

India's Trade Pattern with ASEAN in context of AIFTA



Dinesh Yadav

Assistant Professor
(Guest Faculty)
Deptt. of Economics,
Jagat Taran Girls' PG College,
Prayagraj, U.P., India.

Abstract

In the annals of its history, India has extensive cultural, economic and political ties with the Southeast Asian nations. In the present scenario our prime minister Shri Narendra Modi is of the opinion that "We should not only 'Look East' rather 'Act East' i.e. our policy must come into the action harness trading opportunity available to India in ASEAN member countries". Trade between ASEAN and India has seen strong growth over recent years. Trade between India and ASEAN stood at US\$ 65.04 billion in 2015-16 which was more than 10% of India's total trade. The ASEAN-India economic integration process has got a huge response with the creation of the ASEAN-India Free Trade Area, following the entry into force of the ASEAN-India Trade in Services and Investment Agreements. The India-ASEAN Free Trade Agreement (AIFTA) came into effect on 1 January 2010 with regard to Malaysia, Singapore and Thailand. With this background, the present study analyses the impact of free trade agreement (FTA) on India and the ASEAN members. This study also analyses the pattern and effectiveness of trade between India and ASEAN. Conclusions of a balanced Regional Comprehensive Economic Partnership Agreement will further boost our trade and investment ties with the region.

Keywords: ASEAN, Trade, FTA, Tariff.

Introduction

The Look-East Policy is being embarked upon with the presupposition that the improving trade ties between India and ASEAN will certainly elevate the North-East out of the menace of insurgency, poverty and economic backwardness. But certain obstacles like lack of infrastructural development, absence of enthusiastic response from local people, frequent insurgencies, poor governance in the states, the easy availability of arms and weapons from across the international border to be utilised in armed movements and criminal activities impede increased relations between North-East India and South East Asia. Moreover, the geographic location of the North-Eastern region makes it more vulnerable to be the core of hostility with massive negative outcomes.

The directional pattern of India's trade has changed after its 'look East Policy'. The share of United States, the largest trading partner was declined by 1.5 percentage points in 2000- 01, while the share of United Kingdom and Belgium declined by 1.6 and 2 percentage points respectively. On contrary the share of Asian countries like China was increased to 9.2 percent in 2007- 08, from 4.3 percent in 2003- 04 and it became the second largest trade partner of India in 2007- 08. The share of some ASEAN countries like Singapore, Indonesia and Malaysia has significantly increased (Economic Survey, 2008- 09). It indicates that in past years, India's trade has shifted from its traditional partners to Asian region, and India's trade with major ASEAN countries has amplified. And with the passage of time India's engagement with ASEAN countries has stimulated and in present it became an important trade destination for India. The Standard said in a research report (2014), "We expect exports to ASEAN to reach \$280 billion in 10 years, at which point it would hold a 15 per cent share in Indian exports". India has renewed its 'Look East Policy' into 'Act East Policy' in 2014, in order to strengthen its relations with Asian countries in future. In addition, the new Indian government has prioritized strengthening ties with the Association of South East Asian Nations, as Prime Minister of India Mr. Narendra Modi has said on September 2016, at ASEAN- India Summit, "ASEAN is a central to our Act East Policy". Thus India's trade relations with ASEAN member countries have been consolidating with the passage of time and in contemporary period it

became a central region for India. Therefore it is imperative to find out the trade pattern of India with ASEAN countries during last two decades.

Review of Literature

Pal and Dasgupta (2008) concluded that, on the basis of a study, India was unlikely to benefit in the short term from the India-ASEAN FTA, but in long term ASEAN will be benefited from the India-ASEAN FTA. Because India's imports are greater than exports with ASEAN member countries. They also pointed out that ASEAN was not a natural trading partner of India, and not a member country of ASEAN. However, the agreement may make strategic sense in the long term, if India looks at the option of becoming a hub for services exports to the ASEAN region and this will be beneficial for both ASEAN and India because they have no any boundary disputes or any other disputes which may obstacle in relations between them.

Bhattacharya R. & Mandal A. (2010) in their combined research paper titled "Estimating the impact of INDO ASEAN Free Trade Agreement on India's Balance of Trade" tried to analyze the effect of INDOASEAN FTA on India's Balance of Trade. Main Discussion of the study revealed that impact of the FTA on Balance of Trade is expected to be negative. Indian import would rise significantly in comparison to exports to these countries except to Indonesia. Net effect of FTA was analyzed by estimating tariff elasticity of India's bilateral export and import to and from ASEAN 6 from 1989 to 2006. It was found that ASEAN exports are sensitive to tariff imposed by India while India's export are not. Hence the results of tariff reduction under FTA is asymmetric which means INDO-ASEAN FTA will increase ASEAN's access to markets in India whereas there is significant rise in India's access to markets in ASEAN. Analysis of time series elasticity gives an additional insight that India's export to Indonesia is extremely price sensitive. Moreover, Except Indonesia, market access to all other countries in the ASEAN would remain stagnant after decline in tariffs. India's exports would rise from all these countries except Philippines. Then research gap arises here why India was keen on signing the agreement. For what kind of benefits, India was locking for out of this agreement.

Shekharan (2010), In his paper titled Impact on "Import of Tea in India after ASEAN India Free Trade Agreement: A Simulation analysis", he mainly focused on impact of Indo-ASEAN FTA on tea industry. Since commodity in Plantation sector in India had been overly protected, tariff reduction in this segment would increase the import of plantation commodity especially in case of tea. Trade creation and trade diversion effect had been analyzed with the help of SMART model and gravity model analysis in the study. Welfare effect and revenue loss associated with the tariff reduction under different scenarios in tea segment were also analyzed with the SMART model simulations. The Indo-ASEAN agreement's tariff schedule shows that tariff rate for tea will be brought down in two phases during 2010-2019 (phase -1 from 2010-2015 and phase second from 2015 to 2019). Tariff rate in tea would be reduced from base

rate of 100% to 70% by 2015 and further to 45% by December 2019. SMART model analysis showed that there would be significant increase in import of tea. FTA would result in trade creation rather than trade diversion. Trade creation would replace the high cost domestic production and thereby improve the welfare gains. Results also revealed that consumer surplus and revenue loss to government would increase with reduction in tariff in tea segment. But Consumer surplus will overweigh the loss in tariff revenue leading to net welfare gains. Overall results showed that increase in import is because of trade creation rather than trade diversion. Increased import would affect the livelihood of Indian farmers so Indian farmers would have to realign their structure of production.

Nag and Sikdar (2012) showed that there will be welfare improvement for India but the gain will materialize only after the full implementation of the tariff elimination process. This is because the welfare improvement for India will come from realignment of production activities through allocative efficiency though the terms of trade effect will go against India as India will have to bring down tariff to a greater extent than the ASEAN countries.

Ranajoy Bhattacharyya (2014) in his paper 'The India – ASEAN Free Trade Agreement: How Will Indian Industries Be Affected?', They find out that tariffs do not matter at all for a major part of the industries and for them the agreement has no significance. In fact some of the most debated commodities fall in this category. For many of them though tariff rates have steadily increased overtime so has imports imparting a wrong sign to the tariff elasticity which means that reasons other than tariffs determine their imports and there is no point in putting them in the sensitive or exclusion list.

Chandran, Dr. Sarath (2018) looks in to the trade impact of India ASEAN Free Trade Agreement using an augmented Gravity model using a panel data framework. The results show the possibility of greater trade between India and ASEAN countries through RTA. Since the initial tariff levels are higher in India compared to ASEAN, ASEAN is likely to gain more in the short term. For India to exploit the trade potential with ASEAN the FTA should be operationalized in the services and investment domain.

Need of The Study

In the present research work, an attempt has been made by the scholar to study in detail the overall trade relationship with India and ASEAN. India and the states of ASEAN are well placed to expand their cooperation. They do not have any bilateral territorial disputes, security fears and conflicts. Among the ASEAN countries India has maintained trade deficits in most years with Indonesia, Malaysia and Myanmar and with Thailand more recently. India has run a trade surplus with Singapore, Vietnam, Cambodia and the Philippines. However, India's overall trade balance with ASEAN-10 countries is significantly negative, which is major concerning issue among ASEAN and India's trade relationship. As the scope and density of relations between India and ASEAN has been steadily

rising. The study is an important contribution in order to illustrate the share of trade of ASEAN in India's total trade, India's direction, composition and trade structure with Asia's major economic bloc ASEAN and also analyzes the impact of implementation of AIFTA on merchandise trade with India

Objective of The Study

1. To identify the India's trade potential in ASEAN market.
2. To find out the role and significance of India's imports to ASEAN before and after AIFTA came into effect.
3. To find out the role and significance of India's Export to ASEAN before and after AIFTA came into effect.
4. To find out the Contrary index of India's trade with ASEAN.

Hypothesis

The study has been based on the following hypotheses:

1. **Ho-** There is no significant difference in India's exports to ASEAN before and after AIFTA came into effect.
Ha- There is significant difference in India's exports to ASEAN before and after AIFTA came into effect.
2. There is no significant difference in India's imports from ASEAN before and after AIFTA came into effect.
Ha- There is significant difference in India's imports from ASEAN before and after AIFTA came into effect.

Research Design

The research work has been mainly carried out on the basis of secondary data obtained from various published sources. To accomplish the research, following methodology have been used

1. The study is original in nature. In this study exploratory research techniques have been used. For the purpose of the study, Secondary Sources of data have been collected through various published literature; Journals, Articles, Newspapers, Books and Websites etc. The major sources of secondary data have been the online database of Ministry of Commerce and other publications of Government of India as various issues of Handbook of Indian Statistics, ASEAN Statistical Year Book and Economic Survey. Data have been properly classified and statistically analyzed with the appropriate tools such as Mean, Percentage Change, Correlation and Compound Annual Growth Rate etc.
2. **Sample under Study:** India and 10 ASEAN countries including Singapore, Malaysia, Thailand, Indonesia, Philippines, Brunei Darussalam, Cambodia, Laos, Myanmar and Vietnam.

Source of Data Collection

The comprehensive data on foreign trade are officially collected and published by Directorate General of Commercial Intelligence and Statistics (DGCI&S). A new commodity classification system, known as harmonized system has been adopted by

DGCI&S from April 1987. This data is also available on Ministry of Commerce, India's trade site.

Nature of Data

Trade data from 1996-97 to 2017-18 has been taken under study. Data has been taken from Export and import data Bank, Ministry of Commerce and Industry, Government of India.

1. 1996-97 to 2009-10 - Before AIFTA
2. 2010-11 to 2017-18 - After AIFTA

What are Free Trade Agreements (FTA)?

A Free Trade Agreement is an agreement between countries to reduce or eliminate barriers to trade. Trade barriers include tariff barriers like taxes and nontariff barriers like regulatory laws. Trade barriers include tariff barriers like taxes and nontariff barriers like regulatory laws. In Free Trade Agreement countries also agree on certain obligations that affect trade in goods and services, and protections for investors and intellectual property rights, among other topics.

The areas of economic cooperation under the India-ASEAN FTA are as follows:

Where suitable, the Parties agree to strengthen their collaboration in the below areas, including, but not limited to:

Trade facilitation

1. Joint Recognition Arrangements, conformity assessment, accreditation procedures, and standards and technical regulations;
2. Non-tariff measures;
3. Customs cooperation;
4. Trade financing; and,
5. Business visa and travel facilitation.

Sectors of cooperation

1. Agriculture, fisheries and forestry;
2. Services – Media and entertainment, health, financial, tourism, construction, business process outsourcing, environmental;
3. Mining and energy – Oil and natural gas, power generation, and supply;
4. Science and technology – Information and communications technology, electronic-commerce, biotechnology;
5. Transport and infrastructure – Transport and communication;
6. Manufacturing – Automotive, drugs and pharmaceuticals, textiles, petrochemicals, garments, food processing, leather goods, light engineering goods, gems, and jewelry processing;
7. Human resource development – Capacity building, education, technology transfer; and,
8. Others: Handicrafts, small and medium enterprises, competition policy, Mekong Basin Development, intellectual property rights, and government procurement.

Trade and investment promotion

1. Fairs and exhibitions;
2. ASEAN-India web links; and,
3. Business sector dialogues.

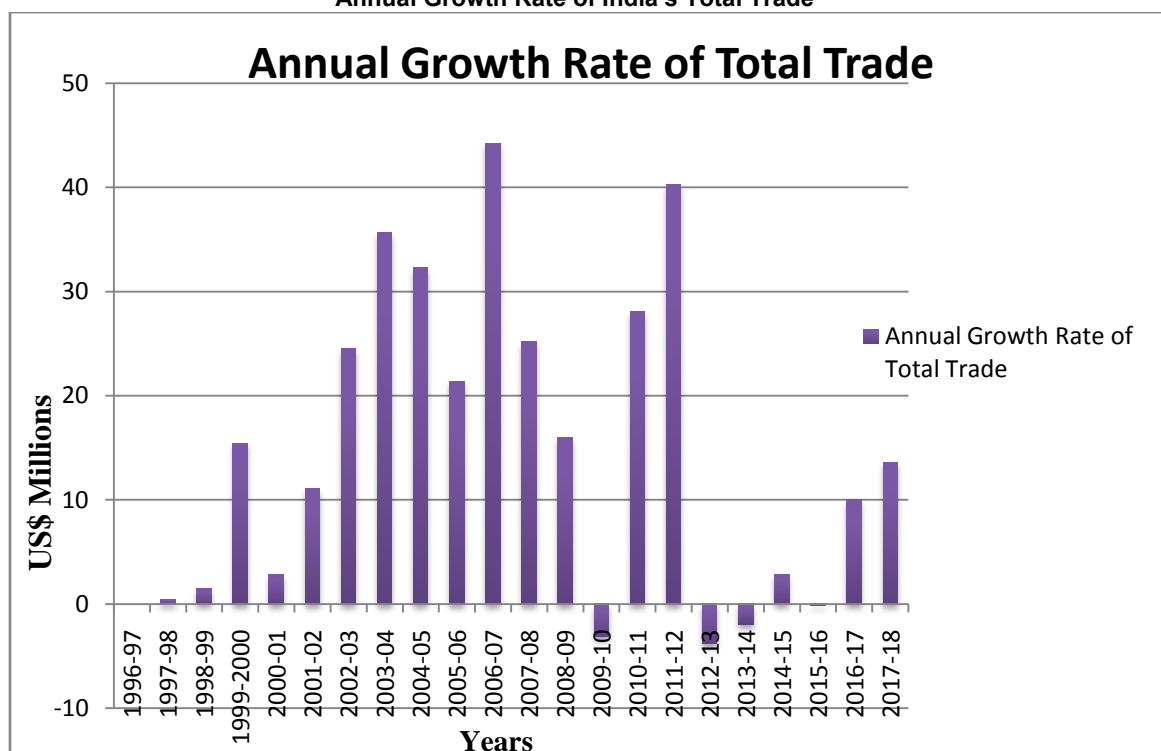
Parties to the AIFTA may set up other bodies as may be necessary to coordinate and execute any

economic cooperation activities undertaken pursuant to the FTA

Table- 1 India's merchandise trade with ASEAN (in US\$ Millions)

Year	India's exports to ASEAN	India's imports from ASEAN	India's Total Trade with ASEAN	India's Balance of Trade with ASEAN	Annual Growth Rate of India's Total Trade with ASEAN
	(A)	(B)	(A+B)	(A-B)	(in %)
1996-97	2,902.45	2,934.00	5,836.45	-31.55	-
1997-98	2,464.78	3,396.44	5,861.22	-931.66	0.42
1998-99	1,629.98	4,317.38	5,947.36	-2,687.40	1.46
1999-2000	2,237.50	4,629.16	6,866.66	-2,391.66	15.45
2000-01	2,913.78	4,147.48	7,061.26	-1,233.70	2.83
2001-02	3,457.01	4,387.22	7,844.23	-930.21	11.09
2002-03	4,618.54	5,150.17	9,768.71	-531.63	24.53
2003-04	5,821.71	7,433.11	13,254.82	-1,611.40	35.68
2004-05	8,425.89	9,114.66	17,540.55	-688.77	32.33
2005-06	10,411.30	10,883.67	21,294.97	-472.37	21.40
2006-07	12,607.43	18,108.48	30,715.91	-5,501.05	44.24
2007-08	16,413.52	22,674.81	39,088.33	-6,261.29	25.21
2008-09	19,140.63	26,202.96	45,343.59	-7,062.33	16.00
2009-10	18,113.71	25,797.96	43,911.67	-7,684.25	-3.16
2010-11	25,627.89	30,607.96	56,235.85	-4,980.07	28.06
2011-12	36,744.35	42,158.84	78,903.19	-5,414.49	40.30
2012-13	33,008.21	42,866.36	75,874.57	-9,858.15	-3.83
2013-14	33,133.55	41,278.09	74,411.64	-8,144.54	-1.93
2014-15	31,812.58	44,714.77	76,527.35	-12,902.19	2.84
2015-16	25,154.50	39,909.60	65,064.10	-14,755.10	-0.15
2016-17	30,961.62	40,617.31	71,578.93	-9,655.69	10.01
2017-18	34,201.36	47,133.79	81,335.15	-12,932.43	13.63
CAGR	11.87%	13.45%	12.72%		

Source: Ministry of Commerce, Govt. of India.

Annual Growth Rate of India's Total Trade

Source: compiled by researcher on the basis of data from Ministry of Commerce, Govt. of India.

As we can see in the above given graph that the Annual Growth Rate of India's total trade with ASEAN countries had increased very fast during the starting of study period. After 2006-07 (during global financial crises), the annual growth rate of total trade had declined. But again this had recovers for next two years and after that it had declined, for year 2017-18 the annual growth rate of India's total trade is 13.36% and Compound Annual Growth Rate for the study period (1996-97 to 2017-18) is 12.72%.

The impact of ASEAN-India Free trade agreement (AIFTA) on India's merchandise exports to ASEAN

As the AIFTA between India and ASEAN was signed in 2009 and came into force on 1st January 2010, researcher have divided the study period (1996- 97 to 2017-18) into two groups i.e. first group presents the India's exports to ASEAN for the period of 1996- 97 to 2009-10 and second group presents India's exports to ASEAN for the period of 2010 to 2017-18. It will clearly present the changes in India's exports to ASEAN countries, before and after application of this ASEAN-India free trade agreement. Here we have applied the independent t- test for analyzing the impact of AIFTA on India's exports to ASEAN countries, over the period of 1996- 97 to 2014- 15. As we know that this agreement was signed in Aug 2009 and came into effect on 1st January 2010 in case of India and ASEAN countries. So this study period have been divided into two groups i.e. Group one represents India's exports to ASEAN for the period 1996-97 to 2009-10 and group two represents India's exports to ASEAN for the period of 2010-11 to 2017-18. These groups have been made on the basis of application of AIFTA between India and ASEAN countries in Jan 2010. Group first presents India's exports to ASEAN before AIFTA came into effect and group second presents India's exports to ASEAN after AIFTA came into effect. So here **Independent t-test** have been applied for comparing the differences between the sample means of these two groups by testing the hypothesis

Ho

There is no significant difference in India's exports to ASEAN before and after AIFTA came into effect.

Ha

There is significant difference in India's exports to ASEAN before and after AIFTA came into effect.

The formula of independent t- test

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_p^2}{n_1} + \frac{S_p^2}{n_2}}}$$

$$S_p^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

Where

and Degree of Freedom = n_1+n_2-2

The first table provides a summary statistics for the two experimental conditions, from this table we can see that before AIFTA there had 14 and after AIFTA had 8 numbers of years. The group which is representing India's exports to ASEAN countries before AIFTA came into effect had a mean export of 7939.874, with standard deviation of 6309.068. The standard error of that group (standard deviation of the sampling distribution) is 1686.169 ($SE = 6309.06 / \sqrt{14} = 1686.169$). In addition, the table shows us that average exports of India to ASEAN after implication of AIFTA was 31330.51, with a standard deviation of 4047.019 and a standard error of 1430.837 ($SE = 4047.019 / \sqrt{8} = 1430.837$).

The standard error of the sampling distribution of differences, which is calculated using the equation

$$SE_{(x_1-x_2)} = \sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}$$

Table -1.1 India's exports to ASEAN (statistics)

India's exports to ASEAN	No. of Years	Mean	Standard Deviation	Standard Error Mean
Before AIFTA	14	7939.874	6309.068	1686.169
After AIFTA	8	31330.51	4047.019	1430.837

Source: Researcher's calculation, based on secondary data, ministry of commerce, Govt. of India.

Table- 1.2 Independent Sample t- test (two Tailed)

t- value*	Degrees of Freedom	P- Value	Mean Difference	Standard Error Difference
-9.3877	20	0.000	-23390.63	2491.621

Source: Researcher's calculation, based on secondary data, ministry of commerce, Govt. of India.

*Significant at 5% level of significance

$t_{cal} (-9.3877) > t_{tab} (2.09)$ at 20 degrees of freedom

Above result shows that the null hypothesis has been rejected.

Here we can see in the table that the value of 't' is significant at 5% level of significance for 20 degrees of freedom, So we conclude that there is significant difference between the means of these

two samples, so we can say that India's merchandise exports to ASEAN countries has increased significantly after implementation of ASEAN India Free Trade Agreement.

The impact of ASEAN-India Free Trade agreement (AIFTA) on India's merchandise imports from ASEAN

As the AIFTA between India and ASEAN was signed in 2009 and came into force on 1st

January 2010, researcher have divided the study period (1996- 97 to 2017-18) into two groups i.e. first group presents the India's imports from ASEAN for the period of 1996- 97 to 2009- 10 and second group presents India's imports from ASEAN for the period of 2010-11 to 2017- 18. It will clearly present the changes in India's imports from ASEAN, before and after application of this ASEAN-India free trade agreement signed August 13, 2009. Here we have applied the independent t - test for analyzing the impact of AIFTA on India's imports from ASEAN, over the period of 1996- 97 to 2017-18. As we know that this agreement was signed in Aug 2009 and came into effect on 1st January 2010 in case of India and ASEAN. So this study period have been divided into two groups i.e. Group one represents India's imports from ASEAN for the period 1996- 97 to 2009- 10 and group second represents India's imports from ASEAN for the period of 2010- 11 to 2014 15. These groups have been made on the basis of application of AIFTA between India and ASEAN countries in Jan 2010. Group one presents India's exports to ASEAN before AIFTA came into effect and group two presents India's exports to ASEAN after AIFTA came into effect. So here

Independent t- test have been applied for comparing the differences between the sample means of these two groups by testing the hypothesis.

Ho

There is no significant difference in India's imports from ASEAN before and after AIFTA came into effect.

Ha

There is significant difference in India's imports from ASEAN before and after AIFTA came into effect.

The formula of independent t- test

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_p^2}{n_1} + \frac{S_p^2}{n_2}}}$$

$$S_p^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

Where

and Degree of Freedom = n_1+n_2-2

The table 2.1 provides summary statistics for the two experimental conditions, from this table we can see that before AIFTA had 14 and after AIFTA had 8 numbers of years. The group which is representing India's imports from ASEAN countries before AIFTA came into effect had a mean of 10655.54, with standard deviation of 8702.77. The standard error of that group (standard deviation of the sampling distribution) is 2325.913 (SE= 8702.77/ $\sqrt{14} = 2325.913$). In addition, the table also shows that average imports of India from ASEAN after implication of AIFTA was 41160.84, with a standard deviation of 4861.649 and a standard error of 1718.852 (SE= 4861.649/ $\sqrt{8} = 1718.852$).

The standard error of the sampling distribution of differences, which is calculated by using the equation

$$SE_{(x_1-x_2)} = \sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}$$

Table-2.1 India's Imports from ASEAN (Statistics)

India's imports from ASEAN	No. of Years	Mean	Standard Deviation	Standard Error Mean
Before AIFTA	14	10655.54	8702.77	2325.913
After AIFTA	8	41160.84	4861.649	1718.852

Source: Researcher's calculation, based on secondary data, ministry of commerce, Govt. of India.

Table- 2.2 Independent Sample t- test (two Tailed)

t- value*	Degrees of Freedom	P- Value	Mean Difference	Standard Error Difference
-9.0768	20	0.000	-30505.3	3360.818

Source: Researcher's calculation, based on secondary data, ministry of commerce, Govt. of India.

*Significant at 5% level of significance

Hence,

$t_{cal} (-9.0768) > t_{tab} (2.09)$ 20 degrees of freedom

Above result shows that the null hypothesis has been **rejected**.

Here we can see in the table that the value of 't' is significant at 5% level of significance for 20 degrees of freedom, So we conclude that there is significant difference between the mean of these two samples, so we can say that India's merchandise imports to ASEAN countries has increased significantly after the implementation of ASEAN India Free Trade Agreement.

Findings

The major findings of paper are following-

1. India's merchandise exports and imports both have increasing trend over the period of 1996-97 to 2017-18, but the growth rate of imports is higher than exports, and because of this, India is facing the unfavorable balance of trade with ASEAN countries. CAGR of imports (13.45) is higher than CAGR of exports (11.87%) during the period for 1996-97 to 2017-18. The CAGR of India's total trade with ASEAN is 12.72%.
2. The study also found that after the implementation of AIFTA trade has growing rapidly with member countries.

3. The study found that ASEAN's share in India's trade improved marginally; It also shows that India's exports to ASEAN countries have increased efficiently in terms of growth rate but not in terms of volume.
4. Though the percentage share of ASEAN countries in India's total trade has seen a very small increase during the study period, it has positive trend in terms of percentage share in exports, imports and total trade, so it may be said that the trade between India and ASEAN countries are going in an affirmative direction.

Conclusion

The paper strongly reasons the possibility of greater trade between India and ASEAN countries through RTA. Since the initial tariff levels are higher in India compared to ASEAN, ASEAN is likely to gain more in the short term. For India to exploit the trade potential with ASEAN the FTA should be operationalised beyond trade in goods to services and investment agreements. Trade liberalization is a necessary but not a sufficient condition. To achieve any substantial progress in intraregional trade whole-hearted economic cooperation, we must give utmost priority for the development of infrastructural facilities. In order to maximize the benefit and minimize the adverse effect from the conclusion of FTA, ASEAN needs to have in place a development oriented trade and investment policy and well-planned FTA strategy that is consistent with their development goals. In addition to strengthening intra-ASEAN economic integration and cooperation, ASEAN must closely cooperate in building up the capacity of our for all ASEAN countries to have the sufficient amount of technical and legal experts to handle the negotiations of numerous FTAs, and the amount of resources for information gathering, consultations and research needed to formulate and evaluate the social, economic, and developmental implications of various negotiating positions on topics ranging from investment protection, market access for goods and services to rules of origin.

References

- Bhattacharyya, R. and Mandal, A. (2010): "Estimating the Impact of the Indo-ASEAN Free Trade Agreement on India's Balance of Trade", *Journal of Global Analysis*, 1, 9-25.
- Chandran, B.P.S (2018) *Trade Impact of the India-ASEAN Free Trade Agreement (FTA)*, VVM's Shree Damodar College of Commerce & Economics, Goa. MPRA Paper No. 84183, posted 11 February 2018
- Chandran, B. P.S. and Sudarsan, P. K. (2012): "India-ASEAN Free Trade Agreement Implications for Fisheries", *Economic and Political Weekly*, 16, 65-70.

- Chandran, Dr. Sarath, *Trade Impact of the India-ASEAN Free Trade Agreement (FTA): An Augmented Gravity Model Analysis (January 25, 2018)*. Available at SSRN: <https://ssrn.com/abstract=3108804> or <http://dx.doi.org/10.2139/ssrn.3108804>
- EXIM Bank of India (2015), 'Catalyzing India's Trade and Investment' a report (2015 Jan 1). www.eximbank.com
- Francis, S. (2011): "A Sectoral Impact Analysis of the ASEAN-India Free Trade Agreement", *Economic and Political Weekly*, 2, 46-55.
- Kumar, N. (2002): "Towards an Asian Economic Community: The Relevance of India", *Discussion Paper no. 34, Research and Information System for Non-Aligned and Other Developing Countries (RIS)*, New Delhi.
- Mukharji, Shameek. (2012), *Overview of India's Export Performance: Trends and Drivers* IIMB, working paper no.363
- Nag, B., & Sikdar, C. (2011). *Impact of India-ASEAN Free Trade Agreement: A cross-country analysis using applied general equilibrium modeling*. <http://www.unescap.org/tid/artnet/pub/wp10711.pdf>
- Neelamagam, V. & Arunachalam, P. (2011), 'The Association of South East Asian Nations Agreement and its blow on Indian Economy'. In P. Arunachalam, *India-ASEAN Free Trade Agreement: Challenges and Opportunities* (pp.100-111). New Delhi: Serial Publications.
- Pal, P. and Dasgupta, M. (2009): "The ASEAN India Free Trade Agreement: An Assessment", *Economic and Political Weekly*, 38, 11-15.
- Rajendra, M. & Veerasekaran, R. (2011), 'Asian Integration Leads to Global Economic Revival'. In P. Arunachalam, *India-ASEAN Free Trade Agreement: Challenges and Opportunities* (pp. 40-47). New Delhi: Serial Publications
- Rupa Chanda, Sasidaran G. *Understanding India's Regional Initiatives within Asia*, ISAS Working Papers, 2008.
- Ranajoy Bhattacharyya (2018), 'The India – ASEAN Free Trade Agreement: How Will Indian Industries Be Affected?' *SSRN Electronic Journal*, Kolkata.
- Shekharan (2010). *Impact on Import of Tea in India after ASEAN INDIA FTA Agreement: A Simulation analysis*. *Managing International Trade and Investment*. pp 1-20. <http://www.epw.in/specialarticles/assessing-impact-asean-india-fta-tea-industry.html>