

## A TRADE INTENSITY ANALYSIS BETWEEN INDIA AND UAE SINCE 2001

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**Abstract:** - International trade has been considered as an engine of economic growth since very long. India has also been involved in trading terms with the world in fact in order to enhance its trading terms, India has adopted economic reforms in 1991 in the form of liberalization, Globalization and Privatization .India's major trading partners are China, USA, UAE, Germany, Saudi Arabia, Kuwait, Oman .But here we are confined to the study of trade between India and UAE. India is having good trading terms with UAE since 1972 that is from the establishment of UAE.UAE has remained important source for India not only for imports and exports but for remittances also. In this study we have tried to analyze trade intensity index for India with respect to UAE. Study period has been taken from 2001 to 2016.We have found that India's export intensity index (wrt) UAE, was highest in 2001 estimated as 12.5 while lowest in the year 2010.Then import intensity index highest in 2010 and lowest in 2002.Besides that we have also discussed the composition of trade between the two countries.

**Keywords:** International trade, Economic growth, Remittances, Trade intensity index.

### 1. Introduction

International trade has been considered as an engine of economic growth since very long. India has also been immensely involved in trading terms with the world in fact in order to enhance its trading terms, India has adopted economic reforms in 1991 in the form of liberalization, Globalization and Privatization .India's major trading partners are China, USA, UAE, Germany, Saudi Arabia, Kuwait, Oman .But here we are confined to the study of trade between India and UAE. India is having congenial trading terms with UAE since 1972 that is from the establishment of UAE.UAE has remained chief source for India not only for imports and exports but for remittances also. According to a World Bank report India received 14244 billion dollars in the form of remittances from UAE in 2012.Which made her the highest remittances receiving country in the world during 2012. India's top most trading

destination for the year 2010 was UAE then in 2016 it became third largest destination.UAE was the second major import destination for India in 2010 with 8.9% share in its total imports. In the year 2016 UAE fell down to third position with 5.6% of share. As far as export destination is concerned in 2010UAE was the second major trade partner with 11.3% of share. While in 2016 UAE gained first position with 13.5% of share out of its total exports.

As we knew it that Indian economy has been knowing as the traditional economy which is backed by strong agriculture sector .So it would be interesting to throw some light on this sector .Agriculture sector has remained an essential part of Indian economy .We export huge agricultural based products to the GCC countries .UAE is one of the important trade partner of agriculture products among GCC countries .In 2013 it was boneless meat which

was the major exported good to UAE and for the same period major imported goods from UAE was Dates fresh or dried.

United Arab Emirates is a prominent economy in the gulf region. UAE is rich and oil based economy. It exports 62% of its oil produce to Japan .Besides that it is third major re-exporter in the world after Singapore and Hong Kong (Jain.NS). 33% of GDP of UAE is generated through oil and gas sector.UAE is a well-known robust economy among Middle East region with high standard of living.

## 2. Literature Review

Anurag and Krishna (2016) in their study "A Study of Trade Intensity with United Arab Emirates" examines trade relations between India and United Arab Emirates. Their study reveals that India's Export Intensity index and Import intensity index with UAE is greater than one for the whole study period, which ultimately suggests India's export and imports are intense with India as compare to UAE's trade with the world. For conducting their work they have used Trade Intensity Index (TII) .The study has taken into account the period from 1991 to 2016 .One of the important aspects of the study is that export intensity index has remained higher than the import intensity index over the period. The study is interesting because during this period trade relations between two countries became stronger. UAE is India's largest trading partner but still the basket of trade is quite limited.

Muhammad Azhar (2003)in his study "Economic Cooperation between India and United Arab Emirates in the 1990's" examines trends in trade between India and UAE in detail. He has also focused on import and export structure of both the countries .Author has also showed his interest in discussing about Indian manpower in UAE and India's financial cooperation with UAE. During 1990's India -UAE bilateral trade was increasing more than the increase in trade of both nations with rest of the world. This study indicates that imports from UAE to India was mainly dominated by crude oil during 1990's, India has faced deficit in balance of trade during the same period. It was only in 1993 that India was having surplus .According to this study an important feature of India -UAE economic cooperation is the large number of workers that have been employed over there. Indian migrant workers to UAE play a significant role in developing economic structure of UAE and these migrants are equally significant for Indian economy due to huge inflow of remittances which helps to restore balance of trade .This study contain valuable information but it would have been more useful if it were updated

Tarique Anwar (2005) in his article "India's Relation with Saudi Arabia" concludes that India's trading terms with Saudi Arabia are healthy and favourable. Political relations of both countries are not so smooth, but as far as trade and commerce are concerned they have good terms Saudi Arabia is a great source of petroleum for India, and India is a great source of primary products for Saudi Arabia.

Jagadambe and subhash (2016) in their combined work "An analysis of export competitiveness of Indian agricultural products with ASEAN countries" have used Trade intensity index and revealed comparative advantage has also applied to this paper .Study period has been taken from 2001 to 2013.Study revealed out that India's exports were high with ASEAN countries as compared to the world .While imports fallen down for the study period .As far as RCA is concern it was also found to be declining throughout study period .Study concluded that India should enhance its exports of Meat , Rice , Tea , Fruits , Vegetables and cereal products to ASEAN Countries .This study needs an update

Krishn A Goyal and Abdul Wajid (2018) in their joint study "An analysis of India's trade Intensity with UAE" focused on determining trade intensity of India with respect to UAE. Study period has been taken from 2007 to 2016.Author has calculated index for different time periods .10.82 was the highest value of intensity index in 2007.Lowest value was observed in 2014 and 2015 which was 6.4.In this study only export intensity index has been calculated .There is no discussion of import intensity index in the paper .And this aspect is not avoidable.

## 3. India -UAE Trade- An Overview

United Arab Emirates is a prominent economy in the gulf region. UAE is rich and oil based economy. According to government sources India was the top major trading partner of UAE in the year 2008.And at the same time UAE's top trading partner was India for the year 2008-2009.It is according to the UAE government, India has traded with UAE which is equivalent to 15 % of the total trade of UAE for the year 2008..It exports 62% of its oil produce to Japan .Besides that it is third major re-exporter in the world after Singapore and Hong Kong (Jain.N.S)33% of GDP of UAE is generated through oil and gas sector.UAE is a well-known robust economy among Middle East region with high standard of living .India and UAE also involved in flourishing their bilateral investment, India is the third largest investor in UAE. While UAE has recently invested 5 million dollars in India which is a symbol of healthy investment relations with the concerned country. A very significant reason behind this strong bond between the concerned two countries is substantial percentage of Indian

migrants residing and earning in UAE .And their remittances play a pivotal role in the development of Indian economy. Some studies have also revealed that even non-oil trade with India through Dubai has increased to 336% from few years. Total non-oil trade between India and UAE is set to be around 18 billion.

## 4. Current Status of Trade Figures

In the following table we have discussed the data of exports and imports of India and UAE for the current

period .Although we have taken study period upto 2016 but still it is significant information to incorporate in the present study. For the year 2018-19(Apr-Oct) total trade of India with UAE was \$33957.77M, while for the current period 2019-20(P), it is \$34034.80M. There is a little increase in the total trade between these two countries. Exports of India to UAE were \$17688.51M in 2018-19 against 2019-20, it has reached to \$17349.36. Then if we shift our focus on imports it was \$16269.26M in 2018-19, and 2019-20(P) reached to \$16685.44M.

Table 1.1: Current trade status (in Million\$)

S.No.	Country	2018-2019				2019-2020(P)				% Growth	
		Exports	Imports	Total Trade	Trd.Bal.	Exports	Imports	Total Trade	Trd.Bal.	Exports	Imports
1.	UAE	17,688.51	16,269.26	33,957.77	1,419.24	17,349.36	16,685.44	34,034.80	663.92	-1.92	2.56
	Total	190,154.99	306,307.47	496,462.45	-116,152.48	185,719.79	284,148.58	469,868.37	-98,428.80	-2.33	-7.23

Source: DGCIS, Kolkata

In the following table we have discussed the composition of commodity between India and UAE during 2016(Apr-Oct) . In this table we have taken top five source countries for Indian imports .Our top most import partner is China with a share of 16.68 % in the total imports of India. Next major import partner of India is USA with 5.53% share in total imports of India. UAE is the third largest import partner of India with a share of 5.53% fourth largest import partner is Saudi Arab with a share of 5.27% and lastly it is Switzerland with a share of 3.78%. As far as imports of India are concerned it is petroleum crude that India has been, importing (during 2016) from UAE equivalent to \$3643.25M while it is importing \$7287.32M from Saudi Arab. Then we have precious stones that we Import mostly

from UAE and the amount is equivalent to \$3093.30M. Gold items that India imports from UAE is of the value of 1403.41M, Other significant import item of Indian Import basket is Petroleum Products which is equivalent to \$1424.34M. It is important to note that India imports maximum petroleum products from UAE among top five import partners. Then we have telecom instruments items, which mostly majorly imported from China equivalent to 6377M. While from UAE we have imported equivalent to the value of \$2.82M. It is to be mention that above details that we have discussed are confined to the period 2016 (Apr-Oct).

Table 1.2: Top five Imports of India from Top Five Trade Partners 2016(Apr to Oct)

Commodity/Country	1	2	3	4	5	Subtotal of Import of 5 Countries	Total Import of Commodity	%Share of commodity in India's total Import
	CHINA P RP	U S A	U ARAB EMTS	SAUDI ARAB	SWITZE RLAND			
1. PETROLEUM: CRUDE	0.00 (0.00)	0.00 (0.00)	3,643.25 (9.64)	7,287.32 (19.28)		10,930.57 (28.92)	37,791.57 (100.00)	18.01
2. PEARL, PRECS, SEMIPRECS STONES	24.87 (0.18)	259.02 (1.90)	3,093.30 (22.64)	376.96 (2.76)	55.71 (0.41)	3,809.87 (27.89)	13,662.18 (100.00)	6.51
3. GOLD	16.29 (0.14)	546.81 (4.78)	1,403.41 (12.28)	0.00 (0.00)	6,862.16 (60.05)	8,828.67 (77.26)	11,427.72 (100.00)	5.45
4. PETROLEUM PRODUCTS	124.64 (1.39)	653.63 (7.27)	1,424.34 (15.83)	1,068.59 (11.88)	0.23 (0.00)	3,271.43 (36.36)	8,996.89 (100.00)	4.29
5. TELECOM INSTRUMENTS	6,377.25 (71.62)	173.35 (1.95)	2.82 (0.03)	0.00 (0.00)	2.45 (0.03)	6,555.88 (73.63)	8,904.15 (100.00)	4.24
Sub-total Import of 5 Commodity	6,543.05 {18.70}	1,632.81 {13.13}	9,567.13 {82.47}	8,732.88 {79.04}	6,920.55 {87.33}	33,396.41	80,782.51	
Total Import of Country	34,990.40	12,439.44	11,600.17	11,048.48	7,924.60	78,003.08	209,836.44*	
% Share of	16.68	5.93	5.53	5.27	3.78	37.17		

Source: DGCIS, Kolkata

In the following table we have discussed the composition of commodity between India and UAE during 2016(Apr-Oct). In this table we have taken top five destinations for Indian exports. Our top most trade partner is USA with a share of 16.17% in Indian exports. Next we have UAE with a share of 11.95%, In Indian exports Hong Kong contributes for 5.29%, 3.29% share of UK in Indian exports and lastly 3.08% exports share is of Singapore in Indian exports. India exports Petroleum products to UAE equivalent to \$2048.41M although India's exports of petroleum products to Singapore equivalent to \$23347.3M which is more than that of UAE. Besides that next top exported commodity of India is Pearls, Precious and semi-precious stones, India exports to

UAE reached to \$1354.46M. Among these top five countries India exports maximum Pearls and stones to Hong Kong \$5711.5M, Third top commodity is Drug formulations, India's exports to UAE is \$26.84M. Then we have Gold and other precious jewelry exported to UAE of the value of \$3523.30M. Fifth commodity is RMG cotton with an amount of \$629.91M which is exported to UAE by India. Among the top five commodities that are being exported by India to UAE in 2016 has remain gold and other precious jewelry and the least one is Drug formulations and biological.

Table 1.3: Top five Imports of India from Top Five Trade Partners 2016(Apr to Oct)

Commodity/Country	1 USA	2 ARAB EMTS	3 HONG KONG	4 UK	5 SINGA PORE	Subtotal of Export of 5 Countries	Total Export of Commodity	%Share of commodity in India's total Export
1. PETROLEUM PRODUCTS	1,204.76 (7.01)	2,048.41 (11.92)	90.88 (0.53)	4.59 (0.03)	2,334.73 (13.59)	5,683.38 (33.07)	17,185.66 (100.00)	11.06
2. PEARL, PRECS, SEMIPRECS STONES	5,070.17 (32.78)	1,354.46 (8.76)	5,711.54 (36.93)	89.66 (0.58)	179.29 (1.16)	12,405.12 (80.21)	15,465.96 (100.00)	9.96
3. DRUG FORMULATIONS, BIOLOGICALS	3,069.97 (41.12)	26.84 (0.36)	9.58 (0.13)	279.83 (3.75)	32.29 (0.43)	3,418.50 (45.79)	7,465.91 (100.00)	4.81
4. GOLD AND OTHER PRECS METL JWLERY	1,327.14 (17.98)	3,523.30 (47.73)	1,811.49 (24.54)	203.20 (2.75)	150.44 (2.04)	7,015.57 (95.03)	7,382.19 (100.00)	4.75
5. RMGCOTTON INCL ACCESSORIES	1,143.34 (23.63)	629.91 (13.02)	17.96 (0.37)	579.01 (11.97)	13.66 (0.28)	2,383.88 (49.28)	4,837.67 (100.00)	3.11
Sub-total Export of 5 Commodity	11,815.37 {47.04}	7,582.93 {40.84}	7,641.44 {49.06}	1,156.29 {22.62}	2,710.42 {56.73}	30,906.44	52,337.38	
Total Export of Country	25,120.22	18,566.18	8,210.90	5,111.81	4,777.96	61,787.06	155,345.13	*
% Share of country in India's total Export	16.17	11.95	5.29	3.29	3.08	39.77		

Source: DGCIS, Kolkata

## 5. Methodology

This study examines trade relations of India and UAE with each other. That is how intensely India trades with UAE. Data has been collected from WITS, Ministry of commerce and direction of trade statistics. This index was introduced by K. Kojima. Trade intensity index is a simple and useful tool to measure share of trade of one country with another country as a proportion of latter's share of world total trade.

Value of the index lies between 0 to 1. If the value of index zero it means that there is no trade between the concerned regions. Likewise if the value is 1 it indicates high trade relations. If the values are more than 1 it means that there is much scope for trade between the concerned countries.

In trade intensity analysis values of the index lies between 0 to 1. If the values are greater than 1, it indicates that exports or imports ability of the concerned countries is more than the imports and exports of world (on an

average). More than 1 indicates that the countries have greater potential for trade.

Trade intensity index = Export intensity index / Import intensity index.

Export intensity index of India with respect to UAE can be calculated as follows.

$$XII_{ijt} = [X_{ij} / X_i] / [M_j / (M_w - M_i)]$$

Where:

XII<sub>ijt</sub> = Export intensity index of trade of India with UAE,

X<sub>ij</sub> = Exports of India to UAE

X<sub>i</sub> = Total Exports of India.

M<sub>j</sub> = Total Imports of UAE

M<sub>w</sub> = Total World Imports.

M<sub>i</sub> = Total Imports of India.

t = 2001 to 2016.

Import intensity index (MII<sub>ijt</sub>) can also be measured in the similar way:

$$MII_{ijt} = [M_{ij} / M_i] / [X_j / (X_w - X_i)]$$

Where:

MII<sub>ijt</sub> = Import intensity index of trade of India with UAE

M<sub>ij</sub> = Imports of India from UAE

M<sub>i</sub> = Total Imports of India.

$X_j$  = Total Exports of UAE.  
 $X_w$  = Total World Exports.  
 $X_i$  = Total Exports of India.  
 $t$  = 2001 to 2016.

In this paper this index has been used to determine exports and imports share of India with respect to UAE against world's exports and imports. Findings of the study are discussed in the following section.

2010	8
2011	6.25
2012	4.64
2013	6
2014	3.22
2015	2.83
2016	5

Source: author's own calculation

## 6. Findings and Conclusion

Most important and attractive part of the present study is the analysis of trade intensity between India and UAE. We have shown values of intensity between concerned countries in the following table.

Table:1.4 Export intensity index

Year	Export intensity Index of India for UAE
2001	12.5
2002	10
2003	11.76
2004	11.15
2005	10.67
2006	11.72
2007	10.32
2008	12
2009	10.3
2010	4.8
2011	9.7
2012	8.97
2013	6.06
2014	6.6
2015	6.3
2016	6.6

Source: author's own calculation

Table: 1.5 Import intensity index

Year	Import intensity index of India for UAE
2001	4.25
2002	2.14
2003	2.93
2004	3.72
2005	2.87
2006	4.6
2007	5.3
2008	6.5
2009	6

It is clear from the table that value of import intensity for India with UAE is lower than the value of export intensity for India with UAE. As far as export intensity is concerned it shows a declining trend in 2001 it was 12.5, then 10 in 2002. Again in 2003 it was 11.76 then in 2004 it became 11.15. There has been a very minute difference among the values. In 2005 it was 10.67 and 11.72 in 2006. 10.32 and 12 in 2007 and 2008 respectively. Then in 2009 it was 10.3. From 2001 to 2009 it has reflecting a slight fluctuation among the values, values were moving between 12 to 10. But from 2010 there was a sharp fall in exports, export intensity for 2010 was calculated as 4.8 it was due to the decline in some of the export commodities like edible fruits, cereals, articles of apparel clothing non-knitted, work of art collectors, silk, manmade staple fibers. In 2011 export intensity index calculated as 9.7 and in 2012 8.97, in 2012 there has been acute fall in exports of aircraft spacecraft articles and in ships boat. Besides that exports share of Coffee, Tea mates, sugar, silk and cereals were also observed as declining in 2012. In 2013 it was 6.06 then 6.6 in 2014, till 2016 export intensity indices remained little fluctuating and it was 6.3 in 2015 and 6.6 in 2016. There has been a significant decline in export intensity of India from 2001 when it was 12.5 and in 2016 it was 6.6, it has become almost half. It indicates that India has not expands its merchandise exports basket.

As far as import intensity index is concerned it has almost remained steady throughout the study period that is from 2001 to 2016. In 2001 import intensity index was 4.7 and slightly fell down to 2.14 in 2002 and 2.93 in 2003. Then it was 3.72 in 2004 and 2.87 in 2005. In 2006 it was 4.6. In 2016 it was reached to 5.0 so we can conclude from the table that import intensity index has been gradually increased from 2006 to 2010. Then started to decline from 2011 till the end except for 2016.

Trade intensity index can be calculated by dividing export intensity index to the import intensity index. In the following table we have shown the Trade intensity index of India for UAE from the period 2001 to 2016.

Table: 1.6 Trade Intensity Index

Time period	Trade intensity index
2001	2.94
2002	4.67
2003	4.01
2004	2.99
2005	3.71
2006	2.54
2007	1.94
2008	1.84
2009	1.71
2010	0.6
2011	1.55
2012	1.93
2013	1.01
2014	2.04
2015	2.22
2016	1.32

Source: author's own calculation

While going through trade intensity analysis we can easily derive that lowest intensity has been found in the year 2010 which is 0.6 .That reflects in 2010 India's trade with UAE was less than the trade of UAE with rest of the world. In 2010 MII was 8 while EII was calculated as 4.8. It is when we calculate TII Imports are taken as denominator and exports are taken as numerator which ultimately results a fall in the value of TII (if MII>EII) with UAE as compare to other years. One of the significant reasons for low TII can be global financial crises.

So the purpose of determining trade intensity index for this study has been fulfilled .It has revealed that India does more trade with UAE as compared to the trade that UAE does with the rest of the world. And on the basis of this study we may conclude that both countries should expand their respective export and import baskets. India and UAE both have potential to raise the level of bilateral trade between them.

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