade, it is interesting to investigate the export competitiveness of BRIC with its enormous capacity for trade.

BRIC is the term coined by Jim O'Neill, the chief economist of Goldman Sachs, in 2001. He was the first person to recognise and highlight BRIC's growth prospects and its role in global trade (O'Neill, 2001). Each member country of BRIC has a unique feature which represents its inbuilt potential to grow. Brazil is extremely rich in natural resources; Russia possesses massive deposits of natural gas and minerals; India is a strong service provider to the world; and China proved itself as a manufacturing giant. These differences in their endowments have been reflected in their export basket (Government of India, 2012). However, the actual political interaction within BRIC began in 2006 when the 61$^{st}$ United Nations assembly was held in New York. This gave a platform for political dialogues within BRIC. This high level gathering was followed by large scale diplomatic meeting on 16$^{th}$ May 2008 in Yekaterinburg, Russia. Finally, this paved the way for annual BRIC summits. Since its inception in 2009, total six summits were held till 2014. Each member country takes turns to host this summit. The first summit focused on issues such as a more stable and diversified international monetary system, reformation of financial institutions and increased co-operation. However, it failed to address the issues affecting BRIC countries. It has been criticised as an empty forum, as all member countries of BRIC struggled to find a common cause for which they had come together, because these countries had radically different competing priorities and dissimilar economic and political structures. The second summit was held in Brasilia, Brazil in 2010. BRIC signed a joint statement and took concrete steps to move forward for co-operation and co-ordination. South Africa became an official member of the group on 24$^{th}$ December 2010 and the group was renamed 'BRICS'. In 2011, the third annual meeting hosted by China encouraged co-actions with the theme of

broad vision and shared prosperity. During the fourth summit in 2012 in India, the group signed an agreement of extending credit facilities in local currency to promote intra-regional trade and reduce demand for fully convertible currencies for transactions to reduce transaction costs. At the fifth summit held in South Africa, member countries agreed to establish a bank to fund infrastructural projects undertaken by the member countries. In the last summit hosted by Brazil (2014), BRICS signed an agreement to create a new development bank with an initial authorized capital of US $ 100 billion. The initial subscribed capital shall be of US $ 50 billion, which would be equally shared among founding members. The headquarters of the Bank shall be located in Shanghai. BRICS new development bank shall work in accordance with sound banking principles. All these measures would ultimately increase trade opportunities among the member countries of BRICS.

Section *two* of the paper discusses methodology and data sources. Section *three* concisely deals with Hirschman Index (HI) of BRIC and elaborates on the Revealed Comparative Advantage (RCA) for exports of BRIC as a group and member countries of BRIC as well. Section *four* assesses RCA of BRIC and each member of BRIC based on three different classifications of products, the classifications based on trade theories, UNCTAD and the WTO classification. Section *five* concludes the study.

## 2. METHODOLOGY

We have used HI to estimate export concentration and computed RCA for BRIC as a group and also for each member country of BRIC separately.

### 2.1 Hirschman Index

This index was first developed and used by Hirschman in his trade study, where the square root of the sum of squared market shares of products were calculated (Hirschman, 1945, 1964). Thus, it is popularly known as the Hirschman Index (HI). It is widely used to measure the trade concentration. The HI is as follows:

$$H_j = \sqrt{\sum_{i=1}^{n}\left(x_i / X\right)^2} \times 100 \qquad \text{---------- (1)}$$

where, $H_j$ is the Hirschman Index for country j, $x_i$ is the value of exports of product i from country j (defined at the HS-6 digit classification) and X is the total export of country j. The index is multiplied by 100 to get rid of fractions, and therefore the index ranges between 0 and 100, lower values indicate less concentrated trade structure.

**2.2 Revealed Comparative Advantage**

The concept of comparative advantage ascribed to J. S Mill, Adam Smith and David Ricardo. It was determined by the opportunity cost and labour specialisation. More recently, the modern theory of trade propounded by Hecksher and Ohlin (HO) emphasized factor endowment as a major factor influencing comparative advantage. In 1965, Bela Balassa elaborated the idea of RCA which pertains to relative trade performance of an individual country. According to him, if a country's trade performance is determined by comparative advantage, then the observation of trade performance should also reveal its comparative advantage (Leishman *et al*., 1999). However, the concept of the RCA was pioneered by Liesner (1958). However, it was popularized and refined by Balassa (1965, 1989) and thus, it is popularly known as the Balassa index. The idea is to determine a country's strong sector by analyzing its export flow. The actual export flow reveals a country's strong sectors, and therefore it's RCA. A range of alternative indices exists for measuring RCA which have been suggested and employed in the literature, such as Yu *et al.,* (2009), Hoen and Oosterhaven (2006), Proudman and Redding (2000), Lafay (1992), Bowen (1983), Wolter (1977), Donges and Riedel (1976), and Michaely (1967), etc. Besides these, Vollrath (1991) offered three alternative ways of measurement of a country's RCA. All these alternative specifications of the RCA are relative trade advantage (RTA), logarithm of the relative export advantage (ln RXA) and the revealed competitiveness (RC). These alternative measures of the RCA implicitly give incomplete and unstable results. Nonetheless, it is important to indicate that Balassa and Vollrath indices are

grounded on different concepts, and hence are not comparable (Utkulu and Seymen, 2004).

We use Balassa's RCA index (Balassa, 1965) which estimates the trade performance of an individual country for a particular product. It is a commonly used measure of the RCA of a country in foreign trade. A modified formula of the RCA (Burange and Chaddha, 2008) has been applied in the study for the measurement of comparative advantage for export as follows,

$$RCA_{ij} = \frac{x_{ij} / X_i}{x_{wj} / X_w} \qquad \text{---------- (2)}$$

where,

$RCA_{ij}$ = RCA of the $i^{th}$ country's $j^{th}$ industry,

$x_{ij}$ = Merchandise exports of the $j^{th}$ industry by the $i^{th}$ country,

$X_i$ = Total merchandise exports of the $i^{th}$ country,

$x_{wj}$ = World merchandise exports of the $j^{th}$ industry,

$X_w$ = Total merchandise exports of the world.

The index of the $RCA_{ij}$ has a relatively simple interpretation. If the value of RCA is greater than one, it signifies a country has exported that product relatively more than the world in that particular year. In other words, the RCA measures a country's competitiveness of exports in foreign trade.

Among various other alternative indices to measure comparative advantage, this study used the modified Balassa index based on export. This is the most relevant index for analysing the competitiveness of export of BRIC countries because it only considers export data. This index is widely used due to its simplicity of calculation and appropriateness in dealing with trade data. Moreover, one can use this index for various other sectors, industries and products and also rank it in terms of estimated RCA values. In addition, this index can be employed for the comparison of cross-commodity, cross-country and for inter-temporal analysis.

This study is based on export trade data as per HS-1996 classification. The RCA is estimated at the Section, Chapter (2-digits classification) and at the disaggregated (6-digit) level of the Harmonised System (HS) classification. For the description of sections and chapters, refer Table A1 and A2 in Annexure A. The basic data source is the UNCOMTRADE for Brazil, Russia, India and China and for the world for the period 1997 to 2013. This database keeps on updating its data as it receives it from the reporting countries. Therefore, there may be discrepancy in the data retrieved afterwards. Besides this, there are two major limitations of the study. First, South Africa being the new entrant in this group since 2011, we have not included South Africa in this analysis. Second, this study excluded project goods (Chapter 98) and unspecified products (Chapter 99) for which data have not been reported in the UNCOMTRADE database. This study regrouped data into three different classifications of categories of products to further explore comparative advantage. Data at HS-06 digit level first classified all products based on the *Trade Classification*, Ricardo, HO and Product-cycle (PC) products (Annexure B, Table B1). Ricardo products comprise products which use natural resources for their production. Production of HO products is based on standard technology and requires low investment in R&D, whereas PC products are technology intensive with high R&D activities. Second, the *UNCTAD Classification* of primary and manufacturing products, which further separates manufacturing products into low-technology skill-based, medium-technology skill-based and high-technology skill-based manufactured products (Table B2) Third, the *WTO Classification* which essentially grouped products on the basis of its use. WTO categorises HS-06 digit products into agricultural products, raw materials, intermediate, consumer and capital goods. However, for the first two categories of classifications of products Standard International Trade Classification (SITC) is a preferred classification. This has been developed by the United Nations. It classifies traded products based on their material and physical properties, stage of processing and their economic functions while the HS classification has the merit of detailed disaggregation, but is restricted only to a precise breakdown of the individual products categories. Thus, the preliminary and important step is to map HS-06 digit with SITC (Rev 3) products based on concordance, using UN-COMTRADE classification registry. The second step is to aggregate these products into SITC three digit level, as product classifications are

available only up to SITC three digit level of aggregation. The elaborated list of SITC (Rev.3) three digit codes comprising each of these categories is given in Annexure B, Table B1 and B2.

## 3. ANALYSIS OF BRIC'S EXPORT

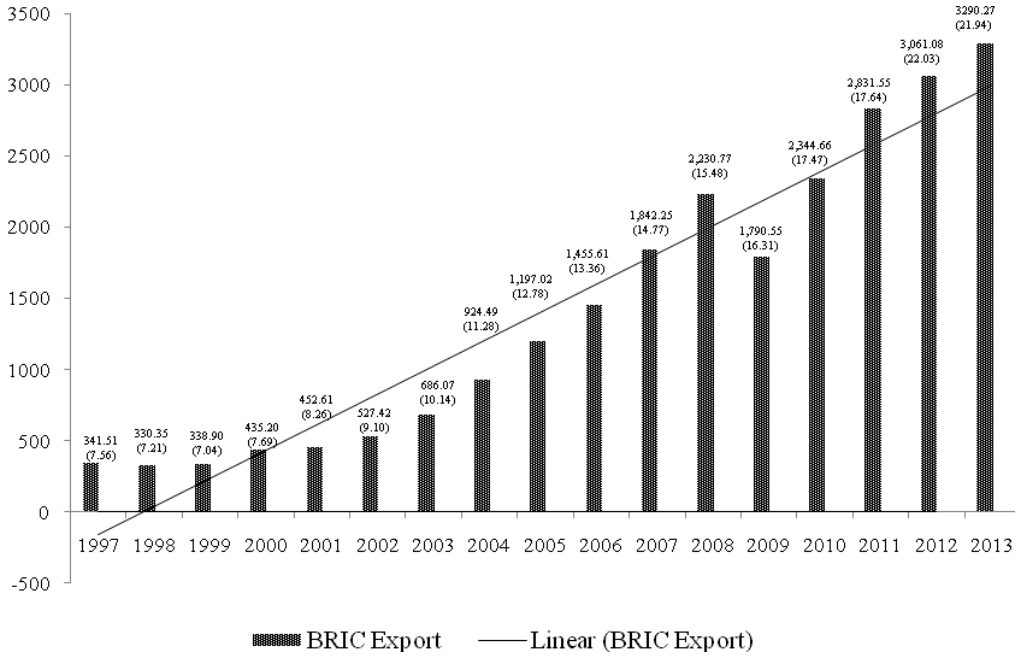
This section incorporates three sub-sections. The first sub-section briefly overviews BRIC's exports and estimates trade concentration of BRIC and each member of BRIC. The second section estimates BRIC's RCA at three expandable levels, those at the section, chapter and product levels. The third sub-section emphasises RCA of each member country at disaggregated levels.

Figure 1 indicates that BRIC's world export increased rapidly from 2001 to 2008. Due to the world economic downswing in 2008, export showed a downward trend in 2009. However, BRIC's export bounced back and achieved a new high in 2013. BRIC's contribution in total world exports was more than 7 percent in 1997 but it rose to 21.94percent in 2013. This implies growing importance of BRIC in world trade. Moreover, BRIC invariably enjoyed a merchandise trade surplus for all the years of the study. BRIC's export grew at a Compound Annual Growth Rate (CAGR) of 17.88 percent per annum. Table 1 indicates the share of each member of BRIC in the world export basket. Table 1 indicates that China's contribution overshadowed BRIC's total exports; approximately 67 percent of BRIC's exports to the world are Chinese products. China's dominance means a decline in shares of other member countries such as Brazil and Russia. Over the period of time, India's share was hovering around 8 to 10 percent except for one plunge in 2007. The increase in China's share in the exports of BRIC adversely affected the export shares of Brazil and Russia more significantly.

### 3.1 Hirschman Index: Members and BRIC

Table 2 indicates that Brazil's HI increased from 12.00 percent to 18.08 percent from 1997 to 2013. At the HS-06 digit level, exports basket of Brazil was dominated by four products, namely, iron ores and concentrates, other than

**Figure 1: BRIC's Total World Export (U.S. $ billions)**




*Note*: Figures in parenthesis represent share in world exports expressed in percentages.

roasted iron pyrites non-agglomerated (260111), petroleum oils and oils obtained from bituminous minerals, crude (270900), soya beans whether or not broken (120100) and cane sugar (170111). Over the years, the contribution of these products in the exports basket of Brazil increased from 10 to 30 percent. Russia's export has been highly concentrated among the group. It was 31.49 percent in 1997 which reached its peak in 2011 and declined to 42.17 percent in 2013.

Russia's exports basket was largely concentrated merely in three products, *viz.*, petroleum oils and oils obtained from bituminous minerals, crude (270900), petroleum oils and oils obtained from bituminous minerals, other than crude; preparations not elsewhere specified or included (271000) and natural gas (271121). Over the years, the share of these products remarkably increased from 52 percent to70 percent in Russia's export. However, the major share was contributed by petroleum oils and oils obtained from bituminous minerals, crude (270900) which was 20 per cent in 1997, increased to 34 percent in 2013. India's HI represented an increase in the export concentration from 14.62 percent to 22.36 percent in 2013. Five products

**Table 1: Contribution of Member Country in BRIC's Export**

**(Percent)**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 15.19 | 21.76 | 9.97 | 53.08 | 100.00 |
| 1998 | 15.19 | 19.61 | 9.79 | 55.41 | 100.00 |
| 1999 | 13.81 | 18.39 | 10.66 | 57.14 | 100.00 |
| 2000 | 12.42 | 20.90 | 9.54 | 57.14 | 100.00 |
| 2001 | 12.62 | 19.31 | 9.41 | 58.66 | 100.00 |
| 2002 | 11.23 | 17.89 | 9.27 | 61.61 | 100.00 |
| 2003 | 10.49 | 17.25 | 8.52 | 63.74 | 100.00 |
| 2004 | 10.30 | 17.53 | 8.11 | 64.06 | 100.00 |
| 2005 | 9.72 | 18.47 | 8.29 | 63.52 | 100.00 |
| 2006 | 9.29 | 16.07 | 8.24 | 66.40 | 100.00 |
| 2007 | 8.49 | 17.58 | 7.83 | 66.10 | 100.00 |
| 2008 | 8.66 | 19.26 | 8.02 | 64.06 | 100.00 |
| 2009 | 8.39 | 15.15 | 9.44 | 67.02 | 100.00 |
| 2010 | 8.42 | 15.13 | 9.22 | 67.23 | 100.00 |
| 2011 | 8.86 | 14.02 | 10.16 | 66.96 | 100.00 |
| 2012 | 7.74 | 16.00 | 9.38 | 66.88 | 100.00 |
| 2013 | 7.21 | 15.62 | 10.08 | 67.01 | 100.00 |

namely, semi-milled or wholly milled rice whether or not polished or glazed (100630), petroleum oils and oils obtained from bituminous minerals, other than crude; preparations not elsewhere specified or included (271000), ayurvedic, unani, homeopathic, siddha or bio-chemic system medicament (300490), non-industrial diamonds, cut or otherwise worked but not mounted or set (710239) and articles of jewellery, parts of precious metals whether or not plated clad (711319) dominated India's exports basket. Their contribution increased from 19 percent in 1997 to approximately 36 percent in 2013 in India's export. Compared to other member countries, China's HI was low, however, it exhibited an increase in the trade concentration. It increased from 5.44 percent in 1997 to 9.38 percent in 2013. The share of 3 products, namely, portable digital automatic data processing machines weights not more than 10 kg. (847130), two-way radio communication equipments (852520) and electronic integrated circuits, monolithic analogue and digital (854230) accelerated from 0.55 percent in 1997 to 13 percent in 2013.

**Table 2: Export Concentration of BRIC and Member Countries**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | **12.00** (4251) | **31.49** (4488) | **14.62** (4487) | **5.44** (4947) | **8.59** (5089) |
| 1998 | **11.52** (4291) | **26.99** (4455) | **16.77** (4478) | **5.69** (4936) | **7.22** (5085) |
| 1999 | **11.35** (4352) | **30.38** (4426) | **19.09** (4510) | **5.84** (4928) | **7.45** (5083) |
| 2000 | **11.29** (4374) | **34.06** (5436) | **17.52** (4634) | **6.03** (4945) | **9.10** (5087) |
| 2001 | **11.62** (4423) | **35.44** (4480) | **15.29** (4706) | **6.44** (4945) | **8.99** (5086) |
| 2002 | **11.65** (4417) | **35.91** (4400) | **16.62** (4787) | **7.24** (4892) | **9.00** (5077) |
| 2003 | **11.59** (4456) | **37.40** (4390) | **16.86** (4807) | **8.02** (4894) | **9.34** (5027) |
| 2004 | **11.00** (4452) | **38.53** (4369) | **15.51** (4836) | **8.71** (4879) | **9.72** (5022) |
| 2005 | **11.02** (4488) | **41.65** (4297) | **16.93** (4840) | **8.76** (4892) | **10.75** (5018) |
| 2006 | **11.60** (4470) | **45.71** (4331) | **18.04** (4832) | **8.71** (4894) | **10.82** (5016) |
| 2007 | **11.87** (4392) | **41.17** (4115) | **19.28** (4799) | **8.21** (4611) | **10.43** (4989) |
| 2008 | **13.64** (4268) | **42.80** (4063) | **20.25** (4827) | **7.98** (4570) | **11.38** (4973) |
| 2009 | **14.99** (4208) | **41.45** (4034) | **18.82** (4586) | **8.92** (4568) | **10.22** (4727) |
| 2010 | **17.40** (4132) | **43.31** (3983) | **20.83** (4573) | **9.17** (4571) | **10.75** (4724) |
| 2011 | **19.00** (4213) | **49.21** (3945) | **22.86** (4602) | **8.75** (4562) | **11.19** (4738) |
| 2012 | **17.51** (4164) | **44.58** (4133) | **21.36** (4580) | **9.16** (4527) | **11.27** (4732) |
| 2013 | **18.08** (4132) | **42.17** (4404) | **22.67** (4561) | **9.38** (4536) | **10.99** (4695) |

*Note*: Figures in parenthesis represent total number of (HS-6 digit level of classification) products exported.

As far as BRIC is concerned, it registered an increase in HI from 8.59 percent in 1997 to 10.99 percent in 2013. China had substantial contribution in BRIC's exports basket. However, the export concentration of BRIC was higher than China because more trade concentration was exhibited by Brazil, Russia and India. Five products predominated in BRIC's export whose contribution increased from 12 percent to 22 percent comprising petroleum oils and oils obtained from bituminous minerals, crude (270900), petroleum oils and oils obtained from bituminous minerals, other than crude; preparations not elsewhere specified or included (271000), kerosene jet fuel (271021), portable digital automatic data processing machines weights not more than 10 kg. (847130) and two-way radio communication equipments (852520).

In short, Russia's export is highly concentrated within the member countries, whereas China's export is relatively less concentrated.

### 3.2 Revealed Comparative Advantage of BRIC

BRIC's section-wise picture shows that in 1997, BRIC enjoyed an advantage for 11 sections out of 21 sections, whereas the number reduced to 8 in 2013 (Annexure C, Table C1). Over the period of time, vegetable products (S-2), prepared food stuffs, beverages, spirits vinegar (S-4), wood and articles thereof (S-9) precious and semi-precious stones (S-14) and base metals (S-15) lost their comparative advantage. On the other hand, machinery and mechanical appliances (S-16) gained competitiveness in world trade. One can observe the structural change in BRIC's basket of exports. BRIC as a group has been gradually shifting its competitiveness from primary to manufacturing products. However, 6 sections retained their advantage namely, raw hides and skins, leather fur skin and article thereof (S-8), textiles and products (S-11), footwear and umbrellas etc (S-12) and articles of stones, cement, plaster ceramic products (S-13) which are basically resource-based in nature. The remaining one is miscellaneous manufacturing articles (S-20).

BRIC's chapter-wise scenario describes that in 1997, chapters in which it had comparative advantage were 58 which stepped down to 47 in 2013 (Annexure D, Table D1). Moreover, 37 chapters were successful in maintaining their export competitiveness for all the years of study. Manufactures of straw, of esparto or of other plaiting materials (C-46) fetched highest RCA value for the initial two years. Thereafter, it exchanged its position with prepared feathers etc (C-67) in 1999. The chapter (C-67) commanded first rank for ten years. However, in 2010 its first position has been replaced by umbrellas, sun-umbrellas etc (C-66) and maintained till date. Table 3 enlists chapters which gained and lost advantage during 1997 to 2013.

At the disaggregated (6 digit) level in 1997 BRIC enjoyed competitiveness for 1936 products (38.04%) out of 5089 (Table 4). The count reached 1959 (41.73%) out of 4695 products in 2013. In 2006, BRIC enjoyed comparative advantage for maximum products, the count being to 2097 (41.81%) out of 5016 products. Further,

**Table 3: BRIC's Inter-temporal Movement of RCA of Exports at Chapter Level During 1997 to 2013**

| **Number of Chapters that have sustained their advantage during 1997 to 2013: 37** | |
|---|---|
| **Number of Chapters that have gained advantage during 1997 to 2013: 07** | |
| **Chapter** | **Description** |
| 54 | Manmade filaments |
| 59 | Impregnated, coated, covered etc |
| 70 | Glass and glassware products |
| 73 | Articles of iron and steel |
| 84 | Machinery and mechanical appliances |
| 85 | Electrical machinery and equipments |
| 89 | Ships, boats and floating structures |
| **Number of chapters that have lost advantage during 1997 to 2013: 17** | |
| **Chapter** | **Description** |
| 07 | Edible vegetables and certain roots and tubers |
| 20 | Preparations of vegetables, fruit, nuts or other plant parts |
| 23 | Food industry residues & waste; prepared animal feed |
| 24 | Tobacco and manufactured tobacco substitutes |
| 25 | Salt, sulphur, earths and stones etc |
| 26 | Ores, slag and ash |
| 41 | Raw hides and skins (other than fur skins) and leather |
| 44 | Wood and articles of wood; wood charcoal |
| 47 | Pulp of wood and other fibrous cellulosic materials |
| 51 | Cotton |
| 71 | Natural and cultural pearls |
| 74 | Copper and articles thereof |
| 72 | Iron and steel |
| 76 | Aluminium and articles thereof |
| 78 | Lead and articles thereof |
| 80 | Tin and articles thereof |
| 91 | Clocks and watches and parts thereof |

*Note*: Please refer Annexure D, Table D1 for details.

940 products were able to sustain competitiveness from BRIC's basket of exports. All these products scattered among various chapters largely drawn from inorganic chemicals (C-28), organic chemicals (C-29), cotton (C-52) manmade staple fibres (C-55), articles of apparel and clothing knitted or crocheted (C-61), articles of apparel and clothing not knitted or crocheted (C-62) and electrical machinery and equipments (C-85). Out of 97 chapters, 27 did not show from 1997 to 2013 (Table D1). Even so, among these chapters some products showed their comparative advantage throughout the period of the study (Table 5).

**Table 4: Total Exported and Export Competitive Products at Disaggregated Level (HS-6-Digit Classification) of Members and BRIC**

| Year | Items | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|---|
| 1997 | **1. Total No. of Products Exported** | **4251** | **4488** | **4487** | **4947** | **5089** |
| | 2. No. of Products with RCA > 1 | 739 | 535 | 1158 | 1814 | 1936 |
| | 3. Percentage of Products with RCA > 1 | 17.38 | 11.92 | 25.81 | 36.67 | 38.04 |
| 1998 | **1. Total No. of Products Exported** | **4291** | **4455** | **4478** | **4936** | **5085** |
| | 2. No. of Products with RCA > 1 | 719 | 550 | 1161 | 1812 | 1962 |
| | 3. Percentage of Products with RCA > 1 | 16.76 | 12.35 | 25.93 | 36.71 | 38.58 |
| 1999 | **1. Total No. of Products Exported** | **4352** | **4426** | **4510** | **4928** | **5083** |
| | 2. No. of Products with RCA > 1 | 765 | 564 | 1187 | 1836 | 1999 |
| | 3. Percentage of Products with RCA > 1 | 17.58 | 12.74 | 26.32 | 37.26 | 39.33 |
| 2000 | **1. Total No. of Products Exported** | **4374** | **5436** | **4634** | **4945** | **5087** |
| | 2. No. of Products with RCA > 1 | 788 | 557 | 1345 | 1892 | 2038 |
| | 3. Percentage of Products with RCA > 1 | 18.02 | 10.25 | 29.02 | 38.26 | 40.06 |
| 2001 | **1. Total No. of Products Exported** | **4423** | **4480** | **4706** | **4945** | **5086** |
| | 2. No. of Products with RCA > 1 | 708 | 538 | 1384 | 1858 | 2017 |
| | 3. Percentage of Products with RCA > 1 | 16.01 | 12.01 | 29.41 | 37.57 | 39.66 |
| 2002 | **1. Total No. of Products Exported** | **4417** | **4400** | **4787** | **4892** | **5077** |
| | 2. No. of Products with RCA > 1 | 715 | 503 | 1414 | 1837 | 2032 |
| | 3. Percentage of Products with RCA > 1 | 16.19 | 11.43 | 29.54 | 37.55 | 40.02 |
| 2003 | **1. Total No. of Products Exported** | **4456** | **4390** | **4807** | **4894** | **5027** |
| | 2. No. of Products with RCA > 1 | 733 | 483 | 1455 | 1800 | 1973 |
| | 3. Percentage of Products with RCA > 1 | 16.45 | 11.00 | 30.27 | 36.78 | 39.25 |
| 2004 | **1. Total No. of Products Exported** | **4452** | **4369** | **4836** | **4879** | **5022** |
| | 2. No. of Products with RCA > 1 | 747 | 462 | 1438 | 1833 | 2002 |
| | 3. Percentage of Products with RCA > 1 | 16.78 | 10.57 | 29.74 | 37.57 | 39.86 |
| 2005 | **1. Total No. of Products Exported** | **4488** | **4297** | **4840** | **4892** | **5018** |
| | 2. No. of Products with RCA > 1 | 754 | 396 | 1434 | 1911 | 2004 |
| | 3. Percentage of Products with RCA > 1 | 16.80 | 9.22 | 29.63 | 39.06 | 39.94 |
| 2006 | **1. Total No. of Products Exported** | **4470** | **4331** | **4832** | **4894** | **5016** |
| | 2. No. of Products with RCA > 1 | 764 | 446 | 1397 | 1963 | 2097 |
| | 3. Percentage of Products with RCA > 1 | 17.09 | 10.30 | 28.91 | 40.11 | 41.81 |
| 2007 | **1. Total No. of Products Exported** | **4392** | **4115** | **4799** | **4611** | **4989** |
| | 2. No. of Products with RCA > 1 | 742 | 364 | 1423 | 1902 | 2039 |
| | 3. Percentage of Products with RCA > 1 | 16.89 | 8.85 | 29.65 | 41.25 | 40.87 |
| 2008 | **1. Total No. of Products Exported** | **4268** | **4063** | **4827** | **4570** | **4973** |
| | 2. No. of Products with RCA > 1 | 643 | 316 | 1469 | 1938 | 2050 |
| | 3. Percentage of Products with RCA > 1 | 15.07 | 7.78 | 30.43 | 42.41 | 41.22 |
| 2009 | **1. Total No. of Products Exported** | **4208** | **4034** | **4586** | **4568** | **4727** |
| | 2. No. of Products with RCA > 1 | 614 | 338 | 1225 | 1887 | 1909 |
| | 3. Percentage of Products with RCA > 1 | 14.59 | 8.38 | 26.71 | 41.31 | 40.39 |
| 2010 | **1. Total No. of Products Exported** | **4132** | **3983** | **4573** | **4571** | **4724** |
| | 2. No. of Products with RCA > 1 | 563 | 305 | 1181 | 1933 | 1922 |
| | 3. Percentage of Products with RCA > 1 | 13.63 | 7.66 | 25.83 | 42.29 | 40.69 |
| 2011 | **1. Total No. of Products Exported** | **4213** | **3945** | **4602** | **4562** | **4738** |
| | 2. No. of Products with RCA > 1 | 540 | 310 | 1234 | 2001 | 1994 |
| | 3. Percentage of Products with RCA > 1 | 12.82 | 7.86 | 26.81 | 43.86 | 42.09 |
| 2012 | **1. Total No. of Products Exported** | **4164** | **4133** | **4580** | **4527** | **4732** |
| | 2. No. of Products with RCA > 1 | 513 | 310 | 1264 | 1959 | 1978 |
| | 3. Percentage of Products with RCA > 1 | 12.32 | 7.50 | 27.60 | 43.27 | 41.80 |
| 2013 | **1. Total No. of Products Exported** | **4132** | **4404** | **4561** | **4536** | **4695** |
| | 2. No. of Products with RCA > 1 | 494 | 333 | 1339 | 1955 | 1959 |
| | 3. Percentage of Products with RCA > 1 | 11.96 | 7.56 | 29.36 | 43.10 | 41.73 |

**Table 5: Chapters with Disadvantage at Aggregate level (HS -2) but Sustained Advantage at Product Level (HS-6)* During 1997 to 2013: BRIC**

| Chapter | Description | Number of Products* |
|---|---|---|
| 08 | Edible fruit and nuts; peel of citrus fruit or melons | 04 |
| 11 | Products of the milling industry; malt; starches | 01 |
| 15 | Animal or vegetable fats and oils and their cleavage products | 04 |
| 22 | Beverages, spirits and vinegar | 02 |
| 29 | Organic chemicals | 55 |
| 30 | Pharmaceutical products | 01 |
| 32 | Tanning or dyeing extracts; tannins and their derivatives; | 09 |
| 33 | Essential oils and resinoids; perfumery, cosmetic or toilet preparations | 05 |
| 34 | Soap organic surface-active agents, washing preparations | 01 |
| 35 | Albuminoidal substances; modified starches; glues; enzymes | 01 |
| 38 | Miscellaneous chemical products | 04 |
| 39 | Plastic and articles thereof | 09 |
| 40 | Rubber and Articles Thereof | 11 |
| 48 | Paper and paperboard; articles of paper pulp | 07 |
| 49 | Printed books, newspaper, pictures and other products of the printing industry | 01 |
| 87 | Vehicles other than railway or tramway rolling – stock | 09 |
| 90 | Optical, photographic, cinematographic, etc | 12 |

*Products with RCA > 1 at HS-6 digit level for all the years of the study.

### 3.3 RCA of BRIC Member Countries

The RCA in the exports of each member country of BRIC is analysed in this section.

#### 3.3.1 RCA: Brazil

With a GDP of US$ 2,223 trillion in 2012, Brazil is the largest country in Latin America and Caribbean in terms of area and population. It is the world's seventh wealthiest economy in the world (World Bank, 2014a). Brazil has a strong domestic market which is less vulnerable to external shocks because of its stable economic growth and relatively low inflation rates. As far as trade is concerned, Brazil enjoyed a trade surplus from 2001. In 2009, the recession adversely affected

the volume of exports. Brazil's merchandise export increased at a CAGR of 12.73 percent per annum during the period of 1997 to 2013.

Brazil enjoyed export competitiveness for 12 sections out of 21 in 1997 but the count came down to 10 in 2013 (Table C2). Prepared food stuffs, beverages, spirits vinegar (S-4) command the number one position in terms of comparative advantage for most of the years of the study. However, live animals and products (S-1) and vegetable products (S-2) took the position of prepared food stuffs, beverages, spirits vinegar (S-4) in 2008 and 2009, respectively. (S-4) regained its place in 2010 with the highest RCA index. Even after this, vegetable products (S-2) dominated in terms of export competitiveness since the last three years. Various vegetation types exist in Brazil due to the diversity in climate and soil, the large plain area of fertile soil in the Amazon basin and well developed infrastructure. Besides, the availability of substantial area of grasslands led to high competitiveness in livestock. There were 7 sections which successfully maintained their comparative advantage. However, the overall scenario suggests that the number of sections in which Brazil experienced export competitiveness gradually diminished after 2007.

Brazil's chapter-wise sketch indicates that in 2013, export competitive chapters reduced to 29 from 35 chapters in 1997 (Table D2). Initially, coffee, tea, mate and spices (C-9) and ores, slag, and ash (C-26) represented the highest comparative advantage but, over the period of time, sugar and sugar confectionary (C-17) and oilseeds and oleaginous (C-12) replaced their position. Brazil is the largest producer of coffee, sugarcane and oilseeds due to suitable climate, fertile soil and use of advanced technology, adequate infrastructure and skilled farmers. Nevertheless, there were 18 chapters which maintained their competitiveness throughout the period of the study (Table D2). Collaborative efforts of the government and the national cement industry to upgrade technology resulted in Brazil's increasing competitiveness in the cement sector (C-68) (CNI, 2012). Similarly, iron and steel companies are becoming globally competitive as Brazilian producers own and operate iron ore mines. Hence, they have access to high quality cooking coal at low cost. This ensued that Brazil is the second largest producer of iron ore (Thomas White, 2010). Table 6 enlists chapters in which Brazil gained advantage or lost competitiveness during 1997

to 2013. Brazil gained advantage for aircraft (C-88) due to the government policy of privatisation, efficiency gains through economies of scale and research and development there by fall in sunk cost in its domestic production.

**Table 6: Brazil's Inter-temporal Movement of RCA of Exports at Chapter Level During 1997 to 2013**

| **Number of Chapters that have sustained their advantage during 1997 to 2013: 18** | |
|---|---|
| **Number of Chapters that have gained advantage during 1997 to 2013: 07** | |
| **Chapter** | **Description** |
| 01 | Live Animals |
| 10 | Cereals |
| 22 | Beverages, spirits and vinegar |
| 25 | Salt, sulphur, earths and stones etc |
| 52 | Cotton |
| 83 | Miscellaneous articles of base metal |
| 88 | Aircraft, space craft and parts thereof |
| **Number of chapters that have lost advantage during 1997 to 2013: 15** | |
| **Chapter** | **Description** |
| 08 | Edible fruits and nuts etc |
| 13 | Lac, gums, resins and other vegetable saps etc |
| 18 | Cocoa and cocoa preparations |
| 36 | Explosives; pyrotechnic products; matches; pyrotechnic alloys; certain combustible preparations |
| 37 | Photographic or cinematographic goods |
| 40 | Rubber and articles thereof |
| 50 | Silk |
| 53 | Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn |
| 56 | Wadding, felt and nonwovens, etc |
| 63 | Other made up textile articles etc |
| 64 | Footwear, gaiters and the like; parts of such articles |
| 69 | Ceramic products |
| 76 | Aluminium and articles thereof |
| 82 | Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal |
| 93 | Arms and ammunition; parts and accessories thereof |

*Note*: Please refer Annexure D, Table D2 for details.

At the disaggregated level, out of 4251 products only 739 products (17.38%) enjoyed competitiveness in 1997 which declined to 494 products (11.36%) out of 4132 products in 2013 (Table 4). In 2000, the maximum number of products 788 out of 4374 products (18.02%) gained advantage. Moreover, there were 217 products which maintained competitiveness throughout the time span of study. The products which sustained their advantage in all the years during 1997 to 2013 dispersed among various chapters largely drawn from meat and edible meat offal (C-2), inorganic chemicals (C-28), iron and steel (C-72), nuclear reactors, boilers, machinery and

mechanical appliances (C-84) and electrical machinery and equipments (C-85). The government policy of privatisation of iron and steel, cell phone companies, establishment of a special regime for the automobile sector and the support of the Brazilian Development Bank (BNDES) for the production of telecom equipments has been reflected at the disaggregated level of the RCA analysis (Bonelli and Pinheiro, 2008). Interestingly, this study finds that some chapters where Brazil is disadvantageously positioned at the aggregate level but show competitiveness at the product level. Out of 97 chapters, 47 chapters featured in this manner. Among these chapters some products showed competitiveness throughout the study period. List of chapters in which some products sustained their competitiveness during 1997 to 2013 is given in Table 7.

### 3.3.2 RCA: Russia

Russia is an upper middle income country. It has a market economy with enormous natural resources, particularly oil and natural gas. It is the eighth largest economy in the world by nominal GDP and sixth largest in terms of PPP. Russia's economy grew 3.4 percent in 2012 which is lower than 4.3 percent in the previous year. The weak performance of investment resulted in decline in growth (World Bank, 2013). On the trade front, Russia recorded trade surplus for all the accounted years. Even so, Russia's export grew at a slower rate (15.56%) than its imports, its import increased at a CAGR of 17.74 percent whereas export increased by 15.56 percent per annum during the period of the study. In 2009, due to downturn in the world economy the volume of both exports and imports declined. Russia's section-wise scenario indicated that mineral products (S-5) displayed the highest export competitiveness, in 1997 (S-5) was followed by base metals (S-15) and wood and articles thereof (S-9) (Table C3). Precious and semi precious stones (S-14) and arms and ammunitions (S-19) emerged with the RCA greater than one. Even so, both sections lost their advantage immediately in the succeeding year. Three sections namely, mineral products (S-5), wood and articles thereof (S-9) and base metals (S-15) maintained competitiveness in the global market. Russia's export competitiveness mirrored its

**Table 7: Chapters with Disadvantage at Aggregate Level (HS -2) but Sustained Advantage at Product Level (HS-6)* During 1997 to 2013: Brazil**

| Chapter | Description | Number of Products* |
|---|---|---|
| 03 | Fish and crustaceans molluscs and other aquatic | 01 |
| 19 | Preparations of cereals, flour, starch or milk; pastry cooks' products | 02 |
| 29 | Organic chemicals | 13 |
| 30 | Pharmaceutical products | 01 |
| 31 | Fertilisers | 02 |
| 32 | Tanning or dyeing extracts; tannins and their derivatives; | 02 |
| 33 | Essential oils and resinoids, perfumery etc. | 05 |
| 38 | Miscellaneous chemical products | 05 |
| 39 | Plastics and articles thereof | 05 |
| 58 | Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery | 01 |
| 70 | Glass and glassware | 01 |
| 71 | Natural or cultured pearls, precious or semi-precious stones | 03 |
| 73 | Articles of iron or steel | 01 |
| 74 | Copper and articles thereof | 01 |
| 81 | Other base metals; cermets; articles thereof. | 01 |
| 84 | Nuclear reactors, boilers, machinery etc | 23 |
| 85 | Electrical machinery and equipments | 05 |
| 90 | Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus | 01 |
| 94 | Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; lamps and lighting fittings etc. | 02 |
| 96 | Miscellaneous manufactured articles | 02 |

*Products with RCA > 1 at HS-6 digit level for all the years of the study.

abundant supply of natural resources, including timber, precious metals, and particularly fossil fuels (Livine and Glenn, 2007).

At the chapter level, we observe that from 1997 to 2013, the number of chapters which were advantageous from the Russian basket of exportables declined to 10 from 18 chapters (Table D3). The top three chapters nickel and articles thereof (C-75), mineral fuels, mineral oils and products of their distillation (C-27) and fertilizers (C-31) reshuffled their position. Russia gained export competitiveness in fertilizer due to its efficiency and fully secured feedstock supply, and thus the fertilizer industry is Russia's most export-oriented industry (Enikeena, 2011). Nickel and articles thereof (C-75) enjoyed highest competitiveness among all chapters for most of the years. Even so, RCA has been showing a decreasing trend which indicates that Russia's predominance as leading producer of nickel is declining. Forbidden from making

investments in developing facilities and production of nickel has decreased its competitiveness from 14.97 in 1997 to 4.42 in 2013. Russia's chapter-wise performance in terms of RCA has been considerably poor; as of now only 8 chapters managed their export competitiveness out of 97. Thus, it can be inferred that Russia's exports are highly concentrated in a few products. One of those is inorganic chemicals (C-28). The Russian government grant extra ordinary support in the form of subsidies to the National Chemical Industry which includes concessions in tariff for gas, electricity and railway transportation (Gerden, 2012). However, it would be interesting to see its performance on the eve of Russia's accession to WTO under which Russia has to withdraw all types of subsidies given to the chemical sector. Table 8 presents Russia's chapter-wise performance of RCA.

**Table 8: Russia's Inter-temporal Movement of RCA of Export at Chapter Level During 1997 to 2013**

| **Number of Chapters that have sustained their advantage during 1997 to 2013: 08** | |
|---|---|
| **Number of Chapters that have gained advantage during 1997 to 2013: 01** | |
| **Chapter** | **Description** |
| 10 | Cereals |
| **Number of chapters that have lost advantage during 1997 to 2013: 07** | |
| **Chapter** | **Description** |
| 26 | Ores, slag and ash |
| 41 | Raw hides and skins (other than fur skins) and leather |
| 47 | Pulp of wood or of other fibrous cellulosic material |
| 49 | Printed books, newspaper, pictures and other products of printing |
| 79 | Zinc and articles thereof |
| 80 | Tin and articles thereof |
| 86 | Railway and tramway locomotives rolling stocks etc |

*Note*: Please refer Annexure D, Table D3 for details.

At a product level, we noticed that out of 4488 products Russia had advantage only in 535 products (11.92%) in 1997 (Table 4). This count was decreased to merely 333 products out of 4404 products (7.56%) in 2013. In 1999, maximum number of products advantageously positioned in the world market stepped up to 564 (12.74%) out of 4426 products. There were only 126 products that maintained their export competitiveness throughout the time period of the study. All these products were spread into various chapters. However, the dominant chapters were iron and steel (C-72), inorganic chemicals (C-28), organic chemicals (C-29) and fertilizers (C-31). High investment in iron and steel greatly increased its product quality. However, there

is still scope for improvement and expansion in the production of iron and steel. Out of 97 chapters, 68 did not gain competitive advantage at 2 digits. However, some of the products among these chapters experienced RCA greater than one for all the accounted years (Table 9).

**Table 9: Chapters with Disadvantage at Aggregate Level (HS-2) but Sustained Advantage at Product Level (HS-6)* During 1997 to 2013: Russia**

| Chapter | Description | Number of Products* |
|---|---|---|
| 11 | Products of the milling industry; malt; starches | 01 |
| 16 | Preparation of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates | 01 |
| 22 | Beverages, spirits and vinegar | 01 |
| 29 | Organic chemicals | 09 |
| 38 | Miscellaneous chemical products | 01 |
| 39 | Plastics and articles thereof | 01 |
| 40 | Rubber and articles thereof | 04 |
| 43 | Fur skins and artificial fur, manufactures thereof | 01 |
| 48 | Paper and paperboard; articles of paper pulp, of paper or of paperboard | 03 |
| 68 | Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware | 03 |
| 73 | Articles of iron and steel | 03 |
| 84 | Nuclear reactors, boilers, machinery etc | 02 |
| 85 | Electrical machinery and equipments | 03 |
| 90 | Surgical instruments and apparatus; parts and accessories thereof | 01 |

*Products with RCA > 1 at HS-6 digit level for all the years of the study.

### 3.3.3 RCA: India

India is the second largest country in terms of population and the largest democracy in the world. In the last decade, India's integration into the global economy has increased and it has been accompanied by rapid economic growth. India has become a global player. According to the World Bank (2014b), it is the fourth largest economy in the world. However, India experiences persistent deficits in its merchandise trade balance. India's continuous deficit in merchandise trade has increased at a CAGR of 29 percent per annum. India is the only country in the group which incurred a continuous trade deficit in merchandise trade.

In 1997, India had comparative advantage in 8 sections out of 21 sections. However, the number increased by one in 2013 (Table C4). Base metal (S-15) gained advantage in 2013. Even so, prepared food stuffs, beverages, spirits, and vinegar (S-4) has been replaced by mineral products (S-5). Works of arts antiques and pieces (S-21) outperformed from 2003, onwards but could not maintain competitiveness after 2010. Overall, section-wise picture of competitiveness reveals that there were only 4 sections that exhibited comparative advantage in the world market for all the years of the analysis, namely, vegetable products (S-2), textile and products (S-11), footwear and umbrellas etc (S-12) and precious and semi precious stones, metals and natural and cultural pearls (S-14). Textiles have a fundamental strength to be export competitive due to its strong traditional base, availability of various fibres such as cotton, jute, silk and wool etc and cheap supply of semi or unskilled labour (Devaraja, 2011). Moreover, the leather industry in India is an engine of growth to the footwear industry. Liberalization and government policies of attracting overseas investment, the establishment of Special Economic Zones (SEZs) are important reasons for the increase in India's export competitiveness in the world market (EXIM, 2012, 2010, 2007).

At the two-digit (chapter) level, India enjoyed comparative advantage for 39 chapters in 1997 which reduced to 37 in 2013 (Table D4). There were 27 chapters which successfully maintained their export competitiveness throughout the period of the study. Lac, gums, resins and other vegetable saps etc (C-13) rank highest in terms of comparative advantage. However, its first position was conquered by silk (C-50) from 2001 to 2008. In 2009, natural and cultured pearls (C-71) emerged with the highest RCA value. In 2010, cotton (C-52) surpassed all leading chapters and became more competitive in the world market from India's basket of exports. However, (C-13) regained its position in 2011 and managed to maintain it till date.

India has the world's most competitive market for gems and jewellery due to its low cost of production, highly skilled, low cost and efficient artisans for designing and crafting jewellery and strong government support in the form of subsidies (EXIM, 2010). In addition, India earned global competitiveness for chemicals due to EXIM Bank's support to chemical manufacturing and exporting units to modernise and

upgrade their production facilities. Similarly, as per WTO regulations, reduction in tariff barriers from developed countries could be the reason for the increase in India's export competitiveness in chemicals (EXIM, 2007). Articles of apparel and clothing accessories, knitted or crocheted (C-61) and articles of apparel and clothing accessories, not knitted or crocheted (C-62) and other made up textile articles (C-63) maintained export competitiveness, but displayed a decreasing trend in the RCA index since all three failed to keep pace with modernisation and up-gradation. Similarly, the consistent fall in the competitiveness of coffee, tea, mate and spices (C-9) could be because of a change in consumer preferences and tough competition from the new players in the international market. Also, the age of the tree adversely affects quality and yield (Burange and Chaddha, 2008). Table 10 enlists chapters which gained or lost their RCA over the period of study.

**Table 10: India's Inter-temporal Movement of RCA of Export at Chapter Level During 1997 to 2013**

| **Number of Chapters that have sustained their advantage during 1997 to 2013: 27** | |
|---|---|
| **Number of Chapters that have gained advantage during 1997 to 2013: 06** | |
| **Chapter** | **Description** |
| 02 | Meat and edible meat offal |
| 17 | Sugars and sugar confectionery |
| 27 | Mineral fuels mineral oils etc |
| 79 | Zinc and articles thereof |
| 88 | Aircraft, spacecraft and parts thereof |
| 89 | Ships, boats and floating structures |
| **Number of Chapters that have lost Advantage during 1997 to 2013: 08** | |
| **Chapter** | **Description** |
| 05 | Products of animal origins not specified |
| 08 | Edible fruits and nuts etc |
| 12 | Oil seeds and oleaginous fruits etc |
| 21 | Miscellaneous edible preparations |
| 26 | Ores, slag and ash |
| 51 | Wool, fine or coarse animal hair; horsehair yarn and woven fabric |
| 80 | Tin and articles thereof |
| 82 | Tools, implements, cutlery, spoon and forks etc |

*Note*: Please refer Annexure D, Table D4 for details.

At a more elaborated level, according to the HS-06 digit classification, India enjoyed RCA in 1158 products (25.80%) out of 4487 products in 1997 which increased to 1339 (29.36%) out of 4561 products in 2013 (Table 4). In 2008, the maximum number of 1469 products (30.43%) enjoyed comparative advantage. From

the Indian side, 435 products sustained their competitiveness. All of these are dispersed in various chapters out of which organic chemicals (C-29), cotton (C-52), articles of clothing, accessories not knitted or crocheted (C-62) contributed the lion's share. It is important to note that 43 out of 97 chapters did not show advantage at the aggregate level. Nevertheless, some of the products among these chapters registered comparative advantage for all the years of the study (Table 11).

**Table 11: Chapters with Disadvantage at Aggregate Level (HS -2) but Sustained Advantage at Product Level (HS-6)*During 1997 to 2013: India**

| Chapter | Description | Number of Products* |
|---|---|---|
| 04 | Dairy produce; bird's eggs; natural honey; edible products of animal origin | 02 |
| 06 | Live trees and other plants; bulbs, roots and the like | 02 |
| 20 | Preparations of vegetables, fruit, nuts or other parts of plants | 02 |
| 33 | Essential oils and resinoids, perfumery etc | 05 |
| 37 | Photographic or cinematographic goods | 02 |
| 39 | Plastics and articles thereof | 03 |
| 48 | Paper and paperboard; articles of paper pulp | 03 |
| 49 | Printed books | 01 |
| 56 | Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables | 05 |
| 60 | Knitted or crocheted fabrics | 01 |
| 65 | Headgear and parts thereof | 02 |
| 69 | Ceramic products | 02 |
| 70 | Glass and glassware | 01 |
| 76 | Aluminium and articles thereof | 02 |
| 81 | Other base metals; cermets; articles thereof | 01 |
| 84 | Nuclear reactors, boilers, machinery etc | 10 |
| 85 | Electrical machinery and equipments | 06 |
| 87 | Vehicles other than railway or tramway rolling - stock | 06 |
| 91 | Clocks and watches and parts thereof | 02 |
| 95 | Furniture; bedding, mattresses, mattress supports | 02 |

*Products with RCA > 1 at HS-6 digit level for all the years of the study.

### 3.3.4 RCA: China

China, the largest populated country in the world, experienced impressive economic growth for last three decades. With 1978 reforms, China has shifted from a centrally planned to a more liberalised economy. China recently became the second largest economy and increasingly plays an important and dominant role in the global economy. China is the biggest reservoir of foreign exchange reserves. It has been

experiencing a continuous trade surplus for all the years of the study. Due to the economic downturn, China's export as well as imports declined and increased again in 2013. Over the years, China's merchandise export as well as imports grew at a CAGR of 9 percent per annum. China witnessed 6 sections with export competitiveness in 1997. The number remained same in 2013, namely, leather fur skin and article thereof (S-8), textile and products (S-11), footwear and umbrellas etc. (S-12), raw hides and skins, articles of stones, cement, plaster ceramic products (S-13) and miscellaneous manufacturing articles (S-20). Machinery and mechanical appliances (S-16) is a new entrant in the list from 2002 and successfully retained its advantage (Table C5). The second position was always ruled by (S-8) but was overtaken by textile and products (S-11) in 2006. Optical musical, cinematographic, medical instruments (S-18) gained from 2005 and maintained it except in 2009, 2012 and 2013. Resources and their cost acted as an important determining factor in China's comparative advantage. China has export competitiveness in footwear, clothing, toys and other manufacturing products due to abundant labour. However, five sections maintained their competitiveness in the world market for all the years during 1997 to 2013.

Chapter-wise analysis of China's comparative advantage suggests that there were 45 Chapters in 1997 which decreased to 39 in 2013 (Table D5). Furthermore, 31 chapters maintained their advantage over all the years of the study. Before 2000, manufactures of straw etc. (C-46) gained the highest RCA. Later on, prepared feathers etc (C-67) replaced the first rank in terms of RCA till 2003. Thereafter, sun-umbrellas etc (C-66) exchanged position with C-67. In 2008, (C-46) was more predominant in terms of RCA than C-66. The technical assistance from the government for sustainable development, quality of infrastructure and local business dynamics such as urbanisation and migrations etc. are the important factors that increased the production of consumer products such as umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding crops and parts thereof (C-66) (Deloitte, 2011). Table 12 portrays chapters that gained or lost competitive advantage over the period of time.

**Table 12: China's Inter-temporal Movement of RCA of Export at Chapter Level**

| Number of Chapters that have sustained their advantage during 1997 to 2013: 31 | |
|---|---|
| **Number of Chapters that have gained advantage during 1997 to 2013: 06** | |
| **Chapter** | **Description** |
| 54 | Manmade filaments |
| 56 | Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables |
| 59 | Impregnated, coated textile fabrics |
| 70 | Glass and glassware |
| 84 | Nuclear reactors, boilers, machinery etc |
| 85 | Electrical machinery and equipments |
| **Number of Chapters that have lost Advantage during 1997 to 2013: 12** | |
| **Chapter** | **Description** |
| 01 | Live animals; animal products |
| 03 | Fish and crustaceans, molluscs and other aquatic invertebrates |
| 07 | Edible vegetables and certain roots and tubers |
| 12 | Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; |
| 14 | Vegetable plaiting materials; vegetable products not elsewhere specified |
| 20 | Preparations of vegetables, fruit, nuts or other parts of plants |
| 25 | Salt, sulphur, earths and stones etc |
| 28 | Inorganic chemicals |
| 78 | Lead and articles thereof |
| 79 | Zinc and articles thereof |
| 80 | Tin and articles thereof |
| 91 | Clocks and watches and parts thereof |

*Note*: Please refer Annexure D, Table D5 for details.

Detailed analysis of the RCA at product level shows that China acquired comparative advantage for 1814 products (36.67%) out of 4947 products in 1997, which increased to 1955 (43.10%) out of 4536 products in 2013 wherein 2001 products (43.86%) out of 4562 products were exported in 2011 (Table 4). Nevertheless, there were 963 products which maintained export competitiveness for all the reported years of the study. Chapters that dominated these products involve inorganic chemicals (C-28), organic chemicals (C-29), cotton (C-52) manmade staple fibres (C-55), articles of apparel and clothing knitted or crocheted (C-61), articles of apparel and clothing not knitted or crocheted (C-62) and electrical machinery equipment (C-85). The study found that 37 chapters out of 97 chapters did not gain advantage at the aggregated level. Among these chapters, some of the products showed their competitiveness at the disaggregated level during 1997 to 2013 (Table 13).

**Table 13: Chapters with Disadvantage at Aggregate Level (HS -2) but Sustained Advantage at Product Level (HS-6)* During 1997 to 2013: China**

| Chapter | Description | Number of Products* |
|---|---|---|
| 02 | Meat and edible meat offal | 01 |
| 08 | Edible fruit and nuts; peel of citrus fruit or melons | 02 |
| 11 | Products of the milling industry; malt; starches | 01 |
| 15 | Animal or vegetable fats and oils and their cleavage products | 02 |
| 19 | Preparations of cereals, flour, starch or milk; pastry cooks' products | 02 |
| 21 | Miscellaneous edible preparations | 01 |
| 29 | Organic Chemicals | 60 |
| 30 | Pharmaceutical products | 02 |
| 32 | Tanning or dyeing extracts; tannins and their derivatives; | 05 |
| 33 | Essential oils and resinoids; perfumery, cosmetic or toilet preparations | 02 |
| 34 | Soap organic surface-active agents, washing preparations | 01 |
| 38 | Miscellaneous chemical products | 04 |
| 39 | Plastics and articles thereof | 11 |
| 40 | Rubber and articles thereof | 06 |
| 44 | Wood and articles of wood | 07 |
| 48 | Paper and paperboard etc | 06 |
| 49 | Printed books, newspaper, pictures and other products of the printing industry | 03 |
| 71 | Natural or cultured pearls, precious or semi-precious stones | 03 |
| 74 | Copper and articles thereof | 03 |
| 76 | Aluminium and articles thereof | 04 |
| 87 | Vehicles other than railway and tramway rolling | 10 |

*Products with RCA > 1 at HS-6 digit level for all the years of the study.

## 4. COMPETITIVENESS OF MEMBERS OF BRIC: COMPARATIVE ANALYSIS

This section assesses RCA of BRIC and individual member based on three different classifications of products, *viz.*, (1) Trade Classification, (2) UNCTAD Classification and (3) WTO Classification. This study elaborates each country's export competitiveness in different categories of products according to the type of classification.

### 4.1 RCA: Trade Classification

Trade classification provides information regarding changes in the economic structure of the country. It basically classifies products on the basis of trade theories. According to the trade classification, all the products are categorised into four groups, *viz.,* (1) Ricardo products, (2) HO products, (3) PC and (4) Other products (Annexure B, Table B1). This classification of product is based on the corresponding nature and importance of specific production factors. BRIC lost its comparative advantage for the Ricardo products from 2006 onwards. This could be due to a decline in the contribution of Ricardo products from the BRIC basket of exportables. Russia enjoyed the highest export competitiveness among the group. Table 14 depicts that Brazil and India also registered advantage in exporting Ricardo products.

The decrease in the RCA of BRIC is due to China's dominance in total exports of BRIC. Moreover, China does not have RCA in Ricardo products. This may be because of the dominance of manufacturing sector in which primary products are processed and exported as the manufacturing products. HO products essentially require standardised technology for their production and are manufactured with the constant return to scale with the use of capital and labour. A large proportion of the BRIC export basket comprises HO products. This fact has been reflected in BRIC's RCA in the exports of these products (Table 15). This suggests the developing nature

**Table 14: RCA for Ricardo Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 2.11 | 3.54 | 1.70 | 0.56 | 1.56 |
| 1998 | 2.33 | 3.89 | 1.98 | 0.52 | 1.60 |
| 1999 | 2.36 | 3.63 | 1.91 | 0.44 | 1.45 |
| 2000 | 1.82 | 3.46 | 1.58 | 0.42 | 1.34 |
| 2001 | 1.95 | 3.71 | 1.50 | 0.40 | 1.34 |
| 2002 | 2.10 | 3.69 | 1.69 | 0.37 | 1.28 |
| 2003 | 2.04 | 3.64 | 2.12 | 0.34 | 1.19 |
| 2004 | 1.99 | 3.56 | 1.44 | 0.31 | 1.15 |
| 2005 | 1.91 | 3.31 | 1.38 | 0.26 | 1.08 |
| 2006 | 1.96 | 2.88 | 1.16 | 0.24 | 0.90 |
| 2007 | 2.10 | 3.22 | 1.22 | 0.22 | 0.99 |
| 2008 | 1.94 | 2.77 | 1.01 | 0.19 | 0.90 |
| 2009 | 2.27 | 3.09 | 1.12 | 0.17 | 0.88 |
| 2010 | 2.47 | 2.90 | 1.18 | 0.16 | 0.87 |
| 2011 | 2.36 | 2.51 | 1.00 | 0.16 | 0.77 |
| 2012 | 2.73 | 3.25 | 1.08 | 0.17 | 0.95 |
| 2013 | 2.46 | 3.08 | 1.13 | 0.16 | 0.95 |

of these economies. Labour endowment in India and China showed RCA in the exports of HO products in which labour-intensive technology is used in these products. China does not have RCA in Ricardo products, whereas having RCA in HO products indicates the sign of development. It is also observed that even China's share dominates the export basket of HO products, India's competitiveness in these products has been marginally lower than that of China.

PC products are primarily labour saving and products using capital that are first produced and consumed in developed countries. It requires highly capital-intensive technology. BRIC constitutes developing countries which lack in capital and advanced technology, and therefore BRIC does not have RCA in PC products. Thus, Table 16 describes that none of the members of BRIC has advantage in exporting PC products, except China from 2005, which started gaining export competitiveness in these products. China's RCA in PC products is due to technology transfers through FDI from industrially advanced countries.

Table 17 shows that BRIC lost its export competitiveness for other products after 2003. However, Brazil, Russia and India exhibited export competitiveness throughout the years of the study.

**Table 15: RCA for HO Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 0.87 | 0.44 | 1.23 | 1.60 | 1.20 |
| 1998 | 0.86 | 0.43 | 1.22 | 1.53 | 1.18 |
| 1999 | 0.79 | 0.42 | 1.24 | 1.54 | 1.20 |
| 2000 | 0.90 | 0.39 | 1.30 | 1.61 | 1.24 |
| 2001 | 0.82 | 0.35 | 1.24 | 1.56 | 1.20 |
| 2002 | 0.79 | 0.33 | 1.18 | 1.51 | 1.19 |
| 2003 | 0.82 | 0.33 | 1.63 | 1.46 | 1.18 |
| 2004 | 0.84 | 0.38 | 1.19 | 1.46 | 1.19 |
| 2005 | 0.88 | 0.33 | 1.15 | 1.52 | 1.21 |
| 2006 | 0.84 | 0.36 | 1.12 | 1.56 | 1.26 |
| 2007 | 0.77 | 0.31 | 1.04 | 1.54 | 1.22 |
| 2008 | 0.76 | 0.31 | 1.06 | 1.60 | 1.24 |
| 2009 | 0.60 | 0.30 | 1.20 | 1.57 | 1.26 |
| 2010 | 0.58 | 0.26 | 1.07 | 1.59 | 1.25 |
| 2011 | 0.56 | 0.26 | 1.09 | 1.65 | 1.30 |
| 2012 | 0.52 | 0.23 | 1.07 | 1.59 | 1.24 |
| 2013 | 0.59 | 0.25 | 0.96 | 1.59 | 1.33 |

**Table 16: RCA for PC Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 0.49 | 0.26 | 0.35 | 0.58 | 0.48 |
| 1998 | 0.50 | 0.30 | 0.32 | 0.64 | 0.52 |
| 1999 | 0.54 | 0.34 | 0.34 | 0.68 | 0.56 |
| 2000 | 0.60 | 0.32 | 0.36 | 0.71 | 0.58 |
| 2001 | 0.57 | 0.30 | 0.42 | 0.75 | 0.61 |
| 2002 | 0.54 | 0.32 | 0.43 | 0.82 | 0.66 |
| 2003 | 0.49 | 0.31 | 0.62 | 0.91 | 0.73 |
| 2004 | 0.52 | 0.27 | 0.46 | 0.96 | 0.75 |
| 2005 | 0.54 | 0.21 | 0.47 | 1.00 | 0.77 |
| 2006 | 0.55 | 0.22 | 0.50 | 1.02 | 0.80 |
| 2007 | 0.55 | 0.20 | 0.50 | 1.05 | 0.81 |
| 2008 | 0.54 | 0.23 | 0.58 | 1.12 | 0.86 |
| 2009 | 0.48 | 0.21 | 0.51 | 1.08 | 0.84 |
| 2010 | 0.44 | 0.20 | 0.51 | 1.12 | 0.87 |
| 2011 | 0.44 | 0.23 | 0.52 | 1.14 | 0.89 |
| 2012 | 0.44 | 0.21 | 0.51 | 1.06 | 0.82 |
| 2013 | 0.43 | 0.22 | 0.55 | 1.10 | 0.92 |

**Table 17: RCA for Other Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 1.68 | 1.86 | 1.45 | 0.96 | 1.31 |
| 1998 | 1.50 | 1.61 | 1.20 | 0.96 | 1.19 |
| 1999 | 1.48 | 1.67 | 1.18 | 0.98 | 1.20 |
| 2000 | 1.48 | 1.61 | 1.37 | 0.87 | 1.15 |
| 2001 | 1.67 | 1.43 | 1.43 | 0.85 | 1.12 |
| 2002 | 1.66 | 1.53 | 1.26 | 0.78 | 1.06 |
| 2003 | 1.73 | 1.50 | 1.81 | 0.70 | 1.00 |
| 2004 | 1.59 | 1.49 | 1.43 | 0.64 | 0.95 |
| 2005 | 1.28 | 1.68 | 1.51 | 0.58 | 0.93 |
| 2006 | 1.16 | 1.99 | 1.85 | 0.54 | 0.94 |
| 2007 | 1.14 | 1.65 | 1.96 | 0.55 | 0.90 |
| 2008 | 1.14 | 1.66 | 1.92 | 0.53 | 0.91 |
| 2009 | 1.42 | 1.65 | 1.59 | 0.57 | 0.90 |
| 2010 | 1.07 | 1.83 | 1.83 | 0.56 | 0.91 |
| 2011 | 1.04 | 2.00 | 1.93 | 0.54 | 0.93 |
| 2012 | 1.17 | 1.79 | 1.94 | 0.51 | 0.90 |
| 2013 | 1.30 | 1.78 | 1.99 | 0.50 | 0.98 |

### 4.2 RCA: UNCTAD Classification

UNCTAD classifies products into mainly (1) primary and (2) manufactured products and then manufactured production is further classified into more sub-categories on the basis of degrees of skill, technology, capital and scale which is essentially an input-based classification. Therefore, according to UNCTAD classification, manufactured products are classified into (1) Labour-intensive resource-based, (2) Low-technology skill-based, (3) Medium-technology skill-based

and (4) High-technology skill-based manufactured products. The products which are not included in any of these categories are separately grouped under (5) other manufactured products (Annexure B, Table B2). According to this classification, BRIC lost its comparative advantage in primary products especially from 2006 onwards (Table 18). This is due to a decline in the share of primary products in BRIC's export basket and China's increasing share in the manufactures which dominates total exports of BRIC. However, due to the massive deposits of natural resources, Russia exhibited export competitiveness in the primary products which essentially involve mineral products. Similarly, Brazil and India both displayed advantage in exporting primary products. As far as labour-intensive-resource-based manufactured products are concerned, it can be seen from Table 19 that BRIC showed competitiveness for all the accounted years of the study albeit, with a declining trend. Due to cheap and abundant labour supply, both India and China registered RCA in exporting labour-intensive resource-based manufactured products. China's competitiveness was invariably higher than that of India. China dominates in terms of its contribution in the BRIC's export basket of labour-intensive resource-based manufactured products. It constituted approximately 90 percent of BRIC's export of such products. This results in a decrease in India's contribution in labour resource-based manufactured products in which India has RCA. However, Brazil and Russia do not have RCA in this category of products.

**Table 18: RCA for Primary Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 2.21 | 3.47 | 1.80 | 0.68 | 1.63 |
| 1998 | 2.35 | 3.66 | 1.95 | 0.65 | 1.62 |
| 1999 | 2.30 | 3.50 | 1.90 | 0.57 | 1.49 |
| 2000 | 1.84 | 3.22 | 1.65 | 0.52 | 1.36 |
| 2001 | 2.02 | 3.31 | 1.63 | 0.51 | 1.34 |
| 2002 | 2.10 | 3.32 | 1.71 | 0.46 | 1.27 |
| 2003 | 2.08 | 3.27 | 1.62 | 0.41 | 1.18 |
| 2004 | 1.97 | 3.18 | 1.60 | 0.36 | 1.12 |
| 2005 | 1.78 | 3.04 | 1.56 | 0.31 | 1.06 |
| 2006 | 1.77 | 2.84 | 1.52 | 0.27 | 0.93 |
| 2007 | 1.87 | 2.94 | 1.61 | 0.25 | 0.96 |
| 2008 | 1.74 | 2.58 | 1.43 | 0.22 | 0.90 |
| 2009 | 2.09 | 2.82 | 1.39 | 0.22 | 0.88 |
| 2010 | 2.09 | 2.74 | 1.52 | 0.21 | 0.87 |
| 2011 | 1.99 | 2.51 | 1.42 | 0.20 | 0.81 |
| 2012 | 2.23 | 2.89 | 1.54 | 0.21 | 0.92 |
| 2013 | 2.12 | 2.78 | 1.59 | 0.22 | 0.88 |

**Table 19: RCA for Labour-Intensive Resource-Based Manufactured Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 0.94 | 0.22 | 2.59 | 3.17 | 2.13 |
| 1998 | 0.88 | 0.25 | 2.68 | 3.03 | 2.13 |
| 1999 | 0.97 | 0.26 | 2.68 | 2.99 | 2.18 |
| 2000 | 1.03 | 0.22 | 2.80 | 2.99 | 2.15 |
| 2001 | 0.97 | 0.22 | 2.60 | 2.83 | 2.07 |
| 2002 | 0.93 | 0.20 | 2.40 | 2.70 | 2.03 |
| 2003 | 0.95 | 0.19 | 2.23 | 2.54 | 1.94 |
| 2004 | 0.96 | 0.18 | 2.12 | 2.45 | 1.87 |
| 2005 | 0.88 | 0.16 | 2.05 | 2.52 | 1.88 |
| 2006 | 0.86 | 0.18 | 1.95 | 2.58 | 1.98 |
| 2007 | 0.79 | 0.16 | 1.77 | 2.48 | 1.87 |
| 2008 | 0.67 | 0.13 | 1.70 | 2.58 | 1.87 |
| 2009 | 0.56 | 0.16 | 1.57 | 2.49 | 1.89 |
| 2010 | 0.54 | 0.13 | 1.51 | 2.53 | 1.91 |
| 2011 | 0.46 | 0.13 | 1.47 | 2.62 | 1.96 |
| 2012 | 0.46 | 0.15 | 1.44 | 2.61 | 1.94 |
| 2013 | 0.46 | 0.14 | 1.44 | 2.67 | 1.86 |

BRIC always depicted RCA in exporting low technology skill-based products in the production of which less R&D is needed. Table 20 shows that Russia and Brazil lost their RCA in the export of low-technology and skill-based manufactured products in 2007 and 2009, respectively. Table 20 asserts that India gained RCA in the export of low-technology skill-based manufactured products since 1999. China, too recorded comparative advantage in the export of these products. However, Table 21 confirms that BRIC and its member countries revealed complete disadvantage in exporting medium-technology skill-based manufactured products.

**Table 20: RCA for Low-Technology Skill-Based Manufactured Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 1.40 | 1.59 | 0.95 | 1.27 | 1.32 |
| 1998 | 1.30 | 1.61 | 0.83 | 1.23 | 1.27 |
| 1999 | 1.28 | 1.76 | 1.01 | 1.28 | 1.34 |
| 2000 | 1.35 | 1.62 | 1.11 | 1.44 | 1.44 |
| 2001 | 1.12 | 1.33 | 1.04 | 1.31 | 1.26 |
| 2002 | 1.23 | 1.29 | 1.10 | 1.22 | 1.22 |
| 2003 | 1.28 | 1.24 | 1.27 | 1.21 | 1.23 |
| 2004 | 1.43 | 1.43 | 1.30 | 1.25 | 1.30 |
| 2005 | 1.34 | 1.20 | 1.29 | 1.27 | 1.27 |
| 2006 | 1.18 | 1.20 | 1.25 | 1.38 | 1.32 |
| 2007 | 1.09 | 0.95 | 1.18 | 1.42 | 1.29 |
| 2008 | 1.15 | 0.93 | 1.31 | 1.50 | 1.35 |
| 2009 | 0.92 | 0.96 | 1.16 | 1.30 | 1.20 |
| 2010 | 0.85 | 0.87 | 1.26 | 1.42 | 1.28 |
| 2011 | 0.92 | 0.85 | 1.20 | 1.49 | 1.32 |
| 2012 | 0.93 | 0.77 | 1.12 | 1.43 | 1.26 |
| 2013 | 1.22 | 0.72 | 1.13 | 1.52 | 1.26 |

products, except China. This is due to the transitional change in China. China has been experiencing change due to FDI inflows. FDI inflows bifurcates Chinese manufacturing sector into low and high technology. Preferential foreign investment policies to encourage FDI helped China to bring investment with advanced technology and management skills, thereby increasing productivity (Liu and Daly, 2011).

**Table 21: RCA for Medium-Technology Skill-Based Manufactured Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 0.72 | 0.18 | 0.26 | 0.43 | 0.41 |
| 1998 | 0.73 | 0.19 | 0.24 | 0.45 | 0.42 |
| 1999 | 0.66 | 0.21 | 0.23 | 0.51 | 0.45 |
| 2000 | 0.71 | 0.19 | 0.26 | 0.58 | 0.48 |
| 2001 | 0.67 | 0.23 | 0.29 | 0.59 | 0.50 |
| 2002 | 0.65 | 0.20 | 0.29 | 0.59 | 0.50 |
| 2003 | 0.71 | 0.18 | 0.33 | 0.58 | 0.50 |
| 2004 | 0.73 | 0.16 | 0.34 | 0.60 | 0.52 |
| 2005 | 0.82 | 0.14 | 0.39 | 0.65 | 0.55 |
| 2006 | 0.81 | 0.17 | 0.41 | 0.69 | 0.60 |
| 2007 | 0.72 | 0.14 | 0.39 | 0.76 | 0.62 |
| 2008 | 0.70 | 0.13 | 0.46 | 0.85 | 0.66 |
| 2009 | 0.59 | 0.15 | 0.44 | 0.86 | 0.69 |
| 2010 | 0.60 | 0.11 | 0.46 | 0.87 | 0.69 |
| 2011 | 0.57 | 0.11 | 0.41 | 0.90 | 0.71 |
| 2012 | 0.55 | 0.10 | 0.43 | 0.83 | 0.65 |
| 2013 | 0.55 | 0.13 | 0.43 | 0.90 | 0.66 |

**Table 22: RCA High-Technology Skill-Based Manufactured Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 0.38 | 0.26 | 0.42 | 0.72 | 0.54 |
| 1998 | 0.41 | 0.29 | 0.37 | 0.78 | 0.59 |
| 1999 | 0.48 | 0.27 | 0.39 | 0.80 | 0.62 |
| 2000 | 0.60 | 0.27 | 0.39 | 0.83 | 0.64 |
| 2001 | 0.57 | 0.25 | 0.45 | 0.92 | 0.70 |
| 2002 | 0.51 | 0.28 | 0.45 | 1.02 | 0.78 |
| 2003 | 0.43 | 0.28 | 0.46 | 1.17 | 0.88 |
| 2004 | 0.42 | 0.25 | 0.47 | 1.25 | 0.92 |
| 2005 | 0.45 | 0.19 | 0.46 | 1.32 | 0.96 |
| 2006 | 0.46 | 0.20 | 0.47 | 1.33 | 1.00 |
| 2007 | 0.47 | 0.20 | 0.50 | 1.35 | 1.00 |
| 2008 | 0.47 | 0.23 | 0.56 | 1.39 | 1.02 |
| 2009 | 0.43 | 0.20 | 0.57 | 1.33 | 1.01 |
| 2010 | 0.37 | 0.20 | 0.52 | 1.36 | 1.02 |
| 2011 | 0.35 | 0.25 | 0.58 | 1.39 | 1.06 |
| 2012 | 0.35 | 0.21 | 0.56 | 1.30 | 0.98 |
| 2013 | 0.33 | 0.22 | 0.59 | 1.47 | 1.03 |

In the case of other products, BRIC showed RCA from 1998 to 2000, however, lost afterwards. Later, on account of increase in India's competitiveness for these products, BRIC regained its RCA for other products (Table 23). India is the only member country which has RCA for all the years of the study.

In the case of other products, BRIC showed RCA from 1998 to 2000, however, lost it afterwards. Later, due to the increase in India's competitiveness for these products, BRIC regained its RCA for other products (Table 23). India is the only member country which has RCA for all the years of the study, China also has RCA in these products for all the years, except in 2005 and 2006.

**Table 23: RCA for Other Manufactured Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 0.25 | 0.35 | 1.27 | 1.40 | 0.98 |
| 1998 | 0.27 | 0.39 | 1.71 | 1.51 | 1.12 |
| 1999 | 0.29 | 0.71 | 1.49 | 1.47 | 1.17 |
| 2000 | 0.31 | 0.51 | 1.61 | 1.34 | 1.06 |
| 2001 | 0.28 | 0.26 | 1.81 | 1.22 | 0.98 |
| 2002 | 0.37 | 0.39 | 1.78 | 1.14 | 0.98 |
| 2003 | 0.25 | 0.29 | 2.22 | 1.02 | 0.91 |
| 2004 | 0.24 | 0.21 | 2.88 | 1.02 | 0.95 |
| 2005 | 0.23 | 0.10 | 2.49 | 0.98 | 0.87 |
| 2006 | 0.25 | 0.11 | 2.71 | 0.95 | 0.90 |
| 2007 | 0.25 | 0.10 | 2.45 | 1.08 | 0.94 |
| 2008 | 0.26 | 0.10 | 1.86 | 1.16 | 0.94 |
| 2009 | 0.26 | 0.09 | 4.03 | 1.02 | 1.10 |
| 2010 | 0.22 | 0.10 | 2.43 | 1.15 | 1.03 |
| 2011 | 0.20 | 0.06 | 3.18 | 1.44 | 1.31 |
| 2012 | 0.18 | 0.05 | 3.41 | 1.67 | 1.46 |
| 2013 | 0.20 | 0.24 | 1.83 | 1.84 | 1.38 |

### 4.3 RCA: WTO Classification

WTO classification is based on use of the products, thus, it portrays a clearer picture regarding RCA of each member country of BRIC. This classification divided the products into five categories, *viz.*, (1) Agricultural products (2) Raw materials (3) Intermediate products, (4) Consumer products and (5) Capital goods. Table 24 presents the comparative advantage in the case of agricultural products. The share of agricultural products is hardly 3 percent of BRIC's total world exports. This is because of China's ever growing contribution of exporting manufacturing products.

Hence, BRIC lost its comparative advantage in exporting agricultural products since 2004. Table 24 portrays that Brazil gained the highest RCA for agricultural products. The Brazilian government's efforts through the state-owned company EMBRAPA *i.e.* Brazilian Enterprise for Agricultural Research have been reflected in its growing export competitiveness. The Brazilian Agricultural Research Corporation's mission is to provide feasible solutions to agri-business through knowledge and technology. Well-developed agricultural sectors, efficient and skilled farmers, technological advancement with favourable climate are important factors responsible for high RCA in agricultural products. Russia showed complete disadvantage in exporting agricultural products due to unstructured and poor agricultural policies. Similarly, China has disadvantage in exporting agricultural products due to more focused and manufacture-oriented policies, lack of availability of land and an inefficient market mechanism. India showcased RCA in the export of agricultural products during the period of the study.

**Table 24: RCA for Agricultural Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 3.96 | 0.31 | 1.68 | 0.84 | 1.28 |
| 1998 | 3.72 | 0.32 | 1.46 | 0.76 | 1.19 |
| 1999 | 4.09 | 0.15 | 1.62 | 0.77 | 1.20 |
| 2000 | 4.06 | 0.18 | 1.50 | 0.81 | 1.15 |
| 2001 | 4.57 | 0.18 | 1.54 | 0.65 | 1.14 |
| 2002 | 4.67 | 0.41 | 1.42 | 0.62 | 1.11 |
| 2003 | 4.96 | 0.36 | 1.31 | 0.55 | 1.05 |
| 2004 | 5.56 | 0.19 | 1.47 | 0.39 | 0.98 |
| 2005 | 5.43 | 0.26 | 1.28 | 0.39 | 0.93 |
| 2006 | 5.33 | 0.31 | 1.41 | 0.33 | 0.88 |
| 2007 | 5.69 | 0.48 | 1.48 | 0.31 | 0.89 |
| 2008 | 5.66 | 0.28 | 1.47 | 0.26 | 0.83 |
| 2009 | 5.84 | 0.39 | 1.10 | 0.27 | 0.83 |
| 2010 | 5.42 | 0.23 | 1.41 | 0.28 | 0.81 |
| 2011 | 5.50 | 0.36 | 1.54 | 0.27 | 0.87 |
| 2012 | 5.74 | 0.40 | 2.03 | 0.24 | 0.86 |
| 2013 | 6.07 | 0.30 | 1.65 | 0.22 | 0.80 |

In the case of raw material products, Brazil and Russia have enjoyed RCA due to huge deposits of natural resources (Table 25). Russia dominates BRIC's basket of exports in terms of both share and competitiveness. However, Table 25 shows BRIC as a group that lost its RCA in the exports of raw materials from 2006. However, it displayed competitiveness in the last two years. The share of export of Brazil and

Russia together in BRIC's exports basket is approximately 25 per cent. Thus, it failed to make its impact on the RCA for BRIC while the share of these two countries went on decreasing below 25 percent.

Table 26 describes that in the case of intermediate products, China does not have RCA and Russia lost its RCA from 2005, and therefore BRIC as a whole does not gain RCA in spite of the RCA of Brazil and India for all the years of the study. Consumer products consistently contributed heavily in the BRIC's basket of world exports. India and China recorded RCA in the export of consumer products. However, Table 27 indicates that China's competitiveness showed a decreasing trend due to rapid urbanisation and rise in disposable income, thereby increasing the domestic demand for consumer products. In the initial years, Russia too enjoyed competitiveness in consumer products but was unable to retain it. Even though, there was restoration from 2007.

Table 28 affirms that BRIC gained competitiveness in capital goods for later years of the study because only China has competitiveness in those products. FDI in China was the main determining factor which increased BRIC's competitiveness. Other BRIC countries indicated sheer disadvantage in exporting capital goods.

**Table 25: RCA for Raw Material Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 1.22 | 4.81 | 1.04 | 0.72 | 1.72 |
| 1998 | 1.75 | 5.23 | 1.15 | 0.68 | 1.78 |
| 1999 | 1.22 | 4.63 | 0.82 | 0.43 | 1.35 |
| 2000 | 0.97 | 3.97 | 0.67 | 0.37 | 1.23 |
| 2001 | 1.09 | 4.57 | 0.70 | 0.42 | 1.33 |
| 2002 | 1.32 | 4.79 | 0.77 | 0.34 | 1.29 |
| 2003 | 1.25 | 4.87 | 0.64 | 0.28 | 1.21 |
| 2004 | 1.19 | 5.14 | 0.77 | 0.25 | 1.25 |
| 2005 | 1.19 | 4.35 | 0.79 | 0.20 | 1.11 |
| 2006 | 1.27 | 4.52 | 0.61 | 0.14 | 0.99 |
| 2007 | 1.42 | 4.04 | 0.64 | 0.12 | 0.96 |
| 2008 | 1.44 | 3.30 | 0.46 | 0.11 | 0.87 |
| 2009 | 1.69 | 4.09 | 0.54 | 0.11 | 0.89 |
| 2010 | 2.25 | 3.87 | 0.47 | 0.10 | 0.88 |
| 2011 | 2.21 | 4.11 | 0.33 | 0.08 | 0.86 |
| 2012 | 2.83 | 5.00 | 0.43 | 0.11 | 1.13 |
| 2013 | 2.58 | 4.82 | 0.42 | 0.10 | 1.05 |

**Table 26: RCA for Intermediate Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 1.55 | 1.32 | 1.84 | 0.88 | 1.17 |
| 1998 | 1.45 | 1.53 | 1.75 | 0.81 | 1.14 |
| 1999 | 1.57 | 1.38 | 2.04 | 0.81 | 1.15 |
| 2000 | 1.57 | 1.30 | 2.10 | 0.84 | 1.14 |
| 2001 | 1.43 | 1.14 | 1.89 | 0.79 | 1.04 |
| 2002 | 1.50 | 1.11 | 1.99 | 0.76 | 1.02 |
| 2003 | 1.55 | 1.06 | 1.97 | 0.72 | 0.97 |
| 2004 | 1.45 | 1.13 | 1.79 | 0.76 | 0.98 |
| 2005 | 1.42 | 0.99 | 1.76 | 0.76 | 0.95 |
| 2006 | 1.44 | 1.15 | 1.64 | 0.79 | 0.98 |
| 2007 | 1.34 | 0.97 | 1.58 | 0.79 | 0.93 |
| 2008 | 1.32 | 0.86 | 1.59 | 0.86 | 0.96 |
| 2009 | 1.39 | 0.87 | 1.48 | 0.68 | 0.85 |
| 2010 | 1.26 | 0.82 | 1.62 | 0.71 | 0.86 |
| 2011 | 1.22 | 0.86 | 1.47 | 0.76 | 0.89 |
| 2012 | 1.21 | 0.73 | 1.32 | 0.71 | 0.81 |
| 2013 | 1.16 | 0.74 | 1.44 | 0.71 | 0.82 |

**Table 27: RCA for Consumer Products**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 0.72 | 1.18 | 1.23 | 1.72 | 1.40 |
| 1998 | 0.75 | 1.01 | 1.37 | 1.70 | 1.39 |
| 1999 | 0.74 | 1.08 | 1.26 | 1.68 | 1.39 |
| 2000 | 0.76 | 1.13 | 1.32 | 1.62 | 1.38 |
| 2001 | 0.75 | 1.08 | 1.32 | 1.49 | 1.30 |
| 2002 | 0.69 | 0.96 | 1.23 | 1.39 | 1.22 |
| 2003 | 0.66 | 0.95 | 1.22 | 1.27 | 1.15 |
| 2004 | 0.63 | 0.86 | 1.27 | 1.20 | 1.09 |
| 2005 | 0.62 | 0.98 | 1.27 | 1.18 | 1.09 |
| 2006 | 0.63 | 0.70 | 1.38 | 1.16 | 1.05 |
| 2007 | 0.60 | 1.01 | 1.35 | 1.12 | 1.07 |
| 2008 | 0.53 | 1.13 | 1.33 | 1.07 | 1.06 |
| 2009 | 0.51 | 1.06 | 1.35 | 1.09 | 1.06 |
| 2010 | 0.46 | 1.09 | 1.31 | 1.09 | 1.06 |
| 2011 | 0.40 | 0.82 | 1.39 | 1.10 | 1.03 |
| 2012 | 0.40 | 1.13 | 1.41 | 1.10 | 1.08 |
| 2013 | 0.39 | 1.13 | 1.33 | 1.07 | 1.06 |

## 5. CONCLUSIONS

This study determined the competitiveness of BRIC as a group and each member country of the BRIC as well. The empirical evidence suggests a shift in BRIC's comparative advantage over the years. BRIC's global trade rapidly increased and showed substantial broad-based diversification. According to trade classification, in the case of Ricardo products, BRIC does not have RCA for all the years but member countries Brazil, Russia and India have RCA for all the years of the study.

**Table 28: RCA for Capital Goods**

| Year | Brazil | Russia | India | China | BRIC |
|---|---|---|---|---|---|
| 1997 | 0.53 | 0.15 | 0.19 | 0.52 | 0.41 |
| 1998 | 0.56 | 0.24 | 0.17 | 0.59 | 0.48 |
| 1999 | 0.56 | 0.22 | 0.16 | 0.66 | 0.51 |
| 2000 | 0.64 | 0.19 | 0.17 | 0.73 | 0.55 |
| 2001 | 0.63 | 0.21 | 0.21 | 0.83 | 0.63 |
| 2002 | 0.59 | 0.25 | 0.21 | 0.95 | 0.72 |
| 2003 | 0.56 | 0.23 | 0.25 | 1.10 | 0.82 |
| 2004 | 0.62 | 0.19 | 0.26 | 1.19 | 0.88 |
| 2005 | 0.66 | 0.13 | 0.29 | 1.26 | 0.91 |
| 2006 | 0.64 | 0.14 | 0.31 | 1.30 | 0.97 |
| 2007 | 0.62 | 0.12 | 0.32 | 1.36 | 1.00 |
| 2008 | 0.62 | 0.12 | 0.38 | 1.46 | 1.04 |
| 2009 | 0.48 | 0.13 | 0.43 | 1.48 | 1.10 |
| 2010 | 0.46 | 0.11 | 0.38 | 1.51 | 1.10 |
| 2011 | 0.47 | 0.10 | 0.42 | 1.53 | 1.13 |
| 2012 | 0.46 | 0.09 | 0.37 | 1.42 | 1.03 |
| 2013 | 0.52 | 0.12 | 0.38 | 1.45 | 1.07 |

This indicates that these countries are emphasizing their export in resource-based products. In the case of HO products, BRIC has RCA for all the years along with India and China. It means that these two countries are focusing on their exports in standardized technological products. For PC products, neither BRIC nor member countries have RCA for all the years, excluding China for last few years of the study. It shows that only China is able to achieve technological progress over the period. For other products, BRIC does not have RCA including China. However, Brazil, Russia and India enjoyed RCA for all the years of the study.

According to the UNCTAD classification, except BRIC as a group and China, other members which are Brazil, Russia and India have RCA in primary products which reflect the developing nature of these economies over the period. In the case of labour-intensive resource-based manufactured products, BRIC has RCA for all the years along with India and China. It indicates that these economies are labour abundant. Similarly, in the case of low-technology skill-based manufactured products, BRIC has RCA for all the years along with China and India but not for Brazil and Russia. It implies that India and China are able to develop low-technology over the period. For medium-technology skill-based manufactured products, neither BRIC nor its members have RCA for any years of the period of the study. It shows that all these countries are unable to achieve development of technology which requires

technological skill. The same case is for high-technology skill-based manufactured products, except for last few years for BRIC and China. This is due to increase in FDI from industrially advanced countries in China. China has been gaining comparative advantage in high-technology skill-based products, thus, it should explore another basis for the comparative advantage such as technology and innovations. This step would be more assertive as China is fading its low labour cost advantage as Chinese government has proposed 80 percent increase in the average wage of Chinese labour by 2015. Hence, Chinese government should increase their support to the production of advance manufacturing equipments. Simultaneously, Chinese government should also develop energy efficient and sustainable manufacturing environment (World Economic Forum, 2013). On the other hand, India needs rapid skill development programme to increase productivity in the manufacturing industries. India is suffering from supply side constraints such as power supply, lack of adequate and quality infrastructure and high cost of capital etc. Thus, India should remove restrictive barriers and regulatory controls on foreign investment. This would encourage technology up-gradation and infrastructural development and enable India to move up in the value chain.

According to the WTO classification, BRIC does not have RCA for all the years, except for some years in the case of agricultural products. Brazil maintains an extensive range of price and credit policies to develop and upgrade agriculture. However, weak infrastructure is a major bottleneck in the development of agricultural sector. Thus, deeper investment in building transport networks especially in the rural areas is needed. China and Russia do not have RCA in agricultural products for a single year of the study. However, Brazil and India enjoy RCA in these products for all the years of the study. In the case of raw material products, only Brazil and Russia enjoyed RCA for the study period. In the case of intermediate products, only Brazil and India enjoyed RCA for the entire period of the study. For consumer products, BRIC along with India and China showed RCA for all the years. In the case of capital goods, BRIC as well as China showed RCA for last few years only. India, Brazil and Russia do not have RCA in capital goods during the period of the study. Poor business climate is an important drawback of Russian economy due to widespread corruption, weak rule of law and state involvement. This has resulted into sluggish innovations,

growing dependence on natural resources extraction and low level of entrepreneurship and competition. Russia requires strong financial sector reforms to increase productivity in the manufacturing sector, which would be matching with their labour market skills.

In short, RCA differs between the members over the period along with BRIC according to the type of the exported products. BRIC's competitiveness in primary products has been gradually declining. On the other hand, BRIC gained advantage in the manufacturing sector, especially in high-technology and skill-based products. It indicates BRIC as a group shifting from agricultural economy to industrial economy. China contributed the lion's share in BRIC's export of manufacturing products. This transition is mainly because of structural changes in BRIC countries. These structural transitions helped to explore comparative advantage and increase production in the economies. Even so, BRIC's comparative advantage still revolves around primary and low-technology products and is often dominated by their natural endowments. However, these economies are changing their focus from primary and low-technology skill-based products to medium and high-technology skill-based products.

In the last decade, each member country of BRIC has realised the power of togetherness but still enormous potential opportunities exist to be exploited. The importance of BRIC in the world economy is increasing. However, considering the poor infrastructure among member countries, the group (including South Africa) agreed to establish a New Development Bank effective in financing infrastructure, BRICS Think Tanks and the BRICS Business Council to strengthen intra-BRICS co-operation to develop new paradigms for sustainable inclusive growth. It is expected to deal with contemporary growth and development challenges of the group. This co-operation among the group can pave the way for BRIC as a new trading bloc of Emerging Market Economies (EMEs).

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# Annexure A

**Table A1: Description of Sections**

| Section | Description |
|---|---|
| S-01 | Live Animals; Animal Products |
| S-02 | Vegetable Products |
| S-03 | Animal and Vegetable Fats and Oils and their Coverage Products |
| S-04 | Prepared Food stuff, Beverages, Spirits vinegar and Tobacco and Manufactured Tobacco Substitutes |
| S-05 | Mineral Products |
| S-06 | Products of chemicals and allied Industries |
| S-07 | Products of Plastic and Rubber and articles thereof |
| S-08 | Raw Hides and Skins, Leather Fur Skin and article thereof |
| S-09 | Wood and articles thereof |
| S-10 | Pulp of Wood and Fibrous Cellulosic Material |
| S-11 | Textile and Textile Articles |
| S-12 | Footwear and Umbrellas etc |
| S-13 | Articles of Stones, Cement, Plaster and Ceramic Products |
| S-14 | Natural and Cultured Pearls Precious and Semi-Precious Stones |
| S-15 | Base Metals |
| S-16 | Machinery and Mechanical Appliances |
| S-17 | Vehicles and Aircraft, Vessels and Other Transport Equipments |
| S-18 | Optional musical, Cinematographic, Medical Instruments |
| S-19 | Arms and Ammunition Parts and Accessories there of |
| S-20 | Miscellaneous Manufacturing Articles |
| S-21 | Woks of Arts Antiques and Pieces |

**Table A2: Description of Chapters**

(Two Digit HS Classification)

| Section | Chapter | Description |
|---|---|---|
| **S-01** | **(01-05)** | **Live Animals; Animal Products** |
| | C-01 | Live animals |
| | C-02 | Meat and edible meat offal |
| | C-03 | Fish and crustaceans, molluscs and other aquatic invertebrates |
| | C-04 | Dairy produce; bird's eggs; natural honey; edible products of animal origin |
| | C-05 | Products of animal origin, not elsewhere specified or included |
| **S-02** | **(06-14)** | **Vegetable Products** |
| | C-06 | Live trees and other plants; bulbs, roots and the like |
| | C-07 | Edible vegetables and certain roots and tubers |
| | C-08 | Edible fruit and nuts; peel of citrus fruit or melons |
| | C-09 | Coffee, tea, mate and spices |
| | C-10 | Cereals |
| | C-11 | Products of the milling industry; malt; starches |
| | C-12 | Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; |
| | C-13 | Lac; gums, resins and other vegetable saps and extracts |
| | C-14 | Vegetable plaiting materials; vegetable products not elsewhere specified |
| **S-03** | | **Animal and Vegetable Fats and Oils and their Coverage Products** |
| | C-15 | Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes |
| **S-04** | **(16-24)** | **Prepared Foodstuff, Beverages, Spirits Vinegar. Tobacco and Manufactured Tobacco Substitutes** |
| | C-16 | Preparation of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates |
| | C-17 | Sugars and sugar confectionery |
| | C-18 | Cocoa and cocoa preparations |
| | C-19 | Preparations of cereals, flour, starch or milk; pastry cooks' products |
| | C-20 | Preparations of vegetables, fruit, nuts or other parts of plants |
| | C-21 | Miscellaneous edible preparations |
| | C-22 | Beverages, spirits and vinegar |
| | C-23 | Residues and waste from the food industries; prepared animal fodder |
| | C-24 | Tobacco and manufactured tobacco substitutes |
| **S-05** | **(25-27)** | **Mineral Products** |
| | C-25 | Salt; sulphur; earths and stone; plastering materials |
| | C-26 | Ores, slag and ash |
| | C-27 | Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes |
| **S-06** | **(28-38)** | **Products of Chemicals and allied Industries** |
| | C-28 | Inorganic chemicals |
| | C-29 | Organic chemicals |
| | C-30 | Pharmaceutical products |
| | C-31 | Fertilisers |
| | C-32 | Tanning or dyeing extracts; tannins and their derivatives; |
| | C-33 | Essential oils and resinoids; perfumery, cosmetic or toilet preparations |
| | C-34 | Soap organic surface-active agents, washing preparations, lubricating preparations, artificial waxes, prepared waxes, polishing or scouring preparations, |
| | C-35 | Albuminoidal substances; modified starches; glues; enzymes |
| | C-36 | Explosives; pyrotechnic products; matches; pyrotechnic alloys; certain combustible preparations |
| | C-37 | Photographic or cinematographic goods |

To be contd ...

Contd ...

| | | |
|---|---|---|
| | C-38 | Miscellaneous chemical products |
| **S-07** | **(39-40)** | **Products of Plastic and Rubber and articles thereof** |
| | C-39 | Plastics and articles thereof |
| | C-40 | Rubber and articles thereof |
| **S-08** | **(41-43)** | **Raw Hides and Skins, Leather Fur skin and article thereof** |
| | C-41 | Raw hides and skins (other than fur skins) and leather |
| | C-42 | Articles of leather; saddlery and harness, travel goods, handbags and similar containers |
| | C-43 | Fur skins and artificial fur, manufactures thereof |
| **S-09** | **(44-46)** | **Wood and articles thereof** |
| | C-44 | Wood and articles of wood; wood charcoal |
| | C-45 | Cork and articles of cork |
| | C-46 | Manufactures of straw, of esparto or of other plaiting materials; |
| **S-10** | **(47-49)** | **Pulp of Wood and Fibrous Cellulosic Material** |
| | C-47 | Pulp of wood or of other fibrous cellulosic material; recovered |
| | C-48 | Paper and paperboard; articles of paper pulp, of paper or of paperboard |
| | C-49 | Printed books, newspaper, pictures and other products of the printing industry; manuscripts, typescripts and plans |
| **S-11** | **(50-63)** | **Textile and Textile Articles** |
| | C-50 | Silk |
| | C-51 | Wool, fine or coarse animal hair; horsehair yarn and woven fabric |
| | C-52 | Cotton |
| | C-53 | Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn |
| | C-54 | Filaments man-made |
| | C-55 | Man-made staple fibres |
| | C-56 | Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof |
| | C-57 | Carpets and other textile floor coverings |
| | C-58 | Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery |
| | C-59 | Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use |
| | C-60 | Knitted or crocheted fabrics |
| | C-61 | Articles of apparel and clothing accessories, knitted or crocheted |
| | C-62 | Articles of apparel and clothing accessories, not knitted or crocheted |
| | C-63 | Other made up textile articles; sets; worn clothing and worn textile articles; rags |
| **S-12** | **(64-67)** | **Footwear and Umbrellas etc** |
| | C-64 | Footwear, gaiters and the like; parts of such articles |
| | C-65 | Headgear and parts thereof |
| | C-66 | Umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding crops and parts thereof |
| | C-67 | Prepared feathers and down and articles made of feathers or of down; artificial flowers; articles of human hair |
| **S-13** | **(68-70)** | **Articles of Stones, Cement, Plaster and Ceramic Products** |
| | C-68 | Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware |
| | C-69 | Ceramic products |
| | C-70 | Glass and glassware |
| **S-14** | | **Natural and Cultured Pearls Precious and Semi-Precious Stones** |
| | C-71 | Natural or cultured pearls, precious or semi-precious stones, precious metal, metals clad with precious metal and articles thereof; imitation jewellery; coin |
| **S-15** | **(72-83)** | **Base Metals** |
| | C-72 | Iron and steel |
| | C-73 | Articles of iron or steel |

To be contd ...

Contd ...

| | | |
|---|---|---|
| | C-74 | Copper and articles thereof |
| | C-75 | Nickel and articles thereof |
| | C-76 | Aluminium and articles thereof |
| | C-78 | Lead and articles thereof |
| | C-79 | Zinc and articles thereof |
| | C-80 | Tin and articles thereof |
| | C-81 | Other base metals; cermet; articles thereof |
| | C-82 | Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal |
| | C-83 | Miscellaneous articles of base metal |
| **S-16** | **(84-85)** | **Machinery and Mechanical Appliances** |
| | C-84 | Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof |
| | C-85 | Electrical machinery and equipment and parts thereof; sound recorders and reproducers |
| **S-17** | **(86-89)** | **Vehicles and Aircraft, Vessels and Other Transport Equipment** |
| | C-86 | Railway or tramway locomotives, rolling-stock and parts thereof |
| | C-87 | Vehicles other than railway or tramway rolling - stock |
| | C-88 | Aircraft, spacecraft and parts thereof |
| | C-89 | Ships, boats and floating structures |
| **S-18** | **(90-92)** | **Optional musical, Cinematographic, Medical Instruments** |
| | C-90 | Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof. |
| | C-91 | Clocks and watches and parts thereof. |
| | C-92 | Musical instruments; parts and accessories of such articles. |
| **S-19** | | **Arms and ammunition; parts and accessories thereof** |
| | C-93 | Arms and ammunition; parts and accessories thereof |
| **S-20** | **(94-69)** | **Miscellaneous Manufacturing Articles** |
| | C-94 | Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishing; lamps and lighting fittings, not elsewhere specified |
| | C-95 | Toys, games and sports requisites; parts and accessories thereof |
| | C-96 | Miscellaneous manufactured articles |
| **S-21** | | **Woks of Arts Antiques and Pieces** |
| | C-97 | Works of art, collectors' pieces and antiques |

# Annexure B

## Table B1: Categories of Products on the Basis of SITC Classification of Trade

| RIC | | HO | | PC | | OTHERS | |
|---|---|---|---|---|---|---|---|
| 011 | 322 | 111 | 696 | 335 | 735 | 001 | 745 |
| 012 | 325 | 112 | 697 | 511 | 737 | 034 | 749 |
| 016 | 333 | 122 | 699 | 512 | 741 | 035 | 811 |
| 017 | 342 | 273 | 746 | 513 | 742 | 036 | 896 |
| 022 | 343 | 533 | 747 | 514 | 743 | 037 | 898 |
| 023 | 344 | 551 | 748 | 515 | 744 | 062 | 899 |
| 024 | 345 | 553 | 761 | 516 | 751 | 073 | 961 |
| 025 | 411 | 554 | 762 | 522 | 752 | 081 | -- |
| 041 | 421 | 611 | 763 | 523 | 759 | 091 | -- |
| 042 | 422 | 612 | 764 | 524 | 771 | 098 | -- |
| 043 | 431 | 613 | 775 | 525 | 772 | 211 | -- |
| 044 | 641 | 621 | 781 | 532 | 773 | 212 | -- |
| 045 | 667 | 625 | 782 | 541 | 774 | 222 | -- |
| 046 | 681 | 629 | 783 | 542 | 776 | 223 | -- |
| 047 | 682 | 642 | 784 | 562 | 778 | 231 | -- |
| 048 | 683 | 651 | 785 | 571 | 792 | 232 | -- |
| 054 | 684 | 652 | 786 | 572 | 871 | 244 | -- |
| 056 | 685 | 653 | 791 | 573 | 872 | 245 | -- |
| 057 | 686 | 654 | 793 | 574 | 873 | 246 | -- |
| 058 | 687 | 656 | 812 | 575 | 874 | 264 | -- |
| 059 | 689 | 657 | 813 | 581 | 881 | 265 | -- |
| 061 | 971 | 658 | 821 | 582 | 882 | 266 | -- |
| 071 | -- | 659 | 831 | 583 | 883 | 267 | -- |
| 072 | -- | 661 | 841 | 591 | 884 | 269 | -- |
| 074 | -- | 662 | 842 | 593 | 885 | 277 | -- |
| 075 | -- | 664 | 843 | 597 | 891 | 278 | -- |
| 121 | -- | 665 | 844 | 711 | -- | 282 | -- |
| 247 | -- | 666 | 845 | 712 | -- | 286 | -- |
| 248 | -- | 671 | 846 | 713 | -- | 288 | -- |
| 251 | -- | 672 | 848 | 714 | -- | 291 | -- |
| 261 | -- | 673 | 851 | 716 | -- | 292 | -- |
| 263 | -- | 674 | 892 | 718 | -- | 334 | -- |
| 268 | -- | 675 | 893 | 721 | -- | 351 | -- |
| 272 | -- | 676 | 894 | 722 | -- | 531 | -- |
| 274 | -- | 677 | 895 | 723 | -- | 579 | -- |
| 281 | -- | 678 | 897 | 724 | -- | 592 | -- |
| 283 | -- | 679 | -- | 725 | -- | 598 | -- |
| 284 | -- | 691 | -- | 726 | -- | 633 | -- |
| 285 | -- | 692 | -- | 727 | -- | 634 | -- |
| 287 | -- | 693 | -- | 728 | -- | 635 | -- |
| 289 | -- | 694 | -- | 731 | -- | 655 | -- |
| 321 | -- | 695 | -- | 733 | -- | 663 | -- |

*Note*: RIC- Ricardo Products, HO- Heckscher-Ohlin and PC- Product-cycle.

## Table B2: Categories of Products on the Basis of UNCTAD Classification

| PRIMARY PRODUCT | | | LRP | LTSP | MTSP | HTSP | | OTHERS |
|---|---|---|---|---|---|---|---|---|
| 001 | 222 | 345 | 611 | 671 | 621 | 511 | 871 | 891 |
| 011 | 223 | 351 | 612 | 672 | 625 | 512 | 872 | 892 |
| 012 | 231 | 411 | 613 | 673 | 629 | 513 | 873 | 895 |
| 016 | 232 | 421 | 633 | 674 | 711 | 514 | 874 | 896 |
| 017 | 244 | 422 | 634 | 675 | 712 | 515 | 881 | 897 |
| 022 | 245 | 431 | 635 | 676 | 713 | 516 | 882 | 898 |
| 023 | 246 | 677 | 641 | 677 | 714 | 522 | 883 | 899 |
| 024 | 247 | 681 | 642 | 678 | 716 | 523 | 884 | -- |
| 025 | 248 | 682 | 651 | 679 | 718 | 524 | 885 | -- |
| 034 | 251 | 683 | 652 | 691 | 721 | 525 | -- | -- |
| 035 | 261 | 684 | 653 | 692 | 722 | 531 | -- | -- |
| 036 | 263 | 685 | 654 | 693 | 723 | 532 | -- | -- |
| 037 | 264 | 686 | 655 | 694 | 724 | 533 | -- | -- |
| 041 | 265 | 687 | 656 | 695 | 725 | 541 | -- | -- |
| 042 | 266 | 689 | 657 | 696 | 726 | 542 | -- | -- |
| 043 | 267 | -- | 658 | 697 | 727 | 551 | -- | -- |
| 044 | 268 | -- | 659 | 699 | 728 | 553 | -- | -- |
| 045 | 269 | -- | 661 | 785 | 731 | 554 | -- | -- |
| 046 | 272 | -- | 662 | 786 | 733 | 562 | -- | -- |
| 047 | 273 | -- | 663 | 791 | 735 | 571 | -- | -- |
| 048 | 274 | -- | 664 | 793 | 737 | 572 | -- | -- |
| 054 | 277 | -- | 665 | 812 | 741 | 573 | -- | -- |
| 056 | 278 | -- | 666 | 813 | 742 | 574 | -- | -- |
| 057 | 281 | -- | 821 | -- | 743 | 575 | -- | -- |
| 058 | 282 | -- | 831 | -- | 744 | 579 | -- | -- |
| 059 | 283 | -- | 841 | -- | 745 | 581 | -- | -- |
| 061 | 284 | -- | 844 | -- | 746 | 582 | -- | -- |
| 062 | 285 | -- | 843 | -- | 747 | 583 | -- | -- |
| 071 | 286 | -- | 844 | -- | 748 | 591 | -- | -- |
| 072 | 287 | -- | 845 | -- | 749 | 592 | -- | -- |
| 073 | 288 | -- | 846 | -- | 771 | 593 | -- | -- |
| 074 | 289 | -- | 848 | -- | 772 | 597 | -- | -- |
| 075 | 291 | -- | 851 | -- | 773 | 598 | -- | -- |
| 081 | 292 | -- | 894 | -- | 774 | 751 | -- | -- |
| 091 | 321 | -- | -- | -- | 775 | 752 | -- | -- |
| 098 | 322 | -- | -- | -- | 778 | 759 | -- | -- |
| 111 | 325 | -- | -- | -- | 781 | 761 | -- | -- |
| 112 | 333 | -- | -- | -- | 782 | 762 | -- | -- |
| 121 | 334 | -- | -- | -- | 783 | 763 | -- | -- |
| 122 | 335 | -- | -- | -- | 784 | 764 | -- | -- |
| 211 | 342 | -- | -- | -- | 811 | 776 | -- | -- |
| 212 | 343 | -- | -- | -- | 813 | 792 | -- | -- |

*Note*: LRP= Labour Resource-Based Products, LTSP= Low Technology Skill-Based Products, MTSP= Medium Technology Skill-Based Products and HTSP= High Technology Skill-Based Products.

# Annexure C

## Table C1: Section-wise RCA of BRIC in Exports

| SECTION | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Section: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S-01** | 0.98 | 0.90 | 0.94 | 0.95 | 0.97 | 0.91 | 0.82 | 0.80 | 0.76 | 0.71 | 0.65 | 0.65 | 0.67 | 0.69 | 0.70 | 0.70 | 0.66 | -- |
| **S-02** | **1.49** | **1.52** | **1.39** | **1.32** | **1.27** | **1.27** | **1.18** | **1.03** | 0.97 | 0.91 | 0.90 | 0.80 | 0.84 | 0.79 | 0.92 | 0.91 | 0.87 | -- |
| **S-03** | 0.89 | 0.81 | 0.76 | 0.65 | 0.64 | 0.55 | 0.55 | 0.53 | 0.48 | 0.44 | 0.37 | 0.37 | 0.31 | 0.25 | 0.28 | 0.30 | 0.27 | -- |
| **S-04** | **1.26** | **1.15** | **1.10** | **1.03** | **1.07** | 0.97 | 0.85 | 0.83 | 0.79 | 0.86 | 0.77 | 0.76 | 0.71 | 0.72 | 0.74 | 0.71 | 0.62 | -- |
| **S-05** | **2.53** | **2.56** | **1.98** | **1.57** | **1.62** | **1.52** | **1.41** | **1.34** | **1.21** | 0.97 | **1.11** | **1.03** | **1.03** | **1.01** | 0.88 | **1.19** | **1.11** | -- |
| **S-06** | 0.69 | 0.67 | 0.68 | 0.71 | 0.62 | 0.55 | 0.52 | 0.51 | 0.52 | 0.53 | 0.52 | 0.59 | 0.49 | 0.54 | 0.59 | 0.53 | 0.52 | -- |
| **S-07** | 0.64 | 0.64 | 0.65 | 0.66 | 0.65 | 0.64 | 0.60 | 0.59 | 0.60 | 0.63 | 0.59 | 0.58 | 0.59 | 0.60 | 0.65 | 0.67 | 0.70 | -- |
| **S-08** | **3.14** | **3.36** | **3.36** | **3.20** | **3.08** | **3.02** | **2.91** | **2.76** | **2.58** | **2.32** | **2.05** | **2.02** | **2.08** | **2.01** | **2.11** | **2.16** | **1.81** | **S-08** |
| **S-09** | **1.14** | **1.13** | **1.28** | **1.28** | **1.30** | **1.34** | **1.27** | **1.28** | **1.28** | **1.34** | **1.29** | **1.22** | **1.13** | **1.06** | **1.06** | **1.00** | 0.92 | **S-09** |
| **S-10** | 0.51 | 0.53 | 0.54 | 0.58 | 0.54 | 0.49 | 0.49 | 0.45 | 0.47 | 0.51 | 0.50 | 0.51 | 0.51 | 0.53 | 0.57 | 0.58 | 0.59 | -- |
| **S-11** | **2.52** | **2.51** | **2.63** | **2.51** | **2.40** | **2.31** | **2.22** | **2.13** | **2.15** | **2.34** | **2.26** | **2.28** | **2.29** | **2.28** | **2.32** | **2.22** | **2.18** | **S-11** |
| **S-12** | **4.13** | **4.35** | **4.44** | **4.20** | **3.89** | **3.62** | **3.32** | **3.14** | **3.07** | **2.99** | **2.76** | **2.74** | **2.71** | **2.69** | **2.62** | **2.76** | **2.46** | **S-12** |
| **S-13** | **1.03** | **1.00** | **1.09** | **1.11** | **1.07** | **1.14** | **1.11** | **1.11** | **1.18** | **1.26** | **1.16** | **1.20** | **1.28** | **1.34** | **1.41** | **1.47** | **1.47** | **S-13** |
| **S-14** | **1.18** | **1.95** | **1.67** | **1.38** | **1.38** | **1.36** | **1.23** | **1.16** | **1.13** | **1.00** | 0.88 | 0.70 | 0.99 | 0.83 | **1.00** | 0.92 | **1.00** | -- |
| **S-15** | **1.52** | **1.43** | **1.52** | **1.48** | **1.28** | **1.24** | **1.19** | **1.26** | **1.20** | **1.23** | **1.16** | **1.18** | **1.00** | **1.00** | **1.01** | 0.98 | 0.97 | -- |
| **S-16** | 0.49 | 0.55 | 0.61 | 0.63 | 0.74 | 0.85 | 0.97 | **1.03** | **1.07** | **1.14** | **1.16** | **1.20** | **1.25** | **1.25** | **1.27** | **1.19** | **1.25** | -- |
| **S-17** | 0.28 | 0.34 | 0.30 | 0.39 | 0.35 | 0.33 | 0.34 | 0.37 | 0.36 | 0.38 | 0.39 | 0.45 | 0.48 | 0.51 | 0.53 | 0.44 | 0.44 | -- |
| **S-18** | 0.58 | 0.63 | 0.66 | 0.64 | 0.63 | 0.60 | 0.61 | 0.63 | 0.72 | 0.75 | 0.73 | 0.73 | 0.70 | 0.72 | 0.73 | 0.69 | 0.70 | -- |
| **S-19** | 0.23 | 0.88 | **1.86** | **1.08** | 0.33 | 0.64 | 0.32 | 0.25 | 0.24 | 0.25 | 0.28 | 0.31 | 0.32 | 0.28 | 0.30 | 0.27 | 0.35 | -- |
| **S-20** | **1.89** | **1.95** | **2.00** | **2.05** | **1.98** | **2.10** | **2.03** | **1.98** | **2.00** | **2.07** | **1.98** | **2.03** | **2.02** | **2.05** | **2.09** | **2.12** | **2.01** | **S-20** |
| **S-21** | 0.17 | 0.13 | 0.10 | 0.05 | 0.04 | 0.05 | 0.46 | 0.39 | 0.33 | 0.28 | 0.24 | 0.16 | 0.14 | 0.17 | 0.26 | 0.25 | 0.37 | -- |
| **No. of Sections RCA >1** | **11** | **11** | **12** | **12** | **11** | **10** | **10** | **11** | **10** | **9** | **9** | **9** | **9** | **9** | **9** | **8** | **8** | **6** |

*Note*: For description of section please refer Table A1

## Table C2: Section-wise RCA of Brazil in Exports

| SECTION | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Section: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S-01** | **1.27** | **1.24** | **1.64** | **1.76** | **2.35** | **2.59** | **2.86** | **3.32** | **3.54** | **3.39** | **3.84** | **4.01** | **3.52** | **3.47** | **3.09** | **3.40** | **3.23** | **S-01** |
| **S-02** | **3.87** | **3.55** | **3.59** | **3.61** | **3.74** | **3.68** | **3.94** | **4.22** | **3.74** | **3.83** | **3.97** | **3.96** | **4.31** | **3.96** | **4.49** | **4.64** | **5.22** | **S-02** |
| **S-03** | **2.68** | **3.45** | **3.57** | **2.65** | **3.17** | **3.59** | **4.13** | **3.69** | **3.17** | **2.58** | **2.56** | **2.54** | **1.67** | **1.42** | **1.55** | **1.54** | **1.24** | **S-03** |
| **S-04** | **4.67** | **4.47** | **4.49** | **4.04** | **4.25** | **4.15** | **3.83** | **3.82** | **3.86** | **4.35** | **3.98** | **3.92** | **4.29** | **4.31** | **4.06** | **4.07** | **3.64** | **S-04** |
| **S-05** | **1.03** | **1.59** | **1.13** | 0.82 | **1.00** | **1.14** | **1.06** | 0.97 | 0.96 | **1.02** | **1.14** | **1.06** | **1.28** | **1.59** | **1.55** | **1.76** | **1.53** | -- |
| **S-06** | 0.69 | 0.68 | 0.69 | 0.73 | 0.57 | 0.55 | 0.54 | 0.50 | 0.51 | 0.55 | 0.56 | 0.54 | 0.52 | 0.53 | 0.52 | 0.50 | 0.48 | -- |
| **S-07** | 0.72 | 0.68 | 0.71 | 0.78 | 0.66 | 0.63 | 0.68 | 0.62 | 0.66 | 0.70 | 0.70 | 0.61 | 0.67 | 0.58 | 0.56 | 0.54 | 0.51 | -- |
| **S-08** | **1.93** | **2.00** | **2.08** | **2.16** | **2.15** | **2.05** | **2.29** | **2.26** | **2.15** | **2.59** | **2.66** | **2.07** | **1.58** | **1.61** | **1.45** | **1.62** | **1.57** | **S-08** |
| **S-09** | **1.67** | **1.74** | **2.23** | **2.31** | **2.23** | **2.54** | **2.54** | **2.77** | **2.43** | **2.30** | **1.99** | **1.75** | **1.36** | **1.24** | **1.02** | **1.06** | **1.06** | **S-09** |
| **S-10** | **1.38** | **1.39** | **1.69** | **1.84** | **1.51** | **1.41** | **1.64** | **1.38** | **1.44** | **1.57** | **1.59** | **1.70** | **1.68** | **1.86** | **1.65** | **1.69** | **1.78** | **S-10** |
| **S-11** | 0.38 | 0.36 | 0.36 | 0.40 | 0.40 | 0.34 | 0.40 | 0.41 | 0.39 | 0.33 | 0.33 | 0.31 | 0.28 | 0.26 | 0.28 | 0.34 | 0.23 | -- |
| **S-12** | **3.50** | **3.23** | **3.44** | **3.84** | **3.55** | **3.14** | **2.86** | **2.73** | **2.42** | **2.15** | **1.93** | **1.61** | **1.27** | **1.10** | 0.79 | 0.74 | 0.63 | -- |
| **S-13** | **1.05** | **1.06** | **1.19** | **1.27** | **1.13** | **1.25** | **1.26** | **1.29** | **1.32** | **1.38** | **1.25** | 0.97 | 0.89 | 0.85 | 0.72 | 0.73 | 0.76 | -- |
| **S-14** | 0.69 | 0.53 | 0.59 | 0.58 | 0.53 | 0.55 | 0.44 | 0.41 | 0.38 | 0.42 | 0.40 | 0.39 | 0.48 | 0.44 | 0.40 | 0.42 | 0.40 | -- |
| **S-15** | **1.64** | **1.55** | **1.70** | **1.74** | **1.41** | **1.57** | **1.58** | **1.45** | **1.45** | **1.32** | **1.17** | **1.18** | **1.09** | 0.92 | 0.94 | 0.94 | 0.84 | -- |
| **S-16** | 0.41 | 0.40 | 0.40 | 0.42 | 0.44 | 0.43 | 0.43 | 0.41 | 0.48 | 0.47 | 0.42 | 0.41 | 0.35 | 0.32 | 0.33 | 0.32 | 0.31 | -- |
| **S-17** | 0.80 | 0.88 | 0.83 | **1.20** | **1.09** | 0.93 | 0.87 | **1.10** | **1.11** | **1.03** | **1.04** | **1.06** | 0.85 | 0.84 | 0.77 | 0.74 | **1.03** | -- |
| **S-18** | 0.15 | 0.20 | 0.26 | 0.24 | 0.23 | 0.20 | 0.15 | 0.13 | 0.13 | 0.14 | 0.15 | 0.14 | 0.13 | 0.11 | 0.11 | 0.10 | 0.10 | -- |
| **S-19** | **1.06** | 0.96 | **1.17** | **1.70** | **1.52** | **4.71** | **1.99** | **1.61** | **1.59** | **1.70** | **2.13** | **2.31** | **2.80** | **2.32** | **2.04** | **2.24** | **2.14** | -- |
| **S-20** | 0.48 | 0.44 | 0.49 | 0.56 | 0.52 | 0.52 | 0.54 | 0.60 | 0.53 | 0.48 | 0.44 | 0.36 | 0.32 | 0.28 | 0.25 | 0.27 | 0.20 | -- |
| **S-21** | 0.01 | 0.01 | 0.01 | 0.02 | 0.03 | 0.03 | 0.05 | 0.08 | 0.04 | 0.06 | 0.04 | 0.08 | 0.19 | 0.10 | 0.23 | 0.18 | 0.43 | -- |
| **No. of Sections RCA >1** | **12** | **11** | **12** | **12** | **12** | **12** | **12** | **12** | **12** | **13** | **13** | **12** | **11** | **10** | **9** | **9** | **10** | **7** |

*Note*: For description of section please refer Table A1 in Annexure A

## Table C3: Section-wise RCA of Russia in Exports

| SECTION | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Section: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S-01** | 0.22 | 0.27 | 0.21 | 0.24 | 0.25 | 0.23 | 0.20 | 0.14 | 0.14 | 0.18 | 0.14 | 0.10 | 0.34 | 0.34 | 0.33 | 0.31 | 0.31 | -- |
| **S-02** | 0.26 | 0.26 | 0.12 | 0.20 | 0.21 | 0.50 | 0.48 | 0.25 | 0.36 | 0.42 | 0.65 | 0.37 | 0.53 | 0.30 | 0.51 | 0.53 | 0.40 | -- |
| **S-03** | 0.10 | 0.09 | 0.08 | 0.29 | 0.21 | 0.15 | 0.13 | 0.18 | 0.27 | 0.51 | 0.38 | 0.35 | 0.56 | 0.35 | 0.40 | 0.66 | 0.71 | -- |
| **S-04** | 0.17 | 0.11 | 0.12 | 0.15 | 0.17 | 0.18 | 0.20 | 0.20 | 0.22 | 0.26 | 0.25 | 0.22 | 0.25 | 0.19 | 0.19 | 0.26 | 0.29 | -- |
| **S-05** | **9.02** | **9.65** | **8.45** | **5.78** | **6.22** | **6.28** | **6.07** | **5.64** | **4.86** | **4.18** | **4.62** | **3.90** | **4.76** | **4.49** | **3.93** | **5.23** | **5.19** | **S-05** |
| **S-06** | 0.66 | 0.65 | 0.65 | 0.78 | 0.58 | 0.49 | 0.48 | 0.49 | 0.47 | 0.53 | 0.47 | 0.55 | 0.41 | 0.44 | 0.55 | 0.48 | 0.45 | -- |
| **S-07** | 0.37 | 0.33 | 0.35 | 0.32 | 0.32 | 0.29 | 0.27 | 0.26 | 0.23 | 0.26 | 0.24 | 0.23 | 0.26 | 0.26 | 0.29 | 0.26 | 0.28 | -- |
| **S-08** | 0.64 | 0.78 | 0.44 | 0.36 | 0.26 | 0.27 | 0.27 | 0.23 | 0.21 | 0.24 | 0.16 | 0.14 | 0.14 | 0.12 | 0.14 | 0.18 | 0.18 | -- |
| **S-09** | **1.95** | **2.20** | **2.62** | **2.25** | **2.41** | **2.65** | **2.57** | **2.41** | **2.40** | **2.79** | **2.76** | **2.22** | **2.49** | **2.23** | **2.37** | **1.83** | **1.87** | **S-09** |
| **S-10** | 0.70 | 0.84 | 0.82 | 0.79 | 0.79 | 0.74 | 0.65 | 0.61 | 0.53 | 0.59 | 0.49 | 0.44 | 0.48 | 0.46 | 0.49 | 0.43 | 0.45 | -- |
| **S-11** | 0.16 | 0.17 | 0.18 | 0.12 | 0.11 | 0.11 | 0.09 | 0.08 | 0.06 | 0.05 | 0.04 | 0.03 | 0.03 | 0.02 | 0.02 | 0.03 | 0.04 | -- |
| **S-12** | 0.13 | 0.10 | 0.07 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.03 | 0.04 | -- |
| **S-13** | 0.29 | 0.21 | 0.29 | 0.28 | 0.26 | 0.20 | 0.20 | 0.21 | 0.21 | 0.29 | 0.27 | 0.22 | 0.27 | 0.21 | 0.18 | 0.25 | 0.26 | -- |
| **S-14** | 0.00 | **3.34** | 0.00 | 0.00 | 0.73 | 0.47 | 0.40 | 0.45 | 0.43 | 0.88 | 0.57 | 0.18 | 0.18 | 0.30 | 0.31 | 0.00 | 0.86 | -- |
| **S-15** | **3.02** | **3.09** | **3.40** | **2.80** | **2.42** | **2.30** | **2.18** | **2.27** | **1.87** | **1.96** | **1.59** | **1.34** | **1.58** | **1.40** | **1.35** | **1.16** | **1.13** | **S-15** |
| **S-16** | 0.16 | 0.16 | 0.19 | 0.14 | 0.18 | 0.15 | 0.14 | 0.12 | 0.10 | 0.12 | 0.10 | 0.10 | 0.12 | 0.09 | 0.09 | 0.10 | 0.12 | -- |
| **S-17** | 0.11 | 0.27 | 0.17 | 0.24 | 0.17 | 0.34 | 0.33 | 0.27 | 0.15 | 0.15 | 0.12 | 0.12 | 0.10 | 0.09 | 0.08 | 0.04 | 0.14 | -- |
| **S-18** | 0.12 | 0.20 | 0.26 | 0.21 | 0.34 | 0.20 | 0.15 | 0.12 | 0.09 | 0.10 | 0.09 | 0.09 | 0.10 | 0.09 | 0.09 | 0.07 | 0.08 | -- |
| **S-19** | 0.00 | 0.35 | **8.99** | **3.97** | 0.34 | 0.35 | 0.38 | 0.28 | 0.24 | 0.24 | 0.22 | 0.20 | 0.19 | 0.12 | 0.22 | 0.00 | 0.65 | -- |
| **S-20** | 0.08 | 0.06 | 0.07 | 0.06 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.10 | 0.08 | 0.07 | 0.08 | 0.10 | 0.05 | 0.06 | 0.06 | -- |
| **S-21** | 0.01 | 0.01 | 0.01 | 0.03 | 0.01 | 0.05 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | -- |
| **No. of Sections RCA >1** | **3** | **4** | **4** | **4** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** |

*Note*: For description of section please refer Table A1 in Annexure A

## Table C4: Section-wise RCA of India in Exports

| SECTION | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Section: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S-01** | **1.94** | **1.68** | **1.73** | **2.03** | **1.73** | **1.68** | **1.40** | **1.16** | **1.22** | **1.13** | **1.05** | 0.92 | 0.79 | **1.00** | **1.12** | **1.25** | **1.43** | -- |
| **S-02** | **3.47** | **4.15** | **3.42** | **3.13** | **3.13** | **3.18** | **2.58** | **2.76** | **2.49** | **2.18** | **2.23** | **2.10** | **1.59** | **1.60** | **1.98** | **2.75** | **2.26** | **S-02** |
| **S-03** | 0.96 | 0.94 | **1.53** | **1.74** | **1.34** | 0.75 | 0.67 | 0.94 | 0.79 | 0.66 | 0.60 | 0.53 | 0.54 | 0.56 | 0.55 | 0.48 | 0.47 | -- |
| **S-04** | **1.27** | 0.78 | 0.70 | 0.83 | 0.95 | 0.78 | 0.77 | 0.76 | 0.64 | 0.93 | 0.97 | **1.20** | 0.63 | 0.77 | 0.81 | 0.81 | 0.70 | -- |
| **S-05** | 0.58 | 0.54 | 0.36 | 0.55 | 0.76 | 0.80 | 0.87 | **1.13** | **1.17** | **1.30** | **1.45** | **1.22** | **1.23** | **1.30** | **1.19** | **1.43** | **1.50** | -- |
| **S-06** | **1.16** | **1.07** | **1.13** | **1.22** | **1.15** | **1.13** | **1.11** | **1.08** | **1.11** | **1.18** | **1.13** | **1.17** | 0.98 | **1.06** | **1.01** | **1.11** | **1.09** | -- |
| **S-07** | 0.50 | 0.45 | 0.47 | 0.55 | 0.65 | 0.70 | 0.70 | 0.79 | 0.72 | 0.73 | 0.60 | 0.59 | 0.48 | 0.53 | 0.59 | 0.56 | 0.60 | -- |
| **S-08** | **4.30** | **4.81** | **4.33** | **4.51** | **4.11** | **3.67** | **3.21** | **3.38** | **2.97** | **2.78** | **2.63** | **2.70** | **2.17** | **1.77** | **1.78** | **1.91** | **1.66** | **S-08** |
| **S-09** | 0.07 | 0.06 | 0.06 | 0.07 | 0.06 | 0.08 | 0.08 | 0.10 | 0.10 | 0.10 | 0.11 | 0.13 | 0.11 | 0.10 | 0.11 | 0.12 | 0.13 | -- |
| **S-10** | 0.12 | 0.13 | 0.16 | 0.21 | 0.22 | 0.26 | 0.23 | 0.24 | 0.27 | 0.26 | 0.25 | 0.25 | 0.22 | 0.25 | 0.25 | 0.26 | 0.26 | -- |
| **S-11** | **4.33** | **4.51** | **4.65** | **4.70** | **4.35** | **3.98** | **3.69** | **3.52** | **3.47** | **3.40** | **3.19** | **3.13** | **2.86** | **2.93** | **2.75** | **2.73** | **2.74** | **S-11** |
| **S-12** | **1.85** | **2.21** | **2.13** | **2.05** | **1.95** | **1.71** | **1.65** | **1.69** | **1.64** | **1.65** | **1.65** | **1.54** | **1.29** | **1.15** | **1.07** | **1.08** | **1.08** | **S-12** |
| **S-13** | 0.74 | 0.71 | 0.84 | 0.99 | **1.03** | **1.02** | **1.01** | 0.84 | 0.88 | 0.95 | 0.94 | 0.89 | 0.78 | 0.77 | 0.71 | 0.75 | 0.75 | -- |
| **S-14** | **7.97** | **9.19** | **11.16** | **10.38** | **9.28** | **9.92** | **9.99** | **9.44** | **9.14** | **6.92** | **6.67** | **5.54** | **7.96** | **5.86** | **5.83** | **4.62** | **3.90** | **S-14** |
| **S-15** | 0.87 | 0.75 | 0.96 | **1.06** | **1.01** | **1.14** | **1.30** | **1.27** | **1.26** | **1.30** | **1.19** | **1.22** | 0.98 | **1.28** | 0.92 | 0.99 | **1.04** | -- |
| **S-16** | 0.20 | 0.18 | 0.17 | 0.18 | 0.23 | 0.22 | 0.24 | 0.23 | 0.25 | 0.27 | 0.28 | 0.33 | 0.39 | 0.31 | 0.33 | 0.30 | 0.30 | -- |
| **S-17** | 0.20 | 0.16 | 0.16 | 0.19 | 0.19 | 0.18 | 0.23 | 0.28 | 0.34 | 0.33 | 0.34 | 0.52 | 0.62 | 0.68 | 0.68 | 0.57 | 0.60 | -- |
| **S-18** | 0.13 | 0.14 | 0.19 | 0.20 | 0.24 | 0.24 | 0.25 | 0.23 | 0.22 | 0.20 | 0.20 | 0.21 | 0.21 | 0.19 | 0.19 | 0.19 | 0.19 | -- |
| **S-19** | 0.10 | 0.01 | 0.02 | 0.03 | 0.19 | 0.07 | 0.08 | 0.05 | 0.02 | 0.07 | 0.04 | 0.11 | 0.12 | 0.07 | 0.18 | 0.21 | 0.28 | -- |
| **S-20** | 0.24 | 0.24 | 0.23 | 0.25 | 0.26 | 0.23 | 0.28 | 0.30 | 0.30 | 0.31 | 0.30 | 0.27 | 0.26 | 0.29 | 0.28 | 0.29 | 0.28 | -- |
| **S-21** | 0.05 | 0.04 | 0.05 | 0.03 | 0.06 | 0.08 | **5.02** | **4.41** | **3.61** | **2.85** | **2.59** | **1.50** | **1.04** | **1.01** | **1.00** | 0.79 | 0.70 | -- |
| **No. of Sections RCA >1** | **8** | **7** | **8** | **9** | **10** | **9** | **10** | **10** | **10** | **10** | **10** | **10** | **7** | **10** | **9** | **8** | **8** | **5** |

*Note*: For description of section please refer Table A1 in Annexure A

## Table C5: Section-wise RCA of China in Exports

| SECTION | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Section: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S-01** | **1.02** | 0.90 | 0.86 | 0.86 | 0.79 | 0.68 | 0.58 | 0.53 | 0.46 | 0.41 | 0.34 | 0.33 | 0.38 | 0.39 | 0.40 | 0.40 | 0.35 | -- |
| **S-02** | 0.94 | 0.95 | 0.90 | 0.94 | 0.79 | 0.76 | 0.72 | 0.50 | 0.52 | 0.46 | 0.42 | 0.33 | 0.37 | 0.39 | 0.37 | 0.30 | 0.31 | -- |
| **S-03** | 0.69 | 0.32 | 0.15 | 0.16 | 0.13 | 0.08 | 0.06 | 0.06 | 0.09 | 0.10 | 0.06 | 0.07 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04 | -- |
| **S-04** | 0.73 | 0.67 | 0.67 | 0.73 | 0.69 | 0.65 | 0.55 | 0.53 | 0.51 | 0.51 | 0.47 | 0.44 | 0.38 | 0.39 | 0.41 | 0.41 | 0.36 | -- |
| **S-05** | 0.67 | 0.68 | 0.41 | 0.37 | 0.39 | 0.32 | 0.28 | 0.25 | 0.20 | 0.15 | 0.14 | 0.14 | 0.13 | 0.12 | 0.10 | 0.12 | 0.11 | -- |
| **S-06** | 0.62 | 0.61 | 0.60 | 0.59 | 0.56 | 0.49 | 0.45 | 0.44 | 0.46 | 0.44 | 0.46 | 0.53 | 0.44 | 0.49 | 0.54 | 0.47 | 0.46 | -- |
| **S-07** | 0.75 | 0.78 | 0.76 | 0.78 | 0.75 | 0.73 | 0.66 | 0.65 | 0.69 | 0.69 | 0.67 | 0.69 | 0.68 | 0.68 | 0.74 | 0.80 | 0.83 | -- |
| **S-08** | **4.29** | **4.38** | **4.43** | **4.24** | **4.05** | **3.89** | **3.69** | **3.45** | **3.29** | **2.73** | **2.40** | **2.50** | **2.57** | **2.52** | **2.66** | **2.73** | **2.25** | **S-08** |
| **S-09** | 0.86 | 0.77 | 0.84 | 0.91 | 0.93 | 0.93 | 0.87 | 0.89 | 0.93 | **1.01** | 0.94 | 0.98 | 0.93 | 0.90 | 0.93 | 0.92 | 0.82 | -- |
| **S-10** | 0.26 | 0.25 | 0.24 | 0.29 | 0.29 | 0.29 | 0.28 | 0.28 | 0.33 | 0.37 | 0.39 | 0.40 | 0.42 | 0.42 | 0.49 | 0.53 | 0.55 | -- |
| **S-11** | **3.75** | **3.58** | **3.59** | **3.47** | **3.28** | **3.05** | **2.89** | **2.80** | **2.86** | **3.05** | **2.99** | **3.12** | **2.97** | **2.95** | **3.00** | **2.88** | **2.81** | **S-11** |
| **S-12** | **6.38** | **6.54** | **6.52** | **6.16** | **5.54** | **5.04** | **4.51** | **4.24** | **4.24** | **4.00** | **3.72** | **3.86** | **3.69** | **3.70** | **3.65** | **3.89** | **3.43** | **S-12** |
| **S-13** | **1.37** | **1.32** | **1.37** | **1.41** | **1.33** | **1.40** | **1.34** | **1.37** | **1.48** | **1.51** | **1.42** | **1.56** | **1.62** | **1.73** | **1.87** | **1.95** | **1.94** | **S-13** |
| **S-14** | 0.52 | 0.57 | 0.69 | 0.56 | 0.51 | 0.48 | 0.41 | 0.42 | 0.41 | 0.37 | 0.34 | 0.29 | 0.26 | 0.31 | 0.49 | 0.68 | 0.67 | -- |
| **S-15** | 0.99 | 0.94 | 0.97 | **1.02** | 0.92 | 0.88 | 0.85 | 0.95 | 0.96 | **1.03** | **1.03** | **1.13** | 0.86 | 0.89 | 0.95 | 0.94 | 0.95 | -- |
| **S-16** | 0.71 | 0.80 | 0.88 | 0.93 | **1.07** | **1.23** | **1.39** | **1.48** | **1.55** | **1.58** | **1.65** | **1.75** | **1.75** | **1.76** | **1.79** | **1.68** | **1.76** | -- |
| **S-17** | 0.21 | 0.24 | 0.24 | 0.30 | 0.27 | 0.24 | 0.27 | 0.28 | 0.32 | 0.34 | 0.38 | 0.45 | 0.49 | 0.54 | 0.57 | 0.48 | 0.42 | -- |
| **S-18** | 0.97 | 0.99 | 0.97 | 0.96 | 0.88 | 0.85 | 0.86 | 0.90 | **1.06** | **1.07** | **1.03** | **1.07** | 0.98 | **1.01** | **1.03** | 0.97 | 0.99 | -- |
| **S-19** | 0.10 | **1.20** | 0.08 | 0.06 | 0.09 | 0.07 | 0.06 | 0.06 | 0.06 | 0.07 | 0.08 | 0.09 | 0.07 | 0.09 | 0.11 | 0.12 | 0.11 | -- |
| **S-20** | **3.35** | **3.33** | **3.32** | **3.40** | **3.20** | **3.26** | **3.03** | **2.93** | **3.00** | **2.99** | **2.88** | **3.06** | **2.92** | **2.95** | **3.03** | **3.08** | **2.92** | **S-20** |
| **S-21** | 0.30 | 0.22 | 0.16 | 0.07 | 0.06 | 0.05 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.10 | 0.20 | 0.24 | 0.39 | -- |
| **No. of Sections RCA >1** | **6** | **6** | **5** | **6** | **6** | **6** | **6** | **6** | **7** | **9** | **8** | **8** | **6** | **7** | **7** | **6** | **6** | **5** |

*Note*: For description of section please refer Table A1 in Annexure A

# Annexure D

## Table D1: Chapter-wise RCA of BRIC in Exports

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-01** | 0.75 | 0.73 | 0.67 | 0.59 | 0.49 | 0.41 | 0.35 | 0.30 | 0.23 | 0.23 | 0.30 | 0.35 | 0.35 | 0.38 | 0.31 | 0.31 | 0.31 | -- |
| **C-02** | 0.94 | 0.88 | 0.93 | 0.90 | **1.11** | **1.01** | 0.97 | **1.07** | **1.05** | 0.98 | 0.98 | 0.96 | 0.85 | 0.89 | 0.87 | 0.78 | 0.79 | -- |
| **C-03** | **1.62** | **1.46** | **1.45** | **1.42** | **1.37** | **1.31** | **1.17** | **1.03** | 0.94 | 0.88 | 0.74 | 0.68 | 0.92 | 0.98 | **1.05** | **1.17** | **1.04** | -- |
| **C-04** | 0.13 | 0.13 | 0.12 | 0.17 | 0.16 | 0.15 | 0.14 | 0.13 | 0.14 | 0.14 | 0.15 | 0.18 | 0.11 | 0.09 | 0.08 | 0.09 | 0.09 | -- |
| **C-05** | **3.35** | **3.24** | **3.49** | **3.47** | **2.96** | **2.55** | **2.30** | **2.26** | **1.96** | **1.79** | **1.67** | **1.65** | **1.62** | **1.58** | **1.70** | **1.50** | **1.45** | **C-05** |
| **C-06** | 0.12 | 0.12 | 0.12 | 0.11 | 0.11 | 0.11 | 0.10 | 0.10 | 0.10 | 0.11 | 0.12 | 0.09 | 0.10 | 0.10 | 0.09 | 0.10 | 0.09 | -- |
| **C-07** | **1.29** | **1.20** | **1.26** | **1.25** | **1.15** | **1.07** | 0.93 | 0.90 | 0.89 | 0.90 | 0.76 | 0.69 | 0.77 | 0.89 | 0.97 | 0.76 | 0.73 | -- |
| **C-08** | 0.66 | 0.63 | 0.79 | 0.70 | 0.61 | 0.57 | 0.51 | 0.50 | 0.45 | 0.44 | 0.41 | 0.42 | 0.42 | 0.37 | 0.39 | 0.39 | 0.36 | -- |
| **C-09** | **3.93** | **3.63** | **3.76** | **2.78** | **2.80** | **2.51** | **2.08** | **2.10** | **1.94** | **1.83** | **1.62** | **1.57** | **1.46** | **1.50** | **1.62** | **1.59** | **1.40** | **C-09** |
| **C-10** | 0.87 | **1.33** | 0.87 | 0.96 | 0.99 | **1.41** | **1.43** | 0.81 | 0.87 | 0.73 | **1.03** | 0.61 | 0.69 | 0.59 | 0.71 | 0.89 | 0.90 | -- |
| **C-11** | 0.53 | 0.38 | 0.33 | 0.42 | 0.48 | 0.43 | 0.48 | 0.37 | 0.31 | 0.34 | 0.45 | 0.39 | 0.36 | 0.33 | 0.37 | 0.31 | 0.31 | -- |
| **C-12** | **2.61** | **2.49** | **2.24** | **2.48** | **2.47** | **2.28** | **2.15** | **2.19** | **1.93** | **1.83** | **1.48** | **1.45** | **1.51** | **1.24** | **1.47** | **1.14** | **1.33** | **C-12** |
| **C-13** | **2.67** | **2.85** | **2.87** | **2.35** | **2.06** | **1.68** | **1.41** | **1.26** | **1.38** | **1.30** | **1.21** | **1.41** | **1.33** | **1.59** | **2.66** | **3.06** | **2.43** | **C-13** |
| **C-14** | **2.91** | **2.99** | **2.81** | **2.60** | **2.20** | **2.00** | **1.45** | **1.51** | **1.36** | **1.38** | **1.10** | **1.23** | **1.02** | **1.01** | **1.19** | **1.47** | **1.15** | **C-14** |
| **C-15** | 0.89 | 0.81 | 0.76 | 0.65 | 0.64 | 0.55 | 0.55 | 0.53 | 0.48 | 0.44 | 0.37 | 0.37 | 0.31 | 0.25 | 0.28 | 0.30 | 0.27 | -- |
| **C-16** | **2.03** | **1.87** | **1.91** | **2.08** | **1.97** | **1.89** | **1.72** | **1.75** | **1.73** | **1.83** | **1.61** | **1.45** | **1.19** | **1.22** | **1.29** | **1.28** | **1.10** | **C-16** |
| **C-17** | **2.06** | **2.30** | **2.43** | **1.61** | **2.34** | **2.04** | **1.72** | **1.53** | **1.63** | **2.07** | **1.71** | **1.71** | **1.83** | **2.11** | **2.12** | **1.68** | **1.47** | **C-17** |
| **C-18** | 0.38 | 0.39 | 0.34 | 0.35 | 0.28 | 0.30 | 0.27 | 0.25 | 0.26 | 0.24 | 0.20 | 0.19 | 0.15 | 0.15 | 0.15 | 0.19 | 0.17 | -- |
| **C-19** | 0.31 | 0.30 | 0.35 | 0.40 | 0.39 | 0.35 | 0.32 | 0.32 | 0.31 | 0.31 | 0.28 | 0.27 | 0.23 | 0.22 | 0.24 | 0.24 | 0.21 | -- |
| **C-20** | **1.69** | **1.82** | **1.79** | **1.71** | **1.56** | **1.52** | **1.38** | **1.21** | **1.15** | **1.20** | **1.26** | **1.11** | 0.97 | 0.97 | **1.04** | **1.00** | 0.89 | -- |
| **C-21** | 0.82 | 0.77 | 0.78 | 0.90 | 0.76 | 0.58 | 0.52 | 0.48 | 0.46 | 0.47 | 0.45 | 0.44 | 0.41 | 0.41 | 0.41 | 0.41 | 0.38 | -- |
| **C-22** | 0.32 | 0.26 | 0.26 | 0.26 | 0.28 | 0.25 | 0.20 | 0.24 | 0.24 | 0.35 | 0.24 | 0.29 | 0.22 | 0.18 | 0.19 | 0.23 | 0.19 | -- |
| **C-23** | **2.54** | **1.79** | **1.76** | **1.70** | **1.71** | **1.58** | **1.46** | **1.55** | **1.19** | **1.06** | **1.03** | **1.15** | **1.05** | 0.97 | 0.99 | 0.92 | 0.85 | -- |
| **C-24** | **1.55** | **1.50** | **1.09** | 0.87 | 0.95 | 0.95 | 0.92 | 0.91 | 0.90 | 0.86 | 0.87 | 0.92 | 0.99 | 0.88 | 0.79 | 0.81 | 0.78 | -- |
| **C-25** | **2.01** | **1.93** | **1.90** | **1.98** | **1.84** | **1.56** | **1.47** | **1.29** | **1.32** | **1.35** | **1.14** | **1.15** | 0.94 | 0.94 | 0.99 | 0.98 | 0.93 | -- |
| **C-26** | **2.57** | **2.89** | **2.62** | **2.36** | **2.05** | **2.06** | **1.82** | **1.78** | **1.71** | **1.32** | **1.19** | **1.35** | **1.20** | **1.27** | **1.24** | 0.87 | 0.84 | -- |
| **C-27** | **2.56** | **2.57** | **1.94** | **1.53** | **1.60** | **1.49** | **1.39** | **1.32** | **1.18** | 0.94 | **1.11** | **1.01** | **1.02** | 0.99 | 0.84 | **1.22** | **1.15** | -- |
| **C-28** | **1.60** | **1.62** | **1.62** | **1.94** | **1.48** | **1.40** | **1.34** | **1.32** | **1.34** | **1.27** | **1.15** | **1.16** | **1.04** | **1.13** | **1.27** | **1.05** | **1.03** | **C-28** |
| **C-29** | 0.78 | 0.74 | 0.77 | 0.75 | 0.71 | 0.69 | 0.65 | 0.61 | 0.63 | 0.69 | 0.69 | 0.81 | 0.76 | 0.76 | 0.78 | 0.71 | 0.74 | -- |
| **C-30** | 0.33 | 0.30 | 0.29 | 0.26 | 0.22 | 0.18 | 0.16 | 0.14 | 0.14 | 0.14 | 0.14 | 0.16 | 0.15 | 0.17 | 0.20 | 0.20 | 0.20 | -- |

To be contd ...

Contd...

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-31** | **1.89** | **1.73** | **1.80** | **2.23** | **2.18** | **1.81** | **1.83** | **1.97** | **1.67** | **1.64** | **1.82** | **1.48** | **1.33** | **1.44** | **1.51** | **1.49** | **1.30** | **C-31** |
| **C-32** | 0.74 | 0.73 | 0.77 | 0.74 | 0.73 | 0.67 | 0.59 | 0.55 | 0.57 | 0.59 | 0.57 | 0.56 | 0.52 | 0.55 | 0.59 | 0.53 | 0.55 | -- |
| **C-33** | 0.29 | 0.29 | 0.30 | 0.33 | 0.31 | 0.31 | 0.30 | 0.28 | 0.29 | 0.31 | 0.29 | 0.28 | 0.29 | 0.30 | 0.31 | 0.30 | 0.29 | -- |
| **C-34** | 0.33 | 0.41 | 0.43 | 0.45 | 0.42 | 0.40 | 0.38 | 0.39 | 0.39 | 0.40 | 0.40 | 0.41 | 0.37 | 0.38 | 0.40 | 0.42 | 0.38 | -- |
| **C-35** | 0.44 | 0.94 | 0.42 | 0.48 | 0.47 | 0.46 | 0.43 | 0.48 | 0.50 | 0.52 | 0.54 | 0.66 | 0.64 | 0.63 | 0.61 | 0.60 | 0.58 | -- |
| **C-36** | **3.79** | **3.54** | **4.32** | **3.33** | **3.28** | **2.93** | **2.45** | **2.13** | **1.99** | **1.92** | **1.70** | **1.55** | **1.64** | **1.35** | **1.41** | **1.32** | **1.26** | **C-36** |
| **C-37** | 0.29 | 0.34 | 0.43 | 0.49 | 0.46 | 0.44 | 0.47 | 0.51 | 0.52 | 0.36 | 0.33 | 0.38 | 0.35 | 0.40 | 0.40 | 0.36 | 0.38 | -- |
| **C-38** | 0.47 | 0.46 | 0.51 | 0.50 | 0.50 | 0.47 | 0.43 | 0.46 | 0.49 | 0.47 | 0.47 | 0.51 | 0.46 | 0.50 | 0.51 | 0.44 | 0.46 | -- |
| **C-39** | 0.59 | 0.62 | 0.62 | 0.63 | 0.61 | 0.60 | 0.57 | 0.55 | 0.56 | 0.58 | 0.53 | 0.52 | 0.53 | 0.54 | 0.60 | 0.64 | 0.67 | -- |
| **C-40** | 0.76 | 0.72 | 0.73 | 0.77 | 0.76 | 0.74 | 0.71 | 0.70 | 0.75 | 0.78 | 0.78 | 0.78 | 0.79 | 0.75 | 0.76 | 0.75 | 0.77 | -- |
| **C-41** | **1.29** | **1.44** | **1.29** | **1.27** | **1.42** | **1.34** | **1.31** | **1.33** | **1.29** | **1.34** | **1.06** | 0.83 | 0.70 | 0.66 | 0.73 | 0.85 | 0.73 | -- |
| **C-42** | **5.74** | **5.91** | **5.63** | **5.35** | **5.03** | **4.90** | **4.48** | **3.88** | **3.43** | **3.22** | **2.87** | **2.87** | **2.81** | **2.88** | **2.86** | **2.73** | **2.37** | **C-42** |
| **C-43** | **1.37** | **1.34** | **1.70** | **1.87** | **1.94** | **1.84** | **2.31** | **3.34** | **3.34** | **1.69** | **1.41** | **1.17** | **1.82** | **1.71** | **1.73** | **1.94** | **1.47** | **C-43** |
| **C-44** | **1.05** | **1.06** | **1.21** | **1.21** | **1.23** | **1.27** | **1.21** | **1.23** | **1.23** | **1.29** | **1.24** | **1.15** | **1.06** | **1.01** | **1.01** | 0.96 | 0.88 | -- |
| **C-45** | 0.06 | 0.04 | 0.06 | 0.10 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.11 | 0.08 | 0.08 | 0.08 | 0.07 | 0.08 | 0.06 | 0.06 | -- |
| **C-46** | **9.75** | **9.95** | **9.32** | **7.37** | **6.90** | **6.61** | **6.10** | **5.59** | **5.00** | **4.90** | **4.73** | **4.91** | **4.47** | **4.12** | **4.18** | **3.66** | **3.57** | **C-46** |
| **C-47** | **1.07** | **1.19** | **1.39** | **1.19** | **1.15** | **1.02** | **1.08** | 0.88 | 0.86 | 0.86 | 0.78 | 0.83 | 0.83 | 0.80 | 0.76 | 0.65 | 0.66 | -- |
| **C-48** | 0.41 | 0.41 | 0.41 | 0.45 | 0.44 | 0.41 | 0.40 | 0.38 | 0.41 | 0.46 | 0.45 | 0.45 | 0.47 | 0.48 | 0.55 | 0.57 | 0.59 | -- |
| **C-49** | 0.48 | 0.52 | 0.46 | 0.47 | 0.44 | 0.44 | 0.38 | 0.39 | 0.38 | 0.42 | 0.44 | 0.45 | 0.44 | 0.44 | 0.45 | 0.52 | 0.52 | -- |
| **C-50** | **6.49** | **6.87** | **7.58** | **7.31** | **6.69** | **6.18** | **5.47** | **5.04** | **4.62** | **4.40** | **3.94** | **3.63** | **3.77** | **3.78** | **3.63** | **3.41** | **2.86** | **C-50** |
| **C-51** | **1.16** | **1.11** | **1.44** | **1.50** | **1.31** | **1.21** | **1.27** | **1.28** | **1.25** | **1.24** | **1.10** | **1.13** | **1.13** | **1.23** | **1.20** | **1.19** | 0.96 | -- |
| **C-52** | **3.04** | **2.72** | **3.24** | **3.01** | **2.73** | **2.83** | **2.47** | **2.17** | **2.15** | **2.27** | **2.24** | **2.27** | **2.25** | **2.33** | **2.23** | **2.12** | **2.27** | **C-52** |
| **C-53** | **4.40** | **3.89** | **3.69** | **3.66** | **3.66** | **3.07** | **2.54** | **2.24** | **2.18** | **2.10** | **1.78** | **2.07** | **2.32** | **2.56** | **2.68** | **2.53** | **2.38** | **C-53** |
| **C-54** | 0.73 | 0.75 | 0.79 | 0.86 | **1.02** | **1.28** | **1.52** | **1.61** | **1.61** | **1.63** | **1.60** | **1.72** | **1.80** | **1.85** | **2.03** | **1.87** | **2.05** | -- |
| **C-55** | **2.00** | **1.97** | **2.03** | **1.94** | **1.94** | **1.72** | **1.65** | **1.64** | **1.68** | **1.88** | **1.78** | **1.83** | **1.83** | **1.80** | **2.00** | **1.75** | **1.80** | **C-55** |
| **C-56** | 0.74 | 0.72 | 0.70 | 0.67 | 0.62 | 0.56 | 0.55 | 0.56 | 0.63 | 0.69 | 0.69 | 0.81 | 0.90 | 0.96 | **1.03** | **1.01** | 0.99 | -- |
| **C-57** | **1.49** | **1.80** | **1.92** | **1.82** | **1.74** | **1.64** | **1.43** | **1.37** | **1.41** | **1.43** | **1.34** | **1.35** | **1.36** | **1.39** | **1.37** | **1.30** | **1.32** | **C-57** |
| **C-58** | **2.35** | **2.11** | **1.89** | **1.76** | **1.74** | **1.84** | **1.89** | **1.94** | **2.14** | **2.37** | **2.65** | **2.79** | **2.39** | **2.23** | **2.36** | **2.12** | **2.20** | **C-58** |
| **C-59** | 0.52 | 0.46 | 0.52 | 0.54 | 0.56 | 0.67 | 0.69 | 0.83 | 0.98 | **1.06** | **1.12** | **1.32** | **1.51** | **1.61** | **1.75** | **1.54** | **1.59** | -- |
| **C-60** | **1.29** | **1.42** | **1.50** | **1.32** | **1.37** | **1.68** | **1.70** | **1.68** | **1.75** | **1.94** | **1.90** | **1.95** | **2.08** | **2.16** | **2.24** | **2.04** | **2.25** | **C-60** |
| **C-61** | **2.81** | **2.98** | **2.98** | **2.82** | **2.66** | **2.61** | **2.51** | **2.45** | **2.39** | **2.76** | **2.83** | **2.71** | **2.63** | **2.64** | **2.69** | **2.66** | **2.55** | **C-61** |
| **C-62** | **3.43** | **3.34** | **3.36** | **3.26** | **3.04** | **2.66** | **2.50** | **2.34** | **2.37** | **2.56** | **2.30** | **2.36** | **2.37** | **2.35** | **2.35** | **2.29** | **2.13** | **C-62** |
| **C-63** | **3.82** | **3.65** | **3.86** | **3.87** | **3.74** | **3.55** | **3.25** | **3.17** | **3.17** | **3.13** | **2.83** | **2.94** | **2.94** | **2.84** | **2.85** | **2.55** | **2.51** | **C-63** |

To be contd...

Contd ...

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-64** | **3.93** | **4.08** | **4.20** | **4.02** | **3.70** | **3.44** | **3.15** | **2.98** | **2.94** | **2.85** | **2.61** | **2.59** | **2.54** | **2.53** | **2.43** | **2.63** | **2.30** | **C-64** |
| **C-65** | **3.38** | **3.70** | **3.61** | **3.21** | **3.10** | **3.14** | **3.08** | **2.92** | **3.00** | **3.03** | **2.80** | **2.91** | **2.87** | **2.87** | **2.94** | **2.81** | **2.72** | **C-65** |
| **C-66** | **8.23** | **9.07** | **9.11** | **8.01** | **7.62** | **6.95** | **6.24** | **5.88** | **5.43** | **5.33** | **4.88** | **4.71** | **4.55** | **4.61** | **4.61** | **3.91** | **3.88** | **C-66** |
| **C-67** | **9.08** | **9.76** | **9.48** | **8.61** | **8.14** | **7.51** | **6.83** | **6.25** | **5.64** | **5.51** | **5.06** | **4.92** | **4.74** | **4.50** | **4.60** | **3.89** | **3.90** | **C-67** |
| **C-68** | **1.33** | **1.19** | **1.25** | **1.34** | **1.35** | **1.36** | **1.27** | **1.20** | **1.26** | **1.35** | **1.26** | **1.20** | **1.31** | **1.27** | **1.29** | **1.29** | **1.32** | **C-68** |
| **C-69** | **1.45** | **1.47** | **1.56** | **1.56** | **1.39** | **1.50** | **1.48** | **1.48** | **1.55** | **1.63** | **1.38** | **1.43** | **1.66** | **1.81** | **1.93** | **2.07** | **1.91** | **C-69** |
| **C-70** | 0.53 | 0.55 | 0.66 | 0.70 | 0.72 | 0.78 | 0.78 | 0.83 | 0.89 | 0.95 | 0.97 | **1.05** | **1.02** | **1.08** | **1.15** | **1.20** | **1.24** | -- |
| **C-71** | **1.18** | **1.95** | **1.67** | **1.38** | **1.38** | **1.36** | **1.23** | **1.16** | **1.13** | 1.00 | 0.88 | 0.70 | 0.99 | 0.83 | 1.00 | 0.92 | 1.00 | -- |
| **C-72** | **1.91** | **1.61** | **1.61** | **1.61** | **1.28** | **1.24** | **1.18** | **1.37** | **1.30** | **1.32** | **1.25** | **1.31** | 0.90 | 0.97 | **1.00** | 0.93 | 0.97 | -- |
| **C-73** | 0.96 | **1.01** | **1.12** | **1.17** | **1.18** | **1.16** | **1.15** | **1.16** | **1.17** | **1.24** | **1.22** | **1.29** | **1.21** | **1.19** | **1.20** | **1.20** | **1.12** | -- |
| **C-74** | **1.03** | 1.00 | **1.03** | 0.81 | 0.70 | 0.71 | 0.69 | 0.79 | 0.77 | 0.80 | 0.65 | 0.59 | 0.56 | 0.60 | 0.51 | 0.52 | 0.51 | -- |
| **C-75** | **3.01** | **2.90** | **3.00** | **2.66** | **1.90** | **2.61** | **2.42** | **1.99** | **1.80** | **2.09** | **1.64** | **1.31** | **1.59** | **1.55** | **1.18** | **1.08** | **1.05** | **C-75** |
| **C-76** | **1.71** | **1.76** | **1.79** | **1.72** | **1.48** | **1.32** | **1.25** | **1.23** | **1.09** | **1.12** | **1.05** | **1.09** | **1.03** | **1.00** | **1.02** | **1.03** | 0.98 | -- |
| **C-78** | **1.21** | **1.37** | **2.39** | **2.04** | **2.02** | **1.71** | **1.46** | **1.57** | **1.30** | **1.46** | 0.90 | 0.47 | 0.42 | 0.43 | 0.41 | 0.27 | 0.38 | -- |
| **C-79** | **2.16** | **1.67** | **2.09** | **1.88** | **1.78** | **1.47** | **1.20** | 0.79 | 0.59 | **1.07** | 0.78 | 0.57 | 0.53 | 0.56 | 0.54 | 0.34 | 0.32 | -- |
| **C-80** | **2.97** | **3.20** | **3.57** | **3.81** | **2.98** | **1.60** | **1.31** | **1.14** | 0.69 | 0.65 | 0.72 | 0.38 | 0.21 | 0.21 | 0.20 | 0.17 | 0.28 | -- |
| **C-81** | **2.75** | **2.62** | **2.96** | **2.59** | **2.45** | **2.02** | **2.25** | **2.43** | **2.08** | **2.04** | **1.97** | **2.00** | **1.61** | **1.66** | **1.61** | **1.32** | **1.33** | **C-81** |
| **C-82** | **1.26** | **1.42** | **1.71** | **1.76** | **1.45** | **1.34** | **1.36** | **1.33** | **1.34** | **1.30** | **1.23** | **1.12** | **1.16** | **1.18** | **1.22** | **1.14** | **1.19** | **C-82** |
| **C-83** | **1.02** | **1.05** | **1.10** | **1.05** | **1.07** | **1.13** | **1.07** | **1.12** | **1.17** | **1.30** | **1.25** | **1.21** | **1.27** | **1.30** | **1.36** | **1.38** | **1.35** | **C-83** |
| **C-84** | 0.39 | 0.45 | 0.49 | 0.52 | 0.61 | 0.74 | 0.92 | 0.97 | 0.99 | **1.03** | **1.05** | **1.07** | **1.14** | **1.15** | **1.13** | **1.07** | **1.03** | -- |
| **C-85** | 0.61 | 0.68 | 0.75 | 0.74 | 0.87 | 0.98 | **1.03** | **1.09** | **1.15** | **1.24** | **1.29** | **1.34** | **1.37** | **1.35** | **1.42** | **1.31** | **1.47** | -- |
| **C-86** | **2.02** | **2.35** | **2.26** | **3.13** | **2.62** | **2.42** | **2.61** | **2.45** | **2.41** | **2.21** | **2.25** | **2.00** | 0.88 | **1.74** | **2.06** | **1.63** | **1.49** | -- |
| **C-87** | 0.23 | 0.24 | 0.20 | 0.26 | 0.24 | 0.23 | 0.24 | 0.26 | 0.29 | 0.31 | 0.30 | 0.34 | 0.33 | 0.33 | 0.34 | 0.30 | 0.32 | -- |
| **C-88** | 0.17 | 0.30 | 0.34 | 0.61 | 0.50 | 0.57 | 0.50 | 0.50 | 0.30 | 0.23 | 0.26 | 0.31 | 0.31 | 0.31 | 0.31 | 0.24 | 0.31 | -- |
| **C-89** | 0.72 | **1.05** | 0.89 | 0.89 | 0.70 | 0.59 | 0.66 | 0.76 | 0.71 | 0.89 | **1.00** | **1.15** | **1.43** | **1.59** | **1.65** | **1.48** | **1.46** | -- |
| **C-90** | 0.43 | 0.49 | 0.53 | 0.54 | 0.55 | 0.53 | 0.54 | 0.58 | 0.70 | 0.74 | 0.72 | 0.73 | 0.69 | 0.71 | 0.74 | 0.69 | 0.70 | -- |
| **C-91** | **1.75** | **1.88** | **1.89** | **1.70** | **1.47** | **1.32** | **1.26** | **1.05** | 0.86 | 0.74 | 0.70 | 0.65 | 0.67 | 0.62 | 0.56 | 0.60 | 0.61 | -- |
| **C-92** | **1.13** | **1.39** | **1.62** | **1.44** | **1.49** | **1.60** | **1.62** | **1.67** | **1.60** | **1.59** | **1.56** | **1.66** | **1.52** | **1.55** | **1.51** | **1.34** | **1.33** | **C-92** |
| **C-93** | 0.23 | 0.88 | **1.86** | **1.08** | 0.33 | 0.64 | 0.32 | 0.25 | 0.24 | 0.25 | 0.28 | 0.31 | 0.32 | 0.28 | 0.30 | 0.27 | 0.35 | -- |
| **C-94** | **1.03** | **1.07** | **1.26** | **1.35** | **1.35** | **1.47** | **1.48** | **1.52** | **1.57** | **1.67** | **1.64** | **1.68** | **1.77** | **1.86** | **1.88** | **2.03** | **1.91** | **C-94** |
| **C-95** | **3.69** | **3.97** | **3.74** | **3.75** | **3.50** | **3.65** | **3.47** | **3.22** | **3.11** | **3.11** | **2.79** | **2.75** | **2.54** | **2.46** | **2.57** | **2.36** | **2.32** | **C-95** |
| **C-96** | **1.79** | **1.90** | **1.88** | **1.78** | **1.85** | **1.79** | **1.75** | **1.80** | **1.85** | **1.90** | **1.97** | **2.14** | **2.12** | **2.16** | **2.18** | **2.04** | **2.01** | **C-96** |
| **C-97** | 0.17 | 0.13 | 0.10 | 0.05 | 0.04 | 0.05 | 0.46 | 0.39 | 0.33 | 0.28 | 0.24 | 0.16 | 0.14 | 0.17 | 0.26 | 0.25 | 0.37 | -- |
| **No. of chapters RCA>1** | **58** | **60** | **60** | **58** | **59** | **60** | **59** | **57** | **54** | **54** | **55** | **54** | **50** | **49** | **55** | **51** | **47** | **37** |

*Note*: For description of chapter please refer Table A2 in Annexure A

## Table D2: Chapter-wise RCA of Brazil in Exports

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-01** | 0.07 | 0.08 | 0.10 | 0.07 | 0.05 | 0.05 | 0.11 | 0.15 | 0.27 | 0.50 | **1.48** | **1.81** | **2.07** | **2.71** | **1.58** | **2.10** | **2.41** | -- |
| **C-02** | **3.19** | **3.16** | **4.26** | **4.44** | **6.12** | **6.68** | **7.30** | **8.62** | **9.12** | **8.83** | **9.91** | **9.56** | **8.45** | **8.60** | **7.70** | **7.74** | **7.84** | **C-02** |
| **C-03** | 0.34 | 0.31 | 0.38 | 0.62 | 0.66 | 0.79 | 0.84 | 0.70 | 0.56 | 0.47 | 0.35 | 0.26 | 0.18 | 0.17 | 0.14 | 0.16 | 0.14 | -- |
| **C-04** | 0.06 | 0.08 | 0.06 | 0.10 | 0.14 | 0.25 | 0.28 | 0.33 | 0.33 | 0.33 | 0.45 | 0.68 | 0.38 | 0.30 | 0.22 | 0.22 | 0.16 | -- |
| **C-05** | **1.82** | **1.95** | **2.53** | **2.41** | **2.46** | **2.71** | **3.12** | **2.81** | **2.80** | **2.92** | **3.78** | **4.01** | **4.50** | **4.40** | **3.83** | **3.97** | **4.21** | **C-05** |
| **C-06** | 0.13 | 0.14 | 0.16 | 0.15 | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.14 | 0.13 | 0.11 | 0.09 | 0.10 | 0.08 | -- |
| **C-07** | 0.05 | 0.07 | 0.14 | 0.12 | 0.09 | 0.09 | 0.05 | 0.04 | 0.04 | 0.04 | 0.10 | 0.04 | 0.06 | 0.02 | 0.04 | 0.05 | 0.04 | -- |
| **C-08** | **1.03** | 0.98 | **1.23** | **1.46** | **1.23** | **1.24** | **1.32** | **1.26** | **1.16** | **1.12** | **1.28** | **1.09** | 0.95 | 0.82 | 0.71 | 0.71 | 0.61 | -- |
| **C-09** | **16.20** | **14.29** | **16.71** | **12.63** | **10.95** | **11.60** | **10.34** | **10.77** | **11.72** | **11.65** | **11.14** | **10.55** | **9.92** | **10.51** | **11.36** | **11.45** | **9.54** | **C-09** |
| **C-10** | 0.13 | 0.05 | 0.07 | 0.05 | **1.47** | 0.77 | **1.03** | **1.62** | 0.36 | 1.00 | **2.28** | **1.39** | **1.56** | **2.14** | **2.25** | **3.43** | **3.82** | -- |
| **C-11** | 0.17 | 0.20 | 0.20 | 0.20 | 0.19 | 0.26 | 0.31 | 0.24 | 0.26 | 0.34 | 0.35 | 0.29 | 0.31 | 0.24 | 0.27 | 0.25 | 0.25 | -- |
| **C-12** | **10.80** | **10.62** | **9.53** | **12.32** | **13.36** | **14.59** | **15.11** | **16.18** | **14.74** | **14.79** | **12.77** | **13.10** | **14.65** | **11.40** | **13.11** | **11.56** | **15.18** | **C-12** |
| **C-13** | **1.82** | **1.87** | **1.87** | **1.67** | **1.57** | **1.42** | **1.47** | **1.20** | **1.17** | **1.10** | **1.14** | **1.15** | **1.06** | **1.04** | 0.89 | 0.48 | 0.71 | -- |
| **C-14** | 0.39 | 0.51 | 0.63 | **1.31** | **2.30** | **1.01** | **1.24** | **1.02** | 0.86 | **1.52** | 0.30 | 0.94 | 0.84 | **1.07** | **1.29** | **1.83** | 0.63 | -- |
| **C-15** | **2.68** | **3.45** | **3.57** | **2.65** | **3.17** | **3.59** | **4.13** | **3.69** | **3.17** | **2.58** | **2.56** | **2.54** | **1.67** | **1.42** | **1.55** | **1.54** | **1.24** | **C-15** |
| **C-16** | **2.18** | **2.77** | **3.10** | **2.46** | **2.20** | **2.36** | **2.35** | **2.48** | **2.95** | **3.38** | **3.77** | **4.04** | **3.55** | **2.74** | **2.52** | **2.47** | **2.15** | **C-16** |
| **C-17** | **11.49** | **13.56** | **15.93** | **10.47** | **14.97** | **14.22** | **12.67** | **13.00** | **14.72** | **18.55** | **14.97** | **13.93** | **19.57** | **21.40** | **19.40** | **16.85** | **16.48** | **C-17** |
| **C-18** | **1.55** | **1.82** | **1.66** | **1.86** | **1.46** | **1.69** | **1.70** | **1.46** | **1.52** | **1.29** | **1.08** | 0.93 | 0.77 | 0.76 | 0.63 | 0.70 | 0.50 | -- |
| **C-19** | 0.19 | 0.19 | 0.27 | 0.35 | 0.32 | 0.24 | 0.26 | 0.33 | 0.32 | 0.34 | 0.41 | 0.55 | 0.33 | 0.24 | 0.21 | 0.23 | 0.22 | -- |
| **C-20** | **5.61** | **6.67** | **6.88** | **6.22** | **4.56** | **5.17** | **4.77** | **3.61** | **3.24** | **3.73** | **4.48** | **3.44** | **3.07** | **2.92** | **3.10** | **3.09** | **2.82** | **C-20** |
| **C-21** | **2.61** | **2.26** | **2.63** | **3.77** | **2.70** | **1.80** | **1.68** | **1.64** | **1.70** | **1.69** | **1.81** | **1.77** | **1.55** | **1.67** | **1.36** | **1.42** | **1.34** | **C-21** |
| **C-22** | 0.38 | 0.28 | 0.36 | 0.32 | 0.40 | 0.49 | 0.40 | 0.87 | **1.15** | **2.02** | **1.57** | **2.09** | **1.36** | 0.90 | **1.02** | **1.52** | **1.21** | -- |
| **C-23** | **11.66** | **8.52** | **9.17** | **9.47** | **9.96** | **10.30** | **10.50** | **10.39** | **8.39** | **6.59** | **6.40** | **6.66** | **7.06** | **6.21** | **5.98** | **6.18** | **5.79** | **C-23** |
| **C-24** | **6.48** | **6.64** | **4.92** | **4.38** | **4.61** | **4.96** | **4.98** | **5.40** | **5.69** | **5.55** | **6.32** | **6.39** | **6.79** | **5.72** | **4.97** | **5.57** | **5.52** | **C-24** |
| **C-25** | 0.99 | **1.21** | **1.53** | **1.99** | **1.66** | **1.72** | **2.08** | **1.86** | **1.73** | **1.88** | **1.81** | **1.27** | **1.43** | **1.35** | **1.21** | **1.28** | **1.33** | -- |
| **C-26** | **12.38** | **14.82** | **15.36** | **14.87** | **12.73** | **12.85** | **12.04** | **10.17** | **9.36** | **8.48** | **8.27** | **10.23** | **9.54** | **11.51** | **11.52** | **10.13** | **9.80** | **C-26** |
| **C-27** | 0.01 | 0.02 | 0.01 | 0.18 | 0.41 | 0.56 | 0.55 | 0.46 | 0.47 | 0.56 | 0.63 | 0.56 | 0.67 | 0.68 | 0.64 | 0.87 | 0.57 | -- |
| **C-28** | **1.21** | **1.27** | **1.47** | **1.64** | **1.35** | **1.33** | **1.60** | **1.53** | **1.49** | **1.88** | **1.85** | **1.69** | **1.98** | **1.85** | **1.91** | **1.82** | **1.75** | **C-28** |
| **C-29** | 0.87 | 0.83 | 0.82 | 0.87 | 0.62 | 0.69 | 0.65 | 0.57 | 0.59 | 0.60 | 0.64 | 0.61 | 0.62 | 0.61 | 0.54 | 0.51 | 0.55 | -- |
| **C-30** | 0.20 | 0.23 | 0.27 | 0.25 | 0.20 | 0.17 | 0.15 | 0.14 | 0.15 | 0.18 | 0.18 | 0.19 | 0.20 | 0.21 | 0.21 | 0.21 | 0.21 | -- |
| **C-31** | 0.40 | 0.34 | 0.29 | 0.48 | 0.47 | 0.58 | 0.67 | 0.71 | 0.58 | 0.54 | 0.60 | 0.47 | 0.46 | 0.41 | 0.37 | 0.34 | 0.46 | -- |
| **C-32** | 0.66 | 0.70 | 0.64 | 0.64 | 0.57 | 0.43 | 0.44 | 0.44 | 0.44 | 0.49 | 0.47 | 0.47 | 0.43 | 0.42 | 0.40 | 0.41 | 0.35 | -- |
| **C-33** | 0.44 | 0.38 | 0.41 | 0.51 | 0.50 | 0.57 | 0.57 | 0.51 | 0.53 | 0.58 | 0.56 | 0.55 | 0.54 | 0.55 | 0.54 | 0.49 | 0.42 | -- |
| **C-34** | 0.45 | 0.61 | 0.56 | 0.57 | 0.42 | 0.37 | 0.39 | 0.41 | 0.47 | 0.48 | 0.48 | 0.47 | 0.45 | 0.47 | 0.41 | 0.43 | 0.38 | -- |
| **C-35** | **1.11** | **1.03** | **1.09** | **1.22** | **1.13** | **1.28** | **1.14** | **1.10** | **1.04** | **1.11** | **1.02** | 0.97 | **1.18** | 0.99 | 0.97 | **1.13** | **1.20** | -- |
| **C-36** | **1.23** | **1.02** | 0.89 | 0.91 | 0.90 | 0.93 | **1.08** | **1.00** | 0.93 | 0.81 | 0.60 | 0.55 | 0.53 | 0.50 | 0.56 | 0.67 | 0.64 | -- |
| **C-37** | **1.09** | **1.16** | **1.36** | **1.13** | 0.94 | 0.67 | 0.62 | 0.65 | 0.59 | 0.49 | 0.49 | 0.38 | 0.34 | 0.30 | 0.20 | 0.20 | 0.25 | -- |
| **C-38** | 0.66 | 0.69 | 0.64 | 0.62 | 0.58 | 0.63 | 0.54 | 0.51 | 0.47 | 0.47 | 0.50 | 0.45 | 0.42 | 0.43 | 0.40 | 0.40 | 0.37 | -- |

To be contd ...

Contd ...

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-39** | 0.50 | 0.45 | 0.46 | 0.56 | 0.46 | 0.43 | 0.49 | 0.47 | 0.51 | 0.57 | 0.55 | 0.45 | 0.56 | 0.48 | 0.48 | 0.45 | 0.44 | -- |
| **C-40** | **1.39** | **1.35** | **1.45** | **1.50** | **1.30** | **1.29** | **1.29** | **1.09** | **1.15** | **1.13** | **1.20** | **1.08** | **1.01** | 0.87 | 0.74 | 0.76 | 0.69 | -- |
| **C-41** | **3.64** | **3.85** | **4.17** | **4.26** | **4.19** | **3.92** | **4.70** | **4.84** | **4.94** | **5.97** | **6.27** | **5.43** | **4.63** | **4.37** | **4.52** | **5.95** | **5.53** | **C-41** |
| **C-42** | 0.31 | 0.36 | 0.40 | 0.33 | 0.34 | 0.51 | 0.45 | 0.44 | 0.39 | 0.34 | 0.25 | 0.23 | 0.21 | 0.14 | 0.09 | 0.08 | 0.06 | -- |
| **C-43** | 0.37 | 0.25 | 0.25 | 0.33 | 0.20 | 0.20 | 0.20 | 0.21 | 0.23 | 0.37 | 0.58 | 0.42 | 0.36 | 0.28 | 0.26 | 0.27 | 0.20 | -- |
| **C-44** | **1.72** | **1.80** | **2.30** | **2.39** | **2.32** | **2.64** | **2.64** | **2.87** | **2.51** | **2.38** | **2.05** | **1.82** | **1.41** | **1.28** | **1.06** | **1.10** | **1.09** | **C-44** |
| **C-45** | 0.14 | 0.07 | 0.06 | 0.07 | 0.05 | 0.09 | 0.09 | 0.07 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 | 0.10 | 0.10 | 0.08 | -- |
| **C-46** | 0.01 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 | -- |
| **C-47** | **5.12** | **5.79** | **7.70** | **6.97** | **6.35** | **6.08** | **7.55** | **6.03** | **6.37** | **6.78** | **6.62** | **7.23** | **7.94** | **7.47** | **6.51** | **6.50** | **7.43** | **C-47** |
| **C-48** | 0.96 | 0.93 | **1.00** | 1.00 | 0.93 | 0.87 | 0.90 | 0.80 | 0.83 | 0.85 | 0.84 | 0.83 | 0.83 | 0.83 | 0.76 | 0.75 | 0.74 | -- |
| **C-49** | 0.12 | 0.13 | 0.14 | 0.13 | 0.11 | 0.12 | 0.13 | 0.14 | 0.14 | 0.15 | 0.13 | 0.10 | 0.08 | 0.07 | 0.08 | 0.10 | 0.06 | -- |
| **C-50** | **2.77** | **2.94** | **2.80** | **2.41** | **1.95** | **1.93** | **1.44** | **1.18** | 0.90 | **1.08** | 0.95 | 0.77 | 0.76 | 0.78 | 0.67 | 0.73 | 0.79 | -- |
| **C-51** | 0.28 | 0.25 | 0.22 | 0.21 | 0.22 | 0.20 | 0.22 | 0.14 | 0.14 | 0.16 | 0.17 | 0.17 | 0.21 | 0.20 | 0.17 | 0.20 | 0.21 | -- |
| **C-52** | 0.81 | 0.79 | 0.82 | 0.99 | **1.40** | **1.09** | **1.39** | **1.59** | **1.57** | **1.25** | **1.49** | **1.54** | **1.66** | **1.32** | **1.79** | **2.42** | **1.32** | -- |
| **C-53** | **1.43** | **1.12** | 0.90 | 0.96 | 0.73 | 0.89 | **1.07** | **1.03** | **1.17** | **1.30** | **1.24** | **1.39** | **1.11** | 0.96 | 0.95 | **1.06** | 0.86 | -- |
| **C-54** | 0.26 | 0.24 | 0.23 | 0.23 | 0.21 | 0.26 | 0.30 | 0.27 | 0.30 | 0.25 | 0.20 | 0.21 | 0.20 | 0.16 | 0.13 | 0.14 | 0.14 | -- |
| **C-55** | 0.24 | 0.24 | 0.31 | 0.30 | 0.22 | 0.25 | 0.44 | 0.43 | 0.40 | 0.45 | 0.49 | 0.41 | 0.31 | 0.37 | 0.22 | 0.21 | 0.28 | -- |
| **C-56** | **1.40** | **1.16** | **1.22** | **1.10** | 0.75 | 0.55 | 0.64 | 0.74 | 0.80 | 0.96 | 0.95 | **1.04** | 0.97 | 0.92 | 0.85 | 0.82 | 0.72 | -- |
| **C-57** | 0.21 | 0.27 | 0.24 | 0.26 | 0.28 | 0.22 | 0.22 | 0.17 | 0.16 | 0.14 | 0.14 | 0.12 | 0.10 | 0.11 | 0.09 | 0.08 | 0.08 | -- |
| **C-58** | 0.81 | 0.51 | 0.37 | 0.27 | 0.27 | 0.21 | 0.26 | 0.30 | 0.26 | 0.47 | 0.66 | 0.39 | 0.26 | 0.27 | 0.30 | 0.31 | 0.33 | -- |
| **C-59** | 0.33 | 0.36 | 0.39 | 0.32 | 0.28 | 0.26 | 0.34 | 0.39 | 0.44 | 0.44 | 0.41 | 0.37 | 0.38 | 0.40 | 0.39 | 0.41 | 0.36 | -- |
| **C-60** | 0.21 | 0.23 | 0.23 | 0.24 | 0.21 | 0.21 | 0.25 | 0.28 | 0.25 | 0.27 | 0.24 | 0.23 | 0.13 | 0.15 | 0.12 | 0.12 | 0.13 | -- |
| **C-61** | 0.15 | 0.15 | 0.17 | 0.27 | 0.23 | 0.15 | 0.18 | 0.17 | 0.14 | 0.10 | 0.08 | 0.07 | 0.05 | 0.04 | 0.04 | 0.03 | 0.03 | -- |
| **C-62** | 0.11 | 0.09 | 0.08 | 0.10 | 0.12 | 0.10 | 0.10 | 0.10 | 0.09 | 0.07 | 0.05 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | -- |
| **C-63** | **1.63** | **1.52** | **1.60** | **1.68** | **1.53** | **1.56** | **1.29** | **1.16** | **1.01** | 0.77 | 0.74 | 0.55 | 0.40 | 0.31 | 0.14 | 0.10 | 0.08 | -- |
| **C-64** | **3.84** | **3.58** | **3.82** | **4.32** | **3.97** | **3.51** | **3.19** | **3.07** | **2.71** | **2.41** | **2.17** | **1.81** | **1.44** | **1.26** | 0.91 | 0.87 | 0.74 | -- |
| **C-65** | 0.17 | 0.13 | 0.11 | 0.10 | 0.10 | 0.08 | 0.10 | 0.08 | 0.09 | 0.09 | 0.12 | 0.08 | 0.05 | 0.06 | 0.04 | 0.05 | 0.04 | -- |
| **C-66** | 0.03 | 0.03 | 0.04 | 0.03 | 0.01 | 0.01 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | -- |
| **C-67** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| **C-68** | **1.70** | **1.76** | **1.87** | **2.17** | **1.99** | **2.31** | **2.14** | **2.33** | **2.45** | **2.73** | **2.47** | **1.88** | **1.87** | **1.90** | **1.55** | **1.69** | **1.77** | **C-68** |
| **C-69** | **1.17** | **1.18** | **1.32** | **1.40** | **1.27** | **1.40** | **1.45** | **1.55** | **1.52** | **1.48** | **1.24** | 0.96 | 0.80 | 0.67 | 0.58 | 0.58 | 0.51 | -- |
| **C-70** | 0.56 | 0.55 | 0.69 | 0.68 | 0.58 | 0.59 | 0.65 | 0.54 | 0.50 | 0.45 | 0.48 | 0.38 | 0.34 | 0.33 | 0.27 | 0.24 | 0.25 | -- |
| **C-71** | 0.69 | 0.53 | 0.59 | 0.58 | 0.53 | 0.55 | 0.44 | 0.41 | 0.38 | 0.42 | 0.40 | 0.39 | 0.48 | 0.44 | 0.40 | 0.42 | 0.40 | -- |
| **C-72** | **2.82** | **2.87** | **3.11** | **3.08** | **2.49** | **2.79** | **2.80** | **2.37** | **2.50** | **2.20** | **1.84** | **1.88** | **1.84** | **1.52** | **1.66** | **1.64** | **1.46** | **C-72** |
| **C-73** | 0.79 | 0.72 | 0.70 | 0.72 | 0.73 | 0.78 | 0.62 | 0.63 | 0.60 | 0.59 | 0.50 | 0.55 | 0.59 | 0.43 | 0.38 | 0.41 | 0.40 | -- |
| **C-74** | 0.46 | 0.26 | 0.44 | 0.37 | 0.33 | 0.50 | 0.37 | 0.40 | 0.46 | 0.60 | 0.58 | 0.53 | 0.43 | 0.30 | 0.34 | 0.29 | 0.45 | -- |
| **C-75** | 0.53 | 0.77 | **1.72** | **1.74** | **1.26** | **1.18** | **1.25** | **1.25** | **1.13** | **1.00** | **1.09** | 0.91 | 0.92 | **1.11** | **1.25** | **1.18** | **1.14** | -- |
| **C-76** | **2.24** | **1.91** | **2.37** | **2.54** | **1.85** | **1.94** | **1.93** | **1.81** | **1.54** | **1.70** | **1.57** | **1.29** | **1.15** | 0.86 | 0.68 | 0.68 | 0.56 | -- |

To be contd ...

Contd ...

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-78** | 0.03 | 0.05 | 0.05 | 0.03 | 0.03 | 0.02 | 0.02 | 0.03 | 0.02 | 0.01 | 0.05 | 0.02 | 0.01 | 0.01 | 0.02 | 0.03 | 0.02 | -- |
| **C-79** | 0.55 | 0.31 | 0.58 | 0.51 | 0.43 | 0.97 | 0.99 | 0.83 | **1.02** | **1.03** | 0.67 | 0.57 | 0.80 | 0.75 | 0.79 | 0.57 | 0.30 | -- |
| **C-80** | **3.65** | **2.11** | **2.01** | **2.02** | **1.77** | **1.54** | 0.98 | **1.28** | **1.02** | 0.92 | **1.30** | **1.29** | 0.87 | 0.37 | 0.82 | **1.22** | 0.96 | -- |
| **C-81** | 0.41 | 0.44 | 0.54 | 0.58 | 0.57 | 0.40 | 0.45 | 0.66 | 0.55 | 0.46 | 0.54 | 0.45 | 0.49 | 0.61 | 0.64 | 0.86 | 0.59 | -- |
| **C-82** | **1.03** | 0.98 | 0.88 | 0.80 | 0.76 | 0.68 | 0.79 | 0.76 | 0.85 | 0.76 | 0.80 | 0.72 | 0.72 | 0.64 | 0.62 | 0.57 | **1.07** | -- |
| **C-83** | 0.42 | 0.34 | 0.32 | 0.43 | 0.51 | 0.45 | 0.53 | 0.36 | 0.40 | 0.46 | 0.44 | 0.50 | **1.20** | **1.25** | **1.00** | **1.23** | 0.44 | -- |
| **C-84** | 0.54 | 0.53 | 0.53 | 0.51 | 0.48 | 0.48 | 0.53 | 0.56 | 0.60 | 0.59 | 0.53 | 0.50 | 0.42 | 0.44 | 0.47 | 0.47 | 0.17 | -- |
| **C-85** | 0.25 | 0.25 | 0.27 | 0.34 | 0.39 | 0.38 | 0.32 | 0.26 | 0.35 | 0.35 | 0.30 | 0.31 | 0.27 | 0.20 | 0.18 | 0.17 | 0.31 | -- |
| **C-86** | 0.16 | 0.24 | 0.24 | 0.33 | 0.39 | 0.34 | 0.28 | 0.25 | 0.93 | 0.77 | 0.76 | 0.49 | 0.66 | **1.21** | 0.49 | 0.14 | 0.69 | -- |
| **C-87** | 0.85 | 0.90 | 0.70 | 0.84 | 0.77 | 0.72 | 0.81 | 0.88 | **1.04** | **1.00** | 0.90 | 0.91 | 0.75 | 0.78 | 0.71 | 0.61 | **1.56** | -- |
| **C-88** | 0.77 | **1.09** | **1.80** | **3.78** | **3.22** | **2.56** | **1.81** | **2.46** | **2.12** | **1.76** | **2.26** | **2.31** | **2.49** | **2.24** | **1.85** | **1.93** | **3.84** | -- |
| **C-89** | 0.49 | 0.30 | 0.03 | 0.02 | 0.08 | 0.02 | 0.02 | **1.78** | 0.23 | 0.03 | 0.56 | 0.82 | 0.06 | 0.07 | 0.41 | 0.65 | 0.11 | -- |
| **C-90** | 0.17 | 0.22 | 0.28 | 0.26 | 0.25 | 0.22 | 0.15 | 0.14 | 0.14 | 0.15 | 0.16 | 0.15 | 0.14 | 0.12 | 0.12 | 0.11 | 0.00 | -- |
| **C-91** | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.05 | -- |
| **C-92** | 0.07 | 0.06 | 0.13 | 0.19 | 0.13 | 0.10 | 0.12 | 0.14 | 0.15 | 0.16 | 0.13 | 0.10 | 0.09 | 0.04 | 0.05 | 0.04 | **2.14** | -- |
| **C-93** | **1.06** | 0.96 | **1.17** | **1.70** | **1.52** | **4.71** | **1.99** | **1.61** | **1.59** | **1.70** | **2.13** | **2.31** | **2.80** | **2.32** | **2.04** | **2.24** | 0.24 | -- |
| **C-94** | 0.61 | 0.53 | 0.63 | 0.73 | 0.66 | 0.69 | 0.71 | 0.79 | 0.72 | 0.63 | 0.58 | 0.49 | 0.43 | 0.37 | 0.31 | 0.35 | 0.02 | -- |
| **C-95** | 0.07 | 0.07 | 0.08 | 0.10 | 0.08 | 0.07 | 0.07 | 0.08 | 0.07 | 0.06 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 | 0.02 | 0.35 | -- |
| **C-96** | 0.77 | 0.86 | 0.71 | 0.77 | 0.79 | 0.71 | 0.63 | 0.61 | 0.54 | 0.57 | 0.59 | 0.48 | 0.46 | 0.41 | 0.40 | 0.39 | 0.43 | -- |
| **C-97** | 0.01 | 0.01 | 0.01 | 0.02 | 0.03 | 0.03 | 0.05 | 0.08 | 0.04 | 0.06 | 0.04 | 0.08 | 0.19 | 0.10 | 0.23 | 0.18 | 0.96 | -- |
| **No. of chapters RCA>1** | **35** | **34** | **36** | **36** | **36** | **35** | **37** | **39** | **37** | **37** | **36** | **33** | **32** | **30** | **28** | **31** | **29** | **18** |

*Note*: For description of chapter please refer Table A2 in Annexure A

## Table D3: Chapter-wise RCA of Russia in Exports

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-01** | 0.01 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.04 | 0.03 | 0.01 | 0.01 | 0.01 | 0.01 | 0.03 | 0.01 | 0.01 | 0.02 | 0.02 | -- |
| **C-02** | 0.04 | 0.03 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | -- |
| **C-03** | 0.57 | 0.85 | 0.62 | 0.50 | 0.66 | 0.57 | 0.49 | 0.30 | 0.33 | 0.38 | 0.29 | 0.21 | **1.32** | **1.00** | **1.03** | **1.06** | 0.94 | -- |
| **C-04** | 0.10 | 0.12 | 0.07 | 0.19 | 0.19 | 0.12 | 0.12 | 0.12 | 0.12 | 0.16 | 0.17 | 0.14 | 0.17 | 0.09 | 0.06 | 0.12 | 0.11 | -- |
| **C-05** | 0.05 | 0.06 | 0.12 | 0.17 | 0.25 | 0.13 | 0.14 | 0.12 | 0.13 | 0.18 | 0.14 | 0.12 | 0.13 | 0.11 | 0.18 | 0.16 | 0.24 | -- |
| **C-06** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| **C-07** | 0.03 | 0.05 | 0.04 | 0.05 | 0.07 | 0.07 | 0.08 | 0.08 | 0.07 | 0.08 | 0.06 | 0.05 | 0.12 | 0.05 | 0.15 | 0.20 | 0.12 | -- |
| **C-08** | 0.05 | 0.08 | 0.07 | 0.07 | 0.10 | 0.07 | 0.11 | 0.10 | 0.06 | 0.09 | 0.05 | 0.03 | 0.04 | 0.01 | 0.02 | 0.04 | 0.03 | -- |
| **C-09** | 0.14 | 0.05 | 0.04 | 0.03 | 0.04 | 0.03 | 0.05 | 0.09 | 0.10 | 0.12 | 0.12 | 0.11 | 0.14 | 0.09 | 0.08 | 0.12 | 0.14 | -- |
| **C-10** | 0.29 | 0.32 | 0.13 | 0.16 | 0.53 | **1.70** | **1.52** | 0.69 | **1.11** | **1.39** | **2.73** | **1.29** | **1.73** | 0.95 | **1.80** | **1.59** | **1.19** | -- |
| **C-11** | 0.21 | 0.23 | 0.30 | 0.44 | 0.53 | 0.26 | 0.50 | 0.26 | 0.27 | 0.40 | 0.66 | 0.66 | 0.62 | 0.21 | 0.82 | 0.29 | 0.28 | -- |
| **C-12** | 0.80 | 0.86 | 0.27 | 0.60 | 0.19 | 0.08 | 0.20 | 0.08 | 0.11 | 0.12 | 0.09 | 0.07 | 0.10 | 0.05 | 0.10 | 0.13 | 0.10 | -- |
| **C-13** | 0.00 | 0.01 | 0.01 | 0.02 | 0.01 | 0.00 | 0.02 | 0.02 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | -- |
| **C-14** | 0.00 | 0.01 | 0.00 | 0.01 | 0.03 | 0.01 | 0.01 | 0.00 | 0.03 | 0.31 | 0.39 | 0.36 | 0.50 | 0.29 | 0.34 | 0.64 | 0.49 | -- |
| **C-15** | 0.13 | 0.09 | 0.07 | 0.20 | 0.21 | 0.17 | 0.14 | 0.18 | 0.24 | 0.47 | 0.44 | 0.44 | 0.53 | 0.35 | 0.44 | 0.66 | 0.68 | -- |
| **C-16** | 0.27 | 0.22 | 0.26 | 0.26 | 0.33 | 0.21 | 0.14 | 0.14 | 0.19 | 0.20 | 0.17 | 0.17 | 0.19 | 0.10 | 0.08 | 0.13 | 0.13 | -- |
| **C-17** | 0.30 | 0.22 | 0.27 | 0.26 | 0.32 | 0.29 | 0.20 | 0.19 | 0.16 | 0.22 | 0.23 | 0.14 | 0.23 | 0.11 | 0.15 | 0.18 | 0.17 | -- |
| **C-18** | 0.29 | 0.26 | 0.22 | 0.28 | 0.42 | 0.37 | 0.40 | 0.33 | 0.36 | 0.42 | 0.42 | 0.36 | 0.47 | 0.26 | 0.29 | 0.50 | 0.50 | -- |
| **C-19** | 0.05 | 0.09 | 0.13 | 0.13 | 0.17 | 0.17 | 0.22 | 0.24 | 0.23 | 0.29 | 0.32 | 0.29 | 0.33 | 0.17 | 0.16 | 0.25 | 0.28 | -- |
| **C-20** | 0.05 | 0.04 | 0.04 | 0.03 | 0.04 | 0.04 | 0.05 | 0.06 | 0.08 | 0.09 | 0.08 | 0.06 | 0.09 | 0.05 | 0.04 | 0.10 | 0.12 | -- |
| **C-21** | 0.19 | 0.13 | 0.10 | 0.15 | 0.24 | 0.22 | 0.29 | 0.30 | 0.32 | 0.35 | 0.36 | 0.33 | 0.44 | 0.23 | 0.21 | 0.28 | 0.30 | -- |
| **C-22** | 0.28 | 0.12 | 0.10 | 0.09 | 0.14 | 0.17 | 0.17 | 0.12 | 0.14 | 0.20 | 0.19 | 0.16 | 0.20 | 0.13 | 0.14 | 0.17 | 0.16 | -- |
| **C-23** | 0.06 | 0.07 | 0.06 | 0.08 | 0.11 | 0.07 | 0.12 | 0.18 | 0.13 | 0.18 | 0.24 | 0.19 | 0.27 | 0.19 | 0.25 | 0.36 | 0.39 | -- |
| **C-24** | 0.03 | 0.01 | 0.01 | 0.05 | 0.14 | 0.20 | 0.27 | 0.24 | 0.36 | 0.40 | 0.40 | 0.43 | 0.76 | 0.35 | 0.42 | 0.56 | 0.57 | -- |
| **C-25** | **1.36** | **1.70** | **1.61** | **1.18** | **1.19** | **1.18** | **1.14** | **1.02** | 0.94 | 1.00 | 0.90 | **1.99** | **1.02** | 0.92 | **1.28** | **1.39** | **1.10** | -- |
| **C-26** | **1.79** | **1.48** | 0.89 | **1.02** | 0.73 | 0.64 | 0.66 | 0.90 | 0.89 | 0.60 | 0.56 | 0.58 | 0.45 | 0.62 | 0.73 | 0.00 | 0.47 | -- |
| **C-27** | **13.06** | **8.24** | **12.98** | **10.80** | **6.17** | **6.55** | **6.83** | **6.32** | **6.53** | **4.75** | **4.80** | **5.35** | **4.04** | **5.36** | **5.09** | **5.87** | **5.54** | **C-27** |
| **C-28** | **1.76** | **1.79** | **1.67** | **3.51** | **1.60** | **1.19** | **1.36** | **1.38** | **1.30** | **1.47** | **1.18** | **1.18** | **1.01** | **1.25** | **1.53** | **1.31** | **1.45** | **C-28** |
| **C-29** | 0.51 | 0.41 | 0.49 | 0.53 | 0.50 | 0.47 | 0.46 | 0.48 | 0.42 | 0.47 | 0.43 | 0.34 | 0.34 | 0.34 | 0.42 | 0.33 | 0.34 | -- |
| **C-30** | 0.06 | 0.07 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.04 | 0.03 | 0.04 | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 | 0.04 | 0.04 | -- |
| **C-31** | **7.59** | **7.93** | **7.69** | **6.20** | **9.25** | **7.86** | **7.49** | **7.48** | **7.26** | **6.73** | **7.58** | **9.37** | **4.18** | **5.77** | **6.45** | **5.52** | **4.80** | **C-31** |
| **C-32** | 0.12 | 0.17 | 0.30 | 0.18 | 0.17 | 0.11 | 0.16 | 0.09 | 0.08 | 0.09 | 0.09 | 0.07 | 0.10 | 0.09 | 0.08 | 0.09 | 0.08 | -- |
| **C-33** | 0.07 | 0.05 | 0.09 | 0.13 | 0.11 | 0.12 | 0.12 | 0.11 | 0.11 | 0.14 | 0.14 | 0.12 | 0.18 | 0.12 | 0.11 | 0.15 | 0.16 | -- |
| **C-34** | 0.13 | 0.19 | 0.21 | 0.25 | 0.35 | 0.32 | 0.35 | 0.37 | 0.37 | 0.46 | 0.43 | 0.39 | 0.43 | 0.26 | 0.20 | 0.27 | 0.27 | -- |
| **C-35** | 0.56 | **2.25** | 0.41 | 0.47 | 0.38 | 0.25 | 0.19 | 0.17 | 0.10 | 0.09 | 0.06 | 0.04 | 0.05 | 0.03 | 0.02 | 0.03 | 0.04 | -- |
| **C-36** | **4.61** | **2.77** | **3.21** | **2.14** | **2.63** | **2.08** | **1.90** | **1.41** | 0.92 | **1.65** | 0.93 | 0.86 | **1.24** | 0.64 | 0.68 | **1.01** | 0.93 | -- |
| **C-37** | 0.03 | 0.02 | 0.02 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.04 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | -- |

To be contd ...

Contd ...

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-38** | 0.17 | 0.17 | 0.21 | 0.18 | 0.19 | 0.20 | 0.19 | 0.15 | 0.14 | 0.19 | 0.13 | 0.10 | 0.11 | 0.09 | 0.08 | 0.10 | 0.11 | -- |
| **C-39** | 0.19 | 0.19 | 0.25 | 0.22 | 0.21 | 0.17 | 0.14 | 0.13 | 0.10 | 0.11 | 0.12 | 0.10 | 0.15 | 0.12 | 0.12 | 0.13 | 0.15 | -- |
| **C-40** | 0.86 | 0.78 | 0.64 | 0.56 | 0.70 | 0.72 | 0.74 | 0.69 | 0.65 | 0.77 | 0.64 | 0.60 | 0.64 | 0.72 | 0.79 | 0.59 | 0.58 | -- |
| **C-41** | **1.13** | **1.35** | 0.65 | 0.65 | 0.44 | 0.39 | 0.39 | 0.31 | 0.25 | 0.30 | 0.24 | 0.19 | 0.26 | 0.30 | 0.25 | 0.32 | 0.24 | -- |
| **C-42** | 0.02 | 0.02 | 0.12 | 0.08 | 0.07 | 0.04 | 0.07 | 0.07 | 0.07 | 0.06 | 0.05 | 0.03 | 0.03 | 0.02 | 0.02 | 0.01 | 0.02 | -- |
| **C-43** | 0.51 | 0.50 | 0.50 | 0.62 | 0.65 | 0.69 | 0.73 | 0.59 | 0.52 | 0.70 | 0.36 | 0.47 | 0.49 | 0.36 | 0.47 | 0.90 | 0.78 | -- |
| **C-44** | **2.17** | **2.08** | **2.80** | **2.07** | **2.41** | **2.72** | **2.55** | **2.50** | **2.27** | **2.69** | **2.72** | **1.86** | **2.56** | **2.17** | **2.26** | **1.90** | **1.84** | **C-44** |
| **C-45** | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.01 | -- |
| **C-46** | 0.00 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| **C-47** | **1.33** | **1.43** | **1.65** | **1.87** | **1.39** | **1.68** | **1.60** | **1.31** | **1.13** | **1.30** | **1.18** | 0.92 | 0.92 | **1.14** | **1.03** | 0.81 | 0.74 | -- |
| **C-48** | 0.41 | 0.59 | 0.58 | 0.53 | 0.60 | 0.52 | 0.46 | 0.43 | 0.38 | 0.42 | 0.37 | 0.32 | 0.46 | 0.32 | 0.35 | 0.37 | 0.37 | -- |
| **C-49** | **1.08** | **1.46** | 0.99 | 0.77 | 0.83 | 0.72 | 0.55 | 0.48 | 0.37 | 0.41 | 0.38 | 0.27 | 0.39 | 0.23 | 0.22 | 0.22 | 0.34 | -- |
| **C-50** | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| **C-51** | 0.30 | 0.22 | 0.13 | 0.13 | 0.11 | 0.16 | 0.14 | 0.08 | 0.05 | 0.06 | 0.07 | 0.04 | 0.05 | 0.05 | 0.05 | 0.06 | 0.07 | -- |
| **C-52** | 0.29 | 0.31 | 0.26 | 0.29 | 0.32 | 0.28 | 0.25 | 0.18 | 0.12 | 0.12 | 0.08 | 0.05 | 0.05 | 0.04 | 0.03 | 0.03 | 0.03 | -- |
| **C-53** | 0.62 | **1.24** | **2.01** | **1.45** | **1.37** | **1.61** | **1.50** | **1.22** | 0.84 | 0.82 | 0.43 | 0.19 | 0.34 | 0.23 | 0.21 | 0.23 | 0.16 | -- |
| **C-54** | 0.19 | 0.18 | 0.17 | 0.13 | 0.10 | 0.09 | 0.08 | 0.07 | 0.05 | 0.05 | 0.04 | 0.02 | 0.02 | 0.03 | 0.04 | 0.03 | 0.03 | -- |
| **C-55** | 0.22 | 0.21 | 0.14 | 0.14 | 0.13 | 0.14 | 0.15 | 0.15 | 0.09 | 0.11 | 0.08 | 0.03 | 0.05 | 0.03 | 0.02 | 0.04 | 0.05 | -- |
| **C-56** | 0.11 | 0.10 | 0.07 | 0.08 | 0.09 | 0.11 | 0.14 | 0.11 | 0.09 | 0.11 | 0.10 | 0.10 | 0.19 | 0.13 | 0.12 | 0.15 | 0.14 | -- |
| **C-57** | 0.04 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | -- |
| **C-58** | 0.04 | 0.03 | 0.22 | 0.03 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.02 | 0.02 | -- |
| **C-59** | 0.18 | 0.22 | 0.17 | 0.21 | 0.16 | 0.29 | 0.12 | 0.12 | 0.11 | 0.11 | 0.11 | 0.08 | 0.11 | 0.07 | 0.06 | 0.08 | 0.07 | -- |
| **C-60** | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | -- |
| **C-61** | 0.04 | 0.04 | 0.12 | 0.05 | 0.04 | 0.05 | 0.04 | 0.02 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.02 | -- |
| **C-62** | 0.17 | 0.21 | 0.20 | 0.10 | 0.11 | 0.09 | 0.06 | 0.04 | 0.04 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | -- |
| **C-63** | 0.14 | 0.14 | 0.14 | 0.11 | 0.14 | 0.14 | 0.10 | 0.08 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 | 0.04 | -- |
| **C-64** | 0.13 | 0.11 | 0.07 | 0.04 | 0.04 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.03 | 0.04 | -- |
| **C-65** | 0.09 | 0.05 | 0.09 | 0.05 | 0.18 | 0.14 | 0.12 | 0.06 | 0.08 | 0.04 | 0.03 | 0.02 | 0.04 | 0.02 | 0.02 | 0.04 | 0.07 | -- |
| **C-66** | 0.03 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | -- |
| **C-67** | 0.01 | 0.02 | 0.02 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| **C-68** | 0.47 | 0.29 | 0.24 | 0.25 | 0.30 | 0.29 | 0.30 | 0.34 | 0.33 | 0.42 | 0.38 | 0.28 | 0.34 | 0.25 | 0.26 | 0.34 | 0.31 | -- |
| **C-69** | 0.20 | 0.17 | 0.29 | 0.26 | 0.20 | 0.18 | 0.19 | 0.17 | 0.17 | 0.22 | 0.21 | 0.15 | 0.22 | 0.18 | 0.12 | 0.21 | 0.15 | -- |
| **C-70** | 0.18 | 0.21 | 0.31 | 0.25 | 0.28 | 0.16 | 0.15 | 0.15 | 0.13 | 0.23 | 0.22 | 0.19 | 0.27 | 0.19 | 0.15 | 0.23 | 0.27 | -- |
| **C-71** | 0.00 | **3.52** | 0.00 | 0.00 | 0.70 | 0.47 | 0.39 | 0.43 | 0.42 | 0.93 | 0.58 | 0.18 | 0.23 | 0.31 | 0.36 | 0.00 | 0.81 | -- |
| **C-72** | **4.27** | **3.81** | **3.45** | **3.44** | **3.11** | **3.43** | **3.43** | **4.28** | **2.74** | **2.62** | **2.21** | **2.01** | **1.53** | **2.23** | **2.00** | **1.68** | **1.62** | **C-72** |
| **C-73** | 0.38 | 0.51 | 0.42 | 0.39 | 0.62 | 0.51 | 0.56 | 0.57 | 0.53 | 0.53 | 0.41 | 0.36 | 0.55 | 0.26 | 0.30 | 0.33 | 0.35 | -- |
| **C-74** | **3.92** | **2.90** | **3.11** | **2.24** | **1.79** | **1.62** | **1.62** | **2.30** | **1.60** | **2.43** | **1.21** | 0.84 | **1.33** | **1.53** | **1.14** | **1.15** | 0.99 | -- |
| **C-75** | **14.97** | **11.10** | **14.76** | **13.42** | **7.28** | **13.55** | **12.20** | **12.87** | **7.84** | **13.80** | **11.26** | **3.55** | **6.60** | **9.42** | **5.84** | **4.73** | **4.42** | **C-75** |

To be contd ...

Contd ...

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-76** | **5.40** | **6.01** | **6.20** | **5.09** | **4.63** | **3.50** | **3.06** | **2.74** | **2.26** | **2.75** | **2.04** | **1.63** | **1.90** | **1.95** | **1.86** | **1.61** | **1.47** | **C-76** |
| **C-78** | 0.30 | 0.25 | 0.96 | 0.51 | 0.19 | 0.10 | 0.07 | 0.38 | 0.17 | 0.69 | **1.32** | 0.64 | **1.17** | **1.13** | **1.10** | 0.91 | 0.83 | -- |
| **C-79** | **1.75** | **1.72** | **1.95** | **1.16** | **1.11** | **1.08** | 0.55 | 0.52 | 0.35 | **1.16** | 0.58 | 0.26 | 0.50 | 0.57 | 0.38 | 0.26 | 0.10 | -- |
| **C-80** | **2.55** | 0.57 | 0.24 | 0.40 | 0.35 | 0.38 | 0.11 | 0.20 | 0.11 | 0.05 | 0.12 | 0.06 | 0.05 | 0.06 | 0.04 | 0.06 | 0.09 | -- |
| **C-81** | **8.80** | **6.71** | **6.80** | **4.63** | **5.15** | **3.21** | **3.67** | **4.30** | **2.71** | **3.27** | **2.85** | **2.09** | **1.97** | **2.44** | **1.99** | **1.68** | **1.59** | **C-81** |
| **C-82** | 0.19 | 0.59 | **2.38** | **2.07** | 0.99 | 0.27 | 0.22 | 0.20 | 0.18 | 0.19 | 0.18 | 0.15 | 0.16 | 0.12 | 0.15 | 0.20 | 0.13 | -- |
| **C-83** | 0.12 | 0.13 | 0.24 | 0.18 | 0.14 | 0.10 | 0.10 | 0.08 | 0.10 | 0.15 | 0.12 | 0.09 | 0.09 | 0.07 | 0.04 | 0.07 | 0.09 | -- |
| **C-84** | 0.18 | 0.21 | 0.24 | 0.20 | 0.25 | 0.20 | 0.19 | 0.16 | 0.13 | 0.15 | 0.13 | 0.12 | 0.16 | 0.12 | 0.10 | 0.12 | 0.14 | -- |
| **C-85** | 0.15 | 0.11 | 0.15 | 0.09 | 0.10 | 0.09 | 0.08 | 0.08 | 0.06 | 0.08 | 0.06 | 0.06 | 0.09 | 0.06 | 0.07 | 0.07 | 0.08 | -- |
| **C-86** | **1.68** | **1.88** | **1.01** | 0.84 | 0.94 | **1.02** | **1.57** | **1.17** | 0.81 | **1.00** | 0.88 | 0.90 | 0.62 | 0.63 | 0.58 | **1.03** | 0.65 | -- |
| **C-87** | 0.10 | 0.10 | 0.08 | 0.11 | 0.10 | 0.15 | 0.12 | 0.11 | 0.09 | 0.11 | 0.10 | 0.08 | 0.07 | 0.05 | 0.05 | 0.00 | 0.08 | -- |
| **C-88** | 0.00 | 0.47 | 0.07 | 0.21 | 0.22 | **1.18** | **1.25** | **1.03** | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 | -- |
| **C-89** | 0.00 | **2.04** | **1.32** | **1.36** | 0.83 | 0.59 | 0.37 | 0.38 | 0.34 | 0.63 | 0.37 | 0.37 | 0.23 | 0.34 | 0.17 | 0.16 | 0.37 | -- |
| **C-90** | 0.13 | 0.22 | 0.30 | 0.22 | 0.37 | 0.20 | 0.17 | 0.13 | 0.10 | 0.10 | 0.09 | 0.09 | 0.13 | 0.10 | 0.09 | 0.08 | 0.09 | -- |
| **C-91** | 0.03 | 0.03 | 0.04 | 0.02 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.01 | 0.00 | 0.01 | 0.00 | 0.01 | -- |
| **C-92** | 0.02 | 0.02 | 0.04 | 0.02 | 0.02 | 0.03 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | -- |
| **C-93** | 0.00 | 0.38 | **8.04** | **2.82** | 0.32 | 0.35 | 0.32 | 0.27 | 0.21 | 0.23 | 0.22 | 0.19 | 0.26 | 0.10 | 0.17 | 0.00 | 0.62 | -- |
| **C-94** | 0.10 | 0.10 | 0.09 | 0.08 | 0.11 | 0.09 | 0.11 | 0.11 | 0.10 | 0.13 | 0.12 | 0.09 | 0.11 | 0.08 | 0.05 | 0.07 | 0.06 | -- |
| **C-95** | 0.04 | 0.02 | 0.04 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.04 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | -- |
| **C-96** | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.03 | 0.07 | 0.02 | 0.03 | 0.02 | 0.02 | 0.01 | 0.08 | 0.33 | 0.01 | 0.03 | 0.03 | -- |
| **C-97** | 0.01 | 0.01 | 0.01 | 0.03 | 0.01 | 0.05 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | -- |
| **No. of chapters RCA>1** | **18** | **21** | **18** | **18** | **14** | **17** | **16** | **15** | **11** | **15** | **12** | **10** | **14** | **12** | **14** | **14** | **10** | **8** |

*Note*: For description of chapter please refer Table A2 in Annexure A

## Table D4: Chapter-wise RCA of India in Exports

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-01** | 0.01 | 0.02 | 0.02 | 0.02 | 0.03 | 0.01 | 0.05 | 0.06 | 0.04 | 0.06 | 0.05 | 0.05 | 0.07 | 0.04 | 0.04 | 0.02 | 0.03 | -- |
| **C-02** | 0.80 | 0.72 | 0.67 | 0.97 | 0.88 | 0.85 | 0.76 | 0.83 | 0.87 | 0.94 | 0.94 | 1.00 | 0.89 | **1.17** | **1.32** | **1.47** | **1.81** | -- |
| **C-03** | **5.60** | **4.77** | **4.55** | **4.86** | **4.02** | **3.86** | **3.22** | **2.45** | **2.48** | **2.22** | **2.06** | **1.55** | **1.36** | **1.72** | **1.98** | **2.37** | **2.37** | **C-03** |
| **C-04** | 0.15 | 0.11 | 0.13 | 0.17 | 0.32 | 0.28 | 0.29 | 0.33 | 0.51 | 0.37 | 0.38 | 0.48 | 0.20 | 0.21 | 0.15 | 0.22 | 0.38 | -- |
| **C-05** | **2.07** | **1.67** | **1.72** | **1.73** | **1.63** | **1.52** | **1.03** | 0.94 | 0.77 | 0.71 | 0.75 | 0.47 | 0.53 | 0.66 | **1.25** | 0.72 | 0.64 | -- |
| **C-06** | 0.43 | 0.44 | 0.42 | 0.40 | 0.45 | 0.45 | 0.43 | 0.48 | 0.47 | 0.53 | 0.72 | 0.35 | 0.26 | 0.22 | 0.20 | 0.24 | 0.17 | -- |
| **C-07** | **1.60** | **1.16** | **1.46** | **1.80** | **1.42** | **1.33** | **1.28** | **1.35** | **1.59** | **1.50** | **1.28** | **1.17** | **1.12** | **1.09** | 0.97 | 0.85 | **1.05** | -- |
| **C-08** | **2.58** | **2.55** | **3.56** | **3.12** | **2.55** | **2.34** | **1.69** | **1.84** | **1.74** | **1.54** | **1.32** | **1.38** | **1.07** | 0.94 | 1.00 | 0.95 | 0.88 | -- |
| **C-09** | **9.78** | **10.13** | **9.03** | **7.70** | **9.06** | **7.18** | **6.04** | **5.78** | **4.63** | **4.73** | **4.65** | **4.54** | **3.36** | **3.56** | **3.54** | **4.23** | **3.69** | **C-09** |
| **C-10** | **3.37** | **6.40** | **3.05** | **2.68** | **3.48** | **5.28** | **4.24** | **4.54** | **4.14** | **2.94** | **3.35** | **3.05** | **2.53** | **2.20** | **2.61** | **3.78** | **4.20** | **C-10** |
| **C-11** | 0.34 | 0.23 | 0.16 | 0.53 | **1.15** | **1.42** | **1.64** | **1.06** | 0.39 | 0.35 | 0.38 | 0.31 | 0.27 | 0.35 | 0.44 | 0.69 | 0.85 | -- |
| **C-12** | **2.24** | **1.51** | **1.95** | **2.20** | **2.05** | **1.38** | **1.39** | **1.75** | **1.30** | **1.40** | **1.54** | **1.25** | 0.78 | **1.01** | **1.28** | 0.98 | 0.81 | -- |
| **C-13** | **19.36** | **22.04** | **21.19** | **18.81** | **15.37** | **12.18** | **11.30** | **11.10** | **11.87** | **10.48** | **9.27** | **8.50** | **5.39** | **8.19** | **17.77** | **28.03** | **17.16** | **C-13** |
| **C-14** | **6.19** | **7.64** | **7.04** | **7.05** | **6.12** | **5.64** | **3.86** | **5.81** | **5.21** | **4.51** | **4.52** | **4.76** | **3.52** | **4.87** | **4.17** | **5.29** | **4.27** | **C-14** |
| **C-15** | 0.96 | 0.94 | **1.53** | **1.74** | **1.34** | 0.75 | 0.67 | 0.94 | 0.79 | 0.66 | 0.60 | 0.53 | 0.54 | 0.56 | 0.55 | 0.48 | 0.47 | -- |
| **C-16** | 0.03 | 0.03 | 0.09 | 0.05 | 0.04 | 0.14 | 0.42 | 0.55 | 0.59 | 0.66 | 0.51 | 0.53 | 0.38 | 0.49 | 0.22 | 0.11 | 0.12 | -- |
| **C-17** | 0.71 | 0.12 | 0.16 | 0.81 | **2.99** | **2.43** | **2.82** | 0.44 | 0.33 | **2.24** | **3.29** | **4.11** | 0.19 | **1.57** | **2.32** | **2.37** | **1.14** | -- |
| **C-18** | 0.03 | 0.03 | 0.04 | 0.03 | 0.04 | 0.02 | 0.02 | 0.04 | 0.03 | 0.03 | 0.03 | 0.05 | 0.03 | 0.05 | 0.04 | 0.08 | 0.10 | -- |
| **C-19** | 0.28 | 0.24 | 0.26 | 0.31 | 0.34 | 0.35 | 0.30 | 0.32 | 0.37 | 0.35 | 0.35 | 0.42 | 0.31 | 0.33 | 0.38 | 0.40 | 0.37 | -- |
| **C-20** | 0.27 | 0.29 | 0.28 | 0.38 | 0.48 | 0.32 | 0.34 | 0.36 | 0.42 | 0.50 | 0.39 | 0.44 | 0.39 | 0.37 | 0.36 | 0.39 | 0.37 | -- |
| **C-21** | **1.15** | **1.14** | 0.87 | **1.05** | **1.05** | 0.75 | 0.69 | 0.54 | 0.55 | 0.53 | 0.50 | 0.49 | 0.42 | 0.43 | 0.45 | 0.50 | 0.44 | -- |
| **C-22** | 0.08 | 0.07 | 0.06 | 0.12 | 0.11 | 0.07 | 0.06 | 0.06 | 0.08 | 0.09 | 0.08 | 0.10 | 0.10 | 0.12 | 0.15 | 0.19 | 0.19 | -- |
| **C-23** | **5.90** | **3.51** | **2.93** | **3.45** | **2.78** | **2.23** | **2.13** | **3.56** | **2.65** | **3.63** | **3.52** | **4.26** | **2.19** | **2.32** | **2.40** | **1.95** | **2.15** | **C-23** |
| **C-24** | **1.71** | **1.20** | **1.55** | **1.20** | **1.14** | **1.25** | **1.26** | **1.27** | **1.17** | **1.30** | **1.36** | **1.69** | **1.78** | **1.66** | **1.18** | **1.30** | **1.31** | **C-24** |
| **C-25** | **2.14** | **2.12** | **3.06** | **3.75** | **3.78** | **3.62** | **3.69** | **3.66** | **3.49** | **3.42** | **3.28** | **2.25** | **2.25** | **1.96** | **2.18** | **2.38** | **2.43** | **C-25** |
| **C-26** | **3.49** | **3.01** | **2.39** | **2.67** | **2.80** | **4.45** | **4.09** | **6.12** | **6.64** | **4.51** | **4.37** | **3.84** | **3.40** | **2.35** | **1.12** | 0.80 | 0.48 | -- |
| **C-27** | 0.22 | 0.11 | 0.05 | 0.37 | 0.57 | 0.54 | 0.65 | 0.80 | 0.81 | **1.07** | **1.22** | **1.06** | **1.05** | **1.19** | **1.18** | **1.48** | **1.60** | -- |
| **C-28** | 0.84 | 0.69 | 0.67 | 0.84 | 0.83 | **1.26** | 0.99 | **1.21** | **1.10** | **1.03** | 0.72 | 0.86 | 0.71 | **1.43** | 0.66 | 0.83 | 0.65 | -- |
| **C-29** | **1.39** | **1.37** | **1.47** | **1.55** | **1.48** | **1.50** | **1.55** | **1.54** | **1.61** | **1.83** | **1.71** | **1.82** | **1.57** | **1.52** | **1.47** | **1.57** | **1.54** | **C-29** |
| **C-30** | **1.57** | **1.32** | **1.30** | **1.32** | **1.16** | **1.01** | **1.01** | 0.94 | 0.90 | 0.95 | 0.98 | **1.06** | 0.82 | 0.91 | **1.03** | **1.14** | **1.15** | -- |
| **C-31** | 0.07 | 0.07 | 0.03 | 0.08 | 0.21 | 0.02 | 0.05 | 0.05 | 0.06 | 0.04 | 0.04 | 0.05 | 0.23 | 0.05 | 0.06 | 0.08 | 0.06 | -- |
| **C-32** | **2.11** | **1.73** | **1.85** | **2.01** | **1.95** | **1.89** | **1.80** | **1.57** | **1.55** | **1.58** | **1.66** | **1.80** | **1.39** | **1.49** | **1.37** | **1.41** | **1.56** | **C-32** |
| **C-33** | 0.78 | 0.80 | 0.78 | 0.93 | 0.83 | 0.74 | 0.69 | 0.64 | 0.63 | 0.75 | 0.71 | 0.75 | 0.73 | 0.66 | 0.70 | 0.78 | 0.71 | -- |
| **C-34** | 0.28 | 0.23 | 0.25 | 0.29 | 0.32 | 0.42 | 0.31 | 0.26 | 0.32 | 0.36 | 0.35 | 0.50 | 0.38 | 0.44 | 0.47 | 0.70 | 0.45 | -- |
| **C-35** | 0.21 | 0.33 | 0.47 | 0.57 | 0.71 | 0.63 | 0.65 | 0.67 | 0.86 | 0.71 | 0.98 | 0.90 | 0.64 | 0.69 | 0.49 | 0.58 | 0.61 | -- |
| **C-36** | **1.52** | 0.86 | 0.98 | **1.02** | **1.23** | **1.02** | **1.01** | **1.15** | **1.29** | **1.18** | **1.46** | **1.70** | **1.38** | **1.35** | **1.07** | **1.10** | 0.98 | -- |
| **C-37** | 0.27 | 0.35 | 0.36 | 0.34 | 0.24 | 0.18 | 0.14 | 0.15 | 0.14 | 0.14 | 0.12 | 0.15 | 0.10 | 0.13 | 0.10 | 0.08 | 0.07 | -- |

To be contd ...

Contd ...

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-38** | 0.94 | 0.90 | **1.01** | **1.09** | **1.05** | 0.96 | 0.93 | 0.88 | **1.12** | 0.97 | 0.96 | **1.02** | 0.89 | 0.88 | 0.79 | 0.83 | 0.89 | -- |
| **C-39** | 0.35 | 0.31 | 0.37 | 0.46 | 0.58 | 0.60 | 0.59 | 0.75 | 0.65 | 0.66 | 0.55 | 0.50 | 0.41 | 0.49 | 0.57 | 0.51 | 0.56 | -- |
| **C-40** | 0.94 | 0.85 | 0.77 | 0.82 | 0.91 | **1.02** | **1.03** | 0.91 | 0.95 | 0.94 | 0.78 | 0.89 | 0.67 | 0.63 | 0.64 | 0.70 | 0.71 | -- |
| **C-41** | **2.22** | **2.39** | **2.17** | **2.46** | **2.91** | **3.08** | **2.48** | **2.86** | **2.66** | **2.59** | **2.50** | **2.63** | **1.99** | **1.81** | **1.96** | **2.54** | **2.13** | **C-41** |
| **C-42** | **7.81** | **8.55** | **7.12** | **7.30** | **6.07** | **4.91** | **4.46** | **4.54** | **3.85** | **3.46** | **3.08** | **3.09** | **2.53** | **2.02** | **1.96** | **1.95** | **1.78** | **C-42** |
| **C-43** | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.03 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | -- |
| **C-44** | 0.07 | 0.06 | 0.06 | 0.06 | 0.06 | 0.08 | 0.08 | 0.10 | 0.10 | 0.10 | 0.11 | 0.13 | 0.11 | 0.10 | 0.11 | 0.12 | 0.14 | -- |
| **C-45** | 0.03 | 0.02 | 0.19 | 0.17 | 0.05 | 0.04 | 0.04 | 0.06 | 0.05 | 0.08 | 0.06 | 0.07 | 0.06 | 0.08 | 0.10 | 0.07 | 0.07 | -- |
| **C-46** | 0.36 | 0.33 | 0.25 | 0.14 | 0.20 | 0.35 | 0.17 | 0.17 | 0.15 | 0.19 | 0.29 | 0.15 | 0.12 | 0.06 | 0.03 | 0.04 | 0.05 | -- |
| **C-47** | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -- |
| **C-48** | 0.12 | 0.12 | 0.16 | 0.23 | 0.24 | 0.29 | 0.24 | 0.26 | 0.30 | 0.27 | 0.24 | 0.27 | 0.24 | 0.30 | 0.28 | 0.29 | 0.30 | -- |
| **C-49** | 0.21 | 0.27 | 0.29 | 0.32 | 0.30 | 0.31 | 0.34 | 0.35 | 0.38 | 0.41 | 0.48 | 0.38 | 0.34 | 0.32 | 0.40 | 0.45 | 0.39 | -- |
| **C-50** | **9.50** | **12.08** | **15.02** | **16.03** | **16.40** | **16.75** | **16.29** | **16.03** | **12.70** | **11.07** | **9.85** | **8.88** | **6.83** | **6.82** | **4.56** | **3.13** | **2.55** | **C-50** |
| **C-51** | **1.06** | 0.93 | 0.58 | 0.60 | 0.56 | 0.59 | 0.55 | 0.56 | 0.63 | 0.62 | 0.62 | 0.78 | 0.75 | 0.74 | 0.79 | 0.84 | 0.54 | -- |
| **C-52** | **13.08** | **10.82** | **11.54** | **11.24** | **9.73** | **8.75** | **6.95** | **6.66** | **6.17** | **7.35** | **8.56** | **7.89** | **5.57** | **8.31** | **6.81** | **7.54** | **8.42** | **C-52** |
| **C-53** | **10.36** | **7.58** | **5.84** | **4.73** | **8.60** | **5.19** | **4.88** | **5.37** | **5.02** | **4.24** | **4.38** | **5.55** | **5.15** | **7.58** | **6.33** | **6.00** | **4.61** | **C-53** |
| **C-54** | **1.92** | **1.72** | **2.09** | **2.27** | **2.54** | **2.82** | **3.12** | **3.04** | **2.65** | **2.55** | **2.74** | **3.24** | **3.62** | **3.53** | **3.19** | **2.70** | **2.89** | **C-54** |
| **C-55** | **2.33** | **2.35** | **2.60** | **2.80** | **2.94** | **3.16** | **3.61** | **3.46** | **3.09** | **3.30** | **3.73** | **3.76** | **3.18** | **3.25** | **3.26** | **2.92** | **2.86** | **C-55** |
| **C-56** | 0.48 | 0.66 | 0.85 | 0.79 | 0.66 | 0.62 | 0.57 | 0.46 | 0.54 | 0.56 | 0.61 | 0.65 | 0.64 | 0.76 | 0.74 | 0.79 | 0.72 | -- |
| **C-57** | **8.36** | **10.44** | **11.01** | **10.91** | **9.81** | **9.02** | **8.49** | **8.42** | **8.91** | **9.13** | **8.13** | **6.98** | **5.66** | **6.05** | **4.77** | **4.96** | **5.29** | **C-57** |
| **C-58** | **2.65** | **2.75** | **3.28** | **3.74** | **3.68** | **2.44** | **1.31** | **1.26** | **1.28** | **1.36** | **1.30** | **1.45** | **1.30** | **1.42** | **1.16** | **1.18** | **1.62** | **C-58** |
| **C-59** | 0.56 | 0.59 | 0.55 | 0.42 | 0.46 | 0.45 | 0.46 | 0.53 | 0.49 | 0.41 | 0.45 | 0.40 | 0.35 | 0.43 | 0.36 | 0.41 | 0.49 | -- |
| **C-60** | 0.61 | 0.54 | 0.40 | 0.31 | 0.33 | 0.25 | 0.32 | 0.31 | 0.25 | 0.35 | 0.33 | 0.42 | 0.37 | 0.38 | 0.51 | 0.40 | 0.43 | -- |
| **C-61** | **2.24** | **2.97** | **3.29** | **3.31** | **3.30** | **3.38** | **3.23** | **2.79** | **2.63** | **2.46** | **2.27** | **2.24** | **2.44** | **1.83** | **1.79** | **1.67** | **1.69** | **C-61** |
| **C-62** | **4.88** | **5.57** | **5.29** | **5.60** | **4.67** | **3.91** | **3.42** | **3.29** | **3.59** | **3.42** | **2.92** | **2.95** | **2.90** | **2.54** | **2.58** | **2.63** | **2.39** | **C-62** |
| **C-63** | **8.48** | **7.87** | **8.17** | **9.15** | **8.53** | **7.76** | **7.14** | **7.14** | **6.92** | **6.01** | **5.15** | **4.53** | **3.73** | **3.90** | **4.05** | **3.84** | **3.70** | **C-63** |
| **C-64** | **1.97** | **2.34** | **2.25** | **2.17** | **2.02** | **1.76** | **1.67** | **1.74** | **1.67** | **1.65** | **1.63** | **1.53** | **1.29** | **1.16** | **1.10** | **1.10** | **1.09** | **C-64** |
| **C-65** | 0.24 | 0.35 | 0.24 | 0.24 | 0.27 | 0.26 | 0.25 | 0.18 | 0.18 | 0.30 | 0.25 | 0.32 | 0.25 | 0.21 | 0.22 | 0.32 | 0.26 | -- |
| **C-66** | 0.17 | 0.13 | 0.03 | 0.04 | 0.09 | 0.06 | 0.11 | 0.12 | 0.12 | 0.11 | 0.05 | 0.04 | 0.04 | 0.03 | 0.02 | 0.02 | 0.03 | -- |
| **C-67** | **1.62** | **3.06** | **3.06** | **3.53** | **4.16** | **3.71** | **4.77** | **4.56** | **4.72** | **5.42** | **5.47** | **4.95** | **3.77** | **3.05** | **2.23** | **2.13** | **2.28** | **C-67** |
| **C-68** | **2.04** | **1.88** | **2.11** | **2.60** | **2.29** | **2.28** | **2.32** | **1.87** | **2.07** | **2.21** | **2.11** | **1.81** | **1.73** | **1.69** | **1.34** | **1.45** | **1.38** | **C-68** |
| **C-69** | 0.26 | 0.30 | 0.31 | 0.35 | 0.61 | 0.56 | 0.50 | 0.40 | 0.38 | 0.39 | 0.43 | 0.43 | 0.40 | 0.49 | 0.46 | 0.54 | 0.52 | -- |
| **C-70** | 0.31 | 0.29 | 0.45 | 0.54 | 0.60 | 0.64 | 0.63 | 0.54 | 0.48 | 0.53 | 0.51 | 0.56 | 0.42 | 0.40 | 0.47 | 0.45 | 0.48 | -- |
| **C-71** | **7.97** | **9.19** | **11.16** | **10.38** | **9.28** | **9.92** | **9.99** | **9.44** | **9.14** | **6.92** | **6.67** | **5.54** | **7.96** | **5.86** | **5.83** | **4.62** | **3.90** | **C-71** |
| **C-72** | **1.19** | 0.86 | **1.24** | **1.37** | **1.08** | **1.45** | **1.76** | **1.57** | **1.49** | **1.46** | **1.25** | **1.30** | **1.06** | **1.16** | 0.95 | 0.97 | **1.27** | -- |
| **C-73** | **1.02** | **1.10** | **1.30** | **1.48** | **1.53** | **1.37** | **1.52** | **1.59** | **1.55** | **1.44** | **1.54** | **1.66** | **1.28** | **1.68** | **1.25** | **1.44** | **1.17** | **C-73** |
| **C-74** | 0.29 | 0.37 | 0.38 | 0.54 | 0.71 | **1.12** | **1.51** | **1.54** | **1.67** | **1.94** | **1.74** | **1.32** | 0.98 | **2.23** | 0.94 | 0.96 | 0.95 | -- |
| **C-75** | 0.09 | 0.08 | 0.07 | 0.04 | 0.09 | 0.04 | 0.07 | 0.05 | 0.09 | 0.08 | 0.06 | 0.08 | 0.06 | 0.08 | 0.07 | 0.62 | 0.91 | -- |

To be contd ...

Contd ...

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-76** | 0.64 | 0.37 | 0.60 | 0.65 | 0.67 | 0.79 | 0.57 | 0.50 | 0.61 | 0.53 | 0.59 | 0.63 | 0.59 | 0.59 | 0.48 | 0.60 | 0.66 | -- |
| **C-78** | 0.24 | 0.07 | 0.07 | 0.07 | 0.16 | 0.08 | 0.15 | 0.31 | 0.50 | 0.39 | 0.59 | 0.55 | 0.97 | **1.20** | **1.34** | 0.83 | **1.40** | -- |
| **C-79** | 0.21 | 0.17 | 0.03 | 0.14 | 0.08 | 0.22 | 0.34 | 0.64 | 0.42 | **3.00** | **1.82** | **2.80** | **2.48** | **3.20** | **2.98** | **2.10** | **1.89** | -- |
| **C-80** | **1.19** | 0.66 | 0.93 | 1.00 | 0.94 | 0.77 | 0.84 | 0.29 | 0.29 | 0.77 | 0.29 | 0.39 | 0.25 | 0.10 | 0.05 | 0.05 | 0.59 | -- |
| **C-81** | 0.18 | 0.23 | 0.13 | 0.12 | 0.12 | 0.13 | 0.11 | 0.16 | 0.18 | 0.24 | 0.17 | 0.16 | 0.21 | 0.15 | 0.24 | 0.24 | 0.23 | -- |
| **C-82** | **1.01** | 0.99 | **1.08** | **1.14** | **1.13** | **1.06** | **1.11** | **1.12** | **1.21** | **1.19** | 0.92 | 0.90 | 0.70 | 0.74 | 0.81 | 0.75 | 0.72 | -- |
| **C-83** | 0.64 | 0.62 | 0.82 | 0.75 | 0.73 | 0.67 | 0.63 | 0.65 | 0.55 | 0.57 | 0.56 | 0.58 | 0.47 | 0.48 | 0.45 | 0.43 | 0.41 | -- |
| **C-84** | 0.21 | 0.18 | 0.17 | 0.19 | 0.24 | 0.23 | 0.26 | 0.27 | 0.29 | 0.31 | 0.31 | 0.35 | 0.33 | 0.30 | 0.31 | 0.31 | 0.32 | -- |
| **C-85** | 0.19 | 0.18 | 0.17 | 0.17 | 0.21 | 0.20 | 0.22 | 0.19 | 0.20 | 0.23 | 0.26 | 0.30 | 0.45 | 0.32 | 0.35 | 0.30 | 0.28 | -- |
| **C-86** | 0.18 | 0.09 | 0.06 | 0.11 | 0.35 | 0.12 | 0.13 | 0.13 | 0.11 | 0.23 | 0.18 | 0.16 | 0.11 | 0.11 | 0.18 | 0.16 | 0.23 | -- |
| **C-87** | 0.23 | 0.19 | 0.18 | 0.21 | 0.20 | 0.20 | 0.25 | 0.30 | 0.34 | 0.34 | 0.31 | 0.40 | 0.45 | 0.55 | 0.46 | 0.49 | 0.49 | -- |
| **C-88** | 0.07 | 0.02 | 0.04 | 0.07 | 0.09 | 0.10 | 0.08 | 0.05 | 0.05 | 0.03 | 0.18 | 0.63 | 0.57 | 0.72 | 0.86 | 0.54 | **1.06** | -- |
| **C-89** | 0.25 | 0.20 | 0.27 | 0.16 | 0.15 | 0.15 | 0.26 | 0.61 | 0.91 | 0.85 | **1.09** | **1.50** | **1.74** | **1.57** | **2.18** | **1.43** | **1.25** | -- |
| **C-90** | 0.11 | 0.13 | 0.17 | 0.18 | 0.21 | 0.23 | 0.23 | 0.22 | 0.21 | 0.20 | 0.20 | 0.21 | 0.22 | 0.20 | 0.20 | 0.19 | 0.20 | -- |
| **C-91** | 0.23 | 0.25 | 0.34 | 0.41 | 0.50 | 0.42 | 0.48 | 0.41 | 0.29 | 0.20 | 0.16 | 0.14 | 0.11 | 0.10 | 0.11 | 0.10 | 0.10 | -- |
| **C-92** | 0.35 | 0.39 | 0.30 | 0.27 | 0.24 | 0.21 | 0.19 | 0.21 | 0.20 | 0.17 | 0.16 | 0.15 | 0.18 | 0.15 | 0.14 | 0.20 | 0.13 | -- |
| **C-93** | 0.10 | 0.01 | 0.02 | 0.03 | 0.19 | 0.07 | 0.08 | 0.05 | 0.02 | 0.07 | 0.04 | 0.11 | 0.12 | 0.07 | 0.18 | 0.21 | 0.28 | -- |
| **C-94** | 0.05 | 0.05 | 0.07 | 0.10 | 0.10 | 0.11 | 0.16 | 0.23 | 0.23 | 0.26 | 0.29 | 0.25 | 0.24 | 0.27 | 0.27 | 0.27 | 0.25 | -- |
| **C-95** | 0.34 | 0.33 | 0.25 | 0.23 | 0.26 | 0.23 | 0.25 | 0.25 | 0.24 | 0.23 | 0.16 | 0.14 | 0.13 | 0.14 | 0.15 | 0.15 | 0.17 | -- |
| **C-96** | 0.93 | 1.00 | **1.11** | **1.16** | **1.20** | **1.03** | **1.13** | 0.93 | 0.92 | 0.90 | 0.83 | 0.80 | 0.79 | 0.80 | 0.75 | 0.80 | 0.79 | -- |
| **C-97** | 0.05 | 0.04 | 0.05 | 0.03 | 0.06 | 0.08 | **5.02** | **4.41** | **3.61** | **2.85** | **2.59** | **1.50** | **1.04** | **1.01** | 1.00 | 0.79 | 0.70 | -- |
| **No. of chapters RCA>1** | **39** | **35** | **38** | **41** | **42** | **42** | **42** | **38** | **38** | **40** | **39** | **42** | **36** | **41** | **40** | **34** | **37** | **27** |

*Note*: For description of chapter please refer Table A2 in Annexure A

## Table D5: Chapter-wise RCA of China in Exports

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-01** | **1.40** | **1.29** | **1.14** | **1.01** | 0.82 | 0.64 | 0.51 | 0.42 | 0.32 | 0.26 | 0.25 | 0.30 | 0.24 | 0.22 | 0.24 | 0.22 | 0.19 | -- |
| **C-02** | 0.68 | 0.58 | 0.46 | 0.45 | 0.43 | 0.29 | 0.21 | 0.18 | 0.14 | 0.13 | 0.10 | 0.08 | 0.08 | 0.09 | 0.08 | 0.06 | 0.06 | -- |
| **C-03** | **1.66** | **1.42** | **1.41** | **1.34** | **1.35** | **1.24** | **1.12** | **1.10** | 0.96 | 0.88 | 0.75 | 0.76 | 0.93 | 0.96 | **1.03** | **1.15** | 0.97 | -- |
| **C-04** | 0.15 | 0.15 | 0.15 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | 0.07 | 0.07 | 0.08 | 0.09 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | -- |
| **C-05** | **5.37** | **5.00** | **5.13** | **5.19** | **4.17** | **3.37** | **2.92** | **2.93** | **2.51** | **2.16** | **1.91** | **1.94** | **1.75** | **1.68** | **1.80** | **1.64** | **1.56** | **C-05** |
| **C-06** | 0.11 | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.10 | 0.10 | 0.09 | 0.11 | 0.09 | -- |
| **C-07** | **2.11** | **1.92** | **1.89** | **1.83** | **1.70** | **1.49** | **1.26** | **1.19** | **1.17** | **1.14** | 0.97 | 0.91 | 0.96 | **1.16** | **1.27** | 0.96 | 0.90 | -- |
| **C-08** | 0.46 | 0.40 | 0.39 | 0.36 | 0.33 | 0.33 | 0.32 | 0.31 | 0.28 | 0.29 | 0.29 | 0.32 | 0.34 | 0.32 | 0.33 | 0.36 | 0.33 | -- |
| **C-09** | 0.90 | 0.83 | 0.83 | 0.83 | 0.95 | 0.88 | 0.75 | 0.79 | 0.62 | 0.52 | 0.43 | 0.43 | 0.44 | 0.40 | 0.37 | 0.43 | 0.47 | -- |
| **C-10** | 0.82 | **1.13** | 0.89 | **1.15** | 0.64 | 0.84 | **1.05** | 0.23 | 0.40 | 0.24 | 0.28 | 0.07 | 0.07 | 0.06 | 0.04 | 0.03 | 0.03 | -- |
| **C-11** | 0.78 | 0.49 | 0.40 | 0.42 | 0.42 | 0.37 | 0.33 | 0.32 | 0.31 | 0.32 | 0.44 | 0.35 | 0.32 | 0.35 | 0.29 | 0.27 | 0.24 | -- |
| **C-12** | **1.09** | 0.99 | **1.15** | **1.06** | 0.95 | 0.81 | 0.64 | 0.57 | 0.58 | 0.48 | 0.39 | 0.33 | 0.29 | 0.26 | 0.25 | 0.20 | 0.21 | -- |
| **C-13** | 0.87 | 0.74 | 0.62 | 0.60 | 0.70 | 0.63 | 0.45 | 0.36 | 0.44 | 0.50 | 0.58 | 0.98 | **1.09** | **1.10** | **1.16** | 0.59 | 0.97 | -- |
| **C-14** | **4.20** | **3.91** | **3.46** | **3.08** | **2.26** | **2.21** | **1.56** | **1.45** | **1.33** | **1.22** | 0.99 | **1.07** | 0.84 | 0.64 | 0.89 | **1.09** | 0.88 | -- |
| **C-15** | 0.69 | 0.32 | 0.15 | 0.16 | 0.13 | 0.08 | 0.06 | 0.06 | 0.09 | 0.10 | 0.06 | 0.07 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04 | -- |
| **C-16** | **3.06** | **2.53** | **2.50** | **2.99** | **2.78** | **2.55** | **2.22** | **2.23** | **2.13** | **2.16** | **1.85** | **1.60** | **1.24** | **1.37** | **1.55** | **1.58** | **1.36** | **C-16** |
| **C-17** | 0.34 | 0.34 | 0.27 | 0.30 | 0.21 | 0.27 | 0.18 | 0.19 | 0.23 | 0.19 | 0.21 | 0.22 | 0.22 | 0.22 | 0.22 | 0.19 | 0.21 | -- |
| **C-18** | 0.14 | 0.11 | 0.10 | 0.07 | 0.05 | 0.05 | 0.05 | 0.05 | 0.07 | 0.06 | 0.06 | 0.06 | 0.04 | 0.05 | 0.06 | 0.07 | 0.07 | -- |
| **C-19** | 0.46 | 0.42 | 0.45 | 0.52 | 0.50 | 0.42 | 0.35 | 0.33 | 0.31 | 0.30 | 0.25 | 0.22 | 0.21 | 0.21 | 0.23 | 0.21 | 0.17 | -- |
| **C-20** | **1.50** | **1.39** | **1.40** | **1.57** | **1.58** | **1.46** | **1.32** | **1.25** | **1.23** | **1.20** | **1.26** | **1.20** | 0.99 | **1.02** | **1.08** | **1.06** | 0.94 | -- |
| **C-21** | 0.49 | 0.52 | 0.54 | 0.51 | 0.48 | 0.44 | 0.38 | 0.32 | 0.30 | 0.32 | 0.30 | 0.28 | 0.28 | 0.29 | 0.32 | 0.31 | 0.29 | -- |
| **C-22** | 0.35 | 0.33 | 0.32 | 0.32 | 0.33 | 0.26 | 0.20 | 0.19 | 0.15 | 0.18 | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.09 | -- |
| **C-23** | 0.32 | 0.25 | 0.30 | 0.30 | 0.29 | 0.33 | 0.25 | 0.25 | 0.20 | 0.18 | 0.26 | 0.31 | 0.32 | 0.30 | 0.27 | 0.30 | 0.24 | -- |
| **C-24** | 0.73 | 0.68 | 0.42 | 0.34 | 0.41 | 0.39 | 0.37 | 0.31 | 0.27 | 0.25 | 0.23 | 0.23 | 0.25 | 0.26 | 0.26 | 0.25 | 0.24 | -- |
| **C-25** | **2.49** | **2.15** | **1.85** | **1.90** | **1.80** | **1.33** | **1.14** | 0.96 | **1.08** | **1.10** | 0.86 | 0.84 | 0.65 | 0.74 | 0.71 | 0.65 | 0.62 | -- |
| **C-26** | 0.14 | 0.09 | 0.10 | 0.08 | 0.08 | 0.13 | 0.14 | 0.18 | 0.20 | 0.11 | 0.08 | 0.07 | 0.02 | 0.03 | 0.02 | 0.01 | 0.01 | -- |
| **C-27** | 0.60 | 0.63 | 0.35 | 0.34 | 0.36 | 0.29 | 0.27 | 0.24 | 0.18 | 0.13 | 0.13 | 0.13 | 0.12 | 0.11 | 0.10 | 0.12 | 0.12 | -- |
| **C-28** | **1.81** | **1.80** | **1.78** | **1.60** | **1.58** | **1.46** | **1.32** | **1.29** | **1.38** | **1.17** | **1.11** | **1.16** | 0.93 | 1.00 | **1.22** | 0.93 | 0.91 | -- |
| **C-29** | 0.73 | 0.72 | 0.72 | 0.67 | 0.67 | 0.63 | 0.58 | 0.54 | 0.57 | 0.61 | 0.64 | 0.84 | 0.77 | 0.76 | 0.79 | 0.71 | 0.74 | -- |
| **C-30** | 0.24 | 0.22 | 0.18 | 0.17 | 0.13 | 0.10 | 0.08 | 0.07 | 0.07 | 0.06 | 0.06 | 0.08 | 0.08 | 0.09 | 0.10 | 0.10 | 0.09 | -- |
| **C-31** | 0.40 | 0.29 | 0.42 | 0.64 | 0.67 | 0.50 | 0.80 | 0.93 | 0.52 | 0.53 | **1.06** | 0.61 | 0.61 | 0.89 | 0.97 | 0.86 | 0.77 | -- |
| **C-32** | 0.76 | 0.77 | 0.74 | 0.75 | 0.75 | 0.69 | 0.57 | 0.57 | 0.61 | 0.61 | 0.59 | 0.57 | 0.51 | 0.55 | 0.60 | 0.53 | 0.52 | -- |
| **C-33** | 0.25 | 0.27 | 0.25 | 0.26 | 0.25 | 0.25 | 0.26 | 0.24 | 0.26 | 0.26 | 0.25 | 0.24 | 0.23 | 0.25 | 0.26 | 0.24 | 0.24 | -- |
| **C-34** | 0.37 | 0.47 | 0.50 | 0.51 | 0.46 | 0.43 | 0.39 | 0.41 | 0.39 | 0.38 | 0.39 | 0.40 | 0.36 | 0.38 | 0.42 | 0.42 | 0.39 | -- |
| **C-35** | 0.23 | 0.64 | 0.25 | 0.30 | 0.33 | 0.34 | 0.35 | 0.44 | 0.48 | 0.52 | 0.56 | 0.78 | 0.70 | 0.71 | 0.71 | 0.67 | 0.64 | -- |
| **C-36** | **4.48** | **4.96** | **6.11** | **4.57** | **4.31** | **3.83** | **3.03** | **2.61** | **2.52** | **2.24** | **2.06** | **1.86** | **1.97** | **1.60** | **1.71** | **1.51** | **1.44** | **C-36** |
| **C-37** | 0.18 | 0.22 | 0.34 | 0.54 | 0.55 | 0.56 | 0.62 | 0.67 | 0.69 | 0.46 | 0.42 | 0.52 | 0.46 | 0.53 | 0.55 | 0.50 | 0.52 | -- |
| **C-38** | 0.45 | 0.42 | 0.48 | 0.48 | 0.50 | 0.44 | 0.42 | 0.48 | 0.51 | 0.47 | 0.50 | 0.58 | 0.49 | 0.55 | 0.57 | 0.47 | 0.49 | -- |

To be contd ...

Contd ...

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-39** | 0.83 | 0.87 | 0.83 | 0.81 | 0.79 | 0.76 | 0.69 | 0.66 | 0.68 | 0.69 | 0.64 | 0.66 | 0.63 | 0.65 | 0.72 | 0.80 | 0.83 | -- |
| **C-40** | 0.49 | 0.50 | 0.56 | 0.65 | 0.63 | 0.62 | 0.57 | 0.61 | 0.70 | 0.72 | 0.77 | 0.77 | 0.81 | 0.77 | 0.79 | 0.79 | 0.83 | -- |
| **C-41** | 0.50 | 0.58 | 0.60 | 0.66 | 0.92 | 0.88 | 0.84 | 0.84 | 0.84 | 0.78 | 0.43 | 0.16 | 0.12 | 0.13 | 0.13 | 0.15 | 0.11 | -- |
| **C-42** | **9.26** | **9.06** | **8.38** | **8.04** | **7.51** | **7.11** | **6.35** | **5.39** | **4.81** | **4.35** | **3.94** | **4.05** | **3.80** | **3.98** | **3.96** | **3.79** | **3.26** | **C-42** |
| **C-43** | **2.20** | **2.14** | **2.70** | **2.96** | **3.08** | **2.74** | **3.39** | **5.03** | **5.07** | **2.28** | **1.92** | **1.61** | **2.56** | **2.44** | **2.45** | **2.66** | **1.98** | **C-43** |
| **C-44** | 0.66 | 0.60 | 0.68 | 0.74 | 0.77 | 0.77 | 0.72 | 0.76 | 0.81 | 0.90 | 0.84 | 0.83 | 0.81 | 0.81 | 0.84 | 0.83 | 0.74 | -- |
| **C-45** | 0.07 | 0.04 | 0.06 | 0.12 | 0.12 | 0.11 | 0.10 | 0.11 | 0.12 | 0.15 | 0.10 | 0.10 | 0.10 | 0.09 | 0.09 | 0.07 | 0.07 | -- |
| **C-46** | **18.30** | **17.88** | **16.25** | **12.88** | **11.72** | **10.66** | **9.53** | **8.70** | **7.85** | **7.36** | **7.12** | **7.65** | **6.65** | **6.12** | **6.24** | **5.46** | **5.32** | **C-46** |
| **C-47** | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 | 0.03 | 0.04 | 0.02 | 0.02 | -- |
| **C-48** | 0.28 | 0.27 | 0.25 | 0.32 | 0.31 | 0.30 | 0.31 | 0.31 | 0.36 | 0.42 | 0.45 | 0.45 | 0.47 | 0.50 | 0.59 | 0.64 | 0.67 | -- |
| **C-49** | 0.34 | 0.36 | 0.38 | 0.42 | 0.42 | 0.44 | 0.38 | 0.40 | 0.41 | 0.45 | 0.49 | 0.56 | 0.52 | 0.55 | 0.56 | 0.65 | 0.62 | -- |
| **C-50** | **9.65** | **9.46** | **9.79** | **9.59** | **8.36** | **7.15** | **6.17** | **5.66** | **5.49** | **5.10** | **4.68** | **4.45** | **4.57** | **4.58** | **4.64** | **4.58** | **3.80** | **C-50** |
| **C-51** | **1.78** | **1.67** | **2.31** | **2.43** | **2.06** | **1.79** | **1.84** | **1.88** | **1.84** | **1.76** | **1.55** | **1.62** | **1.55** | **1.68** | **1.64** | **1.63** | **1.30** | **C-51** |
| **C-52** | **2.91** | **2.66** | **3.22** | **3.06** | **2.68** | **3.00** | **2.66** | **2.24** | **2.29** | **2.31** | **2.15** | **2.32** | **2.36** | **2.16** | **2.05** | **1.83** | **1.96** | **C-52** |
| **C-53** | **5.69** | **4.96** | **4.50** | **4.87** | **4.23** | **3.60** | **2.75** | **2.29** | **2.32** | **2.22** | **1.88** | **2.27** | **2.52** | **2.59** | **2.87** | **2.76** | **2.72** | **C-53** |
| **C-54** | 0.86 | 0.91 | 0.87 | **1.03** | **1.26** | **1.59** | **1.90** | **2.07** | **2.12** | **2.09** | **2.05** | **2.25** | **2.14** | **2.24** | **2.52** | **2.40** | **2.60** | -- |
| **C-55** | **3.17** | **2.99** | **2.94** | **2.81** | **2.74** | **2.23** | **1.99** | **2.01** | **2.15** | **2.33** | **2.17** | **2.32** | **2.24** | **2.19** | **2.46** | **2.18** | **2.21** | **C-55** |
| **C-56** | 0.85 | 0.82 | 0.74 | 0.77 | 0.77 | 0.69 | 0.64 | 0.66 | 0.78 | 0.81 | 0.83 | **1.02** | **1.09** | **1.17** | **1.29** | **1.26** | **1.26** | -- |
| **C-57** | **1.17** | **1.33** | **1.24** | **1.31** | **1.33** | **1.25** | **1.07** | **1.04** | **1.03** | 0.99 | **1.04** | **1.21** | **1.22** | **1.22** | **1.31** | **1.24** | **1.16** | -- |
| **C-58** | **3.69** | **3.17** | **2.53** | **2.38** | **2.32** | **2.57** | **2.75** | **2.82** | **3.16** | **3.33** | **3.78** | **4.12** | **3.34** | **3.09** | **3.31** | **2.96** | **2.99** | **C-58** |
| **C-59** | 0.71 | 0.55 | 0.65 | 0.73 | 0.78 | 0.90 | 0.94 | **1.13** | **1.38** | **1.45** | **1.56** | **1.93** | **2.13** | **2.27** | **2.49** | **2.18** | **2.25** | -- |
| **C-60** | **2.26** | **2.40** | **2.49** | **2.20** | **2.24** | **2.66** | **2.58** | **2.53** | **2.68** | **2.84** | **2.81** | **2.95** | **3.03** | **3.13** | **3.25** | **2.98** | **3.27** | **C-60** |
| **C-61** | **4.82** | **4.80** | **4.52** | **4.30** | **3.95** | **3.69** | **3.47** | **3.43** | **3.39** | **3.84** | **4.00** | **3.94** | **3.57** | **3.66** | **3.74** | **3.74** | **3.54** | **C-61** |
| **C-62** | **5.44** | **4.94** | **4.81** | **4.71** | **4.38** | **3.69** | **3.43** | **3.21** | **3.23** | **3.41** | **3.12** | **3.30** | **3.12** | **3.14** | **3.11** | **3.04** | **2.80** | **C-62** |
| **C-63** | **5.08** | **4.73** | **4.81** | **4.84** | **4.63** | **4.27** | **3.91** | **3.84** | **3.92** | **3.84** | **3.56** | **3.93** | **3.81** | **3.64** | **3.62** | **3.26** | **3.16** | **C-63** |
| **C-64** | **5.88** | **5.93** | **5.98** | **5.71** | **5.12** | **4.67** | **4.19** | **3.94** | **3.98** | **3.74** | **3.47** | **3.60** | **3.43** | **3.44** | **3.34** | **3.67** | **3.18** | **C-64** |
| **C-65** | **6.24** | **6.56** | **6.21** | **5.54** | **5.17** | **5.00** | **4.75** | **4.51** | **4.66** | **4.50** | **4.18** | **4.49** | **4.24** | **4.23** | **4.35** | **4.14** | **4.00** | **C-65** |
| **C-66** | **15.46** | **16.32** | **15.93** | **14.01** | **12.97** | **11.27** | **9.78** | **9.16** | **8.53** | **8.01** | **7.38** | **7.34** | **6.78** | **6.84** | **6.87** | **5.84** | **5.77** | **C-66** |
| **C-67** | **16.80** | **17.07** | **16.01** | **14.48** | **13.20** | **11.62** | **10.07** | **9.18** | **8.26** | **7.63** | **7.00** | **7.06** | **6.54** | **6.27** | **6.53** | **5.52** | **5.46** | **C-67** |
| **C-68** | **1.42** | **1.23** | **1.27** | **1.33** | **1.40** | **1.37** | **1.25** | **1.17** | **1.24** | **1.27** | **1.24** | **1.31** | **1.40** | **1.36** | **1.47** | **1.45** | **1.50** | **C-68** |
| **C-69** | **2.25** | **2.22** | **2.26** | **2.25** | **1.92** | **2.05** | **1.96** | **1.96** | **2.11** | **2.14** | **1.81** | **2.00** | **2.27** | **2.49** | **2.71** | **2.91** | **2.68** | **C-69** |
| **C-70** | 0.69 | 0.72 | 0.80 | 0.89 | 0.92 | **1.02** | 1.00 | **1.10** | **1.21** | **1.25** | **1.28** | **1.45** | **1.36** | **1.46** | **1.57** | **1.65** | **1.69** | -- |
| **C-71** | 0.52 | 0.57 | 0.69 | 0.56 | 0.51 | 0.48 | 0.41 | 0.42 | 0.41 | 0.37 | 0.34 | 0.29 | 0.26 | 0.31 | 0.49 | 0.68 | 0.67 | -- |
| **C-72** | 0.86 | 0.57 | 0.53 | 0.70 | 0.42 | 0.34 | 0.33 | 0.65 | 0.68 | 0.88 | 0.99 | **1.06** | 0.46 | 0.66 | 0.73 | 0.66 | 0.72 | -- |
| **C-73** | **1.22** | **1.27** | **1.39** | **1.48** | **1.42** | **1.39** | **1.35** | **1.36** | **1.40** | **1.48** | **1.50** | **1.63** | **1.42** | **1.41** | **1.49** | **1.47** | **1.38** | **C-73** |
| **C-74** | 0.47 | 0.52 | 0.51 | 0.49 | 0.37 | 0.40 | 0.38 | 0.49 | 0.51 | 0.50 | 0.38 | 0.40 | 0.32 | 0.27 | 0.33 | 0.34 | 0.33 | -- |
| **C-75** | 0.16 | 0.36 | 0.31 | 0.21 | 0.13 | 0.10 | 0.19 | 0.22 | 0.21 | 0.22 | 0.17 | 0.10 | 0.34 | 0.42 | 0.29 | 0.25 | 0.27 | -- |
| **C-76** | 0.41 | 0.46 | 0.37 | 0.38 | 0.50 | 0.64 | 0.72 | 0.81 | 0.74 | 0.79 | 0.78 | 0.90 | 0.81 | 0.89 | 0.96 | 0.99 | 0.96 | -- |

To be contd ...

Contd ...

| Chapter | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Chapter: RCA>1 for all the years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **C-78** | **2.09** | **2.35** | **3.83** | **3.33** | **3.35** | **2.73** | **2.25** | **2.32** | **1.94** | **2.00** | **1.04** | 0.43 | 0.22 | 0.23 | 0.18 | 0.07 | 0.16 | -- |
| **C-79** | **3.26** | **2.24** | **2.88** | **2.73** | **2.52** | **1.83** | **1.52** | 0.88 | 0.61 | 0.94 | 0.72 | 0.32 | 0.23 | 0.19 | 0.17 | 0.09 | 0.13 | -- |
| **C-80** | **3.64** | **4.88** | **5.51** | **5.90** | **4.40** | **2.09** | **1.76** | **1.50** | 0.86 | 0.74 | 0.86 | 0.36 | 0.15 | 0.25 | 0.18 | 0.10 | 0.16 | -- |
| **C-81** | **2.05** | **2.20** | **2.62** | **2.54** | **2.44** | **2.06** | **2.44** | **2.71** | **2.44** | **2.21** | **2.16** | **2.41** | **1.65** | **1.89** | **1.87** | **1.43** | **1.48** | **C-81** |
| **C-82** | **1.81** | **1.91** | **1.83** | **1.92** | **1.82** | **1.82** | **1.79** | **1.76** | **1.76** | **1.66** | **1.61** | **1.49** | **1.50** | **1.54** | **1.59** | **1.49** | **1.57** | **C-82** |
| **C-83** | **1.63** | **1.64** | **1.62** | **1.55** | **1.56** | **1.63** | **1.48** | **1.59** | **1.68** | **1.79** | **1.74** | **1.71** | **1.65** | **1.70** | **1.82** | **1.84** | **1.82** | **C-83** |
| **C-84** | 0.47 | 0.56 | 0.61 | 0.69 | 0.81 | **1.01** | **1.27** | **1.35** | **1.39** | **1.40** | **1.45** | **1.52** | **1.56** | **1.59** | **1.56** | **1.47** | **1.41** | -- |
| **C-85** | 0.99 | **1.08** | **1.18** | **1.16** | **1.34** | **1.46** | **1.51** | **1.61** | **1.71** | **1.77** | **1.86** | **2.00** | **1.93** | **1.92** | **2.03** | **1.88** | **2.11** | -- |
| **C-86** | **3.02** | **3.62** | **3.50** | **5.03** | **4.02** | **3.54** | **3.67** | **3.46** | **3.37** | **2.92** | **3.06** | **2.77** | **1.05** | **2.29** | **2.87** | **2.15** | **2.00** | **C-86** |
| **C-87** | 0.11 | 0.11 | 0.13 | 0.19 | 0.18 | 0.17 | 0.18 | 0.20 | 0.23 | 0.25 | 0.28 | 0.33 | 0.31 | 0.31 | 0.34 | 0.31 | 0.31 | -- |
| **C-88** | 0.08 | 0.10 | 0.13 | 0.12 | 0.08 | 0.07 | 0.06 | 0.06 | 0.07 | 0.09 | 0.08 | 0.09 | 0.07 | 0.08 | 0.09 | 0.07 | 0.07 | -- |
| **C-89** | **1.18** | **1.15** | **1.03** | 0.94 | 0.92 | 0.75 | 0.90 | 0.71 | 0.86 | **1.09** | **1.22** | **1.41** | **1.84** | **2.06** | **2.04** | **1.89** | **1.49** | -- |
| **C-90** | 0.69 | 0.73 | 0.73 | 0.78 | 0.74 | 0.72 | 0.75 | 0.83 | **1.02** | **1.05** | **1.01** | **1.06** | 0.96 | 1.00 | **1.03** | 0.97 | 0.98 | -- |
| **C-91** | **3.24** | **3.33** | **3.22** | **2.89** | **2.42** | **2.07** | **1.90** | **1.58** | **1.30** | **1.09** | **1.03** | 0.99 | 0.99 | 0.91 | 0.82 | 0.88 | 0.89 | -- |
| **C-92** | **2.04** | **2.41** | **2.73** | **2.43** | **2.47** | **2.54** | **2.49** | **2.56** | **2.47** | **2.35** | **2.32** | **2.56** | **2.23** | **2.29** | **2.22** | **1.97** | **1.95** | **C-92** |
| **C-93** | 0.10 | **1.20** | 0.08 | 0.06 | 0.09 | 0.07 | 0.06 | 0.06 | 0.06 | 0.07 | 0.08 | 0.09 | 0.07 | 0.09 | 0.11 | 0.12 | 0.11 | -- |
| **C-94** | **1.71** | **1.74** | **2.01** | **2.16** | **2.11** | **2.21** | **2.15** | **2.19** | **2.30** | **2.36** | **2.34** | **2.50** | **2.53** | **2.67** | **2.71** | **2.94** | **2.77** | **C-94** |
| **C-95** | **6.85** | **7.07** | **6.46** | **6.49** | **5.90** | **5.87** | **5.40** | **4.98** | **4.85** | **4.64** | **4.20** | **4.25** | **3.75** | **3.62** | **3.81** | **3.50** | **3.42** | **C-95** |
| **C-96** | **2.96** | **3.00** | **2.90** | **2.74** | **2.78** | **2.62** | **2.48** | **2.59** | **2.70** | **2.66** | **2.80** | **3.17** | **2.98** | **2.97** | **3.09** | **2.89** | **2.84** | **C-96** |
| **C-97** | 0.30 | 0.22 | 0.16 | 0.07 | 0.06 | 0.05 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.10 | 0.20 | 0.24 | 0.39 | -- |
| **No. of chapters RCA>1** | **45** | **47** | **46** | **47** | **44** | **46** | **46** | **45** | **45** | **45** | **44** | **44** | **40** | **44** | **45** | **42** | **39** | **31** |

*Note*: For description of chapter please refer Table A2 in Annexure A

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