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India's Development Prospects in Indo-ASEAN Free Trade Agreement: An Evaluation of Revealed Comparative Advantage

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ABSTRACT

India-ASEAN relations began soon after economic liberalisation in 1991 with the end of the Cold War and the enunciation of India's "Look East" policy by India. However, their relationships received with special momentum in recent past. India-ASEAN Free Trade Agreement (AIFTA) trade in goods was inked on August 13, 2009 and came into effect from January 01, 2010. The most often cited impetus for the agreement was converging economic interests. India and ASEAN are both significant markets in the world economy. They have inked many framework agreements to boost their economic and trade relations overtime. The trade prospects between the two economies would essentially depend on the extent to which their demand and production structures are mutually supportive and complementary. Hence, this paper used revealed comparative advantage index to identify those sectors that can reap greater benefits based on comparative advantage.

Key Words : Liberalisation, Free Trade Agreements, Revealed Comparative Advantage, ASEAN

INTRODUCTION

India embraced the path of liberalization in the early nineties. With the withering away of 'protectionist' policies', the trade pattern of India was likely to march in the direction of its comparative advantage. India has had trade links with South-East Asian countries for a very long time. However, in the post-Independence period, India's trade relations with this region were not particularly significant or encouraging. In part due to the politics of the Cold War era, wherein India and ASEAN found themselves on different sides of the global divide, and in part due to India's 'inward-oriented' development strategy, because of which India's share in world trade declined from 2.0 percent in the early 1950s to 0.5 percent in the 1980s. India-ASEAN relations began with economic liberalisation in 1991, the end of the Cold War and the enunciation of India's "Look East" policy by India. "There was a confluence of interests. A new world order, the economic reforms in India along with its "Look East"

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policy, coincided with ASEAN's "Look West" and regionalization drive." [Ministry of External Affairs, Govt. of India, 1997]. It was seen as an attempt to increase India's engagement with the East Asian countries. India became a sectoral dialogue partner of the Association of Southeast Asian Nations (ASEAN) in 1992 and further elevated to the level of Full Dialogue Partner of ASEAN in 1995 and a member of the ASEAN Regional Forum (ARF) in 1996. The relationship was further strengthened with the convening of the ASEAN- India Summit in 2002 in Phnom Penh, Cambodia. Since then the ASEAN-India Summit has been held annually. At the 2nd ASEAN-India Summit on 8 October 2003, India and ASEAN signed a Framework Agreement– the Comprehensive Economic Cooperation Agreement (CECA) with a view to providing an institutional framework that would enable further economic cooperation. India-ASEAN Free Trade Agreement (AIFTA) was signed on 13 August 2009 in Bangkok The agreement, which only covers trade in goods between India and the ASEAN members, came into effect on 1 January 2010 in the case of Malaysia, Singapore and Thailand. For the remaining ASEAN members it will come into force after they have completed their internal requirements. The signing of the ASEAN-India Trade in Goods Agreement paves the way for the creation of one of the world's largest free trade areas (FTA) - market of almost 1.8 billion people with a combined GDP of US$ 4.6 trillion. The ASEAN-India FTA was for tariff liberalization of over 90 percent of products traded between the two dynamic regions. Tariffs on over 4,000 product lines were to be eliminated by 2016. At the ASEAN-India Commemorative Summit held on 20 December 2012 in New Delhi, the ASEAN-India Vision Statement was adopted and declared that the ASEAN-India Partnership stands elevated to a Strategic Partnership.

In terms of income, India-ASEAN community is roughly the size of the EU. In terms of trade, India-ASEAN community equals NAFTA. The ASEAN is India's fourth-largest trading partner after the EU, the US and China. India – ASEAN is slated to grow faster than the rest of the world due to a favorable demographic profile and growing market for goods and services. India's trade relations are shifting from West economies towards the East, comprising of Japan, China, Korea and ASEAN.

The most often cited impetus for cooperation is converging economic interests. India and ASEAN are both significant markets in the world economy. At the time when the ASEAN- India Free Trade Agreement (AIFTA) was inked, both had a combined market of almost 1.8 billion people and a combined GDP of US$2.75 trillion. According to ASEAN statistics, total trade mushroomed from 2.9 billion in 1993 to 47.5 billion in 2008, while India's share of total ASEAN trade quadrupled from just 0.7 percent in 1993 to 2.8 percent in 2008, making it ASEAN's seventh biggest trade partner. Meanwhile, ASEAN accounts for 10 percent of India's global trade and is India's fourth largest trading. Both ASEAN and India have a strong interest in intensifying this cooperation in the long run.

In this backdrop, the present paper attempts to assess India's development prospects in trade relations with ASEAN particularly under free trade agreement. The paper is organised as follows. The preceding sections gives introductory view on the subject while the following section, provides conceptual clarification of the research method used. In the section 3, an attempt has been made to measure revealed comparative advantage in different sectors to identify the India's export potential and prospects. The last section makes some concluding

remarks.

METHODOLOGY

The present study has made an attempt to evaluate India's development prospects in its trade engagements with ASEAN countries. This study are based used Revealed Comparative Advantage Index to identify the sectors in which India has a comparative advantage in its trade with ASEAN. The sectors identified as such may be looked at as prospective sectors leading to the development of India, more so with its trade relation with ASEAN.

Revealed Comparative Advantage Index of a country for a particular sector is defined as the ratio of two export shares. The numerator is the share of the exports of a particular sector in the total exports of the country while the denominator is the share of the particular sector's exports in the total world exports. RCA indices use the trade pattern to identify the sectors in which an economy has a comparative advantage, by comparing the country of interest's trade profile with the world average.

The RCA index of country *i* for product *j* is often measured by the product's share in the country's exports in relation to its share in world trade:

$$\text{Relative Comparative Advantage (RCA)} = \frac{\text{Xij / Xit}}{\text{Xwj / Xwt}}$$

where *Xij* and *Xwj* are the values of country *i*'s exports of product *j* and world exports of product *j* and *Xij* and *Xwt* refer to the country's total exports and world total exports. The Index can take a value between 0 and +8. A country is said to have a revealed comparative advantage if the value exceeds unity. If RCA is less than unity, the country is said to have a comparative disadvantage in the commodity/ industry. Thus in sectors where a country has an RCA of greater than 1 and it is higher than other countries, it can be concluded that the particular country has a comparative advantage in the particular sector and an opening of the trade in the sector would be beneficial for the country. Decreasing RCA can be interpreted as a sector losing its comparative advantage.

Revealed comparative advantage :

Regional Trade Agreements are effective and successful only if they are carefully designed by identifying and collating complementary products and sectors. There are different indices developed to examine the trade pattern and to see whether increased cooperation is possible between nations. These include Trade Intensity Index, Intra Regional Trade Intensity Index, Trade Similarity Index, Trade Complementarity Index and Revealed Comparative Advantage Index. In this section, an attempt is made to construct one of these indices i. e. Revealed Comparative Advantage Index for India and ASEAN to see how far these increased trade relation between two partners is possible and important for development prospects of India.

The Revealed Comparative Advantage (RCA) index is computed to arrive at the competitiveness of each sector for India and ASEAN countries. The RCA indicates whether a country is in the process of extending the products in which it has a trade potential, as

opposed to situations in which the number of products that can be competitively exported is static. It can also provide useful information about trade potential and prospects with new partners. Countries with similar RCA profiles are unlikely to have high bilateral trade intensities unless intra-industry trade is involved. Revealed Comparative Advantage (RCA) for ASEAN countries is calculated for the Commodity Groups compared against India's RCA to see trade complementarity between these trading partners. At the aggregate level, RCA is calculated for 09 ASEAN countries except Lao PDR across 17 major commodity groups for 25 years to identify specific advantage in trade. RCA index for Lao PDR could not be computed due to lack of relevant data.

Table 1 gives the mean Revealed Comparative Advantage (RCA) of ASEAN countries and India of the period 2005 to 2014 for 17 product categories. Countries are grouped into four categories based on mean RCA. Country having RCA index value above 2 imply strong comparative advantage whereas the index value between 1 to 2 , index value between 0.5 to 1 and the index value lesser than 0.5 imply high, low and weak comparative advantage respectively. This facilitates easy comparison of comparative advantage across countries and product groups.

Based on mean RCAs of India and ASEAN, the following sectors are identified in

Table 1: Mean RCA of India and ASEAN Countries, 2005-2014

Commodity categories	India	BRU	CAM	INDO	MAL	MYA	PHI	SING	THA	VIET
Agriculture	1.33	0.02	0.45	2.48	1.49	3.40	0.99	0.26	2.05	2.53
Food	1.32	0.02	0.26	2.19	1.47	2.63	1.10	0.28	1.79	2.58
Fuels and mining	1.13	4.76	0.02	1.87	0.96	2.10	0.37	0.86	0.34	0.82
Fuels	1.05	5.84	0.00	1.84	1.07	2.43	0.16	1.00	0.34	0.99
Manufactures	0.96	0.00	1.42	0.60	1.02	0.36	1.26	1.12	1.12	0.94
Iron and steel	1.55	0.00	0.00	0.40	0.49	-	0.13	0.32	0.45	0.59
Chemicals	1.03	0.01	0.02	0.50	0.58	0.01	0.26	1.09	0.84	0.23
Pharmaceuticals	1.18	0.01	0.01	0.07	0.04	0.00	0.03	0.66	0.06	0.02
Machinery and transport equipments	0.40	0.00	0.12	0.38	1.32	0.00	1.95	1.52	1.27	0.56
Office and Tel. equipments	0.15	0.00	0.03	0.46	3.30	0.00	4.70	3.47	1.79	1.15
EDP and office equipments	0.08	0.00	0.00	0.44	3.23	1.00	4.68	2.47	2.65	1.00
Telecom equipments	0.27	0.00	0.08	0.67	1.74	0.01	0.53	1.09	1.11	1.87
IC and EC product	0.07	0.00	0.00	0.21	5.41	-	10.29	7.79	1.62	0.33
Transport equip	0.55	0.00	0.24	0.27	0.15	0.47	0.47	0.33	1.05	0.16
Automotive	0.39	0.00	0.08	0.25	0.08	0.00	0.48	0.13	1.22	0.10
Textiles	3.57	0.00	0.39	1.70	0.51	0.04	0.24	0.16	1.15	1.94
Clothing	2.49	0.03	25.19	1.91	0.79	3.12	1.59	0.18	0.99	5.73

Source: Computation based on WTO Database

which India has high or strong comparative advantage. This means that India has greater potential and prospects in following product groups than many of the ASEAN countries.

Agricultural products:

India's RCA for agricultural products for the year 2014 is 1.44 which illustrates that India's agricultural exports are higher than share of agricultural exports in world trade. The RCA for agricultural products among ASEAN countries are high for Vietnam, Indonesia, Malaysia, Thailand and Myanmar. That means India can have increase its exports of agricultural product to other ASEAN countries having low RCA such as Brunei, Cambodia, Philippines and Singapore. The mean RCA also provide the long term trend for each product. The mean RCA for agricultural commodity is above one for India, Indonesia, Malaysia, Myanmar Philippines, Thailand and Vietnam and below one for Brunei, Cambodia, Philippines and Singapore. This means there is a scope to export agricultural Commodities to low RCA countries of ASEAN such as Brunei, Cambodia, Philippines and Singapore; however it faces stiff competition with some of the ASEAN countries.

Food:

Food items form part of agricultural products and follow the same pattern of RCA that of agricultural products. RCA for food is high for India, Malaysia, Philippines, Thailand and Vietnam and low for Brunei, Cambodia, and Singapore. The average RCA showed that the three ASEAN countries namely Indonesia, Myanmar and Vietnam are having a strong RCA of above two. Whereas Brunei, Cambodia and Singapore got a very low RCA in food and India with mean RCA of 1.32 can export food articles to these nations.

Fuel and mining:

Fuel and Mining are resource based products depending on the natural endowments of the country. But industries can be established to process and refine these products. For Mining and Fuels, RCA is high in Brunei, India, Indonesia, and Myanmar and low in Cambodia, Malaysia, Singapore, Philippines, Thailand and Vietnam. The three oil rich countries of ASEAN are Brunei, Indonesia and Myanmar and they export petroleum related products to other parts of the world. India has a rich deposit of mineral ores and export them to the mineral scarce countries of ASEAN and rest of the world. India is a huge importer of petroleum crude and its requirements are surging ahead every year and they can look forward to ASEAN oil exporters to meet the demand. The mean RCA shows, Brunei and Myanmar got strong RCA for fuel and mining products while India and Indonesia got high RCA and they can export fuel products to Cambodia, Philippines and Thailand who have weak RCA and Malaysia, Singapore and Vietnam who have low RCA. This showed there is complementarity in trading fuel products in the ASEAN region. With regard to the mining products alone, India got the comparative advantage in many product categories and can export them to most of the ASEAN countries

Fuels:

If we consider fuel separately; Brunei, Indonesia and Myanmar got a high comparative

advantage. Brunei's single most item of export is petroleum and enjoys the mean RCA of 5.84. India, Indonesia, Singapore and Malaysia got high RCA in fuels for refining and exporting the products to other countries. Cambodia, Philippines and Thailand got weak RCA and import large quantity of fuel from other countries.

Iron and steel:

In the case of Iron and Steel industry, all the ASEAN countries got comparative disadvantage where as India enjoy a high RCA in the product. This industry depends on the availability of natural resource in a country and India got huge iron ore reserve in the country. India can export iron and steel to most of the ASEAN countries.

Chemicals:

RCA index for Chemicals showed that India developed comparative advantage in the product category over the period of time. Currently India is exporting different chemical products and increasing the export share in its export basket. In general, India has been maintaining consistently an RCA of greater than one; however the index was low during nineties. RCA improved in the late nineties but the index has fallen for the year 2009-11and improved to greater than one since 2011 onward. This can be interpreted as India having comparative advantage in this sector in general. In this particular sector most of the ASEAN countries have had RCA values lower than unity throughout the period of study. Thus India is in general more competitive in this sector and can benefit by extending its chemical export to ASEAN.

Pharmaceuticals:

Pharmaceutical industry is an important sector of an economy. India is having high RCA in this knowledge based industry showing the capacity built over the period of time. India maintained high RCA throughout. Singapore has low RCA while as all other ASEAN countries have weak RCA in Pharmaceuticals. There is a prospect of higher trade between India and ASEAN countries in this important sector.

Textiles:

This is the labour intensive sector with high employment potential and most of the developing countries of Asia depend on their export to earn their foreign exchange. India traditionally exported large quantity of textile products and enjoyed strong RCA. Indonesia Thailand and Vietnam also have high RCA as their export shares are above the world share. The mean RCA computed in the study is 3.57 for India, 1.69 for Indonesia, 1.14 for Thailand and 1.94 for Vietnam. Most of the ASEAN countries have low RCA showing the complementarity existing in the sector and they can import more from India for their requirement.

Clothing:

There is increased competition in the clothing sector in the East Asian region as most of the developing countries having strong comparative advantage along with India. The mean

RCA for Cambodia (25.18), Myanmar (3.11), and Vietnam (5.73) are very high showing their very strong comparative advantage. RCA of Philippines (1.58), Indonesia (1.90) is high. These countries are major exporters of clothing to the rest of the world. India is also a major exporter of clothing to the world maintain mean RCA of 2.49. Though having high index value in clothing, there is limited scope for India to further increase trade in this sector in ASEAN region.

Concluding Observations:

There are a large number of commodities which can be traded on the basis of relative comparative advantage. ASEAN countries are in different stages of economic development. India can have increased trade cooperation with some countries in all commodities while trade in selected commodities is advantageous with other ASEAN countries. India can export agriculture, foods to small and developed countries and fuels to most of the ASEAN countries. It can import manufactures and machinery and other equipments from Singapore, Thailand and other countries. However, it has some advantage over ASEAN in some manufactured items like iron and steel, chemicals and pharmaceuticals and exports them to many of the ASEAN countries. In Textiles and clothing, India finds fair amount of competition with most of the countries in ASEAN, particularly with Cambodia, Myanmar, and Vietnam which have much RCA. In the light of preceding discussions, it can be concluded that India has better development prospects in view of the enhanced and more integrated relationships after Indo-ASEAN free trade agreement.

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