

Original Article

India's Trade Potential and Prospects with Australia

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ABSTRACT

Under the wave of regionalism, India is also going to sign free trade agreement with Australia to enhance economic cooperation. India's trade continued to increase with it. Volume of trade, as well as percentage share of India's trade, is significant with it. It is in this context, the present study tried to explore India's trade potential and prospects with Australia, used revealed comparative advantage (RCA) and trade intensity index (TII). Results show that India has trade specialization in the export of products gums, silk, footwear, pearls, metals, steel, and iron, etc., to it and cotton, pearls, precious stones, metals, coins, nickel, etc., from it. This comparative advantage helps not only to diversify product baskets but also lead to increase the volume of trade. Intensity of India's trade with Australia for total trade and imports by India from it is >1 . India has sustainable potential and prospects with this bloc.

Keywords: Regionalism, specialization, sustainable, trade, volume

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INTRODUCTION

Under the wave of regionalism^[1]/slow and failure of trade negotiations at the multilateral level, India^[2] like other developing countries has negotiated and signed various bilateral and regional trade agreements with great enthusiasm.^[3] India wants to boost trade relation with its extended neighbor, i.e., Australia. Both are connected by 3C's, i.e., curry, commonwealth, and cricket.^[3] No doubt, both share many commonalities such as democracy, free press, independent judicial system, membership in Commonwealth, passion for the game of cricket and business interests and dissimilarities also such as diverse in size, economic and social development, geography, political system, language, and culture, but their relation continued to improve and became closer.

The relationship has achieved far from its potential. The economic relationship between them has developed rapidly in recent years, particularly under the impetus of economic reforms and regionalism. India has become the fifth largest trading partner of Australia. Bilateral trade continued to increase at increasing rate as seen from Table 1. India's exports to Australia increased to US\$ 25,93,528 thousand (2014) from US\$ 1,77,027.5 thousand in 1990. Similarly imports

also increased to US\$ 99,34,691 thousand (2014) from US\$ 7,49,134.3 thousand in 1990 [Table 1]. India has throughout imported substantially more from Australia than exported to it. However, percentage-wise share is very small but continued to increase. Major imports of India from Australia are mineral fuels, oils, distillation products, etc., pearls, precious stones, metals, coins, ores, slag and ash, edible vegetables and certain roots and tubers and Inorganic chemicals, and precious metal compound, isotopes. Similarly, India's major exports to Australia are mineral fuels, oils, distillation products, etc., pearls, precious stones, metals, coins, etc., pharmaceutical products, vehicles other than railway, tramway and other made textiles articles, sets, worn clothing, etc.^[4] Australia has become a significant trading partner of India, but its potential has yet to be exploited. To further promote the bilateral trade and economic cooperation, two biggest naval powers of the Indian Ocean have started to forge a comprehensive bilateral relationship, i.e., FTA in the coming decades.

Objectives of the Study

1. To briefly explain India's relation with Australia,
2. To identify the comparative advantage/trade specialization in the exports and imports for commodities, at 2-digit level, to explore potential areas for further cooperation and
3. To explore intensity of India's trade with Australia.

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India's Relation with Australia: Historical Prospective

India and Australia trade link go back to the colonial period. India played a central role in nourishing the young colony, i.e., Australia and trade with it. Calcutta also came to the rescue of the new colony when in 1792 the Guardianship carrying food to Australia submerged leaving the colony without any food supplies. The Governor of Australia looked toward India for immediate help in dispatching the Atlantic to bring back all the food and stores it could carry. The Atlantic came back to Australia with a cargo of rice, wheat, and lentils. Likewise, Bengal received its first shipment of Australian coal in 1799, from Newcastle. In the first half of 19th century, as British bureaucrats, merchants, chaplains, and judges from the two colonies interacted directly; India became Australia's first direct contact. The links began to grow further, and a ship was visiting India from Sydney nearly every 4 days by 1840. It brought prosperity to Indian merchants as they supplied food, spices Anglo-Indian furniture. Australia became a new settlement place for many British colonial families posted in India at the beginning the 19th century.

The recent trade links between India and Australia began during the post-independence period. When India became independent in 1947, Australia had a labor government that held power until 1949 and relations with India were close and sympathetic. At India's invitation, two representatives from Australia came to India and participated at the 1947 Asia Relations Conference held in New Delhi. Their reports to the Australian government mentioned government differences on two critical issues, i.e., United Nations Security Council veto rights and treatment of newly defeated Japan and India's concern at Australia's restrictions on immigration. Their report led to produce little negativity in the relationship. From 1947-67, relations between these countries pivoted around the strong personalities of Prime Ministers Robert Menzies,^[5] the Anglophile Empire loyalist and Jawaharlal Nehru,^[6] the leader of struggles against colonialism in India and the Third World. Due to political and ideological dynamics and the varying perceptions of the Cold War politics, both the countries failed to establish any trade links. For decades due to clashes between two personalities, India decided to pursue a foreign policy of Non-alignment; this matched with Australia's pact alliance with the United States (Sharma, 2016).

Until the 1980s, head of both the governments visited each other's countries. After Prime Minister Rajiv Gandhi's bilateral visit to Australia in 1986, there was no prime ministerial visit to Australia from the Indian side for almost three decades. However, other important minister, heads of the state and the Vice President of India visited Australia. However, the end of the Cold War cleared political and ideological divergences and India's economic reforms in the 1990s began to change the perception of many Western developed countries about India.

Since the liberalization and economic reforms began to unfold, India has progressed and is being recognized at the international stage for economic, military, and political considerations. A developing India offers immense opportunities to Australia that has got resources and expertise to offer that India needs. Australia too began to view India as the next big destination for the business and market. The enormous opportunities in Australia and India trade relations began to be noticed by both the nations.^[3]

Over the past one and half decade, India's economic growth, its appetite for resources, energy demand, skill development, technical know-how, and investment have made it an important trade partner and export destination for Australia. The two countries established a strategic partnership and have strengthened multi-level interactions and cooperation. There have been frequent high-level visits between the two countries' leaders, with more than 10 ministerial visits annually. Since its inception in 2005, the foreign ministers' annual dialog between the two countries has been held 7 times and played an important role in promoting and coordinating bilateral cooperation. In November 2009, Australian Prime Minister Kevin Rudd visited India, and the two sides upgraded their bilateral relationship to a strategic partnership.

To meet the needs of a rapidly developing bilateral relationship, India opened consulates in Melbourne and Perth in 2006 and 2011, respectively; Australia expanded its High Commission in New Delhi, upgraded its consulates in Chennai and Mumbai, and either opened or expanded trade representative offices in eight other Indian cities. In their two summit-level meetings last year, Prime Minister Narendra Modi and Prime Minister Tony Abbott decided to prioritize and enhanced the India-Australia relationship to a comprehensive level, i.e., signing of FTA. The political stability of the new government in India and the political will at the top level of Australian and Indian leadership augur well for a comprehensive relationship with expansion in the sectors which have yet to form a considerable chunk of Australia-India trade.

REVIEW OF LITERATURE

Ariff and Hill analyzed the growth and trade performance of ASEAN manufactured exports only, future prospects and structural changes in revealed comparative advantage (RCA), used trade intensity index (TII), and RCA. Balassa and Noland examined the changing pattern of trade specialization of Japan and the United States, applied Balassa index of RCA and net export index (NEI). Both countries have also increased their comparative advantage in high technology products overtime. Khwaja and Mahmood explored the prospects of trade expansion between ASEAN and SAARC countries, employed RCA, TII, and trade complementarity index (TCI). Bojnec analyzed the pattern and potential of regional and global

agricultural trade flows, with special emphasis on EU-15, Asia, NAFTA, Africa, Caribbean, and Oceania, utilized intra-industry versus inter-industry trade with Grubel and Lloyd, RCA and international agricultural terms of trade. Utkulu and Seymen estimated competitiveness and the pattern of trade, trade specialization for Turkey to EU, embodied RCA Sikdar evaluated trade prospects, nature, structure, and viability of trade between two neighboring countries India and Bangladesh, using TII, RCA, and TCI.

Zhou *et al.* investigated the major trends and changes in the bilateral agricultural trade between Australia and China at disaggregate level and also calculated trade intensity, comparative advantage and trade complimentary between them to address the likely prospects of trade. Trade between them has been increased at increasing rate. It stated that both will trade greater than the expected level. Basu and Datta analyzed trend in comparative advantage, similarity, and complementarity in trade and reasons behind persistent bilateral trade deficit of Bangladesh with India since its formation in 1971 applied RCA, cosine measure and GL indices for intra-industry trade. Both have trade specialization in unskilled labor-intensive products with $RCA > 1$. Makochekanwa studied the pattern of trade specialization for Botswana that has undergone a structural shift between 1999 and 2004 due to openness and competitiveness in the world.

Boughanmi used a gravity model to investigate the trade potential of the Gulf Cooperation Council countries within the context of old and emerging preference trade arrangements in the region of Middle East and North African countries (19 countries). Akhtar *et al.* analyzed the trade pattern, trend, performance, and trade specialization in the footwear industry of Pakistan and compared it with China and India, Balassa index of RCA, both at 2-digit and 4-digit level of industrial classification for the time period 1996-2006. Chanda and Chaitanya analyzed the viability of a free trade agreement in goods between India and China, utilized RCA and TII. Bhattacharyya tried to quantify the extent to which India has a comparative advantage in the vegetable, fruit, and flower industries in the markets of Asian, EU, and North America (USA and Canada) as compared to South-East Asian countries.

Raghuramapatruni (2011) analyzed potential and prospects of trade within SAARC countries employed RCA and TII. Political conflicts between India and Pakistan should be settled as soon as possible because these two countries have great influence on other countries. Mehmood used Univariate autoregressive integrated model of model to forecast Pakistan's export potential and prospects with seven members of SAARC over the next few years. Bano *et al.* the first to used TII and trade potential method to analyze trade prospects and potential between New Zealand and ASEAN countries for the period 1980-2010. The results of TII showed that there is considerable variation in export

and import intensity index (III) between them, but expected to increase over time. These studies have analyzed particular country's trade prospects with various countries individually and regional trading blocs by taking one commodity, utilized gravity model, augmented gravity model, Aquino Index, Grubel-Lloyd index, RCA, TII, and trade complementarity index. No study has been carried to calculate India's trade potential and prospects with Australia. It is in this context the present study attempt to make an effort in this direction.

MATERIALS AND METHODS

The secondary data have been used to attain the stated objectives. Data to calculate RCA, data have been collected at 2-digit level mentioned in standard international trade classification revision-2, United Nations Conference on Trade and Development (UNCTAD) database for the period 2001-2014. This data have been extracted from International Trade Centre (ITC) which is a joint agency of the WTO and the United Nations (www.trademap.org/Index.aspx). Data for India's trade intensity with Australia have been collected (for the period 1990-2014) from various official sources, i.e., World Integrated Trade Solution (World Bank) (www.wits.worldbank.org/lang=en), Handbook of Statistics on the Indian Economy (Reserve Bank of India) (www.rbi.org.in), Direction of Trade Statistics (International Monetary Fund), Ministry of Commerce and Industry (Government of India), UNCTAD Handbook of Statistics (United Nations), UN Comtrade Database (United Nations Statistics Division), etc.

Methods

The present study calculated India's trade prospects with Australia and the analytical tools/methods used for the study are as follows:

- a. RCA: It tells about the relative trade performance of individual countries in particular commodities. It shows how competitive is a product in countries export compared to the products share in world trade. A product with high RCA is competitive and can be exported to countries with low RCA. Balassa's formulation RCA for exports (RCAX) is calculated as below:

$$RCAX = \frac{(X_{ij}^k / X_{ij})}{(X_j^k / X_j)}$$

Where,

X_{ij}^k = Export of product k by country i (India) to another Region/country j,

X_{ij} = Total exports of country i (India) to the reference group j,

X_j^k = Exports of product k by the reference group j,

X_j = Total exports of reference group j.

The RCA for imports (RCAM) is calculated as below:

$$RCAM = \frac{(m_{ij}^k / M_{ij})}{(m_j^k / M_j)}$$

Where,

m_{ij}^k = Import of product k by country i (India) from another Region/country j,

M_{ij} = Total imports of country i (India) from the reference group j,

m_j^k = Imports of product k by the reference group j,

M_j = Total imports of reference group j.

- b. TII: Trade potential of any country can primarily be measured with the help of Kojima (1964) TII with its partners. It tries to establish the relative trade performance of a trading partner in relation to a country's trade with the rest of the world. When the trade intensity is high between two countries, it shows that both have more potential of trade with each other. It is defined as the share of one country's exports (trade) going to a partner country divided by the share of world trade going to the partner. It is calculated as:

$$T_{ij} = \frac{[(X_{ij} + M_{ij}) / (X_i + M_i)]}{[(X_{wj} + M_{wj}) - (X_{ij} + M_{ij}) / (X_w + M_w) - (X_i + M_i)]}$$

Where,

T_{ij} = Total TII of country i with country j,

X_{ij} = Exports of country i to country j,

M_{ij} = Imports of country i from country j,

X_i = Total exports of country i,

M_i = Total imports of country i,

X_{wj} = Total world exports to country j,

M_{wj} = Total world imports from country j,

X_w = Total world exports,

M_w = Total world imports.

The calculation for the TII for exports is as follows:

$$X_{ij}^a = \frac{[X_{ij} / X_i]}{[(M_j - M_{ji}) / (M_w - M_i)]}$$

Where,

X_{ij}^a = Export TII of country i with country j,

X_{ij} = Exports of country i to country j,

X_i = Total exports of country i,

M_j = Total imports of country j,

M_{ji} = Imports of country j from country i,

M_w = Total world imports,

M_i = Total imports of country i.

The calculation for the TII for imports is as follow:

$$M_{ij}^a = \frac{[M_{ij} / M_i]}{[(X_j - X_{ij}) / (X_w - X_i)]}$$

Where,

M_{ij}^a = Import TII of country i with country j,

M_{ij} = Imports of country i from country j,

M_i = Total imports of country i,

X_j = Total exports of country j,

X_{ji} = Exports of country j to country i,

X_w = Total world exports,

X_i = Total exports of country i.

RESULTS AND DISCUSSION

a. Results of RCAX

Table 2 summarizes the products which have a comparative advantage ($RCA > 1$) in India's export to Australia. Value > 1 for RCAX indicates that India should export that particular product to Australia and vice versa.

- As is seen from Table 2, India has sustainable RCA ($RCA > 1$) in the export of products with code [Annexure 1] 3, 6, 9, 10, 13, 14, 19, 20, 23, 25, 29, 30, 32, 33, 34, 38, 39, 40, 42, 46, 49, 50, 53, 54, 55, 56, 57, 58, 59, 61, 62, 63, 64, 66, 67, 68, 69, 71, 72, 73, 82, 83, 85, 92, 94, and 95 to Australia since 2001 [Annexure 2].
- India has no trade specialization in products with code 7, 8, 24, 48, 52, 80, and 81, i.e., RCA is < 1 as seen from Annexure 2.
- Products with code 11, 21, 27, 37, 43, 60, 84, 86, and 87 started to gain RCA in 2011, 2007, 2015, 2006, 2015, 2005, 2004, 2013, and 2007, respectively.

b. Results of RCAM

Table 3 summarizes products which have a comparative advantage ($RCA > 1$) in India's imports from Australia.

- As is seen from Table 3, India has no trade specialization in the imports of products with code 50, 72, 80, and 99 [Annexure 1] from Australia since 2001 [Annexure 3].
- India has a sustainable comparative advantage ($RCA > 1$) in the imports of products with code 7, 8, 26, 27, 41, 47, 51, 52, 71, 75, 78, and 79 from Australia as seen from Annexure 3.
- Product with code 11, 28, and 32 had no RCA since 2001 but started to gain in 2009, 2005, and 2003, respectively [Annexure 3].

c. Results of TII

Intensity of trade index is used to find relative intensity of trade of India with Australia for total trade, exports from India to Australia and for imports by India from Australia. A unitary value, i.e., TII = 1, shows that there

Table 1: Bilateral trade between India and Australia (US\$ thousand)

Year	Export from India to Australia	Import of India from Australia	Export from Australia to India	Import of Australia from India
1990	1,77,027.5	7,49,134.3	2,45,655.2	2,16,132.6
1991	2,02,899.7	5,60,919.4	2,28,135.4	1,99,620.4
1992	2,49,365.3	9,31,629.8	5,46,058.6	2,35,112.5
1993	2,45,222.5	6,57,062.6	5,24,355.3	2,70,565.4
1994	3,46,418.3	9,15,032.8	6,31,086.4	3,48,780.9
1995	3,74,501.5	10,19,564	7,99,906	4,08,627.7
1996	3,85,317.6	13,16,520	9,42,436.3	4,38,112.2
1997	4,38,342.1	14,83,560	9,52,662.3	4,64,626.6
1998	3,87,255.8	14,46,305	10,53,899	4,20,006.2
1999	4,03,364.9	10,87,737	8,80,198	4,31,021
2000	3,97,404.6	10,49,818	10,59,581	4,52,753.1
2001	3,98,279.8	12,43,357	12,52,743	4,45,302.1
2002	4,86,796	13,46,295	13,50,323	5,41,361.5
2003	5,57,989	20,36,946	21,75,138	6,75,884.6
2004	6,61,559.2	35,49,558	39,91,108	8,85,286.4
2005	8,26,594.1	48,99,710	53,22,623	9,95,383.1
2006	8,86,630.9	65,02,159	66,44,789	10,23,494
2007	10,83,025	76,80,940	78,02,195	12,96,619
2008	13,47,332	95,68,942	1,13,79,978	16,42,098
2009	14,10,197	1,20,17,049	1,13,63,671	16,67,570
2010	16,50,865	1,20,61,235	1,51,09,408	19,12,249
2011	20,95,772	1,34,16,619	1,57,50,321	22,97,365
2012	26,33,034	1,29,28,894	1,26,11,730	26,77,047
2013	23,97,686	1,08,71,894	84,53,698	22,82,313
2014	25,93,528	99,34,691	79,95,340	27,68,026

Source: World Integrated Trade Solution (WITS)

Table 2: Products with value of RCA>1 for exports to Australia by India

Product Code ^[7]	RCA characteristics ^[8]
3	Except from 2008 to 2012, India has RCA in this product since 2001. The trend of RCA is in decreasing mode
6	India has sustainable trade specialization in the export of this product to Australia since 2001
7	The product was having a comparative advantage since 2003 but lost thereafter. RCA started to gain in 2005 and continued to remain till 2008. Again after it lost trade specialization in the export of this product to Australia and never gain it again
8	India had RCA in the export of this product to Australia since 2001 but lost after 2012
9	The product has very strong and sustainable RCA since 2001
10	Except 2007, India has no comparative in the export of this product to Australia since 2001
11	The product had trade specialization since 2001 but started to gain after 2011 and continued to maintain it
12	Except from 2005 to 2008, India has no trade specialization in the export of this product to Australia since 2001
13	There is very strong and sustainable comparative advantage in this product since 2001
14	The product has sustainable trade specialization since 2001
19	RCA is very strong in this product since 2001. The trend of RCA is on increasing mode
20	There is trade specialization in the export of this product since 2001

(Contd...)

Table 2: (Continued)

Product Code ^[7]	RCA characteristics ^[8]
21	There was no comparative advantage in this product since 2001 but started to develop in 2007. India continued to maintain its specialization in this product
23	Except 2009, there is no RCA in the export of this product to Australia by India since 2001
24	India had strong and sustainable RCA in this product since 2001-2014. Thereafter, India lost its comparative advantage in this product
25	The product has sustainable trade specialization since 2001
27	India had no RCA in this product since 2001. RCA remained <1 till 2014 and gained thereafter, i.e., 2015
29	India has very strong and sustainable comparative advantage in the export of this product to Australia since 2001
30	Except 2003 and 2004, there is RCA in this product since 2001
32	India has sustainable trade specialization in this product since 2001
33	There is RCA in this product since 2001. The trend of RCA is in increasing mode
34	India has strong and sustainable RCA in this product since 2001
37	There was no trade specialization in the export of this Australia since 2001. RCA started to develop in 2006 and continued to be >1 thereafter
38	The product has strong and sustainable RCA since 2001
39	There is trade specialization (RCA > 1) in the export of this product to Australia since 2001
40	India has strong and sustainable RCA in this product since 2001
42	The product has very strong comparative advantage since 2001
43	India had no RCA in this product since 2001 and continued to be <1 till 2014. Thereafter, India gained RCA in this product
45	RCA was zero in this product since 2001 and remained 0 for many years. India started to gain comparative advantage in the export of this product to Australia in 2008 but maintained it till 2014. After 2014, the product lost its specialization
46	India has strong and sustainable trade specialization in this product since 2001
48	There was no comparative advantage in the export of this product since 2001. India started to gain advantage in 2006. India enjoyed benefit in the export of this product from 2006 to 2013 and lost thereafter. India has no comparative advantage in the export of this product to Australia since 2001 except
49	India has sustainable trade specialization in this product since 2004
50	The product is having very strong comparative advantage since 2001
52	India had trade specialization since 2001 and sustained it from 2001 to 2010. Thereafter, product lost its comparative advantage
53	India has very strong sustainable RCA since 2001. The trend of RCA is in increasing mode
54	India has trade specialization in this product since 2001
55	There is sustainable RCA in this product since 2001
56	India has sustainable RCA in this product since 2001. The trend of RCA is in increasing mode
57	There is a comparative advantage in the export of this product since 2001
58	India has strong RCA in this product since 2001
59	There is RCA in this product since 2001
60	India has a comparative advantage in the export of this product to Australia since 2005
61	The product is having sustainable RCA since 2001
62	India has comparative advantage in this product since 2001
63	India has sustainable trade specialization in this product since 2001
64	The product has strong RCA in this product since 2001
65	There is trade specialization in this product since 2002

(Contd...)

Table 2: (Continued)

Product Code ^[7]	RCA characteristics ^[8]
66	Except from 2003 to 2004, 2006 and 2012, there is RCA in this product since 2001
67	India has trade specialization in the export of this product to Australia since 2001
68	India has strong trade specialization in this product since 2001
70	There is a comparative advantage in the export of this product to Australia by India since 2001
71	There is sustainable RCA in this product since 2001
72	India has RCA in this product since 2001
73	The product has comparative advantage (RCA>1) since 2001
80	The product has no RCA since 2001 (except for 2005 to 2006, 2008 and 2010)
81	There is no comparative advantage in this product since 2002
82	India has sustainable RCA in this product since 2001
83	RCA is strong and sustainable in this product since 2001
84	India has trade specialization in the export of this product to Australia since 2004
85	India has trade specialization in this product since 2001
86	The product has RCA since 2013
87	India has RCA in this product since 2007
89	The product has no comparative advantage since 2001 (except 2005)
90	India has no comparative in the export of this product to Australia since 2001 (Except from 2009 to 2012)
92	India has sustainable RCA in this product since 2001
94	There is trade specialization in the export of this product to Australia by India since 2001
95	India has sustainable RCA in this product since 2001
96	The product has comparative since 2001
97	India has strong RCA in this product since 2003

RCA: Revealed comparative advantage**Table 3: Products with value of RCA>1 for imports by India from Australia**

Product code ^[9]	RCA characteristics ^[10]
7	There is strong and sustainable RCA (RCA>1) in this product since 2001
8	Except 2004 and 2005, the product has trade specialization since 2001
10	India had RCA in this product since 2001 but lost thereafter. The product started to gain RCA in 2006 but failed to maintain it. In 2013, trade specialization again started to develop in this product and continued to be>1
11	India has comparative advantage in the import of this product from Australia since 2001 instead of producing it domestically
17	Except 2005, India has no trade specialization in this product since 2001
26	The product has very strong and sustainable RCA since 2001
27	RCA is sustainable and strong in this product since 2001
28	There was no trade specialization in this product since 2001 but started to develop in 2005. Except for 2008 and 2009, India has comparative advantage in import of this product from Australia
32	India has no trade specialization in this product since 2001 but gained in 2003. India maintained it for 3 years and lost thereafter. After 2009, India gained RCA in this product and continued to maintain it
37	Except for 2004, India has trade specialization in this product since 2003
41	There is comparative advantage (RCA>1) in the import of this product from Australia instead of producing it domestically since 2001
47	India had trade specialization in this product since 2001 but lost thereafter. RCA started to gain in the last, i.e., 2013 and maintained it
50	India has no trade specialization in this product since 2001 (except for 2002 and 2003)

(Contd...)

Table 3: (Continued)

Product code ^[9]	RCA characteristics ^[10]
51	The product has strong and sustainable RCA since 2001
52	India has trade specialization in this product since 2001 but failed to maintain it. India gained RCA in 2011 and continued to maintain it
71	There is RCA in this product since 2001
72	India has no trade specialization in this product since 2003
74	The product had RCA since 2001 but failed to maintain it. RCA gained in 2004 and maintained it till 2011 and lost thereafter
75	There is sustainable comparative advantage in this product since 2001
76	The product had strong RCA since 2001 and remained it for 1 year (2002). Thereafter, RCA lost but started to gain in 2007. However, in 2010, this product lost its specialization and regained in 2012. India has comparative advantage in the import of this product from Australia
78	India has very strong and sustainable comparative advantage in the import of this product from Australia since 2001. The trend of RCA is on increasing mode
79	India has strong and sustainable RCA in this product since 2001
80	There is no RCA in this product since 2001 (except for 2007 and 2008)
99	Except 2001, India has no trade specialization in this product since 2002

RCA: Revealed comparative advantage

Table 4: Intensity of trade index of India with Australia

Year	TII for total trade between India and Australia	TII for exports by India to Australia	TII for imports by India from Australia
1990	1.4609	0.3401	1.1111
1991	2.4272	0.5779	1.3449
1992	2.0542	0.7296	2.2355
1993	1.5853	0.7450	1.9157
1994	2.0147	1.0038	2.5564
1995	3.6541	0.9744	2.4827
1996	2.2133	0.9522	2.8191
1997	2.3201	1.0991	3.0491
1998	2.3165	1.0246	3.2601
1999	1.6950	0.9468	2.2027
2000	1.3985	0.8482	2.2185
2001	1.6193	0.8801	2.6857
2002	1.5409	0.8641	2.6381
2003	1.8175	0.8020	3.4502
2004	2.1870	0.7358	4.4051
2005	2.1266	0.6847	3.9367
2006	2.2522	0.6306	4.1387
2007	2.1545	0.6188	3.9860
2008	1.8075	0.5867	3.0009
2009	2.3750	0.5881	4.3036
2010	1.8104	0.5487	2.8804
2011	1.4540	5.7444	2.2455
2012	1.3814	0.6282	2.1010
2013	1.2048	0.5401	1.9102
2014	1.0174	0.5778	1.4464

TII: Trade intensity index

is no difference in importance to a nation i in supplying imports to nation j . TII with a value >1 ($TII >1$) indicates higher bilateral trade that can be expected on the basis of their share in world trade. When the value of intensity is high between two countries, it shows that both have more potential of trade with each other.

As is seen from Table 4, there are fluctuations in total TII and III. Intensity of India trade with Australia for total trade and imports by India from it is >1 since 1990. Total TII is recorded highest in 1995. Except 1994, 1997, and 1998, India has no intensity of trade with for exports by India to it. India has sustainable trade prospects with Australia and is a net importer of it.

DISCUSSION

India has sustainable comparative advantage ($RCA >1$) in the export of products Lac, gums, resins, vegetable saps, silk, textile fibres, paper yarn, woven fabric, wadding, carpets textile floor, knit or crochet, footwear, pearls, precious stones, metals, steel and iron, electronic equipment, musical instruments, furniture, lighting, toys, games, sports requisites salt, sulfur, stone, plaster, lime and cement, soaps, lubricants, waxes, candles, modeling pastes, etc., and edible vegetables, fruit, nuts, peel of citrus fruit, melons, wool, animal hair, horsehair yarn, cotton, pearls, precious stones, metals, coins, nickel and articles, lead and articles, zinc and articles, mineral fuels, oils, pulp of wood, fibrous cellulosic material, etc., from it. This comparative advantage helps not only to diversify product baskets but also lead to increase the volume of trade. Intensity of trade India with Australia for total and for imports from it is >1 . India's export intensity is <1 except 1994, 1997, and 1998. India has sustainable and strong potential and prospects with Australia. Australia is India's major trading partner.^[11-23]

CONCLUSION

India's trade with Australia continued to increase with increasing rate. Percentage share of exports to Australia and imports from it increased, so it becomes relevant to analyze India's trade prospects with Australia. From above discussion, it can be concluded that India has trade sustainable and strong potential and prospects with Australia due to have trade specialization in many products and high rate of intensity.

RESEARCH IMPLICATIONS AND POLICY IMPLICATIONS

India has to focus on such products in which it has comparative advantage and export to Australia. This will help both in increasing volumes and achieving diversification of trade with Australia. It will enlarge its market size and competitive in the

product. India has to maintain its specialization in products which have $RCA >1$ but also have to develop comparative advantage in other products. Off late, some of the goods from secondary sector have been added in exports from India to Australia.

Limitation of the Study

As I calculated India's trade prospects with Australia at 2-digit level from 1990 to 2015, similarly trade prospects can also be calculated at 4, 6, and 8 digit level.

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ANNEXURE

Annexure 1: Product codes-2 digit SITC, revision 2

Product code	Product description	Product code	Product description
1	Live animals	50	Silk
2	Meat and edible meat offal	51	Wool, animal hair, horsehair yarn, and fabric thereof
3	Fish, crustaceans, molluscs, aquatic invertebrates nes	52	Cotton
4	Dairy products, eggs, honey, edible animal product nes	53	Vegetable textile fibers nes, paper yarn, woven fabric
5	Products of animal origin	54	Manmade filaments
6	Live trees, plants, bulbs, roots, cut flowers, etc.	55	Manmade staple fibers
7	Edible vegetables and certain roots and tubers	56	Wadding, felt, nonwovens, yarn, twine, cordage, etc.
8	Edible fruit, nuts, peel of citrus fruit, melons	57	Carpets and other textile floor coverings
9	Coffee, tea mate, and spices	58	Special woven or tufted fabric, lace, tapestry, etc.
10	Cereals	59	Impregnated, coated or laminated textile fabric
11	Milling products, malt, starches, inulin, wheat gluten	60	Knitted or crocheted fabric
12	Oilseed, oleagic fruit, grain, seed, fruit, etc., nes	61	Articles of apparel, accessories, knit or crochet
13	Lac, gums, resins, vegetable saps and extracts nes	62	Articles of apparel, accessories, not knit or crochet
14	Vegetable plaiting materials, vegetable products nes	63	Other made textiles articles, sets, worn clothing, etc.
15	Animal, vegetable fats, and oils, cleavage products, etc.	64	Footwear, gaiters and the like, parts thereof
16	Meat, fish, and seafood food preparations nes	65	Headgear and parts thereof
17	Sugars and sugar confectionery	66	Umbrellas, walking sticks, seat sticks, whips, etc.
18	Cocoa and cocoa preparations	67	Bird skin, feathers, artificial flowers, human hair
19	Cereal, flour, starch, milk preparations and products	68	Stone, plaster, cement, asbestos, mica, etc., articles

(Contd...)

Annexure 1: (Continued)

Product code	Product description	Product code	Product description
20	Vegetable, fruit, nut, etc., food preparations	69	Ceramic products
21	Miscellaneous edible preparations	70	Glass and glassware
22	Beverages, spirits, and vinegar	71	Pearls, precious stones, metals, coins, etc.
23	Residues, wastes of food industry, animal fodder	72	Iron and steel
24	Tobacco and manufactured tobacco substitutes	73	Articles of iron or steel
25	Salt, sulfur, earth, stone, plaster, lime and cement	74	Copper and articles thereof
26	Ores, slag, and ash	75	Nickel and articles thereof
27	Mineral fuels, oils, distillation products, etc.	76	Aluminum and articles thereof
28	Inorganic chemicals, precious metal compound, isotopes	78	Lead and articles thereof
29	Organic chemicals	79	Zinc and articles thereof
30	Pharmaceutical products	80	Tin and articles thereof
31	Fertilizers	81	Other base metals, cermets, articles thereof
32	Tanning, dyeing extracts, tannins, derivatives, pigments, etc.	82	Tools, implements, cutlery, etc., of base metal
33	Essential oils, perfumes, cosmetics, toiletries	83	Miscellaneous articles of base metal
34	Soaps, lubricants, waxes, candles, modeling pastes	84	Machinery, nuclear reactors, boilers, etc.
35	Albuminoids, modified starches, glues, enzymes	85	Electrical, electronic equipment
36	Explosives, pyrotechnics, matches, pyrophoric, etc.	86	Railway, tramway locomotives, rolling stock, equipment
37	Photographic or cinematographic goods	87	Vehicles other than railway, tramway
38	Miscellaneous chemical products	88	Aircraft, spacecraft, and parts thereof
39	Plastic and articles thereof	89	Ships, boats, and other floating structures
40	Rubber and articles thereof	90	Optical, photo, technical, medical, etc., apparatus
41	Raw hides and skins (other than furskins) and leather	91	Clock and watches and parts thereof
42	Articles of leather, animal, gut, harness, travel goods	92	Musical instruments, parts, and accessories
43	Furskins and artificial fur manufactures thereof	93	Arms and ammunition, parts and accessories thereof
44	Wood and articles of wood, wood charcoal	94	Furniture, lighting, signs, prefabricated buildings
45	Cork and articles of cork	95	Toys, games, sports requisites
46	Manufactures of plaiting material, basketwork, etc.	96	Miscellaneous manufactured articles
47	Pulp of wood, fibrous cellulosic material, waste, etc.	97	Works of art, collectors pieces, and antiques
48	Paper and paperboard, articles of pulp, paper, and board	99	Commodities not elsewhere specified
49	Printed books, newspapers, pictures, etc.		

Source: International Trade Centre, Geneva (ITC) http://www.trademap.org/Bilateral_TS.aspx?nvpm=1|699|699||TOTAL||2|1|1|1|2|1|1|1|1, SITC: Standard international trade classification

Annexure 2: India's RCA for exports to Australia

Product code	Australia						
	2001	2002	2003	2004	2005	2006	2007
1	0	0.0016	0	0.002	0	0	0.000669
2	0	0.0014	0	0.0002	0.0008	0.0005	0.0034
3	4.2185	3.16	3.4206	3.47	3.2234	3.5340	2.47
4	0.0375	0.0041	0.0404	0.0129	0.0460	0.0764	0.0720
5	0.4217	0.0968	0.0826	0.0498	0.1053	0.7466	0.0821
6	2.9380	3.21	5.1052	5.83	5.0233	7.6942	8.64
7	0.8456	0.909	1.3643	0.859	1.2561	1.0933	1.24
8	1.7467	2.36	0.8254	1.11	1.6571	1.8459	2.92
9	57.7793	90.1	126.2176	13.1	160.368	165.163	18.1
10	0.0794	0.0823	0.1349	0.100	0.1989	0.2621	1.15
11	0.0137	0.0669	0.1223	0.183	0.2047	0.385	0.442
12	0.5250	0.423	0.5943	0.690	1.3248	1.5930	8.62
13	27.9382	30.0	45.6169	33.8	52.4870	113	15.0
14	13.6380	1.69	15.5676	27.9	46.7944	28.6223	34.7
15	0.5994	0.755	0.6505	0.458	0.7529	0.77718	0.760
16	0.1489	0	0.0446	0.137	0.04	0.2324	0.474
17	0.1438	0.326	9.3826	0.371	0.5147	0.5318	1.45
18	0.0076	0.00436	0.0271	0.0175	0.1158	0.1279	0.238
19	1.0503	1.32	0.9383	0.866	1.3545	2.0785	2.27
20	1.0975	1.73	1.5969	2.06	2.8788	3.4537	3.73
21	0.9542	0.601	0.4424	0.434	0.4630	0.8199	1.05
22	0.0120	0.0207	0.0107	0.00566	0.0032	0.0057	0.00550
23	0.0951	0.0672	0.1738	0.253	0.4808	0.5585	0.918
24	7.6685	3.88	8.9726	4.12	6.2256	9.0023	7.66
25	2.7753	1.93	2.6782	2.82	2.3028	2.5763	2.88
26	0.0549	0.139	0.2113	0.0303	0.1060	0.1490	0.128
27	0.0004	0.0169	0.0037	0.00595	0.0089	0.0252	11.7
28	0.1802	0.238	0.1700	0.271	0.2752	0.2221	0.317
29	12.3512	20.1	17.1653	23.5	24.329	29.9430	20.3
30	1.1751	0.958	0.7832	0.776	1.2944	1.3127	1.27
31	0.0751	0.141	0.0987	0.174	0.0283	0.0360	0.0112
32	2.6209	2.52	2.2539	2.19	2.4303	3.2665	3.42
33	1.8618	1.38	1.4108	1.39	1.9914	2.5945	2.08
34	3.4833	2.41	1.6839	1.67	2.5244	2.5353	2.46
35	0.0819	0.195	0.1448	0.237	0.1756	0.0740	0.149
36	0.0568	0.0393	0	0	0.0053	0.0336	0
37	0.1118	0.167	0.1288	0.135	0.7593	1.6235	1.04
38	6.5575	4.53	5.4024	7.02	9.9565	9.8537	6.02
39	2.3538	1.96	2.7467	2.50	2.6559	3.4881	2.95
40	7.6778	14.6	15.9788	18.7	21.4467	26.0323	14.9
41	0.8886	0.902	0.5665	0.423	0.4459	0.3969	0.300
42	114.7669	11.2	103.0704	136.	141.188	135.7653	121

(Contd...)

Annexure 2: (Continued)

Australia							
2008	2009	2010	2011	2012	2013	2014	2015
0	0.00724	0	0	0	0	0	0
0.0017	0.0001	0.0018	0.00001	0	0	0	0.00006
0.5223	0.398	0.3422	0.5967	0.8096	1.6033	1.0773	0.2296
0.1042	0.117	0.1549	0.1704	0.1598	0.1381	0.1519	0.0873
0.1835	0.0486	0.1095	0.1312	0.06	0.0289	0.0193	0.0150
11.553	10.2	10.1904	15.7817	14.0661	21.1836	23.5214	12.4253
1.0347	0.0801	0.8966	0.5967	0.4011	0.6015	0.6032	0.25407
4.0013	1.38	1.7010	2.7980	1.2036	0.5521	0.3963	0.1369
194.256	15.4	157.0278	178.7479	160.1877	149.4058	125.997	81.0473
0.3227	0.312	0.2486	0.3196	0.3240	0.5358	0.5962	0.3530
0.1788	0.452	0.5982	0.8388	2.0843	1.3836	0.9719	0.7255
1.8073	0.966	1.3606	0.7974	0.5177	0.6671	1.1007	0.5529
155.27	85.9	159.3754	394.5127	1403.138	309.131	141.5706	86.7459
42.192	60.2	65.7931	86.9297	27.2727	19.6803	288.64	29.7385
0.7070	0.613	0.8199	0.8672	0.5859	0.5833	0.9767	0.8649
0.6444	0.592	0.5432	0.5081	0.6983	0.5755	0.0622	0.0126
0.4969	0.373	0.3482	0.4754	0.4258	0.6519	0.7737	0.6114
0.2202	0.196	0.2012	0.1307	0.0720	0.0417	0.0413	0.1450
1.9824	1.76	1.6673	1.9697	1.8582	1.8161	2.0743	1.3367
5.0558	5.73	7.3078	7.2936	7.1190	9.5913	10.019	7.0802
1.5883	1.78	1.7857	2.5449	2.5140	3.7514	2.9823	1.1871
0.0666	0.0537	0.0180	0.0331	0.0277	0.04796	0.0520	0.0221
0.7852	1.30	0.9011	0.2631	0.2265	0.2139	0.1213	0.0836
14.1822	13.2	12.4542	10.4202	4.1919	2.6395	2.3151	0.4015
4.8550	4.29	4.0457	4.6079	3.1869	5.0386	3.3044	1.3495
0.0020	0.136	0.0070	0.0064	0.0003	0.0002	0.0002	0.0003
0.0069	0.0961	0.0100	0.1775	0.3008	0.0948	0.5436	1.3260
0.3899	0.234	0.1748	0.2436	0.1352	0.2502	0.2611	0.1558
32.3022	31.1	33.5705	50.428	30.540	29.086	18.107	9.6244
1.6717	2.19	2.7953	3.7563	3.3278	5.7077	6.8974	6.4961
0.0067	0.0299	0.0329	0.0273	0.8509	0.1325	0.3155	0.1554
5.5357	3.25	5.4512	5.5178	3.8195	4.1758	3.7479	2.2352
2.5131	3.88	3.2232	3.5363	2.8480	3.0077	2.8974	2.7390
35.433	3.12	5.3359	5.3852	4.5706	6.7380	5.8818	2.9568
0.0764	0.148	0.1889	0.1170	0.2727	0.1101	0.1484	0.14867
0.2739	0.0716	0.0031	0.0510	0.0430	0.1107	0	0.0040
1.0882	1.16	2.9248	3.2018	1.9837	1.7487	0.6277	0.9399
10.6769	8.18	11.763	10.4408	7.9211	13.1801	11.731	11.4214
2.7793	3.17	6.2833	5.8538	4.8715	6.5476	5.1082	3.57375
15.7970	14.2	26.2335	31.1805	24.858	25.9497	24.1581	14.605
0.31799	0.261	0.2607	0.2899	0.1813	0.1707	0.1667	0.1112
155.8742	127	136.2077	124.735	79.679	103.8654	93.895	63.9003

(Contd...)

Annexure 2: (Continued)

Product code	Australia						
	2001	2002	2003	2004	2005	2006	2007
43	0	0	0	0.567	0.2784	0.6002	0
44	0.0873	0.0687	0.0928	0.114	0.1201	0.1375	0.163
45	0	0	0.0766	0	0	0	0.788
46	59.4538	74.8	32.3969	124.	15.5042	3.5723	4.38
47	0.05313	0	0	0.0025	0	0	0.0007
48	0.7014	0.889	0.4071	0.432	0.7296	1.025174	1.02
49	0.6015	0.507	0.7527	1.15	1.1467	1.1777	1.14
50	1276.5	33.2	419.5978	417	557.7698	361.8	436
51	0.0343	0.0309	0.0358	0.0830	0.1133	0.0779	0.0690
52	2.2160	5.74	4.4337	3.34	2.4736	2.5304	4.39
53	619.8229	63.6	505.6311	436	868.6822	605.8839	556
54	16.1764	19.0	19.0538	13.8	14.6183	13.8573	10.4
55	23.5582	24.6	27.3450	25.2	17.7643	19.5963	16.8
56	4.7209	6.69	5.1537	6.81	11.1643	18.5262	17.6
57	43.4484	33.1	33.8385	41.9	47.7017	78.4315	56.2
58	62.0388	40.2	16.8015	19.1	32.0226	32.0787	15.5
59	2.0493	1.99	1.2498	3.46	2.6872	1.3624	0.973
60	0.0387	0.251	0.3098	0.199	2.6472	2.2995	4.92
61	23.9961	22.7	15.1707	17.0	16.207	18.9739	15.7
62	59.9805	69.6	43.0894	45.1	57.089	55.6344	40.9
63	73.931	67.4	74.0101	80.6	91.1928	100.4988	75.3
64	47.266	54.7	31.6064	32.5	44.477	43.8599	40.8
65	0.74298	2.28	1.5765	1.66	1.6352	5.515	3.46
66	0.0735	0	1.8245	1.06	0.0608	1.4649	0.145
67	11.5639	15.1	10.0529	15.4	7.8604	18.1814	3.98
68	53.0131	47.1	50.3269	38.3	41.7735	45.1974	36.4
69	5.6641	6.27	7.2333	3.29	4.7159	8.2132	7.07
70	11.537	13.3	7.7071	5.54	4.5341	6.7763	7.99
71	1.4455	1.59	1.7101	2.06	2.2386	1.7917	1.67
72	2.1626	2.36	2.90	3.90	8.1579	4.9402	2.66
73	9.7654	8.66	8.8290	11.9	10.2829	11.1806	10.3
74	0.5519	0.434	0.7437	0.565	0.8541	0.7384	0.472
75	0.0008	0.0003	0.0043	0.0070	0.0010	0.0045	0.0018
76	0.1010	0.155	0.1437	0.0740	0.1071	0.0831	0.0778
77	0.0515	0	0.0067	0.0061	0.0307	0.0282	0.0456
78	0.2807	0.121	0.0687	0.0627	0.1596	0.0853	0.0589
79	0.1940	0	0.0137	0.665	1.2403	6.5824	0.632
80	1.2911	0.0335	0.0933	0.191	0.0448	0.0408	0.0460
81	7.4902	8.08	5.7463	8.34	9.2948	9.3211	6.22
82	8.3822	8.69	6.3280	6.16	7.5493	7.9628	6.21
83	0.7305	0.991	0.9424	1.82	1.5032	1.7869	1.60
84	1.3012	1.76	2.0342	1.62	1.7696	2.0039	5.70

(Contd...)

Annexure 2: (Continued)

Australia							
2008	2009	2010	2011	2012	2013	2014	2015
0	0.0373	0	0.6549	0.1238	0.1207	0.2360	1.6767
0.1707	0.180	0.1930	0.3515	0.5240	0.6907	0.5887	0.3538
1.7293	2.62	5.9491	1.8816	3.8517	2.6845	1.0341	0.5765
58.910	8.75	9.7434	1.575	11.435	23.6242	46.1720	45.1867
0.0056	0	0.0005	0	0.0020	0	0	0
1.4683	1.24	1.2512	1.4711	1.3918	1.47985	0.8258	0.6091
1.2630	1.01	2.1993	1.5295	1.1492	1.359	1.9530	1.4608
643.4643	138	242.39	428.7991	174.2707	64.8148	50.4257	24.9070
0.0635	0.0507	0.0491	0.0654	0.09168	0.0682	0.0832	0.04857
4.8133	2.32	1.0770	0.6712	0.3031	0.3605	0.37039	0.5009
1034.159	664	748.7273	825	1141.823	1489.91	2105.899	1274.017
15.1582	12.4	21.2948	24.2279	18.5198	37.8622	36.7384	35.0455
32.7268	22.8	32.8716	47.4515	40.3170	52.4809	57.8605	44.45811
23.7869	22.8	22.9352	30.1307	29.3557	38.6679	19.6201	43.2250
79.6133	73.7	81.0987	98.8126	90.1476	115.3949	111.7128	98.1703
28.9861	32.7	31.8893	29.7946	44.0148	76.5909	69.9449	42.4839
1.6975	1.66	3.1786	4.8752	3.9512	9.925	16.9958	3.7942
1.7207	1.15	0.5950	0.6898	1.13943	2.545	1.8825	1.3041
21.1928	27.4	37.0570	47.0631	39.9109	55.7962	60.2554	40.9533
67.9073	76.8	67.8608	87.3783	58.8934	91.6060	102.2726	66.3547
85.0720	74.8	101.6698	118.8713	106.387	109.0051	104.6641	63.6964
45.5856	47.5	42.7849	35.3637	40.3177	46.1972	38.4473	23.3481
7.3064	7.65	6.0066	7.3711	8.6317	10.6961	10.9613	6.8461
0.1891	0.123	2.6242	0.6854	2.5669	0.3347	0.6437	0.8308
11.484	4.92	7.9967	6.8677	10.1141	18.0524	3.1800	3.4586
44.9816	32.0	40.2622	28.997	21.4730	25.215	29.1770	16.558
11.5515	11.1	15.0791	15.9037	12.4817	9.3235	7.4458	6.7079
9.7471	5.05	6.9632	9.1950	7.0205	9.2465	9.9094	4.1503
1.4450	2.05	2.0046	1.7842	1.6004	2.1464	2.0279	1.3135
2.4544	2.12	1.9131	1.8897	1.2743	4.6188	5.0558	1.9312
11.4012	8.54	8.8650	16.2353	29.674	13.0104	13.6361	9.7615
0.5136	0.398	0.3742	0.4651	0.3400	0.2726	0.2007	0.1942
0.0021	0.00122	0.0015	0.0042	0.0157	0.0104	0.0062	0.0160
0.1544	0.179	0.2300	0.3028	0.2620	0.2998	0.342822	0.1948
0.0162	0.0486	0.076	0.1248	0.0252	0.0350	0.0080	0.0009
0.1637	0.0749	0.5623	0.1735	0.1708	0.26176	0.2237	0.1079
10.0758	0.505	4.4201	0.0155	0.0592	0.2828	0.0355	0
0.3231	0.0606	0.0228	0.1194	0.0679	0.0529	0.0404	0.0290
6.5632	6.22	8.7406	11.1189	7.7368	9.7582	11.2629	7.1761
10.8699	9.36	7.8267	8.0155	5.7909	6.7628	6.9998	5.0209
2.4188	2.30	2.5807	2.2880	1.8900	1.7483	1.7639	1.1360
9.8627	7.04	7.5069	4.0362	3.5188	3.8555	2.871	1.7605

(Contd...)

Annexure 2: (Continued)

Product code	Australia						
	2001	2002	2003	2004	2005	2006	2007
85	0.0847	0.0911	0.5628	2.93	0.0968	0.6874	1.31
86	0.4459	0.467	0.4258	0.567	0.6621	1.2404	1.47
87	0.5424	0.0459	0.0245	0.0089	0	0.0012	0.454
88	0	0.0027	0.0010	0.0878	1.0450	0.2008	0
89	0.3160	0.516	0.4956	0.585	0.4124	0.4769	0.603
90	0.2245	0.0565	0.2011	0.131	0.0442	0.1580	0.370
91	5.8500	1.84	1.6780	0.979	1.6177	2.0815	2.30
92	0	0.205	0	0.0199	0.0384	0	0
93	1.8845	0.988	1.8141	4.74	5.5970	6.5377	7.52
94	7.8915	5.43	4.7407	4.52	4.5690	7.3969	4.94
95	19.2596	11.3	13.4303	18.2	20.9201	16.5151	14.4
96	0.0207	0.0960	11.3680	12.5	21.3960	12.2835	7.34
97	0.6618	0.546	0.1744	0.119	0.1311	0.0745	0.104

Annexure 3: India's RCA for imports from Australia

Product code	Australia						
	2001	2002	2003	2004	2005	2006	2007
1	0	0	0.0007	0	0.0003	0.0004	0.108
2	0.0006	0.0020	0	0.0001	0.0028	0.0005	0.0005
3	0.0006	0	0	0.0022	0.0053	0.0004	0
4	0.3217	0.3320	0.945	0.0590	0.0018	0.0001	0.0126
5	0.2195	0.2597	0.413	0.0151	0.0148	0.0114	0.0013
6	0	0.0023	0.0257	0.0049	0.0015	0.0130	0.0022
7	32.1018	37.4884	10.4	7.2584	3.02	7.85	6.49
8	1.1027	1.7351	1.12	0.3922	0.784	1.09	1.23
9	0.0389	0.0938	0.0431	0.0632	0.0267	0.0289	0.0343
10	1.3257	0.0709	0	0.1900	0.737	26.5	43.0
11	0.0031	0.0024	0.0731	0.0318	0.204	0.707	0.891
12	0.2077	0.4081	0.528	0.5694	0.726	0.596	0.351
13	0.2098	0.0205	0.0054	0.0164	0.0478	0.0400	0.0436
14	0	0	0	0	0	0.0509	0
15	0.0788	0.0297	0.0969	0.0438	0.0230	0.0085	0.0038
16	0.0117	0.0298	0	0.0001	0.0054	0.0001	0
17	0.4607	0.2614	0.817	2.6537	1.39	0.109	0.0554
18	0.0216	0.0135	0.0034	0.0037	0.0008	0.0007	0.0137
19	0.0103	0.0105	0.0140	0.0086	0.0174	0.0073	0.0054
20	0.1163	0.1090	0.0463	0.0127	0.0189	0.0063	0.0109
21	0.0095	0.0418	0.0068	0.0031	0.0013	0.0014	0.0016
22	0.0160	0.0091	0.0232	0.0317	0.0402	0.0426	0.0486
23	0.0538	0.1579	0.169	0.1429	0.0802	0.0520	0.0836

(Contd...)

Annexure 2: (Continued)

Australia							
2008	2009	2010	2011	2012	2013	2014	2015
0.4781	0.693	0.1874	0.6782	0.5751	2.9691	5.1477	1.8239
1.3725	2.26	9.2499	7.5584	6.7869	9.2829	8.2547	3.1760
0.2754	0.233	0.3451	3.1565	0.24	0.2551	0.0834	0.0704
0.0010	4.35	0	0.1510	0.0074	0.0143	0.0085	0.0003
0.6849	1.25	2.2684	2.8365	2.7763	2.7638	0.9918	0.4867
0.2586	0.0661	0.0995	0.2575	0.5452	0.7888	0.2917	0.1268
2.8313	2.29	3	3.625	2.0051	1.79	1.4816	1.4769
0.0442	0.0683	0.0071	0.1852	0.1303	0.2144	0.5477	0.2787
9.1941	9.79	12.857	17.7128	14.3856	16.6356	17.8258	10.4054
8.1019	6.28	9.4977	12.4673	10.2897	13.2658	11.5854	5.595
9.5018	12.6	28.4423	17.9413	7.7254	10.6910	12.6205	11.1576
6.8506	6.42	9.2149	6.3892	6.3164	1.41760	0.5517	1.1721
0.7021	0.0807	0.0816	0.0265	0.0229	0.0318	0.0239	0.0079

RCA: Revealed comparative advantage

Annexure 3: (Continued)

Australia							
2008	2009	2010	2011	2012	2013	2014	2015
0.0807	0.0263	0.0147	0.0438	0.0002	0.0002	0	0.0003
0.0010	0.0001	0.0005	0	0.0018	0.0320	0.03	0.0118
0.0060	0.0005	0.0019	0	0	0	0	0
0.0002	0.163	1.13	0.939	0.0061	0.0048	0.0030	0.0057
0	0	0	0.0216	0	0.0009	0.0093	0
0.0128	0.0009	0.0010	0.0037	0.0010	0.0068	0.0003	0.0005
9.14	7.85	8.99	7.90	23.5	29.4	16.4724	33.7
1.22	1.35	0.883	0.905	1.50	3.23	2.9144	4.14
0.0048	0.0019	0.0024	0.0268	0.0049	0.0001	0.0011	0.0005
0.434	0.366	7.24	0.300	0.371	0.948	1.2663	16.7
0.851	0.785	2.10	2.89	3.72	3.89	4.0731	3.75
0.458	0.559	0.552	0.608	0.633	0.675	0.6943	0.855
0.0344	0.0445	0.0671	0.0573	0.0222	0.0039	0.0062	0
0	0	0	0.135	0	0	0	0
0.0049	0.197	0.0402	0.164	0.0674	0.0300	0.0179	0.0278
0.00004	0.00003	0.0006	0.0003	0.0004	0.0010	0	0.00006
0.101	0.126	0.129	0.0714	0.0023	0.0040	0.0005	0.0016
0.0088	0.0052	0.0052	0.0070	0.0176	0.0446	0.0232	0.0007
0.0073	0.0049	0.0070	0.0077	0.0204	0.0077	0.0063	0.0048
0.0195	0.0031	0.0065	0.0057	0.0132	0.0293	0.0543	0.0223
0.0088	0.0019	0.0030	0.0033	0.0045	0.0047	0.0075	0.0076
0.0506	0.0158	0.0227	0.0276	0.0331	0.0349	0.0477	0.0473
0.0853	0.0493	0.0516	0.0522	0.0495	0.0556	0.0612	0.0476

(Contd...)

Annexure 3: (Continued)

Product code	Australia						
	2001	2002	2003	2004	2005	2006	2007
24	0	0	0	0	0	0	0
25	0.2040	0.1045	0.0887	0.0556	0.0482	0.412	0.314
26	54.576	30.6429	15.1	31.0817	21.2	46.4	38.8
27	5.4179	6.4563	5.01	2.8817	3.50	2.34	2.62
28	0.2678	0.3557	0.875	0.4634	1.50	1.65	1.77
29	0.1349	0.1749	0.106	0.0210	0.0410	0.0309	0.0316
30	0.0498	0.0433	0.0445	0.0314	0.0128	0.0119	0.0074
31	0.0049	0.0019	0.0078	0.0027	0.238	0.659	0.0591
32	0.5912	0.9884	1.10	1.1271	1.64	0.946	0.875
33	0.0980	0.0557	0.0505	0.0563	0.0513	0.0322	0.148
34	0.1239	0.0866	0.0382	0.0376	0.0317	0.0401	0.0376
35	0.1067	0.2167	0.150	0.1224	0.0625	0.0560	0.123
36	0.0028	0	0	0.010662	0	0.0303	0.186
37	5.8876	1.5755	0.615	2.7077	0.100	0.0290	0.0391
38	0.3002	0.2002	0.325	0.0910	0.0803	0.118	0.232
39	0.1254	0.0988	0.0967	0.0780	0.112	0.0709	0.0808
40	0.0391	0.0517	0.0287	0.0202	0.0243	0.0163	0.0130
41	1.2422	1.4462	1.35	1.6409	1.38	1.35	1.44
42	0.0030	0.0007	0.0018	0.0009	0.0019	0.0002	0.0017
43	0	0	0.0076	0	0	0.0270	0.0009
44	0.4756	0.0932	0.0936	0.2969	0.115	0.244	0.232
45	0	0	0	0.0032	0.0008	0.0014	0
46	0.0041	0	0	0.0062	0.0045	0	0
47	1.3136	0.7147	0.0439	0.3102	0.484	0.710	0.717
48	0.0986	0.1364	0.0957	0.0408	0.0176	0.0191	0.0314
49	0.0608	0.0474	0.330	0.0237	0.0435	0.0176	0.0439
50	0.7558	1.5290	2.43	0.0590	0.202	0.0117	0.0071
51	41.6238	46.9386	28.7	21.3596	20.5	20.0	22.2
52	13.4344	3.4323	0.888	0.6108	0.306	1.03	0.286
53	0.0052	0.0158	0.0022	0.0159	0	0	0
54	0.1098	0.06520	0.0363	0.0171	0.0044	0.0056	0.0019
55	0.0709	0.2557	0.160	0.0275	0.0483	0.0641	0.0118
56	0.0295	0.0168	0.0089	0.0116	0.0107	0.0180	0.0177
57	0.0639	0.0454	0.0277	0.0185	0.0187	0.0003	0.0009
58	0.2008	0.1878	0.331	0.2299	0.116	0.563	0.539
59	0.4699	0.5967	0.317	0.0792	0.313	0.242	0.224
60	0.0339	0.0651	0.0094	0.0076	0.0055	0.0405	0.0430
61	0.0057	0.0001	0.00005	0.0001	0.0004	0.0002	0.0005
62	0.0015	0.0028	0.0026	0.0008	0.0013	0.0003	0.0010
63	0.1629	0.1634	0.0387	0.0416	0.0267	0.0208	0.0142
64	0.0057	0.0039	1.28	0.0013	0.0027	0.0055	0.0083
65	0	0	0	0.0024	0.0029	0.00113	0.0003

(Contd...)

Annexure 3: (Continued)

Australia							
2008	2009	2010	2011	2012	2013	2014	2015
0	0	0	0	0.0190	0	0	0
0.265	0.167	0.144	0.274	0.348	0.363	0.8371	0.768
43.3	19.5	28.3	33.1	46.2	98.8	57.4185	3.40
3.37	2.54	3.16	3.17	2.89	2.84	3.4359	5.18
0.444	0.829	1.73	2.53	2.93	7.377	4.5234	4.41
0.0516	0.0321	0.0293	0.0628	0.119	0.118	0.1204	0.106
0.00747	0.0096	0.0146	0.0160	0.0164	0.0273	0.0592	0.0316
2.63	1.01	1.30	0.810	0.771	0.0021	0.0032	0.0023
0.840	0.753	1.16	1.22	1.85	2.40	3.0529	1.78
0.304	0.191	0.290	0.280	0.371	0.323	0.2898	0.0809
0.0419	0.0329	0.0491	0.0504	0.0756	0.0911	0.0809	0.120
0.0777	0.0897	0.0658	0.0732	0.0640	0.107	0.0903	0.0883
0.224	0.0935	0.140	0.0922	0.0886	0.239	0.1555	0.111
0.0233	0.0061	0.00615	0.0030	0.0067	0.0012	0.0010	0.0022
0.146	0.0996	0.0983	0.130	0.108	0.0817	0.0472	0.0648
0.0555	0.0386	0.0539	0.0543	0.0678	0.0416	0.0377	0.0346
0.0124	0.0119	0.0127	0.0136	0.0245	0.0079	0.0118	0.0163
2.15	1.19	1.92	1.09	1.71	3.10	3.626	2.25
0.0007	0.0004	0.0006	0.0017	0.00721	0.0003	0.0010	0.0006
0.0008	0	0	0.0067	0	0	0.0036	0
0.0619	0.112	0.0301	0.0176	0.0204	0.351	0.3113	0.0237
0.0052	0	0	0.0046	0	0	0	0.0085
0	0	0	0	0.0007	0	0	0
0.509	0.911	0.805	0.375	0.379	0.999	1.7181	1.48
0.0445	0.0332	0.0588	0.141	0.203	0.464	0.3766	0.438
0.0238	0.0089	0.0140	0.0236	0.117	0.0185	0.0319	0.0200
0.0094	0.00571	0.0285	0.201	0.265	0.0279	0	0
22.3	15.1	23.6	31.0	45.3	56.8	69.9449	6.66
1.18	0.526	0.671	1.31	5.33	6.60	16.9705	7.40
0	0	0	0.0189	0.0311	0	0.0015	0.0013
0.0059	0.0136	0.0279	0.0454	0.0155	0.0275	0.0174	0.0141
0.0261	0.0411	0.0625	0.0165	0.0200	0.0049	0.0398	0.0065
0.0361	0.0484	0.0346	0.104	0.128	0.218	0.1931	0.177
0.0029	0.0006	0.0018	0.0025	0.0065	0.0032	0.0151	0.0005
0.0152	0.148	0.0266	0.0518	0.0873	0.0856	0.1163	0.0504
0.268	0.0648	0.0411	0.0864	0.0957	0.0412	0.0277	0.0353
0.0464	0.0097	0.0423	0.0759	0.0493	0.0321	0.3887	0.0212
0.0005	0.0002	0.0001	0.0005	0.0006	0.0007	0.0001	0.0003
0.0021	0.0004	0.0004	0.0012	0.0011	0.0002	0.0002	0.0003
0.0112	0.0200	0.0170	0.0249	0.0297	0.0315	0.030	0.0205
0.0073	0.0046	0.0073	0.0039	0.0081	0.0035	0.0060	0.0028
0.0013	0.0007	0.0057	0.002	0.0003	0.0021	0.0023	0.0033

(Contd...)

Annexure 3: (Continued)

Product code	Australia						
	2001	2002	2003	2004	2005	2006	2007
66	0.0118	0.0214	0.0058	0.0035	0	0.0011	0.0047
67	0.0159	0.0378	0	0	0	0.0021	0.0025
68	0.1046	0.0262	0.0459	0.0217	0.0082	0.0076	0.0116
69	0.1544	0.3664	0.0467	0.0131	0.0130	0.0299	0.01
70	0.2166	0.2641	0.220	0.2559	0.170	0.120	0.0495
71	3.3274	5.0046	12.5	20.4617	17.3	10.3	9.40
72	1.3094	1.3373	0.949	0.8309	0.865	0.738	0.508
73	0.2020	0.1970	0.0967	0.0614	0.0294	0.0314	0.0302
74	2.7377	2.8613	0.891	1.6558	2.01	0.746	1.60
75	33.9935	47.9119	31.9	7.9471	4.31	6.60	12.0
76	2.4689	2.4908	0.656	0.5333	0.566	0.781	1.07
77	109.5029	111.9211	120	318.25	79.6	45.2	54.9
78	99.9035	119.5953	73.5	63.8507	85.4	58.0	38.9
79	0.0040	0	0	0.0072	0.0803	0.0113	1.40
80	0.3626	0.2803	0.396	0.1201	0.0833	0.180	0.0057
81	0.0817	0.0720	0.0742	0.0472	0.125	0.0689	0.0549
82	0.1298	0.1254	0.124	0.0682	0.0702	0.0736	0.109
83	0.1477	0.1683	0.119	0.0664	0.0528	0.0625	0.0611
84	0.1525	0.2996	0.200	0.1282	0.0997	0.0966	0.0857
85	3.0470	0.8926	0.849	0.8696	0.0303	0.0386	0.0926
86	0.0026	0.0054	0.0082	0.0106	0.0047	0.0043	0.0036
87	0.0018	0.0146	0.0047	0.3257	0.0051	0.0141	0.0256
88	0	0.0066	0.0630	0.1862	0.111	0.164	0.0872
89	0.2096	0.1608	0.119	0.0869	0.0931	0.0891	0.105
90	0.0036	0.0012	0.0040	0.0007	0.0001	0.0009	0.0060
91	0.0008	0	0	0	0	0	0
92	0.01172	0.0042	0.0045	0.0029	0.0016	0	0.0014
93	0.0448	0.0930	0.0513	0.0503	0.0066	0.0061	0.0063
94	0.0064	0.0114	0.0108	0.0073	0.0122	0.0269	0.0156
95	0.0241	0.0052	0.0136	0.0025	0.0038	0.0050	0.0093
96	0.0009	0.2443	0.0162	0.0010	0.0200	0.0231	0.0061
97	1.4381	0.4923	0.0609	0.7918	1.05	0.661	0.609

(Contd...)

Annexure 3: (Continued)

Australia							
2008	2009	2010	2011	2012	2013	2014	2015
0	0	0	0.0136	0	0	0	0
0.0005	0	0.0004	0.0004	0	0.0127	0.0078	0.0109
0.0089	0.0130	0.0099	0.0115	0.009	0.0103	0.0212	0.0034
0.0055	0.004	0.0390	0.0286	0.0171	0.0087	0.0138	0.0095
0.0459	0.0255	0.0308	0.0280	0.0305	0.0216	0.0247	0.0161
4.31	9.88	8.28	5.46	7.53	4.49	5.7458	4.64
0.332	0.342	0.382	0.636	0.695	1.29	2.0715	2.14
0.121	0.0268	0.0369	0.0203	0.0219	0.0139	0.0133	0.0277
2.08	1.47	1.56	1.84	0.407	0.119	0.1634	0.143
9.96	21.3	43.5	8.61	17.3	39.6	7.7448	16.0
1.08	1.59	0.692	0.906	1.23	1.33	1.4069	2.08
104	55.8	69.6	78.0	183	16.7	386.4026	40.8
19.7	37.3	25.6	14.5	12.5	17.2	18.5947	18.9
1.20	0.674	0.0165	0.759	0.0113	0.0592	0	0
0.0447	0.130	0.213	0.212	0.0584	0.105	0.2141	0.281
0.0998	0.0347	0.0479	0.0340	0.0342	0.154	0.0318	0.0135
0.0599	0.0526	0.047	0.301	0.0202	0.0211	0.0295	0.0210
0.0755	0.0444	0.0472	0.478	0.0435	0.0382	0.0361	0.0488
0.0921	0.0448	0.0339	0.0353	0.0300	0.0267	0.0259	0.0262
0.0536	0.0052	0.0410	0.0531	0.0845	0.0228	0.0123	0.0335
0.0033	0.0037	0.0102	0.0046	0.0033	0.0015	0.0012	0.0017
0.0034	0.114	0.203	0.0458	0.0819	0.0248	0.0714	0.0072
0.0517	0.0488	0.0454	0.0014	0.0051	0.0233	0.0347	0.0507
0.128	0.102	0.0700	0.0737	0.0836	0.0983	0.1173	0.0866
0.0008	0.0002	0.0094	0.0084	0.0155	0.0005	0.0001	0.0001
0.0268	0.0020	0.0003	0	0.0018	0	0.0003	0
0.0011	0.0022	0.0101	0.0029	0.0015	0.0009	0.0053	0.0025
0.0150	0.0062	0.0178	0.0268	0.0099	0.0078	0.0039	0.0058
0.0275	0.0152	0.0129	0.0158	0.0156	0.0219	0.0080	0.0142
0.0031	0.0298	0.0364	0.0566	0.0082	0.0045	0.0043	0.0122
0.0028	0.0080	0	0.0166	0.0225	0.0376	0.0265	0.0048
0.101	0.0785	0.0233	0.0418	0.0927	0.0281	0.0443	0.0560

RCA: Revealed comparative advantage