

**INDIA-UAE ECONOMIC RELATIONS:  
WITH SPECIAL REFERENCE TO MERCHANDISE TRADE**

A Thesis Submitted to  
**LOVELY PROFESSIONAL UNIVERSITY**  
For the award of  
**DOCTOR OF PHILOSOPHY**  
In  
**ECONOMICS**

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**April, 2017**

## DECLARATION

I declare that the thesis entitled “*India-UAE Economic Relations: With Special Reference to Merchandise Trade*” has been prepared by me under the guidance of Dr. Surinder Kumar Singla, Assistant Professor & HOD, Department of Economics, DAV College, Bathinda, Punjab. No part of this thesis has formed the basis for the award of any degree or fellowship previously.

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## **ACKNOWLEDGEMENT**

This thesis would not have been possible without the guidance and help of several individuals, who in one way or the other contributed and extended their valuable support in this study. It is indeed my pleasure to convey my sincere gratitude & thanks to one and all. I acknowledge each of them with all earnesty.

First and foremost, I thank "God almighty" for his blessings in making this endeavour a success.

Indeed the words at my command are inadequate in form and spirit to express my deep sense of gratitude and overwhelming indebtedness to my esteemed guide, Dr. Surinder Kumar Singla, Assistant Professor, Department of Economics, DAV college, Bathinda, who has all along been an immense source of inspiration and encouragement to me in completing this work into its present form. His valuable suggestions have enabled me to accomplish this work. He has given me untiring help, painstaking guidance, and constant enthusiasm from the very inception of the work, without which this research work could have never been completed.

I am grateful to Dr. Vishal Sarin, Assistant Professor, School of Business, Lovely Professional University and Dr. Rajesh Verma, HOS, School of Business, Lovely Professional University, for their timely assistance to me. They provided me with prolific advice and moral support, guidance and suggestions for improvement which helped me to arrange the technical details of my work.

I gratefully acknowledge Dr. Jasdeep Kaur Dhani, Director & Professor, CT Institute of Management and Information Technology, Jalandhar, for her understanding, encouragement and personal attention which have provided good and smooth basis for my Ph.D. tenure. I also express my gratitude to Dr. Kulwinder Singh, Punjab University, Chandigarh and Dr. Naresh Singla, Central University of Punjab, Bathinda, for their immense help and suggestions in this research work. I would also like to express my deep thanks to my friends especially Rupinderdeep, Gurpreet Kaur, Prabhreet Kaur and Ambika Chauhan for their motivation and moral support. I am also thankful to staff members of library and all other teaching and non-teaching staff of Lovely School of Business, Lovely Professional University, for their kind care and cooperation.

My acknowledgement would not be completed without a mention of my parents, Mr. Bharat Bhushan and Mrs. Seema Goel, who are my pillars of strength and guiding light all through my life. Their selfless sacrificial life and their great efforts and unceasing prayers have enabled me to reach the present position in life. They have been and will continue to be perennial source of inspiration in all my endeavours. I also pay thanks to my beloved brother, sister and brother-in-law, for their love, constant encouragement, blessings and moral support that helped me to tide over occasional moments of distress.

Finally, I offer my regards and best wishes to all those who supported me directly or indirectly during the completion of the thesis.

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## **ABSTRACT**

India-UAE trade relations have existed since long. These relations are strong and based on cultural and historical links between the two countries. With each passing day, merchandise trade between both the countries is rising rapidly. Present study is a humble attempt to explore India's merchandise trade relations with UAE. It shows a comprehensive picture of the relationship between two countries by putting the things in a most disaggregative manner. Both the countries are now trying to renew and increase their bilateral ties for mutual advantages. The mutual relationship between India and UAE were strengthened after the formation of UAE Federation in 1971. UAE enjoys a broad and comprehensive economic relationship with India, based on mutual interests. The current bilateral trade value reveals that this is exciting time in the history of India-UAE economic relations. In fact, their bilateral relations received stimulus from time to time with the high level official exchanges between the two countries.

Further, the number of trade, technology, capital and service sector related agreements and protocols have been signed between the two countries which paved the way for strengthening their mutual trade ties. These events and mutual agreements have fueled the growth of merchandise trade between the two countries. Also, the events like accession of UAE to WTO in 1996 and the FTA between India and Gulf countries in 2004 have boosted their trade and economic relations. At present, the two countries fall in the list of fast growing developing countries, strongly following the process of market based economic reforms and adjusting their external trade in the multilateral framework as enshrined by the WTO and other global institutions. Being one of the significant trade corridors in the world, UAE has emerged as India's largest trading partner, even exceeding China and the US. This is the result of all these agreements and events that during the study period, India's exports to UAE increased tremendously, i.e. from US\$ 1,476.01 million in 1996-97 to US\$ 30,308.35 million in 2015-16. Similarly, India's imports from UAE also increased rapidly from US\$ 1,327.71 million in 1996-97 to US\$ 19,421.53 million in 2015-16. Also, there is less variability and more stability in case of India's exports to UAE, whereas India's imports from UAE are having more variability. It depicts that during most of the years, India experienced favourable trade with UAE.

Over the period, UAE's demand for Indian workers has also increased substantially which is result of growing trade ties between the two. These migrants have played an important role in the development of both the economies India and UAE. Further, the analysis of Net Barter Terms of Trade reveals that India enjoyed favourable terms of trade with UAE during the study period except few years. Instability of India's exports to UAE reveals that UAE had stabilized effect on the value of eight commodities, volume of nine commodities and unit value of seven commodities. This indicates that India's export earnings from UAE were subject to very less fluctuations. These fluctuations occurred primarily due to the dominance of volume exported to UAE, because the volume instability indices were higher than that for unit. The RCA analysis reveals that the pattern of comparative advantage varies at different levels of commodity disaggregation. It shows that commodities which ranked among the top ten according to the index of RCA at HS 2-digit commodity level were not able to retain their place when ranked according to comparative advantage at the HS 6-digit constituent commodity level.

Though, India's trade with UAE is increasing in value and volume terms but still these countries are unable to exploit full trade potential. Throughout the study period, only few commodities constituted a large share of their mutual trade. The challenges exist in India's exports to UAE impact negatively on India's trade relations with UAE. So, there is need to focus on the appropriate economic policies and diversify the trade basket along with better quality for increasing competitiveness of exported items. Also, there is a strong need for both the countries to rectify all the hurdles in their mutual economic interactions and try to explore the trade opportunities.

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## LIST OF ABBREVIATIONS

ADF	Augmented Dickey-Fuller
ADNOC	Abu Dhabi National Oil Company
BIPPA	Bilateral Investment Protection and Promotion Agreement
CII	Coppock's Instability Index
CMS	Constant Market Share
DGCI&S	Directorate General of Commercial Intelligence and Statistics
DTAA	Double Tax Avoidance Agreement
FDI	Foreign Direct Investment
FERA	Foreign Exchange Regulation Act
FTA	Free Trade Agreement
GCC	Gulf Cooperation Council
HCI	Hirschman Concentration Index
HLTF	High Level Task Force
IIT	Intra-Industry Trade
ISPRL	Indian Strategic Petroleum Reserves
LPG	Liberalization, Privatization and Globalization
MOIA	Ministry of Overseas Indian Affairs
MoU	Memorandum of Understanding
MRTA	Monopolies and Restrictive Trade Practice
NBTT	Net Barter Terms of Trade
RCA	Revealed Comparative Advantage
SEZ	Special Economic Zone
TCI	Trade Intensity Index
TII	Trade Complementarity Index
UAE	United Arab Emirates
UNCTAD	United Nations Conference on Trade and Development
UNCOMTRADE	United Nations Commodity Trade Statistics Database
WTO	World Trade Organization

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Introduction**

India and United Arab Emirates (UAE) have shared economic relations through the centuries. It was established through the establishment of cultural, religious and political relations. The two countries have been connected by the trade routes of the Arabian Sea for millennia. UAE, a federation of seven emirates (i.e. Abu Dhabi, Dubai, Sharjah, Ajman, Umm-al-Qaiwain, Ras-al-Khaimah and Fujairah) was formerly known as Trucial Coast, Trucial Oman and Trucial States. It is situated in Middle East, bordering the Gulf of Oman and the Persian Gulf. It is on a strategic location along northern approaches to the Strait of Hormuz i.e. a vital transit point for world crude oil. It shares a border with Qatar on the northwest, Saudi-Arabia on the west and Oman on the east. The UAE stretches for more than 650 kilometers along the southern shore of the Persian Gulf. Most of the coast consists of salt pans that extend far inland. The largest natural harbor is at Dubai, although other ports have been dredged at Abu Dhabi, Sharjah, and elsewhere. Six of the emirates lie on the coast of the Gulf; and the seventh Fujairah, is situated on the eastern coast of the peninsula and has direct access to the Gulf of Oman. Prior to the discovery of oil and petroleum in UAE, it had a localized economy which was connected to India only through exchange of pearls. Pearl-fishing was the main source of country's national wealth. Before Second World War, almost 80 per cent of the work force of these seven emirates was engaged in pearl-fishing while the remaining 20 per cent was involved in animal husbandry, fishing, agriculture, commerce and other services. After the Second World War, various developments led to the fall of pearls industry and oil replaced pearls as the UAE's main source of income. In 1951, oil was discovered in the coastal waters off Abu Dhabi. The commercial use of petroleum began in 1962 and it sharply increased state's revenue. This enormous oil revenue transformed the seven states into modern cities with an impressive and steadily growing infrastructure. Oil in UAE became the channel of economic and social change. It has strengthened UAE's economic relations with the economies of advanced nations in the world. The oil industry has, in turn, prompted the development of some other subsidiary industries. This diversification of the economy

enabled UAE to avoid dependence on only a single source of income. Therefore, India welcomed the emergence of UAE as a sovereign independent state and it established diplomatic relations with it at embassy level. Their relationship got strengthened after the accession of His Highness Sheikh Zayed Bin Sultan Al Nahyan, ruler of Abu Dhabi in 1966 and then the formation of UAE federation in 1971. A Resident Mission was established in UAE soon thereafter. Sayed E.H. Rizwi was appointed as India's first Resident Ambassador to UAE in 1973. In wanting to establish close links with the emirates, India was guided not only by political and economical considerations, but also by its anxiety to promote the well-being of thousands of people of Indian origin living in this area for the past many decades. In the following years, both the nations have made efforts to improve relations in all fields.

### **1.1.1 Political Relations**

India's relations with UAE grew further by exchange of official visits from time to time. These visits included Presidential visits, Prime ministerial visits, Foreign Ministers' visits and some other important ministerial visits at different levels. These were important as they resulted in a series of agreements, Memorandum of Understanding (MoUs) and brought the compatibility of their political situations and ideals to the fore. The first official visit of an Indian dignitary to UAE was in 1973, when Swaran Singh, India's Minister for External Affairs, visited UAE. The two countries discussed about the possibilities of greater cooperation in the areas of trade and commerce, mainly in the matter of setting up joint ventures in the production of fertilizers, petro-chemicals and cement, etc. The visit also brought out the strong identity of views between the two economies on the matter of getting the Gulf and the Indian Ocean internationally recognized as areas of peace and free from outside interference. The foundations of a firm relationship between the two were thus well laid before the rise in oil price and oil commodities in 1973. The rise in price spurred India's efforts to make strong economic and political links with the Gulf nations in order to obtain crude oil at concessional rates from the oil producing countries. Also, India tried to expand its export earnings by introducing a concerted export drive in the Gulf area. In achieving these two objectives it met with significant success. Further, in June 1974, H.H. Sheikh Mohammed Bin Rashid Al Maktoum, Minister of Defence visited India. This visit covered the issues of



importance of bilateral and regional cooperation. UAE had a keen interest in the development of its economic and political relations with India which was discussed in the visit of H.H. Sheikh Zayed Bin Sultan Al-Nahayan, UAE President, to India in 1975. This visit brought the views of two nations on international issues such as UN charter, restoration of the rights of Palestinian people, non-alignments and anti-colonialism, etc. The visit signified the development of an uncommon sympathetic bilaterally and intimacy between the two economies. On the issue of nuclear power, UAE supported India when it stressed the need to develop nuclear energy for extensively peaceful purpose and for promoting rapid economic development in all the countries. Since then, many a visit has been exchanged by the top dignitaries of the two countries. These visits included Dr. Fakhruddin Ali Ahmed, President of India, to UAE in October 1976; Prime Minister of India, Smt. Indira Gandhi, to UAE in 1981; President of UAE, HH Sheikh Zayed Bin Sultan Al-Nahayan, to India in 1992 & 1997; and visits of some other dignitaries in the following years.

The visit of Prime Minister of India, Shri. Narendra Modi, to UAE in August 2015 was an important landmark in India's relations with UAE. The major commitments of the joint statements issued during this visit are as follows: both sides have agreed to make sincere efforts to counter radicalization and misuse of religion by groups and countries. The two nations will facilitate regular exchanges of religious scholars and intellectuals; and organize seminars and conferences to promote the value of peace, tolerance, inclusiveness and welfare which is inherent in all religions; both sides have decided to criticize and oppose terrorism in all its forms and demonstrations. They will also enhance cooperation in capacity building, counter terrorism and intelligence sharing; they will promote cooperation in cyber security, maritime security and strengthen defence relations, manufacture of defence equipment in India, and cooperation in peaceful uses of nuclear energy including in the fields such as safety, health, agriculture, science and technology; they agreed to establish a dialogue between the national security advisors and the national security council; to establish a strategic security dialogue; to the establishment of UAE-India Infrastructure Investment Fund, with the aim of reaching a target of US\$ 75 billion to support investment in India's plans for rapid expansion of next generation infrastructure, especially in ports, roads, railways, airports, industrial corridors and parks;

target of increasing trade between India and UAE by 60 per cent in the next five years; they decided to promote strategic partnership in the energy sector including through UAE's participation in India in the development of strategic petroleum reserves, upstream and downstream petroleum sectors and collaboration in third countries; to promote cooperation in space including in joint development and launch of satellites, ground-based infrastructure and space application. Hon'ble Prime Minister of India also welcomed UAE's plan to set up the West Asia's first Space Research Centre at AI Ain and plans to launch a Mars Mission in 2021. In results of these visits, the two countries have signed a number of agreements and MoUs in the fields related to economic, political, hydrocarbons, science & technology and security cooperation. Therefore, the exchange of high level visits from both sides and bilateral agreements between them have flourished the relationship between India and UAE.

### **1.1.2 Economic and Commercial Relations**

During eighties and nineties, structural reforms and the new economic policies of foreign trade and investment had occurred all over the world. The openness of international trade has proposed variety of opportunities and scope for flourishing links between the economies. With the intensive globalization, the economic interaction between India and UAE has been developed. Their economic relations especially the trade relations have grown at a tremendous pace. This is the result of these growing trade relations that UAE has already been emerged as the top trading partner of India since recent past. UAE is one of the Gulf Cooperation Council (GCC) countries and it is worth mentioning that the entire Gulf region is the important trading partner for India because it provides many opportunities to India for cooperation in energy, trade, investment and manpower, etc. But for India, UAE has remained the centre of attraction due to its trade sustainability and non-oil trade with it. UAE has a largest proportion in India's overall trade (Rizvi, 2014).

UAE has also become one of the major destinations for Indian migrant community. More than 2 million Indian people live in UAE and are performing an important role in its economic development. They are getting employed in white collar jobs such as doctors, engineers, architects, etc.; semi-skilled workers such as drivers, craftsman, artisans, etc.; unskilled workers in construction sites, livestock ranches, stores,

shops, etc. Indians want to migrate importantly to UAE due to the huge inflow of remittances from the UAE. Thus, the movement of labour from India to UAE is also opening up the ways for stronger economic cooperation between the two countries. Further, Investment opportunities have also given an immense scope for establishing stable and long-run relationship between the two countries. The UAE investors prefer to invest mainly in the eastern economies, especially in India's developing sectors, namely real estate, retail sector, fertilizer industries and petrochemical due to their promises of high return on the foreign investments. UAE has been India's tenth biggest investor and had invested US \$2.36 billion in November, 2012 (Hussain, 2012). Several Indian companies have set up manufacturing segments either as in Special Economic Zones (SEZs) or as joint ventures. Indian companies such as ESSAR Steel Processing and Distribution, Dodsai, TCIL, L&T, Punj Lloyd, etc. have invested in the UAE. To strengthen their economic relations, India and UAE have signed an agreement to promote mutual investment.

With all these developments in the relations of India and UAE, the trade interactions attracted much attention of researchers, academicians and policy makers. With each passing day, the trade connections between both the nations are increasing by leaps and bounds. India and UAE trade increased basically after Liberalization, Privatization and Globalization (LPG) policies adopted by the former. However, their trade relations got momentum after the Free Trade Agreement (FTA) in 2004 between India and Gulf countries. This FTA has paved the way for trade interaction between these two countries. With the growing trade, UAE ranked first in the list of India's top trading partners. UAE comprised 7.74 per cent share in India's global trade in 2015-16. This growth of total trade with UAE is due to the growth of both exports and imports as UAE comprised 11.57 per cent share in India's global exports and 5.10 per cent share in India's global imports during the same period. India has also experienced surplus balance of trade with UAE after liberalization except few years. But, their mutual trade is limited by the narrowness of their export baskets. The two way trade mainly dominated by only two broad commodity groups i.e. pearls, precious stones, metals, coins, etc.; and mineral fuels, oils, distillation products, etc. It was the result of liberal policies of the government to promote the trade of these commodities. But, it shows that India and UAE still have to

exploit their mutual trade potentials over a vast range of commodity groups. According to the report of The Hongkong and Shanghai Banking Corporation (2013), UAE will remain India's top export destination in 2030s. So, to provide future direction, the present study would explore the comprehensive picture of India's merchandise trade with UAE.

### **1.2 Relevance of the Study**

There are possibly few issues that academics, policy makers and market participants regard as new chapters in the history. The growth of India and UAE merchandise trade is probably one of them. Their mutual economic interaction has remained at a lower level till 1991. Though after 1991, their merchandise trade increased slowly but could not get momentum up to the early 21<sup>st</sup> century. That may be one of the reasons why no systematic and comprehensive studies are available focusing exclusively upon their trade relationship. The events like accession of UAE to WTO in 1996 and the FTA between India and Gulf countries in 2004 have boosted the bilateral trade links between India and UAE. At present, the two countries fall in the list of fast growing developing countries, strongly following the process of market based economic reforms and adjusting their external trade in the multilateral framework as enshrined by the WTO and other global institutions. These events and mutual agreements have fueled the growth of merchandise trade between the two countries. Due to all these experiences, UAE has become number one trading partner of India. So, all these have attracted the attention of many researchers, academicians and policy makers. It is very probable that in future the economic relations between India and UAE would be further intensified. Thus, the present study intends to provide better understanding of the course of India-UAE economic relations and to help in formulation of the appropriate policies.

### **1.3 Objectives of the Study**

The main objectives of the study are as follows:

1. To examine the growth, direction and composition of mutual trade between India and UAE.
2. To analyze the role of Indian diaspora in UAE and their mutual investment.
3. To study India's gains from trade with UAE.
4. To estimate the instability and competitiveness of India's exports to UAE.

5. To compare the revealed comparative advantage of India and UAE.
6. To identify the problems faced by Indian exporters of major commodities to UAE and suggest some policy implications for improving their trade ties further.

#### **1.4 Hypotheses**

On the basis of above mentioned objectives the following hypotheses are formed:

1. India's merchandise trade with UAE grew at more rapid pace after India's Free Trade Agreement with Gulf countries.
2. India's export basket to UAE is more diversified as compared to UAE's export basket to India.
3. India experienced favourable terms of trade with UAE as compared to its overall terms of trade.
4. India's export earnings from UAE are more stable as compared to rest of the world.
5. Competitiveness, diversification and UAE's global import demand have affected the growth of India's exports to UAE equally.
6. India is exporting those commodities to UAE, in which it has comparative advantage.

#### **1.5 Research Methodology and Data Sources**

The study is based on secondary data as well as primary data. The period covered under the study is of twenty years (i.e. from 1996-97 to 2015-16). The study presents a comprehensive picture of the merchandise trade between the two countries by placing the things in a comparative and disaggregative manner. The growth of their trade have been analysed by using percentage method and exponential function. The direction and composition of their trade have been analysed with the help of percentage and ratio methods over the time period. Moreover, to make an in depth analysis, various trade indices, i.e. Hirschman Concentration Index; Trade Intensity Indices; Intra-Industry Trade Index; and Trade Complementarity Index have also been evaluated. Trends in Indian diaspora in UAE have been shown by using trend line of magnitude of migration. Further, to analyse causal relations between Indian migrants in UAE and UAE's trade with India, Granger Causality model has been applied. In order to check stationarity of data,

Augmented Dickey-Fuller (ADF) unit root test has been used and to identify long run relationship between the two variables, Johansen's cointegration test has been used. Inflows and outflows of foreign direct investment in two countries have been shown by using percentage methods. The gains from trade have been assessed by using Net Barter Terms of Trade (NBTT) and unit value realisation. For this purpose, import and export unit values has been used as proxy for prices. To analyse instability of India's exports to UAE, Coppock's Instability Index has been used. This has been calculated in terms of value, volume and unit value. To check the Competitiveness of India's exports to UAE, Constant Market Share (CMS) model has been applied. The comparative advantage of the two countries has been computed by using Bela Balassa's Revealed Comparative Advantage (RCA) index. All the above mentioned analyses are based on secondary data. Secondary data has been collected from United Nations Conference on Trade and Development (UNCTAD); Directorate General of Commercial Intelligence and Statistics (DGCI&S); United Nations Commodity Trade Statistics Database (UN Comtrade); World Bank; and Ministry of External Affairs, Government of India.

Further, to identify the problems faced by Indian exporters of major commodities to UAE, primary data has been collected. In fact, the researcher has identified 10 commodities namely pearls, precious stones, metals, coins, etc.; mineral fuels, oils, distillation products, etc.; articles of apparel, accessories, not knit or crochet; electrical, electronic equipment; nuclear reactors, boiler, machinery, etc.; cereals; articles of iron or steel; articles of apparel, accessories, knit or crochet; manmade filaments; and iron and steel. These ten commodities constituted more than 75 per cent share in India's total exports to UAE. The researcher has collected the primary data from the exporters of these commodities through a questionnaire. The questionnaire comprised of three sections i.e. first section contained general information; second section of the questionnaire contained questions related to problems or difficulties faced while exporting to UAE; and third section included suggestions for improving export facilities in India. The exporters' list of the selected commodities was taken from Federation of Indian Export Organisations (Ministry of Commerce, Government of India). A sample of 100 exporters (10 for each commodity) was selected randomly. Out of 100, 56 exporters have responded to the questionnaire. All items asking about the problems and suggestions were measured on a

five point likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Descriptive analysis has been used to interpret the results of collected data.

When conducting a research there are two main issues that have to be examined. These are reliability and validity of the questionnaire. Validity can be defined as the ability of a scale to measure what it was designed to be measured (Carmines & Zeller, 1979). In this study, the content validity has been applied. The questionnaire was discussed with some experts. According to their suggestions, the necessary changes have been incorporated. Further, Cronbach Alpha test of reliability has been used. It measures the extent to which the responses collected for given item correlate highly with each other. The value of this test ranges from 0 to 1. The higher value of Cronbach Alpha shows high reliability of the measured construct. Here, the Cronbach Alpha value is 0.74 which is considered to have a high reliability.

## **1.6 Chapter Scheme**

The study consists of nine chapters which are as follows;

Chapter 1 deals with introduction and general approach of the study. It also consists of objectives of the study, hypotheses, research methodology used in various chapters and data sources.

Chapter 2 highlights the review of existing literature concerning the present study.

Chapter 3 presents the growth, direction and composition of India's merchandise trade with UAE. It also deals with some important trade indices i.e. Hirschman Concentration Index; Trade Intensity Index (Export-Intensity Index and Import Intensity Index); Intra-Industry Trade Index; and Trade Complementarity Index.

Chapter 4 presents the role of and trends in Indian diaspora in UAE. Besides, the comparative analysis of FDI inflows and outflows; and mutual investment between two countries has also been included in this chapter.

Chapter 5 presents India's gains from Trade with UAE for the period from 1996-97 to 2015-16.

Chapter 6 examines the instability and competitiveness of India's exports to UAE for the period of 1996-97 to 2015-16.

Chapter 7 provides the analysis of revealed comparative advantage of India's as well as UAE's exports to each other. It found those commodities in which these countries have comparative advantage.

Chapter 8 analyses the problems or challenges faced by Indian exporters when they export to UAE. The chapter also provides solutions to the problems faced by the exporters.

Chapter 9 deals with summary of conclusions and major policy implications about the study.



## **CHAPTER 2**

### **REVIEW OF LITERATURE**

The existing literature on India-UAE economic and trade relations, both in Indian and the global context, has been extensively referred in order to identify the research gaps and formalize the objectives and methodologies for this research. The review of literature has been focused on the various aspects of the research i.e. economic and trade links between two countries; their historical, political and cultural ties; Indian diaspora in UAE; and advantages in their mutual trade, etc. In this chapter, an attempt has been made to review all these studies in such a way that it serves as a support base for the present study.

Sarbadhikari (1977) analysed that with the extraction and trade of oil in UAE, first in Abu Dhabi emirate since 1962 and later in Dubai since 1969, had transformed the economic perspective of the Arab. It had rapidly altered the international involvement of the states. With the ending of all existing agreements with Britain in 1971, UAE had been transforming from a region of pearls, herding, fishing and agriculture to an advanced emirate with the high level of per capita income. Subsequently official visits from India and United Arab Emirates have exchanged and India has appointed its first resident ambassador to the UAE in 1973, which became the cause of strong bonding between India and UAE.

Chatterjee (1987) analysed that India has expanded its exports and imports of commodities from the UAE. Before the British came to India, its major exports products to UAE were incense, spices, condiments and mainly log wood. He also examined that high oil prices in the Arab countries during 1974-75 have led to increase in the emirates' revenue. This attracted foreign investments to build its infrastructure and industrial economy, due to which UAE has increased its demand for workers from India and flourished its economic relations with India. In 1980s, food and live animals; crude oil and petroleum products had contributed high share in UAE's imports and exports to India.

Rizvi (1993) explained that the discovery of oil and its exports to the world market was helpful in restructuring the economic and social fabric of the United Arab Emirates. The continuous and steadily oil increasing revenues have made UAE a capital-surplus economy. These huge funds have opened the door for investments in UAE market. The

volume and nature of relationships which prevailed between various productive sectors of the economy have undergone a significant change. The economy's main interest had been to safeguard the route to India and it was not concerned with the local conditions. However, its relation with India grew only after the oil was discovered in Abu Dhabi in 1958.

Vasudeva (2000) suggested that Indian government should bring the law on Sanitary and Phytosanitary agreement in order to expand their exports of fruit juices, vegetables, fresh fruit, meat products and meat, processed food products; and marine products like crabs, fish, lobsters plants and dairy products. UAE has stopped their imports of meat products from 10 Indian companies which were situated in Delhi, Hyderabad and Mumbai as they were failed to stick to the SPS measures as put down in the agreement. The legislation of Sanitary and Phytosanitary agreement will also help to retain inspect on the imports of unhygienic food products.

Azhar (2004) tried to examine economic cooperation between India and UAE in the 1990s. He found that the performance of their trade links improved during the study period. It was increased from US\$ 1,499 million in 1990 to US\$ 3,074 in 1999. Indian exports to UAE grew by about 13 per cent and readymade garments of cotton including accessories contributed largest share in India's exports to UAE during this period. Also, Indian exports to the UAE grew faster than the growth of India's exports to the world and the percentage share of UAE in India's overall imports and exports has increased during the same decade. Further, the author found that Indian diaspora in UAE over 0.4 million were the principal source of foreign exchange revenues for India.

Kumar (2004) showed that India's exports of fish and fish products have registered a tremendous growth during the period 1987-2000. The export basket of fisheries products has become reasonably diversified. He found that shrimps and prawns comprised of major category of exports and capturing an impressive 5 per cent of the world export market, whereas exports of frozen fish recorded the highest annual growth. Trade and economic reforms of the 1990s have further facilitated the exports of fish and fish products from India to the world market. Values of relative competitive advantage indicate that India has become reasonably competitive in recent years, but, it must strongly take up various sanitary and phytosanitary measures in order to give exports a

further boost. Japan, USA, UAE and China have been found as major importers of fisheries from India and their share was around 60 per cent of India's total fisheries exports during 1998-2000. Japan has been the largest single importer of Indian fish with a share of 34 per cent to 47 per cent in terms of value in recent years. UAE has become the largest importer in terms of quantity in 2000-01 with a share of 33 per cent.

Zachariah et al. (2004) examined the working condition and structure of Indian migrants to the United Arab Emirates. The study reveals that since 1996, UAE government had diminished the demand for unskilled and half-skilled workers from India due to its trade and business recession; privatization policies; execution of large infrastructure projects. Further, the author concluded that 36 per cent share of Indian unskilled, half-skilled workers were absorbed in production, transportation and construction work in UAE. One-fifth of the skilled workers were engaged in technical, electrical, professional, computer & clerical activities. Majority of the unskilled workers were facing problems like non-payment of salaries, refusing to release the passport and denial of wages, etc.

Karayil (2007) analysed that India's exports to Gulf Cooperation Council countries have been affected by Indian diaspora. Migration-trade relationship has verified with the use of gravity model. An empirical evidences given by the study proves that migrant society was the main source of India's exports to the Gulf countries. It also exhibits that the immigrant's preferences affected their home country products and it stimulated the trade between between these two. The study also examined that among the Gulf countries, UAE was the most important market for India's exports as well as its imports, which may influenced by large number of Indian migrants in United Arab Emirates.

Dutta (2009) explained that defence cooperation is an ideal factor to advance the national foreign policy objectives by strengthening friendship, building mutual trust, preventing conflicts and capacities on a global basis. The process indicates the political commitment to expand cooperative relations, dispel mistrust and misperception on issues of common military interest. India's commitment to regional stability shows India's defence-industrial capabilities. Among the Gulf countries, India's defence cooperation with Qatar is very strong. On the other side, with Saudi Arabia, UAE and Bahrain,

defence cooperation is very limited. So, there is a need to further consolidate India's defence cooperation relationships with those countries which are located along India's strategic footprints. The evolving geostrategic realities require that policy guidelines be formulated for integrated inter-ministerial planning on external security issues of a country. Also, India needs to utilise defence diplomacy to the fullest extent to enhance its national interest as the country grows in stature.

Gulf Research Centre (2009) mentioned that UAE has become one of the major destinations for non-resident Indians. Thus, the movement of labour from India to UAE is also opening up the ways for stronger economic cooperation between the two countries. More than 1.5 million Indian people live in UAE and are performing an important role in its economic development. These migrant workers play a significant role in the development of host country as well as home country. Among the Gulf six nations, UAE and Saudi Arabia became the favourite destinations for Indian workforce as the workers receive higher remittances from these two countries.

Pradhan (2006) tried to estimate India's export potential to six countries of GCC by using gravity model. He has used panel data incorporating Ordinary Least Square estimation procedure. He analysed that India's export potential was largest in Oman, Qatar, Kuwait and Bahrain, but lowest in Saudi Arabia and UAE. It indicates that India is presently overtraded with Saudi Arabia and UAE as both the countries are leading trading partners of India. The study suggested that India's export basket should be diversified in order to explore its exports to these countries.

Seshadri (2009) analysed that India's external trade in terms of trade direction and traded items has now been changed during the recent years. Textile exporting sector has ranked below the exports of manufacturing goods in the year 2000-01. In terms of direction, US were at the top in ranking but its percentage share has dropped in India's total trade from 13 per cent in 2000-01 to 10 per cent in 2007-08. Whereas percentage share of United Arab Emirates has increased from 3.4 per cent (ranking 8<sup>th</sup>) in 2000-01 to 7.02 per cent (ranking 3<sup>rd</sup>) in 2007-08. Increase in the percentage share of UAE was due to increase in India's exports of several petroleum products and jewellery to UAE.

Diab (2010) explained that economic dynamics and investment climate were the key aspects of the growing economic relations of India with UAE. He has also examined

India's volume of non-oil exports and imports with the world and UAE at HS code classification of goods. According to him, Gulf region has become a main destination for India's exports of food (i.e. fruits and vegetables; dairy products; and meat and sweets). On the other side, UAE ranked at second position after Switzerland in terms of its exports of natural or cultured pearls; precious or semi-precious stones; and precious metals, etc. to India. So, the exporters in UAE got investment opportunities in both the countries to increase the value of trade, to increase the exports of the above mentioned goods and to promote mutual investment.

Bhatt (2011) analysed that the pre-reform period have not registered much of structural changes in India's foreign trade, mainly the export sector. However, there were some significant changes in import, specifically high imports of petroleum products; and machinery and equipments. On the other side, the post-reform period exhibit significant changes in the trends, pattern and structure of its foreign trade. Trade liberalization would help diversification of the structure of export sector. The changes in the pattern of specialization in exports were more or less in conformity with changes in pattern of production of goods. India's two policy instruments namely price controls and reserving market segment for small-scale firms have had widely varying impact on the composition of exports. In case of direction of India's foreign trade, the share of developed countries has declined, whereas the share of developing countries such as China, UAE, etc. increased sharply during post-reform period.

Jain (2011) analysed that economic reforms has opened up Indian economy to the world competitive atmosphere. India's connections and its trade trend with United Arab Emirates is on an increasing path in the post liberalization period. Among the seven emirates, India and Dubai trade grew rapidly from US\$ 2.5 billion in 2002 to US\$ 10.9 billion in 2009. Free Trade Agreement helped the two countries in boosting their trade and economic ties. The two countries' trade is now expected to grow in future also by exploring the opportunities in investment, defence and energy sector, etc.

Kaur and Saleem (2011) found that India's floriculture industry has been observed as a future high growth industry. The price of cut (modern) flowers and its demand from international markets have been increasing. Therefore, the study included the trade flows of cut flowers with countries such as; Japan, United Arab Emirates, Italy, China and

Australia. Among all these countries, United Arab Emirates imports of these flowers from India have increased in case of both value-wise and quantity-wise. Also, India's imports of modern flowers from United Arab Emirates have decreased from year 2007 to 2009, which shows a positive sign for India in trade with UAE.

Pradhan (2011) summarised that India's look west policy in 2005 has boosted India's trade with the West Asian neighbour countries. India's high desire in the Gulf nations continues in the areas of energy supply and movement of workers from India to Gulf. UAE and Saudi Arabia are the main source of income in the entire GCC countries. UAE remains to be significant for India's energy security. UAE supplies almost 5,448.84 million ton of crude to India. Thus, India could get benefits from its look west policy and has become an emerging economic and political country in Asia and the World.

Alpen Capital (2012) summarized that the GCC enjoyed strong cultural and historical links with India. Their trade relations flourished after liberalisation in India after 1990 and the "look east" policy of the GCC. Both the economies have been emerged as the fastest growing economies in the world. Merchandise trade between the two regions has grown remarkably than the service trade. Among all the GCC States, UAE continues the largest trading partner for India. India's service and power sector are the major destination for UAE investors. The report also reveals that the trade intensity between India and United Arab Emirates was highest with the share of more than 10 during 2009-2010.

Feiler (2012) explained that India has enjoyed economic and political relations with Middle East countries mainly Arab and Israel. It shows how the collapse of Israeli-Arab peace process affected India's economic relations with Israel and its neighbor countries. Among the Middle East, UAE ranked at 1<sup>st</sup> position with 10.81 per cent in India's total trade, whereas Israel contributed only 0.85 per cent and placed at 31<sup>st</sup> position during the fiscal year 2010-2011. India's focus in the Arab and Israel was not only due to its oil reserves but also in the field of defence and technology for its future development.

Hussian (2012) indicated that India has experienced strategic relations in the Gulf region. But, it experienced special relations with UAE due to their balanced trade as exports are almost equal to imports of two countries. Also, non-oil trade has occupied

greater importance in their trade relations. He also found that UAE invested in India's growing sectors such as energy, services, programming, construction and tourism & hotels with 19.1 per cent, 9.3 per cent, 7.8 per cent, 6.8 per cent and 5.6 per cent respectively of the total FDI during the period from 1991 to 2009. India and UAE have all the strength to create a strong and meaningful mutual links that goes beyond trade and investment. They support each other on security, defence and economic issues.

Kumar and Ranjan (2012) analysed that India's trade relations with GCC six countries witnessed high growth in the recent years. The value of their trade reached around US\$ 90 billion with average growth of 40 per cent per annum, over the past few years. The authors discussed how Gulf countries are highly integrating with the emerging economies in the world, especially with those in Asia. This has given an added reason for Indo-GCC trade relations to strengthen. Though, there is evidence that India's imports from Gulf countries are concentrated on very few items, but, India has increasingly widened its export basket with these nations. This indicates a potential in their trade deepening which is yet to be realized. Further, the study shows that India's trade with Gulf is majorly biased towards two countries i.e. UAE and Saudi Arabia. UAE's share in India's total exports has constantly increased during the periods i.e. 1992-1998, 1998-2004 and 2004-2010. India's exports to UAE were majorly of two commodities i.e. pearls, precious stones, metals, coins, etc.; and mineral fuels, oils, distillation products, etc. These commodity groups accounted for more than 58 per cent in India's overall exports to UAE in 2000s.

Sheshagiri et al. (2012) analysed that that UAE has been India's top most trading partner in the entire West Asia and North Africa region. UAE shows an increasing trade trend with India since 2000. The authors have studied about the trade dimensions and growth trends; and their trade linkages in future. They found that UAE's share in India's total exports grew continuously. Also, India's almost 50 per cent oil demand is derived from the Gulf countries. Between the two countries, diversification in their exports and imports would be responsible for future growth in their trade connections. But, there are also some areas of concern which need to be removed and addressed. These problems are basically competition from other Asian countries and advanced nations of the west. Also,

infrastructural and logistics are the major hindrances to exports from India. Besides, there is need to concern about the quality of our export products.

Shrivastav (2012) explained that bilateral engagements between India and UAE have strengthened from time to time with their official visits. This includes Presidential visits, Prime ministerial visits, Foreign Ministers' visits and some other important ministerial visits at different levels. Foreign Affairs Minister of UAE; Abdullah Bin Zayed al Nahyan visited India on 17-18 May, 2012. In that meeting, both the countries have decided to explore opportunities in investments by setting up a joint task force. The energy requirement of India was also discussed in the meeting and UAE assured that in the coming future they will extend energy exports especially crude oil to India. UAE also assured about its presence in Indian downstream investment, including petrochemical sector.

Yahia (2012) tried to examine the effect of trade relationship between United Arab Emirates and its three largest trading partners. The author has applied simultaneous equation model by using 2 stage least square method of estimation to check trade relationship effect. He concluded that UAE's exports to Japan and Imports from India had a positive effect on GDP of UAE economy. UAE's imports from India were influenced by income elasticity. The short-run income elasticity was 1.36 and long-run elasticity was 1.83. It shows that an increase in the income of UAE led to increase in UAE's imports from India.

Banu and Amit (2013) studied about the trends of Indian expatriation and the role of Indian recruitment agency. The movement of Indian workers to UAE was increased in the twentieth century. But, the unskilled and semi-skilled workers were facing problems in the emirate. In order to resolve these problems, recruitment Agency in India has given extra precautions to Indian unskilled labour and housemaids in United Arab Emirates. The main role of consultancy is helping vulnerable workers to come back to India by paying the contract breaking payment to the company and also give training to unskilled or semi skilled workers before sending them from home country to host country which will help to maintain India's relation with UAE.

Embassy of India (2013) mentioned that with each passing day, the trade connections between India and UAE are increasing by leaps and bounds. India and UAE



trade increased basically after Liberalization, Privatization and Globalization policies adopted by the former. With the growing trade, UAE ranked first in the list of India's top trading partners since 2009. UAE comprised 9.45 per cent share in India's global trade in 2012. This growth of total trade with UAE is due to the growth of both exports and imports as UAE comprised 12.35 per cent share in India's global exports and 7.73 per cent share in India's global imports.

Wadhvani (2013) attempted to analyze India's economic and trade relations with UAE. UAE is one of the prominent nations of Middle East since 1986. He has examined the foreign trade of India, foreign trade of UAE and performance of their mutual trade. He found that trade between these two countries grew from US\$ 43,469.50 million to US\$ 12,945.87 million in the five years between 2005-06 and 2009-10. UAE also became the topmost trading partner of India among all the GCC countries. It contributed around 60 per cent of India's total exports to GCC countries during 2009-10. Further, he found that Indian diaspora in United Arab Emirates and investments flows between the two countries are the main factors for future growth in their trade relations.

Hussain (2014) explained that recently India has promoted its investment policies under "Make in India" programme to attract a large proportion of investment from UAE. Investment provides a bigger scope for a wider and deeper base of economic cooperation between Abu Dhabi and New Delhi. UAE and its commercial hub Dubai are in search of safer and better returns for its capital. The potential investors from UAE are also aware that the economic gravity is now changing from the West to the East. The emerging Indian economy offers one of the most profitable markets for their capital investments in the East. On the other hand, New Delhi has also made significant reforms to encourage the confidence of the investors in general and the UAE in particular. In 2014, it has put Bilateral Investment Protection and Promotion Agreement (BIPPA) into practice. It has also implemented the much awaited Double Tax Avoidance Agreement (DTAA). These two agreements between India and UAE have not only provided the safety to investment of the UAE investors, but also ensured high returns, which were missing in the past. The emerging Indian economy offers opportunities in its sunrise sectors where the investors from the UAE can invest and enhance their returns. These areas are basically automobile, electronic system, aviation, renewable energy, biotechnology, thermal power, tourism and

hospitality, health, real estate, pharmaceuticals, banking, financial market, tourism, upstream and downstream sectors, renewable energy, media and entertainment, etc. Therefore, 21<sup>st</sup> century offers a huge scope to UAE and India to convert their potentials into a natural partnership.

Krishnaswamy and Shaw (2014) found that gold, jewellery and diamonds have played an important role in India-UAE bilateral trade. According to the study, exports of pearls and precious stones to UAE contributed more than half of India's total exports to UAE in 2012-13. On the other side, two commodity groups, namely pearls and precious stones, metals; and mineral fuel, oil, etc. accounted 63 per cent share in India's total imports from UAE in 2000-01 which further increased to 90.4 per cent in 2012-13. The shares have increased sharply because Indian government had cut 3 per cent duties on imports of these commodities in 2007.

Narayan (2016) mentioned in his article that oil-rich country i.e. UAE has showed an interest in storing its crude oil in Indian caverns. This oil would be used during emergencies arising from supply constraints because of the geopolitical turmoil in the oil-producing nations. Abu Dhabi National Oil Company (ADNOC) has been agreed to store 6 million barrels and 0.75 million ton of oil in one compartment of the Mangalore facility and reserve two-thirds of this oil for India. Therefore, India is building three storage caverns at Visakhapatnam in Andhra Pradesh and Mangalore and Padur in Karnataka with high storage capacity. As part of India's strategy to have oil stock availability, apart from these three facilities, the country is planning to construct four similar provisions over the next few years. So, there is a great opportunity for India to fill up its strategic oil reserve facilities by making savings on crude. The caverns are developed by Indian Strategic Petroleum Reserves (ISPRL). This is a special purpose vehicle of the oil industry development board which a statutory body created for India's energy security.

Thus, the literature reveals that both the countries are continuously making efforts to improve their trade relations which boosted up the growth of their merchandise trade. But, the existing literature does not cover all the aspects of their bilateral trade. The studies mainly cover their historical and cultural relations. Though, some studies have explored the trade relationship between India and the entire Gulf countries as a region but still no study is available which has analysed the trade relationship between India and

UAE in a comprehensive manner which can be used as ready reckoner. Hence, the present study is useful keeping in view their economic interaction in general and trade interaction in particular.

## **CHAPTER 3**

### **GROWTH, DIRECTION AND COMPOSITION OF INDIA'S MERCHANDISE TRADE WITH UAE**

#### **3.1 Introduction**

No country in the world is self-sufficient to acquire facilities for the production of all goods and services that are demanded by its domestic people. Probably no country can produce all the commodities that it requires. Therefore, there is need to trade with other countries of the world. Country exports its surplus production to rest of the world and imports the goods and services in which a country lacks. All countries differ in their requirements, technological possibilities, cost of production, factors endowments and factor intensities, etc. These differences cause different prices of commodities which emerge as the basis for international trade (Ohlin, 1952). International trade for a country mainly depends upon the structure of traded commodities. In Indian context, it has been the issue of historical experience that until 1947, India's foreign trade was substantially of a colonial and agricultural economy. However, it has experienced a complete change with the beginning of Economic Planning for the development of industrial sector since independence and it is no longer restricted to only few commodities and few countries (Joshi, 1997). On the other side, UAE has also experienced structural changes in its economy. After the discovery and extraction of oil, UAE became a very wealthy country of the world. With the utilization of natural resources, it has incorporated resource-based industries as an economic development strategy (Shihab, 2001). Hence, the importance of two countries i.e. India and UAE in international trade is emerging appreciable with each passing day. So, it will be an interesting to explore the growth and structure of merchandise trade between two important economies of the world.

India-UAE bilateral trade relations are becoming noticeable. India's exports to and imports from UAE grew gradually after the formation of UAE in 1971. But, their trade got momentum after the process of economic liberalization started in India by early 1990s and on the same time, Dubai placed itself as a regional trading center in UAE. Trade between the two countries increased tremendously from US\$ 180 million per annum in 1970s to US\$ 45 billion in 2009 and more than US\$ 60 billion in 2015. This makes UAE,

India's leading trading partner since 2009 followed by USA and China. UAE has also emerged as top destination for India's export commodities and became the second top source of commodities for India preceded by China. India's top most exports to UAE contains readymade garments, manmade and cotton yarns, gems and jewellery, accessories, machinery and instrument, marine products, linoleum commodities, meat, fruits and vegetables, etc. The key commodities India imports from UAE include gold and silver, pearls, precious stones, ores, metafiles, non-ferrous metals, pyrites, crude oil, organic and chemicals, etc. It shows that India's imports from UAE also comprise non-oil products.

This chapter deals with the growth, direction and composition of India-UAE trade. It is divided into four sections. First section consists of growth of India-UAE merchandise trade. Second section deals with the direction of trade. Third section deals with the composition of merchandise trade and fourth section assess some indices of India-UAE bilateral trade.

### **3.2 Growth of Merchandise Trade**

During the period from 1996-97 to 2015-16, the growth of India's merchandise trade as well as UAE's merchandise trade was quite tremendous. But, before the analyzing the growth of India's merchandise trade with UAE, it is important to analyse the growth of their global trade.

#### **3.2.1 India's Overall Merchandise Trade**

India's foreign trade got importance on the eve of independence in 1947, when the trade was typical of an agricultural economy. India's trade relations were mainly restrained to Britain and other Commonwealth countries. Exports included primarily of raw materials and plantation crops whereas imports composed of consumer goods and other manufactured commodities. Over the last 60 years, the structure of India's foreign trade has undergone a complete change in terms of direction and composition (Mathur, 2006). During the period 1950-1970, India's world imports were growing highly but exports were grown at a very low rate. Only five major commodities constituted a large portion of Indian exports and the belief was that India had nothing a lot to export. Tariff rates were very high and non-tariff barriers were formed through quota system and

quantitative restriction. Thus, the government had adopted a policy of export pessimism and import substitution in 1960s in order to encourage exports and to cut down on foreign imports. With the world merchandise exports expanded relatively faster during the 1960s, the growth rate of India's exports had also been started to improve. During the period 1970-1991, India's trade performance had been improved. The establishment of Indian Institute of Foreign Trade in late 1960s had boosted country's exports and imports growth rate in 1970s. But, India's exports reduced sharply in the first half of 1980s. It was mainly because of the negative growth rate of world's exports which was the result of high oil prices. Then, during the second half of 1980s, India's exports grew at a high pace (Pillania, 2008). Further, with the beginning of 1990s, government of India had set up a series of reforms to liberalize and globalize the Indian economy with emphasis on external sector. During 1990s, WTO and the new economic reform policy has reduced tariff rates and simplified the restrictive import licensing regime. Import licensing was totally abolished with respect to imports of machinery, equipment and manufactured intermediate products. The policy focus was mainly on openness and export promotion activities. India's export composition has been changed significantly in the post-reforms period. The main contributor to growth of India's exports has been the manufacturing sector. On the other side, imports consisted of petroleum and petroleum products, pearls and precious metals, machinery and equipments, etc. With the openness of the economy, the other significant change was in India's direction of trade flows. An important development regarding this parameter is the rapid growth of India's trade with ASEAN, UAE, Mexico, Brazil, Colombia, etc. (Kaur, 2012).

During the study period, India's both imports and exports improved gradually and their successive yearly values turned out to be higher than that of proceeding years. India's overall merchandise exports were increased from US\$ 33,469.95 million in 1996 to US\$ 262,031.23 million in 2015. India's overall merchandise imports increased from US\$ 39,132.41 million in 1996 to US\$ 380,665.13 million in 2015 and total trade increased from US\$ 72,602.36 million in 1996 to US\$ 642,696.36 million in 2015. The relative importance of India in world exports, imports and total trade has been shown in Table 3.1. As is clear from the table that India's share in world total trade increased from 0.67 per cent in 1996 to 1.98 per cent in 2015, but it was very low. India's share in world

imports increased from 0.72 per cent in 1996 to 2.35 per cent in 2015. This was mainly because of liberalization of import tariffs, sharp rise in demand for crude oil and petroleum; gold and other metals. On the other side, India's share in world exports also increased from 0.62 per cent in 1996 to 1.60 per cent in 2015. While during 1996 and 1997, India's share in world export was same i.e. 0.62 per cent then this share had declined to 0.61 per cent in 1998. But again the share was improved. Since 1999, India's share in world exports grew over the period. This change happened due to rising share of gems and jewellery, textile commodities and the high rise in prices of non-fuel primary goods such as ores and minerals, iron and steel, etc. But still the share was not increased with the same pace as in case of imports.

**Table 3.1: India's Percentage Share in World Exports, Imports and Total Trade**

<b>Year</b>	<b>Exports</b>	<b>Imports</b>	<b>Total Trade</b>
1996	0.62	0.72	0.67
1997	0.62	0.73	0.68
1998	0.61	0.76	0.69
1999	0.65	0.86	0.75
2000	0.66	0.80	0.73
2001	0.71	0.80	0.76
2002	0.78	0.87	0.82
2003	0.79	0.94	0.86
2004	0.83	1.05	0.94
2005	0.96	1.31	1.14
2006	1.00	1.44	1.22
2007	1.04	1.54	1.29
2008	1.13	1.93	1.53
2009	1.41	2.10	1.76
2010	1.45	2.28	1.86
2011	1.65	2.52	2.08
2012	1.58	2.65	2.12
2013	1.79	2.49	2.14
2014	1.68	2.44	2.05
2015	1.60	2.35	1.98

Source: Calculated from United Nations Conference on Trade and Development (UNCTAD).

### **3.2.2 UAE's Overall Merchandise Trade**

UAE's incorporation with the world economy is reflected in country's rapidly growing importance in international trade. The country's trade grew gradually with an increase in oil production and oil exports in 1973. The natural resource became a dominant factor for UAE's economic growth. But the country was not just relied on its

natural resources for international trade. UAE's non-oil trade with the world had also played an important role in its economic diversification. UAE has attained an income level comparable to that of the industrialized economies. The country's strong efforts of economic diversification have resulted in a falling dependence on oil. The main factor which contributed to such diversification was the UAE's "Free Trade Zones". These Zones were established to create dynamic business atmosphere conducive to liberal growth by eliminating the traditional laws, agency requirements, licensing and UAE majority ownership. UAE's international trade got momentum when it became a member of World Trade Organization in 1996. Also, UAE's free, competitive and open trade policy has been seen as one of the major elements behind its growth. The country's engagement to free international trade, it has taken some steps to negotiate bilateral trade agreements with several nations such as: Turkey, China, India, Australia and United States, etc. In addition, with the accession of WTO, the country witnessed 98 per cent increase in exports compared to 133 per cent increase in imports from year 1996 to 2004.

**Table 3.2: UAE's Percentage Share in World Exports, Imports and Total Trade**

<b>Year</b>	<b>Exports</b>	<b>Imports</b>	<b>Total Trade</b>
1996	0.70	0.56	0.63
1997	0.73	0.60	0.66
1998	0.57	0.58	0.58
1999	0.65	0.55	0.60
2000	0.78	0.53	0.65
2001	0.79	0.59	0.69
2002	0.81	0.64	0.73
2003	0.89	0.67	0.78
2004	0.99	0.76	0.87
2005	1.10	0.75	0.93
2006	1.18	0.79	0.98
2007	1.28	0.90	1.09
2008	1.48	1.22	1.35
2009	1.40	1.30	1.35
2010	1.30	1.18	1.24
2011	1.65	1.15	1.40
2012	1.90	1.30	1.60
2013	1.94	1.36	1.65
2014	2.01	1.33	1.67
2015	1.63	1.38	1.51

Source: Calculated from United Nations Conference on Trade and Development (UNCTAD).



The relative importance of UAE in world trade has been shown in Table 3.2. As is clear from the table that though UAE's share in world trade increased from 0.63 per cent in 1996 to 1.51 per cent in 2015, yet it was very low. UAE's share in world imports increased from 0.56 per cent in 1996 to 1.38 per cent in 2015. On the other side, UAE's share in world exports also increased from 0.70 per cent in 1996 to 1.63 per cent in 2015. As the data reveals that UAE's share in world imports and exports were improved, but it was fluctuated largely during 1990s. This happened mainly because of the country was experiencing structural changes in its economy. The focus of trade policy was majorly on encouraging non-oil sector trade. It helped UAE to increase its share in the world economy.

### **3.2.3 Value of India-UAE Merchandise Trade**

India-UAE economic relations are on the upswing. The two countries enjoy ties of cultural affinity and have strong commercial linkages. Their growing relations cover the range of economic, social, cultural and technical fields that are mutually beneficial for the two countries' people. India and UAE are strengthening their trade ties with sincere efforts. With each passing day, merchandise trade between both the countries is rising rapidly. The overall picture of trade between the two countries has been shown in Table 3.3. During the study period, India's exports to UAE increased tremendously, i.e. from US\$ 1,476.01 million in 1996-97 to US\$ 30,308.35 million in 2015-16. Similarly, India's imports from UAE also increased rapidly from US\$ 1,327.71 million in 1996-97 to US\$ 19,421.53 million in 2015-16. This table also depicts that annual percentage change of India's exports to and imports from UAE fluctuated sharply during the study period. During 1990s, fluctuations in their trade were mainly because of the effect of Gulf crisis in 1990-91 and due to the focus of UAE's trade policy was mainly on economic diversification. Then, in year 2000-01, India's merchandise exports growth accelerated mainly due to export facilitating measures taken by the government and gains in some selected sectors such as textiles, electronic goods, petroleum products, etc. But the rise in exports has sharply reversed and reached to -4.07 per cent in 2001-02 due to decline in India's overall export growth. This happened because of a sharp deceleration in world production and trade; and a slowdown of the domestic economy. To reverse this downturn in Indian exports, government have announced some measures such as reduction in export

credit rate, special credit packages for selected large value exports, which were internationally competitive (Ministry of Finance, 2001-02). Thus, these steps were become helpful for increasing in India's exports to UAE. However, their trade was again highly affected by the grip of global crisis of 2009 and India's export growth to UAE dropped sharply in 2009-10 and reached to only -2.07 per cent. But, the short term objective of Foreign Trade Policy 2009-2014, was to encourage Indian exports and to give support to those sectors of the economy, which were hit badly by the crisis. Hence, India's exports came back on track with the growth of 41.10 per cent in 2010-11 but the upswing in exports again affected by the euro zone crisis and global slowdown in 2012-13 (Ministry of Finance, 2012-13). The exports growth was dropped down to 6.22 per cent in 2011-12 and reached to -8.23 per cent in 2015-16.

**Table 3.3: Value of India-UAE Merchandise Trade**  
(US\$ Million)

Year	Exports	Growth (Per cent)	Imports	Growth (Per cent)	Trade Balance
1996-97	1,476.01	3.34	1,327.71	-17.36	148.30
1997-98	1,629.56	10.40	1,475.04	11.10	154.52
1998-99	1,867.59	14.61	1,721.24	16.69	146.35
1999-00	2,082.74	11.52	2,003.24	16.38	79.50
2000-01	2,597.52	24.72	658.98	-67.10	1,938.54
2001-02	2,491.79	-4.07	915.09	38.86	1,576.70
2002-03	3,327.48	33.54	956.99	4.58	2,370.49
2003-04	5,125.58	54.04	2,059.84	115.24	3,065.74
2004-05	7,347.88	43.36	4,641.10	125.31	2,706.78
2005-06	8,591.79	16.93	4,354.08	-6.18	4,237.71
2006-07	12,021.77	39.92	8,655.28	98.79	3,366.49
2007-08	15,636.91	30.07	13,482.61	55.77	2,154.30
2008-09	24,477.48	56.54	23,791.25	76.46	686.23
2009-10	23,970.40	-2.07	19,499.10	-18.04	4,471.30
2010-11	33,822.39	41.10	32,753.16	67.97	1,069.23
2011-12	35,925.52	6.22	36,756.32	12.22	-830.80
2012-13	36,316.65	1.09	39,138.36	6.48	-2,821.71
2013-14	30,520.42	-15.96	29,019.82	-25.85	1,500.60
2014-15	33,028.08	8.22	26,139.91	-9.92	6,888.17
2015-16	30,308.35	-8.23	19,421.53	-25.70	10,886.82
Coefficient of Variation (1996-97 to 2015-16)	0.87	-	1.01	-	-

Source: Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

On the other side, the growth of merchandise imports also declined sharply to -67.10 per cent in 2000-01. This was mainly because of a significant fall in non-oil imports

due to fall in imports of pearls, precious and semi precious stones; fertilizers; food and allied commodities; iron and steel, etc. Then the import growth was improved and exhibited high growth i.e. 115.24 per cent and 125.31 per cent in 2003-04 and 2004-05 respectively. It was due to India's strong imports of capital goods, industrial raw material, etc. Also, FTA between India and Gulf countries in 2004 boosted the two countries' exports and imports. But with the high international price of gold and silver, India's imports of pearls and precious stones from UAE declined and the import growth was registered to -6.18 per cent in 2005-06. After that the growth of imports was on upswing till the global crisis of 2009 which affected it negatively. Due to crisis, India's imports of top commodities such as petroleum crude & products, electronic goods, gold and precious stones, etc. declined sharply to -18.04 per cent in 2009-10. Again, it was deteriorated and reached to -25.70 per cent in 2015-16 because of fall in India's gold imports. It indicates that India's imports from UAE fluctuated more than that of exports.

Further, the coefficient of variation shows that India's exports to and imports from UAE actually fluctuated with greater extent. However, the value of coefficient of variation of India's exports to UAE (i.e. 0.87 or 87 per cent) remained less than that of imports (i.e. 1.01 or 101 per cent) for the period 1996-97 to 2015-16. The results indicate that there is less variability and more stability in case of India's exports to UAE, whereas India's imports from UAE are having more variability. It shows India's balance of trade with UAE remained in surplus except few years.

### **3.2.4 Growth Rate of India's Exports and Imports: UAE and Overall**

In absolute terms, India-UAE trade grew at a phenomenal rate. The growth rate of their bilateral trade as well as India's overall trade have been calculated for the whole period i.e. from 1996-97 to 2015-16 and for some of the sub periods by changing the nominal prices into real prices (deflating the actual values by unit value indices with the base year 1999-2000). The growth rate has been calculated by using exponential function of the following form.

$$Y = a (b)^t \quad (1)$$

The equation (1) takes the linear forms by taking logarithms of both sides of the equation as follows.

$$\text{Log } y = \text{log } a + t \text{ log } b$$

The real growth rate has been computed by using the following formula.

$$G = \{ \text{antilog}(\log b) - 1 \} * 100$$

Where, g= growth rate, b=slope of semi-logarithmic trend, a=constant, t=time variable in years and Y= variable for which growth rate is estimated.

**Table 3.4: Real Growth Rate of India's Exports and Imports: UAE and Overall  
(At Constant price of 1999-00)**

Period	UAE		Overall	
	Exports	Imports	Exports	Imports
1996-97 to 2001-02	8.81	-15.34	2.97	1.19
2002-03 to 2008-09	21.86	50.61	13.26	21.19
2009-10 to 2015-16	-4.54	-8.52	3.10	-6.84
1996-97 to 2015-16	14.57	15.13	7.46	6.76

Note: Figures represent the Average Annual Growth Rate of India's Exports to and Imports from UAE and World.

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

Table 3.4 shows the real growth of India's exports and imports with UAE and the world. During 1996-97 to 2015-16, India's exports to and imports from UAE grew at real prices almost at the equal pace (i.e. 14.57 per cent and 15.13 per cent respectively). In the first sub period 1996-97 to 2001-02, growth rate of India's exports to UAE (i.e. 8.81 per cent) was much higher than that of its imports growth rate (i.e. -15.34 per cent). However, during the second sub period 2002-03 to 2008-09, growth rate of India's import from UAE i.e. 50.61 per cent was marginally higher than that of its exports i.e. 21.86 per cent. In the last sub-period 2009-10 to 2015-16, growth rate of both India's exports to and imports from UAE were negative, but exports growth rate (i.e. -4.54 per cent) was higher than that of its imports growth rate (i.e. -8.52 per cent).

In the case of India's overall exports and imports, during 1996-97 to 2015-16, growth rate of exports (i.e. 7.46 per cent) was higher than that of country's overall imports (i.e. 6.76 per cent). During the first sub periods i.e. from 1996-97 to 2001-02, growth rate of India's overall exports (i.e. 2.97 per cent) was higher than that of its overall imports (i.e. 1.19 per cent). Furthermore, second sub period 2002-03 to 2008-09 shows that India's overall imports (i.e. 21.19 per cent) was higher than that of India's overall exports (i.e. 13.26 per cent). Again, in the third sub period 2009-10 to 2015-16, growth rate of India's overall exports (i.e. 3.10 per cent) was higher than that of its overall imports (i.e. -

6.84 per cent). Thus, the table depicts that the growth rate of exports and imports were higher in case of India's trade with UAE than that of its overall exports and imports. The same trend could be seen in the different sub periods. During the first sub period i.e. 1996-97 to 2001-02, India's trade with UAE was larger than that of its overall trade, but the growth rate was very low because of the impact of East Asian Crisis and the climate of political uncertainty. Further, during the second sub period i.e. 2002-03 to 2008-09, the trade relations between two countries recovered again. The major reason behind this was that the adoption of India's "look west policy" in 2005. The policy has boosted India and Gulf six countries' relations in the areas of trade, security, defence and business (Pradhan, 2011). Besides this, Free Trade Agreement between India and six-nations GCC also enhanced trade between India and UAE. A framework agreement for entering into FTA was signed in 2004, following with the two rounds of negotiation were held in the years 2006 and 2008. However, during the third sub period, the growth rate of India's exports to and imports from UAE declined due to fall in growth of India's overall trade because of the global crisis and euro zone crisis. Thus, the growth values show that the trade between these two nations grew with lots of ups and downs.

### **3.2.5 Role of India and UAE in Each Other's Global Trade**

India and UAE economic relations are strong and mutually valuable. The two countries are largely integrated via trade links. The presence of the two in each other's trade is growing with each passing day. Thus, it is interesting to know the relative importance of India and UAE in each other's foreign trade.

The relative importance of India in UAE's exports, imports and total trade has been depicted in the table 3.5. During the study period, India's share in UAE's total trade increased sharply from 5.98 per cent in 1996 to 11.10 per cent in 2015. This was due to increase in share of India in UAE's exports and imports i.e. from 6.11 per cent and 5.83 per cent in 1996 to 9.73 per cent and 12.70 per cent in 2015 respectively. However, in the early years of the study period, India's share in UAE trade was fluctuated. But, as is clear from the table, since 2003, the share was significantly rising over the period. Increasing trend of this share was importantly because of fall in UAE's trade with Japan. The reason behind falling share of Japan in UAE's trade was that the decline in the value and volume of crude oil and petroleum products which Japan imported from UAE. Also, the declining

trend of UAE imports of electrical machinery, iron and steel, etc. from Japan was the major reason for rising share of India's trade in UAE market.

**Table 3.5: Percentage Share of India in UAE's Exports, Imports and Total Trade**

<b>Year</b>	<b>Exports</b>	<b>Imports</b>	<b>Total Trade</b>
1996	6.11	5.83	5.98
1997	4.59	6.07	5.27
1998	5.45	6.20	5.84
1999	7.23	6.43	6.86
2000	2.55	6.88	4.34
2001	2.42	6.46	4.18
2002	2.76	6.81	4.58
2003	3.49	8.14	5.52
2004	5.97	9.86	7.69
2005	5.30	8.85	6.76
2006	6.30	10.22	7.90
2007	8.84	10.83	9.67
2008	10.70	11.94	11.27
2009	13.66	15.70	14.65
2010	16.34	18.13	17.19
2011	13.69	19.45	16.06
2012	14.05	16.82	15.17
2013	12.55	14.26	13.25
2014	9.02	12.69	10.47
2015	9.73	12.70	11.10

Source: Calculated from United Nations Conference on Trade and Development (UNCTAD).

Table 3.6 shows UAE's relative position in India's exports imports and total trade. UAE's share in India's total trade increased from 3.86 per cent in 1996-97 to 7.74 per cent in 2015-16. UAE's share in India's exports grew tremendously from 4.41 per cent in 1996-97 to 12.09 per cent in 2012-13 and to 11.57 per cent in 2015-16. On the other side, UAE's share in India's imports also increased from 3.39 per cent in 1996-97 to 5.10 per cent in 2015-16. But, it was not increased with the same pace as in case of exports. It depicts that India's exports to UAE were higher than imports. Hence, India enjoyed bilateral trade surplus with UAE during the study period. Thus, both the tables depict that the share of India and UAE in each other's international trade grew continuously. The relative importance of the economies in each other's trade is developing and emerging into a strategic partnership with the main emphasis on cooperation in energy, security and defence, etc. It can be noticed that two economies have given more importance to their

mutual trade links after signing an agreement of FTA between India and Gulf countries in 2004. The share of India and UAE in each other's export and import touched even two digit mark in some of the years after 2004. This depicts that FTA had provided many opportunities to India and UAE for enhancing their trade relations.

**Table 3.6: Percentage Share of UAE in India's Exports, Imports and Total Trade**

<b>Year</b>	<b>Exports</b>	<b>Imports</b>	<b>Total Trade</b>
1996-97	4.41	3.39	3.86
1997-98	4.68	3.56	4.07
1998-99	5.62	4.06	4.75
1999-00	5.66	4.03	4.72
2000-01	5.83	1.30	3.42
2001-02	5.69	1.78	3.58
2002-03	6.31	1.56	3.75
2003-04	8.03	2.64	5.06
2004-05	8.80	4.16	6.15
2005-06	8.33	2.92	5.13
2006-07	9.51	4.66	6.62
2007-08	9.59	5.36	7.02
2008-09	13.21	7.83	9.87
2009-10	13.41	6.76	9.31
2010-11	13.47	8.86	10.72
2011-12	11.74	7.51	9.14
2012-13	12.09	7.98	9.54
2013-14	9.71	6.45	7.79
2014-15	10.64	5.83	7.80
2015-16	11.57	5.10	7.74

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

### **3.3 Direction of Trade: India and UAE**

The direction of foreign trade refers to the destination of a country's exports and the source of its imports. Prior to Independence, when India was under the British rule, Britain was the main trading partner of India. Therefore, UK emerged as the top destination for India's exports and had become the leading source for India's imports. But after independence, new trade policies reversed the direction of India's foreign trade. The share of developed countries like USA, Japan and EU has declined in India's exports and imports. Whereas the share of developing countries such as Asia, Africa, China and Middle East countries i.e. UAE, Saudi Arabia, etc. shows uptrend in India's exports and imports. The same case can be seen during the study period also. The share of developing

countries in India's foreign trade increased rapidly. Among these nations, UAE has been emerged as top destination for India's exports and major source for India's imports. Similarly, India has also become an important trading partner for UAE's foreign trade. Hence, the direction of two countries trade exhibited a significant change over the period that is analysed as follows;

### **3.3.1 Direction of India's Trade**

During the pre-independent era, direction of India's foreign trade was determined by the colonial relations between India and Britain. India was the main exporter of raw materials to the industrialized countries and importer of the manufacturer items. UK was the only main trading partner country for India. India's foreign trade policies were framed for UK's industrial development. This trend remained the same till India had not explored the opportunities of growing trade links with other countries of the world. Then, new prospects for India's trade relation with other nations opened up. Hence, India's direction of foreign trade has undergone many changes. It is clear from both the tables 3.7 and 3.8, the countries namely USA, UAE, China, Hong Kong, Saudi Arabia, Singapore, and Switzerland have emerged as India's leading trading partners.

Table 3.7 shows percentage share of selected countries in India's overall exports. It is clear from the table that total share of selected countries in India's overall exports decreased somewhat from 57.90 per cent in 1996-97 to 49.57 per cent in 2015-16. The share of USA, Hong Kong, UK, Germany, Netherland, Japan and Belgium has decreased during the study period. Only the share of UAE, China and Singapore in India's overall exports has increased. UAE ranked at second position in India's top export destinations. In fact, for few years, it also ranked at first place. Besides this, the table also indicates that UAE's percentage share grew throughout the study period i.e. from 4.41 per cent in 1996-97 to 11.57 per cent in 2015-16. It shows that with each passing day, UAE's importance is increasing in India's overall exports. According to the report of The Hongkong and Shanghai Banking Corporation (2013), in the longer term, India's exports to UAE will increase rapidly because of their cultural links, political links and Indian migrants in UAE. By 2030, UAE is likely to keep its top position, while USA will shift into third place.



**Table 3.7: Percentage Share of the Selected Countries in India's Overall Exports**

<b>Country</b>	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<b>USA</b>	19.59	19.36	21.67	22.80	20.88	19.42	20.67	18.00	16.48	16.83	14.92	12.71	11.41	10.93	10.07	11.35	12.04	12.45	13.68	15.37
<b>UAE</b>	4.41	4.68	5.62	5.66	5.83	5.69	6.31	8.03	8.80	8.33	9.51	9.59	13.21	13.41	13.47	11.74	12.09	9.71	10.64	11.57
<b>China</b>	1.84	2.06	1.29	1.46	1.87	2.17	3.75	4.63	6.72	6.56	6.58	6.66	5.05	6.50	6.17	5.91	4.51	4.72	3.85	3.45
<b>Hong Kong</b>	5.56	5.54	5.66	6.82	5.93	5.40	4.96	5.11	4.42	4.34	3.71	3.87	3.59	4.41	4.11	4.23	4.09	4.05	4.38	4.63
<b>Singapore</b>	2.92	2.23	1.56	1.83	1.97	2.22	2.70	3.33	4.79	5.26	4.79	4.52	4.56	4.25	3.91	5.51	4.53	3.98	3.16	2.95
<b>UK</b>	6.12	6.02	5.59	5.53	5.16	4.93	4.74	4.74	4.41	4.91	4.45	4.11	3.59	3.48	2.90	2.81	2.87	3.11	3.00	3.37
<b>Germany</b>	5.66	5.52	5.57	4.72	4.28	4.08	4.00	3.99	3.38	3.48	3.15	3.14	3.45	3.03	2.69	2.60	2.41	2.39	2.43	2.71
<b>Netherland</b>	2.55	2.31	2.30	2.41	1.98	1.97	1.99	2.02	1.92	2.40	2.12	3.22	3.43	3.58	3.06	2.99	3.52	2.54	2.04	1.80
<b>Japan</b>	5.99	5.44	4.97	4.58	4.03	3.45	3.54	2.68	2.55	2.41	2.27	2.37	1.63	2.03	2.03	2.07	2.03	2.17	1.74	1.78
<b>Belgium</b>	3.26	3.49	3.88	3.71	3.30	3.17	3.15	2.83	3.00	2.79	2.75	2.58	2.42	2.10	2.30	2.34	1.83	2.03	1.78	1.94
<b>Total</b>	<b>57.9</b>	<b>56.65</b>	<b>58.11</b>	<b>59.52</b>	<b>55.23</b>	<b>52.5</b>	<b>55.81</b>	<b>55.36</b>	<b>56.47</b>	<b>57.31</b>	<b>54.25</b>	<b>52.77</b>	<b>52.34</b>	<b>53.72</b>	<b>50.71</b>	<b>51.55</b>	<b>49.92</b>	<b>47.15</b>	<b>46.70</b>	<b>49.57</b>

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

**Table 3.8: Percentage Share of the Selected Countries in India's Overall Imports**

Country	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<b>China</b>	1.93	2.68	2.59	2.58	2.97	3.96	4.55	5.19	6.36	7.29	9.41	10.79	10.70	10.69	11.76	11.30	10.65	11.34	13.48	16.21
<b>USA</b>	9.24	8.95	8.59	7.16	5.97	6.13	7.24	6.44	6.28	6.34	6.32	8.37	6.11	5.89	5.42	4.79	5.14	5.00	4.87	5.72
<b>UAE</b>	3.39	3.56	4.06	4.03	1.30	1.78	1.56	2.64	4.16	2.92	4.66	5.36	7.83	6.76	8.86	7.51	7.98	6.45	5.83	5.10
<b>Saudi Arabia</b>	4.65	4.15	4.32	4.86	1.23	0.90	0.82	0.94	1.17	1.09	7.19	7.74	6.58	5.93	5.51	6.50	6.93	8.09	6.27	5.34
<b>Switzerland</b>	2.88	6.37	6.94	5.22	6.25	5.58	3.79	4.24	5.33	4.39	4.92	3.88	3.91	5.10	6.71	7.10	6.55	4.29	4.94	5.07
<b>Germany</b>	7.23	6.09	5.05	3.70	3.48	3.94	3.92	3.73	3.60	4.04	4.07	3.93	3.95	3.58	3.22	3.19	2.92	2.87	2.85	3.18
<b>Australia</b>	3.37	3.58	3.41	2.17	2.10	2.54	2.18	3.39	3.43	3.32	3.77	3.11	3.65	4.30	2.92	3.18	2.67	2.18	2.29	2.31
<b>Japan</b>	5.59	5.17	5.82	5.10	3.65	4.17	2.99	3.41	2.90	2.72	2.48	2.51	2.60	2.34	2.33	2.45	2.53	2.11	2.26	2.59
<b>Belgium</b>	5.70	6.43	6.79	7.40	5.68	5.37	6.04	5.09	4.11	3.17	2.23	1.73	1.90	2.09	2.33	2.13	2.05	2.39	2.41	2.17
<b>Iran</b>	2.20	1.53	1.12	2.19	0.42	0.55	0.42	0.34	0.37	0.47	4.10	4.35	4.08	4.00	2.96	2.82	2.36	2.29	2.00	1.65
<b>Total</b>	<b>46.18</b>	<b>48.51</b>	<b>48.69</b>	<b>44.41</b>	<b>33.05</b>	<b>34.92</b>	<b>33.51</b>	<b>35.41</b>	<b>37.71</b>	<b>35.75</b>	<b>49.15</b>	<b>51.77</b>	<b>51.31</b>	<b>50.68</b>	<b>52.02</b>	<b>50.97</b>	<b>49.78</b>	<b>47.01</b>	<b>47.20</b>	<b>49.34</b>

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&amp;S), Kolkata.

**Table 3.9: Percentage Share of the Selected Countries in UAE's Overall Exports**

Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>Japan</b>	45.16	38.29	33.46	32.43	36.38	33.10	31.34	28.79	25.58	26.84	27.51	24.95	23.80	17.81	14.90	15.73	15.10	14.42	13.54	10.76
<b>India</b>	6.11	4.59	5.45	7.23	2.55	2.42	2.76	3.49	5.97	5.30	6.30	8.84	10.70	13.66	16.34	13.69	14.05	12.55	9.02	9.73
<b>Iran</b>	2.12	2.38	3.45	2.99	2.84	3.95	5.23	6.14	7.32	7.14	7.09	7.30	7.31	10.44	10.77	9.77	9.45	9.03	9.37	11.39
<b>Iraq</b>	0.00	0.24	0.28	0.24	0.59	1.01	1.22	1.16	2.82	2.86	2.52	3.02	1.98	5.49	2.82	1.58	2.28	2.20	6.13	5.04
<b>Switzerland</b>	0.07	0.08	0.09	0.14	0.16	0.20	0.65	0.54	0.56	0.58	0.53	0.30	0.31	0.67	0.54	0.35	0.39	0.39	0.68	1.65
<b>Saudi Arabia</b>	1.58	1.39	1.77	2.09	1.42	1.63	2.20	1.89	1.64	1.61	1.58	1.64	1.44	1.99	1.61	1.58	1.64	1.36	2.16	2.59
<b>Qatar</b>	0.52	0.58	0.98	0.72	0.55	0.52	0.78	0.66	0.54	0.69	0.85	1.23	1.01	1.62	1.12	1.18	1.04	1.13	0.99	1.22
<b>Bahrain</b>	0.40	0.41	0.46	0.37	0.32	0.37	0.48	0.42	0.33	0.45	0.25	0.30	0.31	0.37	0.29	0.22	0.21	0.20	0.27	0.25
<b>Kuwait</b>	0.61	0.78	0.86	0.90	0.73	0.79	0.84	0.74	0.62	0.56	0.64	0.58	0.49	0.59	0.47	0.46	0.46	0.45	0.73	0.66
<b>Oman</b>	4.28	3.22	4.40	4.32	3.55	4.05	4.22	2.59	3.55	2.22	2.19	2.86	2.90	3.34	2.73	2.49	2.60	2.64	3.16	4.66
<b>Total</b>	<b>60.85</b>	<b>51.96</b>	<b>51.20</b>	<b>51.43</b>	<b>49.09</b>	<b>48.04</b>	<b>49.72</b>	<b>46.42</b>	<b>48.93</b>	<b>48.25</b>	<b>49.46</b>	<b>51.02</b>	<b>50.25</b>	<b>55.98</b>	<b>51.59</b>	<b>47.05</b>	<b>47.22</b>	<b>44.37</b>	<b>46.05</b>	<b>47.95</b>

Source: Calculated from United Nations Conference on Trade and Development (UNCTAD).

**Table 3.10: Percentage Share of the Selected Countries in UAE's Overall Imports**

Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>India</b>	5.83	6.07	6.20	6.43	6.88	6.46	6.81	8.14	9.86	8.85	10.22	10.83	11.94	15.70	18.13	19.45	16.82	14.26	12.68	12.70
<b>China</b>	5.10	5.63	5.22	4.58	6.59	6.55	7.85	9.33	10.01	9.14	10.35	12.54	12.85	13.13	13.22	13.44	13.68	14.68	15.40	15.52
<b>USA</b>	10.02	9.58	8.68	8.46	6.95	7.05	7.91	6.48	6.00	8.79	10.68	8.54	8.60	8.67	7.41	8.15	10.44	10.82	8.67	9.62
<b>Japan</b>	9.16	9.04	9.56	7.96	7.95	7.00	7.14	7.25	6.82	5.12	5.55	6.02	6.05	4.71	4.70	3.87	4.15	3.74	3.82	3.64
<b>Germany</b>	5.67	6.27	6.63	5.89	6.34	6.89	6.64	7.03	6.47	5.62	5.99	5.89	6.45	6.06	5.74	4.89	5.30	5.33	5.84	6.78
<b>UK</b>	8.05	8.41	8.36	7.06	7.40	6.33	5.74	5.72	6.54	13.99	7.85	4.75	4.70	4.28	3.31	3.50	3.22	6.17	4.01	4.33
<b>Italy</b>	6.08	4.79	5.46	5.02	4.84	4.46	4.12	4.05	3.79	3.26	3.72	4.39	4.10	3.68	2.99	3.22	3.21	3.14	2.76	2.86
<b>France</b>	4.10	4.34	4.61	5.92	6.34	6.07	5.56	6.32	5.57	4.09	3.83	3.65	2.79	3.41	2.84	2.61	2.12	2.38	2.18	2.38
<b>Saudi Arabia</b>	4.48	4.48	3.76	3.36	2.73	2.58	2.50	3.03	2.13	2.45	2.71	2.61	1.94	1.76	1.93	2.03	2.01	1.89	1.87	2.09
<b>Switzerland</b>	1.51	1.38	1.45	1.24	1.22	2.62	2.19	1.97	1.45	1.24	1.33	1.29	1.57	1.51	1.43	1.65	1.57	1.54	1.87	2.21
<b>Total</b>	<b>60.00</b>	<b>59.99</b>	<b>59.93</b>	<b>55.92</b>	<b>57.24</b>	<b>56.01</b>	<b>56.46</b>	<b>59.32</b>	<b>58.64</b>	<b>62.55</b>	<b>62.23</b>	<b>60.51</b>	<b>60.99</b>	<b>62.91</b>	<b>61.70</b>	<b>62.81</b>	<b>62.52</b>	<b>63.95</b>	<b>59.10</b>	<b>62.13</b>

Source: Calculated from United Nations Conference on Trade and Development (UNCTAD).

In case of percentage share of the selected countries in India's overall imports, table 3.8 reveals that there is a significant increase in India's trade with its important partners like Asia and OPEC countries. Within Asia, China has emerged as the leading source of India's imports since 2004-05. The share of China grew gradually from 1.93 per cent in 1996-97 to 16.21 per cent in 2015-16. While UAE ranked at the second position in India's overall imports since 2008-09. The share of UAE also increased (i.e. from 3.39 per cent in 1996-97 to 5.10 per cent in 2015-16) with some fluctuations during the study period. On the other side, the share of USA declined from 9.24 per cent in 1996-97 to 5.72 per cent in 2015-16. Other countries like Germany, Australia, Japan, Belgium and Iran have also exhibited declining position in India's top ten import countries. One important development in India's import structure is that the emergence of Saudi Arabia, UAE and Switzerland as India's major source countries.

The share of all the selected countries in India's global imports fluctuated highly between 33.05 and 52.02 during the study period. Thus, it is worth mentioning that the trade share of emerging economies showed positive shift of their positions in India's overall imports. While the share of developed countries like USA showed declining trend in India's overall imports. These shifts were mainly because of the slowdown in advance economies, heavy imports of oil products from Middle East countries and increasing imports of non-oil products from China.

### **3.3.2 Direction of UAE's Trade**

Prior to the formation of UAE in 1971, UAE's trade relations were mainly with Britain. Their relations continued even after the formation until the UAE's foreign policy had changed. The main focus of country's foreign policy was on to encourage economic relations with rest of the GCC countries. These relations were set on the basis of their commonality of language, history and culture, etc. Besides this, UAE enjoyed a strategic location on the new Southern Silk Road between Africa, Europe and Asia. This had provided UAE to take an advantage of economic activities among the world's fastest developing and growing countries. Thus, UAE's trade relations exhibited significant change.

Table 3.9 shows percentage share of selected countries in UAE's overall exports. It reveals that countries such as Japan, India, Iran, Iraq, Switzerland, Saudi Arabia, Qatar,

Bahrain, Kuwait and Oman have emerged as top destination countries for UAE's exports. The total share of selected countries in UAE's global exports decreased continually from 60.85 per cent in 1996 to 47.95 per cent in 2015. Japan was the major export destination for UAE's export basket. But its share has decreased throughout the period (i.e. from 45.16 per cent in 1996 to 10.76 per cent in 2015) due to fall in crude exports from UAE to Japan. The share of Bahrain has also decreased from 0.40 per cent in 1996 to 0.25 per cent in 2015. India ranked at the second position in UAE's overall export. Here, it is worth mentioning that the share of India in UAE's total export basket has increased tremendously (i.e. from 6.11 per cent in 1996 to 9.73 per cent in 2015). Other selected countries such as Iran, Iraq, Switzerland, Saudi Arabia, Qatar, Kuwait and Oman have also showed a positive trend in UAE's overall exports.

Table 3.10 shows the percentage share of selected countries in UAE's overall imports. The share of all the selected countries has increased from 60.00 per cent in 1996 to 62.13 per cent in 2015. As is clear from the table, USA and Japan was the leading sources of UAE's imports from 1996 to 2002. But, in the following years the share of these two countries decreased sharply and displaced by China and India. The share of China grew from 5.10 per cent in 1996 to 15.52 per cent in 2015. The share of India in UAE's overall import also increased rapidly from 5.83 per cent in 1996 to 12.70 per cent in 2015. The share of Germany and Switzerland has also increased in UAE's overall imports (i.e. from 5.67 per cent and 1.51 per cent in 1996 to 6.78 per cent and 2.21 per cent in 2015 respectively). While the share of some other countries such as UK, Italy, France and Saudi Arabia have also registered falling trend (i.e. from 8.05 per cent, 6.08 per cent, 4.10 per cent and 4.48 per cent in 1996 to 4.33 per cent, 2.86 per cent, 2.38 per cent and 2.09 per cent in 2015 respectively) in UAE's overall imports.

Thus, it is clear that earlier UAE's foreign trade was dominated by Japan only. But now the trend has totally been changed and the share of India is growing in UAE's international trade. Also, India has emerged as an important trading partner for UAE. In both the cases i.e. UAE's overall exports and imports, India's share has increased tremendously. However, the share in UAE's imports was more than UAE's exports that also leads to India's surplus trade with UAE. This indicates India's growing importance in UAE's foreign trade.

**Table 3.11: Value of Selected Indian Exports to UAE****(US\$ Million)**

Commodity (HS Code)	Pearls, precious stones, metals, coins, etc. (71)	Mineral fuels, oils, distillation products, etc. (27)	Articles of apparel, accessories, not knit or crochet (62)	Electrical, electronic equipment (85)	Nuclear reactors, boiler, machinery, etc. (84)	Cereals (10)	Articles of iron or steel (73)	Articles of apparel, accessories, knit or crochet (61)	Manmade filaments (54)	Iron and steel (72)	Total of Selected Commodities	India's Overall Exports to UAE
1996-97	104.45	0.57	94.32	47.13	54.06	58.18	72.95	39.12	70.28	31.76	572.82	1,476.01
1997-98	149.97	0.61	132.57	31.72	45.94	38.91	45.50	41.34	74.47	26.72	587.75	1,629.56
1998-99	248.61	3.51	347.58	45.12	58.10	37.61	66.57	56.67	72.06	34.67	970.50	1,867.59
1999-00	263.00	0.98	387.78	47.09	61.12	34.77	78.82	102.57	87.63	47.43	1,111.19	2,082.74
2000-01	443.59	30.52	421.76	63.85	65.61	38.57	114.26	122.66	103.27	72.32	1,476.41	2,597.52
2001-02	544.58	5.95	266.12	59.09	76.02	52.69	106.40	98.27	144.48	59.07	1,412.67	2,491.79
2002-03	664.59	404.39	247.69	67.72	112.93	43.57	130.34	150.52	184.88	90.17	2,096.80	3,327.48
2003-04	1,508.39	348.00	299.77	142.12	192.36	104.16	200.56	313.92	236.11	127.86	3,473.25	5,125.58
2004-05	3,145.45	519.57	296.91	145.95	211.91	127.44	236.72	226.31	301.15	164.71	5,376.12	7,347.88
2005-06	2,691.42	1,397.02	286.97	204.38	294.74	96.39	290.24	160.36	212.17	206.21	5,839.90	8,591.79
2006-07	3,313.58	3,642.62	342.60	277.65	383.09	130.22	283.07	181.00	219.50	352.01	9,125.34	12,021.77
2007-08	4,056.28	4,699.60	432.31	419.86	451.52	432.35	354.44	259.01	280.94	426.62	11,812.93	15,636.91
2008-09	10,997.14	4,966.92	583.51	636.14	567.47	687.58	599.29	367.04	313.56	636.20	20,354.85	24,477.48
2009-10	12,524.64	4,467.63	589.87	524.83	528.27	685.83	409.72	378.56	293.89	250.75	20,653.99	23,970.40
2010-11	19,809.26	4,981.83	562.36	805.73	549.55	657.25	525.65	539.50	369.77	348.28	29,149.18	33,822.39
2011-12	18,392.75	6,571.21	725.04	974.56	730.71	896.10	461.52	626.33	342.05	524.84	30,245.11	35,925.52
2012-13	18,890.69	6,964.32	792.64	903.61	802.12	571.82	723.76	642.64	223.50	562.33	31,077.43	36,316.65
2013-14	12,778.80	5,039.94	947.94	1,035.73	637.27	560.92	791.22	789.86	278.75	528.18	23,388.61	30,520.42
2014-15	12,280.37	6,519.64	1,507.56	615.73	711.47	580.97	701.71	1,142.70	278.93	641.60	24,980.68	33,028.08
2015-16	12,952.55	3,978.56	1,762.53	747.81	699.17	624.58	510.93	1,661.22	295.29	288.86	23,521.52	30,308.35

Source: Directorate General of Commercial Intelligence and Statistics (DGCI&amp;S), Kolkata.

**Table 3.12: Percentage Share of UAE in Selected Indian Exports**

<b>Commodity (HS Code)</b>	<b>Pearls, precious stones, metals, coins, etc. (71)</b>	<b>Mineral fuels, oils, distillation products, etc. (27)</b>	<b>Articles of apparel, accessories, not knit or crochet (62)</b>	<b>Electrical, electronic equipment (85)</b>	<b>Nuclear reactors, boiler, machinery, etc. (84)</b>	<b>Cereals (10)</b>	<b>Articles of iron or steel (73)</b>	<b>Articles of apparel, accessories, knit or crochet (61)</b>	<b>Manmade filaments (54)</b>	<b>Iron and steel (72)</b>
1996-97	2.19	0.11	3.47	5.49	5.16	5.27	13.62	3.78	20.24	3.67
1997-98	2.91	0.15	4.64	3.60	3.95	4.27	7.56	4.04	19.84	2.70
1998-99	4.18	2.49	11.19	5.55	6.02	2.52	10.39	4.50	23.47	5.24
1999-00	3.47	1.08	12.20	5.43	6.14	4.80	10.43	6.46	23.73	5.32
2000-01	5.97	1.58	11.13	4.94	4.59	5.19	11.22	6.86	20.13	6.39
2001-02	7.42	0.27	8.47	4.68	4.84	5.44	10.61	5.27	26.36	6.28
2002-03	7.31	14.94	7.39	4.65	6.57	2.72	11.25	6.31	26.35	4.72
2003-04	14.02	9.32	8.46	7.48	7.68	6.88	13.11	11.62	27.16	4.93
2004-05	21.79	7.28	7.55	7.05	6.41	6.35	10.25	8.57	30.29	3.90
2005-06	16.97	11.77	5.28	7.38	7.04	5.90	10.31	5.03	23.14	5.41
2006-07	20.59	19.31	6.47	6.75	7.52	7.67	8.32	5.00	21.35	6.29
2007-08	20.46	16.16	7.98	7.84	6.64	11.74	6.79	6.06	20.71	6.51
2008-09	38.63	17.47	9.89	6.67	7.10	20.56	10.36	7.27	20.32	8.45
2009-10	42.89	15.39	9.63	7.26	7.35	22.93	10.04	8.25	14.62	5.55
2010-11	45.34	11.69	8.43	7.94	6.13	19.63	7.90	10.89	16.07	4.88
2011-12	38.90	11.45	9.11	8.45	6.74	14.29	6.55	10.84	13.08	6.32
2012-13	43.16	11.21	10.70	8.32	6.94	5.92	9.73	11.57	10.04	6.95
2013-14	30.65	7.79	11.36	10.06	5.28	5.31	11.62	11.86	10.85	5.73
2014-15	29.56	11.31	16.40	7.08	5.15	6.08	9.24	14.93	11.66	7.39
2015-16	32.62	12.79	18.90	9.35	5.26	10.09	8.32	21.67	14.13	5.20

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.



**Table 3.13: Value of Selected Indian Imports from UAE****(US\$ Million)**

Commodity (HS Code)	Pearls, precious stones, metals, coins, etc. (71)	Mineral fuels, oils, distillation products, etc. (27)	Iron and steel (72)	Electrical, electronic equipment (85)	Plastics and articles thereof (39)	Aluminium and articles thereof (76)	Beverages, spirits and vinegar (25)	Copper and articles thereof (74)	Nuclear reactors, boiler, machine, etc. (84)	Ships, boats and other floating structure (89)	Total of Selected Commodities	India's Overall Import from UAE
1996-97	65.14	923.44	33.36	42.13	10.75	24.70	51.69	36.03	18.28	0.95	1,206.47	1,327.71
1997-98	396.54	750.46	33.43	5.01	8.30	16.72	57.87	28.44	34.15	13.81	1,344.73	1,475.04
1998-99	371.50	948.05	29.19	15.72	7.97	34.18	50.83	19.22	26.74	0.68	1,504.08	1,721.24
1999-00	138.56	1,553.06	31.41	7.74	6.69	28.70	58.02	21.18	14.01	18.36	1,877.73	2,003.24
2000-01	248.51	161.93	32.36	10.73	8.09	20.15	46.84	15.30	12.49	1.45	557.85	658.98
2001-02	489.35	156.07	43.13	10.68	11.96	34.00	29.46	14.08	21.45	8.32	818.50	915.09
2002-03	577.43	17.53	51.54	15.87	29.40	26.67	35.65	13.03	25.20	0.25	792.57	956.99
2003-04	1,469.71	12.31	88.44	19.92	35.30	34.90	31.71	16.00	31.38	45.78	1,785.45	2,059.84
2004-05	3,667.14	216.86	138.30	36.90	47.03	54.58	61.34	34.75	40.63	96.77	4,394.30	4,641.10
2005-06	3,051.97	212.94	126.74	207.72	81.62	83.61	58.53	55.17	95.51	95.34	4,069.15	4,354.08
2006-07	2,389.50	4,671.75	176.53	334.07	95.47	135.38	64.75	136.19	92.74	100.31	8,196.69	8,655.28
2007-08	3,687.18	7,806.25	257.57	453.21	132.52	164.65	96.97	109.95	188.18	87.61	12,984.09	13,482.61
2008-09	182.34	10,317.90	314.45	502.58	182.34	151.92	221.54	82.18	64.53	99.83	12,119.61	23,791.25
2009-10	203.52	6,443.36	239.86	235.85	203.52	153.26	66.54	134.45	89.61	115.30	7,885.27	19,499.10
2010-11	20,896.32	9,398.23	350.51	127.78	240.97	281.86	145.31	263.20	98.54	199.48	32,002.20	32,753.16
2011-12	18,235.49	15,102.54	556.23	170.90	286.56	294.06	308.08	396.45	193.63	133.79	35,677.73	36,756.32
2012-13	20,376.74	14,984.68	560.30	87.34	371.28	371.22	288.27	450.81	193.53	488.06	38,172.23	39,138.36
2013-14	11,899.69	13,263.35	460.79	75.03	341.23	427.76	308.18	681.13	95.25	569.55	28,121.96	29,019.82
2014-15	8,795.44	13,509.04	572.48	105.74	479.16	502.26	314.78	638.70	94.47	243.35	25,255.42	26,139.91
2015-16	7,944.29	7,890.26	422.35	174.66	667.42	360.08	289.78	545.19	80.64	134.55	18,509.22	19,421.53

Source: Directorate General of Commercial Intelligence and Statistics (DGCI&amp;S), Kolkata.

**Table 3.14: Percentage Share of UAE in Selected Indian Imports**

<b>Commodity (HS Code)</b>	<b>Pearls, precious stones, metals, coins, etc. (71)</b>	<b>Mineral fuels, oils, distillation products, etc. (27)</b>	<b>Iron and steel (72)</b>	<b>Electrical, electronic equipment (85)</b>	<b>Plastics and articles thereof (39)</b>	<b>Aluminium and articles thereof (76)</b>	<b>Beverages, spirits and vinegar (25)</b>	<b>Copper and articles thereof (74)</b>	<b>Nuclear reactors, boiler, machinery, etc. (84)</b>	<b>Ships, boats and other floating structures (89)</b>
1996-97	1.64	8.05	2.22	2.64	1.29	7.50	14.96	4.84	0.43	0.35
1997-98	6.01	7.45	2.36	0.25	1.11	7.91	15.10	4.45	0.76	5.52
1998-99	4.14	11.79	2.76	0.80	1.09	14.41	13.04	5.27	0.67	0.31
1999-00	1.35	10.82	2.84	0.34	0.85	13.46	12.59	6.62	0.36	3.22
2000-01	2.56	0.92	3.38	0.40	1.23	8.76	10.66	6.61	0.29	0.43
2001-02	5.23	0.99	3.91	0.34	1.53	11.17	8.13	5.43	0.50	1.46
2002-03	5.51	0.09	4.65	0.31	3.24	8.68	8.52	6.05	0.49	0.04
2003-04	10.38	0.05	4.98	0.30	2.85	9.32	7.88	4.86	0.45	3.31
2004-05	17.64	0.62	4.12	0.41	2.82	11.34	9.49	6.48	0.42	5.47
2005-06	14.75	0.42	2.33	1.75	3.19	10.07	7.68	6.23	0.69	3.52
2006-07	10.57	7.56	2.87	2.29	3.23	11.54	7.54	12.29	0.50	3.71
2007-08	14.02	9.04	2.83	2.26	3.22	10.78	6.87	7.26	0.74	2.03
2008-09	0.42	9.93	3.06	1.99	4.07	10.01	9.03	6.71	0.24	2.18
2009-10	0.44	6.69	2.72	1.07	3.69	10.06	3.96	11.48	0.37	3.59
2010-11	27.12	8.11	3.18	0.47	3.18	12.69	7.90	14.02	0.34	5.63
2011-12	20.02	8.74	4.08	0.52	3.39	9.92	9.02	14.75	0.52	3.07
2012-13	24.29	8.26	4.12	0.29	3.86	11.58	9.51	15.42	0.55	6.75
2013-14	20.35	7.31	5.06	0.26	3.38	13.86	13.01	23.41	0.31	8.47
2014-15	14.10	8.64	4.64	0.32	4.10	13.43	11.58	19.87	0.30	4.91
2015-16	14.05	8.16	3.75	0.49	5.85	10.50	11.28	16.59	0.25	2.98

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

### **3.4 Composition of India-UAE Merchandise Trade**

Foreign trade has been one of the most important factors of economic development. It consists of inward and outward movement of goods and services that result into the outflow and inflow of foreign exchange from one country to another country. This determines country's structure and pattern of trade. India's colonial pattern of trade that included mainly exports of raw material and imports of manufactured items resulted in an unequal level of specialization. However, over the last six decades, the structure and pattern of India's foreign trade has undergone a complete change in terms of composition of commodities. But the composition of India-UAE trade showed not a drastic change over the period which has been analysed as follows.

#### **3.4.1 Composition of India's Exports to UAE**

Table 3.11 shows the value of selected Indian exports to UAE. India's merchandise exports to UAE exhibited a continuous uptrend during the study period. The value of selected ten commodities in India's exports to UAE increased tremendously from US\$ 572.82 million in 1996-97 to US\$ 23521.52 million in 2015-16 and contributes more than 75 per cent in India's overall exports to UAE. This table also shows some commodities like pearls, precious stones, metals, coins, etc.; and mineral fuels, oils, distillation products, etc. had played an important role in India's exports basket to UAE. The value of these two commodities increased regularly i.e. from US\$ 104.45 million and US\$ 0.57 million in 1996-97 to US\$ 12,952.55 million and US\$ 3,978.56 million in 2015-16 respectively. It is worth mentioning that during 2006-07 and 2007-08, it was for the first time that the mineral fuels, oils, distillation products emerged as the largest commodity in India's exports to UAE thereby putting pearls, precious stones, metals, coins at the second place. The pearls, precious stones, metals, coins have continuously dominated India's merchandise exports to UAE and registered trend of increasing share over the years. Since 2009-10, more than half of India's exports to UAE were comprised by only this commodity. Some other commodities like articles of apparel, accessories, not knit or crochet; electrical, electronic equipment; nuclear reactors, boiler, machinery, etc.; cereals; articles of iron or steel; manmade filaments; and iron and steel showed an increasing trend in terms of value of India's exports to UAE. But the share of these commodities in Indian exports to UAE declined over the period, whereas the share of

articles of apparel, accessories, knit or crochet was increased from 2.65 per cent in 1996-97 to 5.48 per cent in 2015-16.

Table 3.12 presents percentage share of UAE in India's global exports of selected commodities. UAE's share in India's total exports of pearls, precious stones, metals, coins, etc. increased quickly from 2.19 per cent in 1996-97 to 45.34 per cent in 2010-11. But it fell down and reached to 32.62 per cent in 2015-16. Though it was declined sharply, but UAE remained the largest export destination for Indian pearls, precious stones, metals, coins, etc. In case of remaining commodities, UAE's share remained quite unstable. As is clear from the table that in few years, UAE's share in India's world exports of selected commodities went up to greater heights while in other years it went down. But, here it should be worth mentioning that India's exports to UAE were mainly dominated by manufactured products such as pearls, precious stones, metals, coins, etc.; articles of apparels, accessories and capital products such as electrical equipments. Thus, the data reveals that India's exports to UAE were majorly dominated by pearls, precious stones, metals, coins and it can be said that Indian exports to UAE were single commodity driven.

### **3.4.2 Composition of India's Imports from UAE**

With the development of Indian economy, there was an important change in composition of India's imports. For the setting up of new industries and modernization of agriculture sector, India has imported majorly capital goods such as machinery, transports and equipments; manufactured goods such as chemical and fertilizers, gems and jewellery; and petroleum products. Among all these commodities, gems and jewellery; petroleum products; and machinery equipments played a significant role in India's imports from UAE.

Table 3.13 shows the value of selected India's imports from UAE. The value of selected ten commodities in India's imports from UAE increased tremendously from US\$ 1,206.47 million in 1996-97 to US\$ 18,509.22 million in 2015-16. The selected commodities contribute more than 90 per cent in India's total imports from UAE. It is clear from the table that Indian imports of pearls, precious stones, metals, coins, etc.; and mineral oils, distillation products, etc. from UAE grew remarkably. This was mainly because of the emergence of UAE as tenth largest oil & natural gas producer in the world and due to high growth in UAE's pearls, precious stones sector. Now, the global diamond

industry is majorly dominated by the Arab world especially Dubai which has been emerged as an important hub for all luxury brands comprising diamond and coloured stones. Hence, the value of these two commodities i.e. pearls, precious stones, metals, coins, etc.; and mineral oils, distillation products, etc. increased tremendously from US\$ 65.14 million and US\$ 923.44 million in 1996-97 to US\$ 7,944.29 million and US\$ 7,890.26 million in 2015-16. The combined share of these two commodities i.e. pearls, precious stones, metals, coins, etc.; and mineral oils, distillation products, etc. contributed approximately 80 per cent of the total share of selected commodities. This indicates high dependence of India on UAE for its imports of gems and jewellery products; and petroleum products. The value of remaining eight commodities was increased during the study period with some fluctuations. But, the share of commodities such as iron and steel; electrical, electronic equipments; aluminium and articles thereof; beverages, spirits and vinegar; and nuclear reactors, boiler, machinery, etc. declined, whereas the share of plastics and articles thereof; copper and articles thereof; and ships, boats and other floating structures was increased in India's imports from UAE over the period.

Table 3.14 shows percentage share of UAE market in selected Indian global imports. It is clear from the table that Indian dependency on UAE's pearls, precious stones, metals, coins increased tremendously. During the study period, the share of UAE in India's total imports of pearls, precious stones, metals, coins, etc. increased from 1.64 per cent in 1996-97 to 14.05 per cent in 2015-16 but with some fluctuations. UAE's share in India's global imports of aluminium and articles thereof; copper and articles thereof; and ships, boats and other floating structures also increased rapidly i.e. from 7.50 per cent, 4.84 per cent and 0.35 per cent in 1996-97 to 10.50 per cent, 16.59 per cent and 2.98 per cent in 2015-16 respectively. While in case of mineral fuels, oils, distillation products, etc., UAE's share was fluctuated over the period. Though, the share was very low, but UAE was the fourth or in few years it was the fifth largest source of mineral fuels, oils, distillation products for India. But, in case of iron and steel; electrical, electronic equipment; plastic and articles thereof; beverages, spirits and vinegar; and nuclear reactors, boiler, machinery, etc., UAE's share remained very low. Thus, it can be said that with the passage of time India's import from UAE is getting concentrated only on few commodities.

### 3.5 India-UAE Trade: Some Vital Indices

The various aspects of India-UAE mutual trade have been examined by using the various indices. These indices help in understanding and explaining the trade in more elaborated and different perspectives.

#### 3.5.1 Hirschman Concentration Index

The composition of India's trade with UAE reveals that it is dominated by few commodities. However, it does not measure the level of concentration in their trade baskets. The concentration of a country's export basket can be measured by Hirschman Concentration Index (HCI) and it can be calculated by using the following formula:

$$\text{HCI} = \text{sqrt} [\text{sum} (X_i/X_t)^2]$$

Where sqrt stands for square root;  $X_i$  stands for exports of product  $i$  from reporter country; and  $X_t$  stands for total exports of reporter country.

**Table 3.15: Hirschman's Concentration Index: India and UAE**

Year	HCI of India's Exports to UAE	HCI of UAE's Exports to India
1996	0.50	0.71
1997	0.49	0.50
1998	0.50	0.53
1999	0.51	0.71
2000	0.51	0.51
2001	0.51	0.46
2002	0.49	0.56
2003	0.51	0.52
2004	0.51	0.62
2005	0.49	0.63
2006	0.48	0.50
2007	0.47	0.51
2008	0.47	0.52
2009	0.54	0.55
2010	0.51	0.60
2011	0.50	0.56
2012	0.53	0.52
2013	0.44	0.54
2014	0.46	0.50
2015	0.45	0.51

Source: Calculated from United Nations Conference on Trade and Development (UNCTAD).

This index ranges between ‘0’ and ‘1’. If the index value is near to ‘1’ then it indicates that exports are getting more concentrated around few commodities or shows less diversification. On the other hand, if the value of index is near to ‘0’ then it shows less concentration and more diversification in the export basket (World Bank, 2013). Table 3.15 shows the HCI of India’s exports to UAE and UAE’s exports to India. As is clear from the table, during the study period the concentration has declined with fluctuations in both the cases. The value of HCI of India’s exports basket to UAE was 0.50 in 1996, which fluctuated over the period and declined to 0.45 in 2015. The value hovered between 0.44 and 0.54. On the other side, the value of HCI of UAE’s exports to India declined from 0.71 in 1996 to 0.51 in 2015. Table also shows that during 1996-2015, the value of HCI of India’s exports to UAE remained below than that of UAE’s exports to India. This indicates that India’s exports basket to UAE is comparatively more diversified than UAE’s export basket to India. The common trend in both the cases was that in recent years the concentration has declined considerably. This shows that the two nations are exploiting the trade potentials completely.

### 3.5.2 Trade Intensity Index

India’s trade relations with UAE got strengthened during the study period. Thus, it is interesting to show the growing orientation between the two countries. This is done with the help of Trade Intensity Index (TII). This index is used to determine whether a reporter country’s trade with a partner country is more or less than the world does on an average. This is further divided into two parts i.e. Export Intensity Index ( $x_{ij}$ ) and Import Intensity Index ( $i_{ij}$ ). These indices are defined as follows:

$$\text{Export-Intensity Index } (x_{ij}) = \frac{X_{ij} / X_i}{I_j / (I_w - I_i)}$$

Where  $x_{ij}$ = Export Intensity Index of India with UAE,  $X_{ij}$ = India’s exports to UAE,  $X_i$ = Total exports of India,  $I_j$ = Total imports of UAE,  $I_w$ = Total imports of World,  $I_i$ = Total imports of India

$$\text{Import-Intensity Index } (i_{ij}) = \frac{I_j / I_i}{X_j / (X_w - X_i)}$$

Where  $i_{ij}$ = Import intensity index of India with UAE,  $I_{ij}$ = Imports of India from UAE,  $X_j$ = Total exports of UAE,  $X_w$ = Total World exports,  $X_i$ = Total exports of India

Export and Import intensity indices ranges from 0 to 1. An export index of more (less) than unity indicates greater (less) exports of reporter to partner country than would be expected on the basis of importance of partner country in total world trade. Similarly import index of more (less) than unity shows greater (less) imports of reporter country from the partner country than would be expected from that country's share in total world trade.

**Table 3.16: India's Export Intensity Index, Import Intensity Index with UAE**

Year	Export Intensity Index	Import Intensity Index
1996	7.79	5.92
1997	7.70	5.60
1998	9.55	7.46
1999	10.25	5.71
2000	10.74	2.67
2001	9.89	2.66
2002	9.55	2.61
2003	10.49	2.89
2004	11.33	5.13
2005	10.98	4.10
2006	11.74	3.56
2007	10.87	3.95
2008	8.45	4.35
2009	10.85	4.35
2010	10.34	6.30
2011	10.51	4.42
2012	9.44	4.17
2013	7.07	3.58
2014	6.98	3.07
2015	7.23	3.56

Source: Calculated from United Nations Conference on Trade and Development (UNCTAD).

Table 3.16 shows India's Export-Intensity Index and Import-Intensity Index with UAE. It is clear from the table that both India's export intensity as well as import intensity with UAE is more than unity for all the periods. This indicates that India's exports and imports are more intense with UAE as compared to UAE with rest of the world. However, the indices declined slightly from 7.79 in 1996 to 7.23 in 2015 and 5.92 in 1996 to 3.56 in 2015 respectively. One thing worth mentioning here is that India's Export Intensity Index is higher than that of Import Intensity Index over the period. The natural trading partner



theory reveals that nations tend to trade more with neighbor countries. Hence, due to their geographical proximity, India and UAE enjoyed longstanding cultural and economic ties. A momentum to the growing relationship between India and UAE was mainly provided by FTA between India and Gulf countries in 2004. In fact, India's Export Intensity Index with UAE was more than 10 for few years after signing FTA. Thus, it can be said that during the study period, India's trade with UAE remained greater as compared to UAE with rest of the world.

### 3.5.3 Intra-Industry Trade

Intra-Industry Trade (IIT) occurs in order to take an advantage of economies of scale in production. It means foreign competition forces the individual firms in industrial economies to produce single, or a few designs and varieties of the similar products rather than different designs and varieties. The country then imports other designs and varieties from other countries. Thus, it provides the opportunities of having a wide range of differentiated items within the markets of trading partner. In this context, to check the level of Intra-Industry Trade, Grubel-Lloyed Intra-Industry trade index has been used. The index is used as follows:

$$IIT_i = \frac{\sum_i (X_i + I_i) - \sum_i |X_i - I_i|}{\sum_i (X_i + I_i)} \times 100$$

Where  $X_i$  and  $I_i$  represents the value of India's exports to and imports from UAE in product group  $i$ . The value near to 100 indicates high level of trade between the countries in the same industry (Grubel & Lloyed, 1971).

Table 3.17 shows that during 1996-2015, Intra-Industry Trade between India and UAE hovered between 16.62 per cent and 68.63 per cent. The overall index increased from 21.18 per cent in 1996 to 57.61 per cent in 2015. This indicates that trade between India and UAE occupied export and import of differentiated goods of the same industry. Also from the commodity composition tables, it is clear that the trade between the two countries is dominated by a single commodity group i.e. pearls, precious stones, metals, coins, etc. Within this commodity group, India's exports to UAE mainly consist of jewellery and parts of precious metal except silver. On the other side, the share of gold in unwrought forms non-monetary was highest in India's imports from UAE. Hence, the two

countries got opportunities to increase trade in varieties of products of same industry in order to take an advantage of economies of scale.

**Table 3.17: Aggregate Intra-Industry Trade Index between India and UAE**

Year	Aggregate Intra-Industry Trade Index (Per cent)
1996	21.18
1997	21.19
1998	16.62
1999	18.29
2000	32.75
2001	34.99
2002	45.47
2003	41.43
2004	42.24
2005	56.88
2006	53.29
2007	61.05
2008	68.63
2009	53.99
2010	61.20
2011	55.70
2012	49.31
2013	56.89
2014	55.45
2015	57.61

Source: Calculated from United Nations Conference on Trade and Development (UNCTAD).

### 3.5.4 Trade Complementarity Index

Trade Complementarity Index (TCI) is used to measure that to what extent the export profile of a reporter country complements or matches with the import profile of a partner country. A greater Index value shows that two countries would stand to gain from their increased trade. TCI also provides the measurement of the scope of trade co-operation between the two countries through inter-industry trade. Trade Complementarity index is measured as follows:

$$TCI_{ij} = 100 - \sum ( |i_{ik} - x_{ij}| / 2 )$$

Where  $i_{ik}$  = share of product  $i$  in the imports of country  $k$  i.e. UAE,  $x_{ij}$  = share of product  $i$  in the exports of country  $j$  i.e. India. The index value ranges from 0 to 100. The value near to 0 indicates no compatibility between export of a reporter country and import of a partner country. In other words, value of 0 shows that the two nations are perfect

competitors. On the other side, the index 100 indicates that the exports of a reporter country and imports of a partner country match exactly with each other.

**Table 3.18: Trade Complementarity Index between India and UAE**

<b>Year</b>	<b>Trade Complementarity Index (Per cent)</b>
1996	68.84
1997	64.59
1998	61.23
1999	60.41
2000	65.95
2001	65.48
2002	64.70
2003	63.41
2004	64.06
2005	60.75
2006	63.22
2007	66.20
2008	68.89
2009	75.89
2010	70.85
2011	73.71
2012	69.65
2013	67.32
2014	70.23
2015	69.52
<b>Average</b>	<b>66.75</b>

Source: Calculated from United Nations Conference on Trade and Development (UNCTAD).

Table 3.18 shows that the Trade Complementarity Index of India-UAE was high during the study period. However, the index was fluctuated over the period. The index increased from 68.84 per cent in 1996 to 75.89 per cent in 2009, but then it declined to 69.52 per cent in 2015. The index was oscillated between 60.41 per cent and 75.89 per cent. But the average of Trade Complementarity Index was high i.e. 66.75 per cent, for the period 1996-2015. Thus, it indicates that exports of India and imports of UAE matches with each other. Also, there is wide scope of trade co-operation between the two nations through inter-industry trade.

### **3.6 Conclusion**

Trade links between India and UAE have existed since long. Growing Indo-UAE commercial and economic relations contribute valuable stability and strength to their

bilateral trade. UAE enjoys a comprehensive economic relationship with India, based on their mutual interests. The volume of their current bilateral trade shows that this is an exciting time in the history of India-UAE economic relations. The merchandise trade between the two countries developed over the period and UAE has been emerged as number one trading partner of India. India's exports to UAE increased tremendously, i.e. from US\$ 1,476.01 million in 1996-97 to US\$ 30,308.35 million in 2015-16. On the other side, India's imports from UAE also increased rapidly from US\$ 1,327.71 million in 1996-97 to US\$ 19,421.53 million in 2015-16. Besides, it has also been found that India's exports are more stable than its imports. This indicates that most of the years India experienced favourable trade balance with UAE. The growth analysis shows that during the study period, growth of India's exports and imports with UAE remained much higher than its overall exports and imports.

However, during the study period, one major problem with India-UAE merchandise trade was the narrowness of their trade baskets. India's exports to UAE were mainly dominated by a single commodity i.e. pearls, precious stones, metal, coins. Also, during the period 2015-16, out of India's world exports of pearls, precious stones, metal, coins nearly 32.62 per cent was exported to UAE alone. It shows UAE emerged as the top destination for India's exports of gems and jewellery products since 2009. On the other side, India's imports from UAE were majorly dominated by pearls, precious stones, metal, coins; and mineral fuels, oils, distillation products. These two commodities also constituted high share i.e. more than 75 per cent in India's imports from UAE during 2015-16. Hence, these two commodity groups played a crucial role in India-UAE bilateral trade baskets. The main reasons for growth of pearls, precious stones, metals, coins, etc. group was dynamic entrepreneurship and a number of incentives have been given to the gems and jewellery sector in the Foreign Trade Policy 2004-09 and 2009-14 (Ministry of Commerce & Industry, 2011). In Foreign Trade Policy 2009-14, the Indian government encouraged dynamic entrepreneurship in gems and jewellery sector and allowed duty free import entitlement of consumables and tools, cut and polished diamond, gold jewellery, precious metals and rhodium finished silver. To promote export of gems and jewellery products, the value limit of personal carriage of these products in case of holding/participating in overseas exhibitions has also been increased in case of export

promotion tours. Also, the Indian government has allowed 100 per cent foreign direct investment in gems and jewellery sector. Further, in the 12<sup>th</sup> five year plan, mining sector got a special attention. The government motivated domestic as well as foreign investment in the sector. Hence, all these measures have boosted up India's trade of these two commodities in the world economy in general and with UAE in particular.

Further, Hirschman Concentration Index analysis showed that during the study period 1996 to 2015, India's export basket to UAE and UAE's export basket to India became less concentrated. Further, UAE's export basket to India is found to be more concentrated or less diversified as compared to India's export basket to UAE. This analysis shows that India and UAE still have to exploit the existing potential of mutual trade over vast range of commodities. Further, Trade Intensity Index showed that India's exports and imports are more intense with UAE as compared to UAE with rest of the world. Intra-Industry Trade index represented that the two countries contained exports and imports of differentiated commodities of the same industry through which they can take an advantage of economies of scale. Other index such as Trade Complementarity Index showed that during the period 1996 to 2015, on an average, India's exports profile and UAE's imports profile matches to 66.75 per cent with each other. Thus, it can be said that though India-UAE trade is growing by leaps and bounds but still it is limited in the sense that trade basket is very narrow and restricted to only few commodities. Hence, here it is suggested that to enhance and sustain the growth of bilateral trade, both the countries should exploit the existing potential.

## **CHAPTER 4**

### **ANALYSIS OF INDIAN DIASPORA IN UAE, FDI FLOWS AND MUTUAL INVESTMENT**

#### **4.1 Introduction**

Economic and trade links between India and UAE have been developing with each passing day and this pattern is likely to continue for different reasons. First is the presence of Indians in the UAE is reflective of a mutually advantageous relationship between the two nations. Indian expatriate community is reportedly the largest ethnic community in UAE among all the other GCC nations. Indian workers are favored over others owing to their ability and skills. Another reason for growing economic relationship between two countries is that both the nations have made an environment to attract more and more foreign direct investment. FDI policies in India and UAE have been emerged significantly more liberal during the past few years. Also, the FDI flows between these two economies grew tremendously in recent years. Thus, in this context, present chapter has been divided into two parts. First part includes (a) comparison of Indian migrant workers among all the GCC countries in the form of number of migrants and bilateral remittances estimation; (b) different phases of Indian migrants to UAE for the period from 1996 to 2015; and (c) causal relationship between Indian migrants to UAE and UAE's total trade with India by using Granger Causality Model. Second part shows comparison of FDI inflows and outflows of two countries; and mutual investment between India and UAE.

#### **4.2 Indian Diaspora in UAE: A Profile**

The dispersion of people from India and the formation of Indian diaspora community is the result of different waves of migration over hundreds of years driven by a number of reasons. They have been estimated to be second largest in the world and have a diversified global presence. This community represents an eminently successful diaspora in the host country with several of its representatives occupying leadership positions there. They are also important as a strategic resource for India as they have considerably added to knowledge, innovation and development across the world. Indian migrant community is mostly going to the Gulf countries as these countries are one of the important migrants' homes in the world. These countries are not only attracting Indian

migrant people but it also pull people from the other South-East and South Asian countries. Indian migrant community is found more significant among these expatriate communities living in the GCC states. According to the Ministry of Overseas Indian Affairs (MOIA), Government of India, currently the numbers of migrant in the six GCC states are 6 million approximately. They are getting employed in white collar jobs such as doctors, engineers, architects, etc.; semi-skilled workers such as drivers, craftsman, artisans, etc.; unskilled workers in construction sites, livestock ranches, stores, shops, etc. Skilled workers comprise nearly 30 per cent of total Indian migrants in the gulf nations. Semi-skilled and unskilled workers comprise almost 70 per cent of the total Indian migrants. These large number of emigrants are playing an important role not only to the host countries (GCC nations), but also have major developmental share to the place of origin (India). These development affects can be seen at various levels of nation, community, family and individual. This may be in form of social, cultural, political, geographic and economic. As the migrants are an asset to every nation where they gives valuable services with their labour, UAE is one of the best examples for that. The development and growth of the country is entirely depends upon one of the main factor of production i.e. labour, the migrant worker. Within the GCC states, UAE and Saudi Arabia emerged as the leading destinations for Indian migrant workers, where emigrant in UAE is reportedly one of the biggest ethnic community that constituting more than 30 per cent of the country's population.

There were three stages of Indian migration to UAE in last 30 years. The first stage of migration was in the era of high production of oil in 1970s. This had attracted more unskilled and semi-skilled workers from various states of India, especially from the states of South India. Second stage of migration was in the beginning of 1990's i.e. after gulf war and the last stage of migration was found during the twentieth century (Venier, 2011). This shows migration from India to UAE is not a new phenomenon. It was established since long with their bilateral economic, political and culture ties. Further, the two countries' desire was to strengthen the existing close relations between them through enhancing the cooperation in the area of manpower. This was based on their mutual benefits. After signing an FTA between India and GCC countries in 2004, the government of India and the government of UAE signed Memorandum of Understanding (MoU) in

the field of manpower in the year 2006 and the MoU was revised in 2011. The main objective for signing MoU was different for destination and origin country. UAE was like to use MoU to manage irregular migration flows and to promote orderly worker movement. For India, MoU was important for the purpose of protection and rights of country's migrant workers. According to this MoU, manpower refers to all the temporary contractual emigrants employed in the UAE shall leave the destination country after completion of their job period; demand for workers shall mention the required qualification and specification for the jobs needed. It shall also state the conditions of employment, duration of contract, the salary agreed on, end of the service benefits, medical facilities, etc.; terms and conditions of workers' jobs in the UAE shall be defined by a contract between the employer and the worker; employed manpower shall be given protection under the regulation and labour law in the UAE; migrants shall have right to revoke all their savings to their origin country according to UAE's financial regulations; complaints regarding disputes between the worker and the employer shall present to the competent department of Ministry of Labour for settlement and to the competent judicial authorities in case of no settlement attained. However, this MoU exhibited the safeguard of Indian emigration in UAE. But still Indian migrants were being exploited in UAE due to lack of an effective implementation of policy. In this MoU there was no statement regarding the right of the migrant workers to redress if he has been cheated out of wages; labour mobility is restricted because the workers were required to submit their passports to the employers in order to receive a work permit (Wickramasekara, 2012). But the government of UAE has taken some initiatives to improve the situation of migrants in their country as they know that the presence of MoU is the sign of their growing relations with India.

#### **4.2.1 Trends in Indian Migration to the Gulf Countries**

As discussed earlier that the movement of Indian migrant workers to Gulf countries established since long. India was the only country which provided large workforce in GCC when it was facing the problem of shortage of labour in various projects such as oil refineries, recreational infrastructure and construction of industries, etc. There has been rapid increase in the number of labour outflow from India to the region over the past four decades (Kohli, 2014). Table 4.1 shows number of Indian



migrants in the GCC countries during 1970-2015. The figure was increased from 153,380 in 1970 to 6 million approximately in 2015. This number grew significantly especially after 2000 when the FTA was signed between the two. Indian workers preferred this region over the others for their long historical and cultural relations. It is clear from the table that Saudi Arabia and UAE became the leading destinations for Indian migrants. The number of Indian migrants in UAE and Saudi Arabia was increased from 21,584 and 70,109 in 1970 to 2,268,200 and 2,000,000 in 2015 respectively.

**Table 4.1: Number of Indian Migrants in the GCC Countries: 1970-2015**

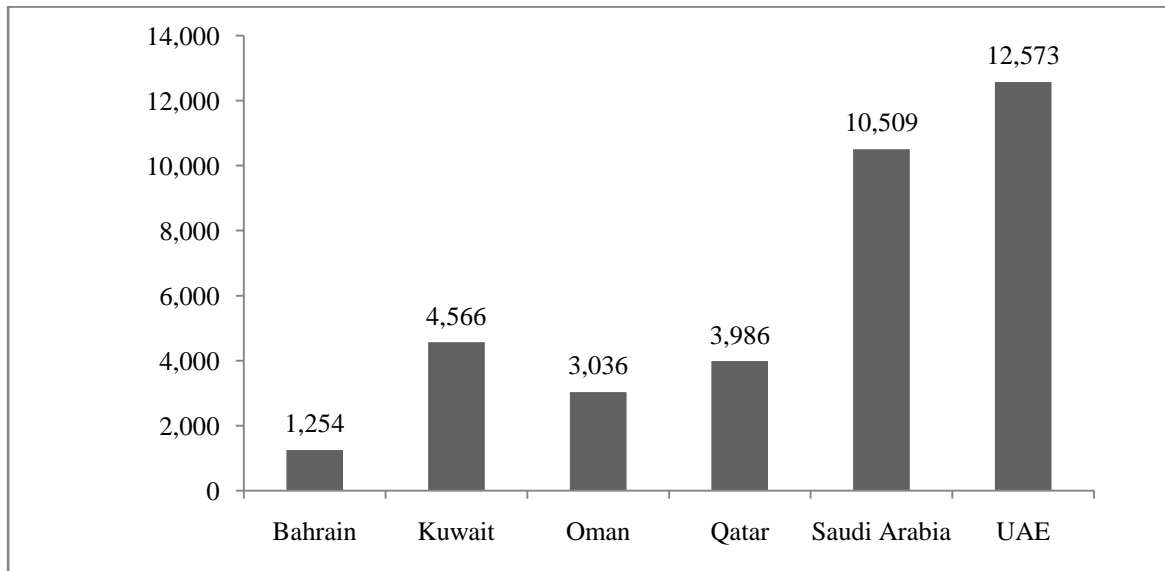
Country	1970	1980	1990	2000	2010	2015
<b>UAE</b>	21,584	235,611	437,179	751,142	2,182,919	2,268,200
<b>Saudi Arabia</b>	70,109	357,516	931,457	1,007,649	1,452,927	2,000,000
<b>Qatar</b>	1,696	16,667	33,750	52,788	250,649	545,000
<b>Oman</b>	31,427	73,080	211,955	312,053	447,824	644,704
<b>Kuwait</b>	21,896	59,060	106,856	100,904	393,210	730,558
<b>Bahrain</b>	6,668	15,286	30,533	39,310	137,402	262,855

Source: Migration and Remittances Data, the World Bank (Various Reports).

The other four nations i.e. Qatar, Oman, Kuwait and Bahrain also exhibit an increasing trend in the outflow of Indian migration to these nations. But these figures are very low. However, earlier the number of migrants was high in Saudi Arabia, but the workers' concentration is actually high in UAE, Bahrain and Qatar as these nations constituting about 32 per cent, 28 per cent and 25 per cent of their total population respectively. Further the fact that Indians want to migrate importantly to UAE due to the huge inflow of remittances from the UAE. Figure 4.1 shows the bilateral remittances estimates from GCC countries for 2015. The developing countries like India have major problems such as high population, high unemployment and low per capita income. Therefore, the country benefits by migrating workers to this region. On one side, it addresses the problem of unemployment with the movement of workers to the region; on the other side it addresses the problem of current account deficit as migration brings foreign exchange in the origin country. It is clear from the figure that Indian workers received highest remittances from UAE among all the GCC countries in year 2015.

**Figure 4.1: Bilateral Remittances Estimates for 2015**

(US\$ Million)



Source: Migration and Remittances Data, the World Bank (Various Reports).

Inflow of remittances from UAE to India was US\$ 12.5 billion or 35 per cent followed by Saudi Arabia (US\$ 10.5 billion or 29 per cent), Kuwait (US\$ 4.5 billion or 13 per cent), Qatar (US\$ 3.9 billion or 11 per cent), Oman (US\$ 3.0 billion or 9 per cent) and Bahrain (US\$ 1.2 billion or 3 per cent). According to the World Bank's Migration and Development Brief 20, India has been the top recipient of migrant remittances in the world for past many a years. The increased remittances were mainly attributed to the large number of workers in UAE. Thus, it shows that UAE remitted highly to Indian migrants.

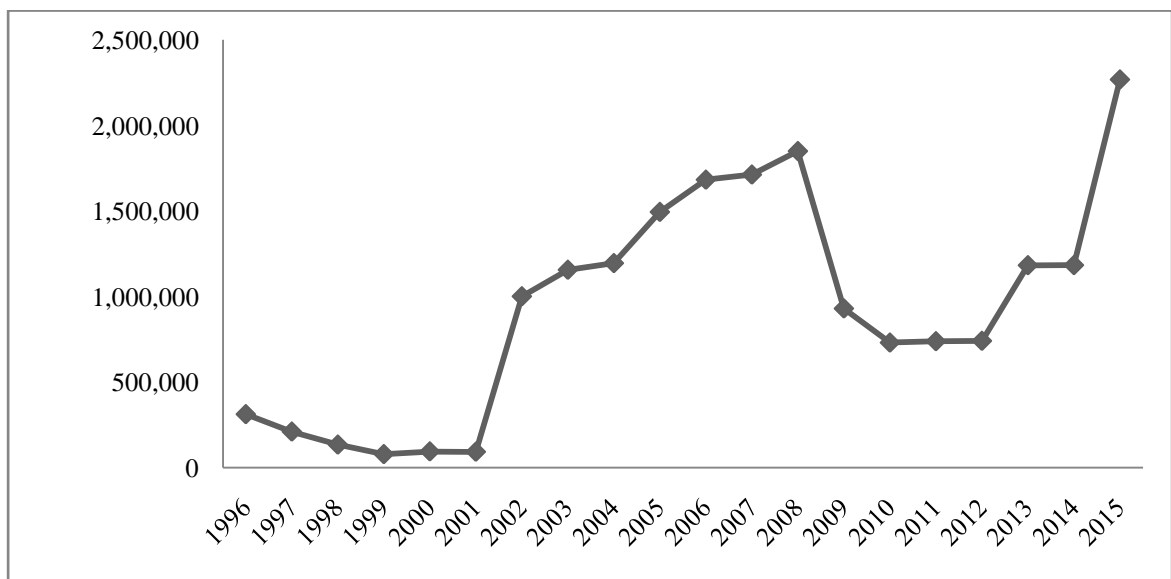
#### **4.2.2 Different Phases of Outflows of Indian Migration to UAE**

Indian diaspora in UAE has played an important role in development of origin and destination country. This community is a culmination of different phases of Indian migration to the emirates. Thus, it is important to know the trend movement of Indian migration in UAE. Figure 4.2 shows the trend of outflow of Indian migrants to UAE. It has been shown by dividing it into three different phases during the study period. First Phase (1996-2001): During this phase, declining trend has been found of Indian emigrants in UAE. The number of migrants was decreased sharply from 312,652 in 1996 to 93,201 in 2001. This was mainly because of changes in the situation during 1996 when a large number of Indian migrant workers were forced to back to India due to the changes in the labour market and immigration policy of the UAE government. At that time, UAE

government realized that the importance and role of UAE domestic workers were being getting marginalized because of the large and growing number of expatriate workers. Thus, government had taken some initiatives such as banning visa for unskilled labour or making jobs of unskilled workers costlier. But, due to this consequent return of high number of migrants and decline in employment, the growth rate of UAE was declined during this phase. The sectors such as crude oil production, real estate, construction, business services registered a negative growth rate (Zachariah, Parkash, & Rajan, 2004). In order to cope up with this situation, UAE government again raised its demand for some specific categories of migrant workers.

It increased the number of Indian migrants to UAE during the second phase (2001-2008). This phase shows an increasing trend of Indian migrants to UAE. The number was increased significantly to 1,849,827 in 2008. During this year, UAE was the single important corridor for Indian migrants. Also, the events like FTA between India and GCC six nations in 2004 and MoU in the field of manpower signing between India and UAE in 2006 have strengthened the relations between the two countries. These events enhanced the outflow of Indian workers to UAE as the Memorandum ensured protection of semi-skilled and unskilled migrant workers in UAE. Thus, during this phase UAE maintained its position as one of the major destination for Indian migrants.

**Figure 4.2: Outflow of Indian Migration to UAE from 1996 to 2015**



Source: Ministry of Overseas Indian Affairs, Government of India (Various Reports).

Third Phase (2008-2012): As shown in the figure that there was again a declining trend in the outflow of Indian migrants to UAE during this phase. After 2008, with a huge fall in trade and commerce; construction and manufacturing activities; and other services, etc., there was decline in the growth rate of a country. This occurred mainly because of the global financial crisis. Due to which, a large number of migrant workers in trade activities, agriculture field, construction activities lost their jobs and were return to India (Rajan, 2014). Therefore, there was a negative impact on Indian workers in UAE. The number of migrants was declined to 741,138 in 2012. Further, during fourth phase (2013-2015), the number of migrants again started rising and reached to more than 2 million. This figure increased because UAE raised its demand for Indian workers to sustain economic growth in the country. Also, the historic visit of India's Prime Minister, Shri Narendra Modi to UAE in 2015 marked the beginning of comprehensive and strategic partnership. Some other steps taken by the government such as e-Migrate project; and Mahatma Gandhi Pravasi Suraksha Yojana, etc. have also encouraged workers to move towards UAE for employment opportunities. Thus, all these phases show fluctuations in the trend of Indian migrants to UAE.

#### **4.3 Causal Relations between Trade and Migration: India-UAE**

The causal links between migration and trade is important for the development and strategic partnership of the countries. Migrant workers can help to conquer restriction to trade with their knowledge, labour power and access to foreign networks. With the increase in number of migrants from an origin country might be expected to increase trade with the destination country. There are many studies available support this hypothesis that migrants affect trade positively. Head and Ries (1998) for Canada examined that immigrants provide information in host country regarding the market structure and language of their home-country. It reduces the transaction costs of trade flows between the home and host country which further stimulates the trade links between them. Murat and Pistoiesi (2006) examined the relationship between immigrant, emigrant and trade for Italy with 51 international trading partners from 1990 to 2005. He found that there is a negative impact of immigrants on imports due to substitution effect but positive impact of emigrants on bilateral trade due to their skills and knowledge. Gould (1994) for US and Canada; Mundra (2009) for US; Girma and Zhihao (2000) for Britain; Bryant, Law, and

Genc (2004) for New Zealand; Besides this, some studies on migration-trade nexus are available which discussed about that whether migration causes foreign trade or foreign trade causes migration. For testing this relationship, Granger (1969) has suggested a data-based methodology that can only be applied on the time-series data. Granger causality may occur in one direction, bi direction or neither direction between the two economic variables i.e. trade and migration. Mosk (2007) analysed the relationship between migration and trade for five countries named USA, UK, Canada, Australia and New Zealand during the different world war periods. Lung (2008) found that for both Australia and Vietnam, there is uni directional Granger causes exist. In case of Australia, immigrants cause exports but not vice-versa. Secondly, he found imports of host country cause immigrants but immigrants do not cause imports. On the other hand, for Vietnam, immigrants Granger cause both imports as well as exports, but not vice versa. The result shows that the existence of migration causes trade; trade causes migration; and bi directional Granger causes during the different war periods.

Hence, we can conclude from the literature that migration-trade links play an important role in country's international network. Both the variables impact positively on each other that can help the countries to get strengthen their relations with the partner country. Thus, here it is interesting to show this analysis in case of India and UAE as the number of Indian migrants to UAE and India's relative importance in UAE's world trade has been increased sharply. So, it is important to check whether there is any relationship between number of migrants and UAE's trade relation with India. For this analysis, Granger Causality Model has been applied for the period from 1996 to 2015.

#### **4.3.1 Unit Root Test**

To explore the cause and effect relation between Indian migrant workers in UAE and UAE's total trade with India, we first examine the essential attributes of two time-series data. More specifically, the first stage is to perform test in order to check whether the data are stationary or not. Stationary data will have constant mean and constant variance. This is important for the estimation, because if the variables are non-stationary, it will give ambiguous parameter estimates of the causal relationship between the variables. The Augmented Dickey-Fuller (ADF) unit root test has been used to examine the stationarity of the time series data. The equation can be expressed as follows:

$$Y_t = \alpha_1 + \alpha_2 Y_{t-1} + u_t \quad (1)$$

$$\Delta Y_t = \beta_1 + \beta_2 Y_{t-1} + \sum_{i=1}^n \Delta Y_{t-i} + u_t \quad (2)$$

Where  $\beta_1 = \alpha_1$ ,  $\Delta Y_t = Y_t - Y_{t-1}$ ,  $\beta_2 = \alpha_2 - 1$ ,  $\Delta =$  first difference operator,  $u_t =$  residual term and  $Y_t =$  relevant time series.

The null hypotheses for unit root test are:

Ho: Migration has a unit root

Ho: Trade has a unit root

If the variables are non-stationary without any differencing, then it is essential to take the first difference of equation (1). Thus, equation (2) shows the recursive conversion with first difference. Similarly, we take the second difference (third, fourth and so on) to make the series stationary. Differencing method is basically used to convert the data from non-stationary to stationary series. This is the necessary condition to obtain reliable and consistent results. Data conversion depends upon the accepting or rejecting null hypothesis. Following is the decision rule for accepting or rejecting null hypothesis:

If ADF test statistics  $>$  critical Value, then we cannot reject null hypothesis (Ho) or unit root exist.

If ADF test statistics  $<$  critical value, then we reject null hypothesis (Ho) or unit root does not exist.

**Table 4.2: Unit Root Test Using Augmented Dickey-Fuller Test**

Variables	ADF Statistics	Critical Value (1%)	Critical Value (5%)	Critical Value (10%)	Prob.*	DW
Migration	-1.750236	-3.980320	-3.095405	-2.673459	0.49	1.68
$\Delta$ Migration	-3.231295	-3.845148	-3.381002	-2.681330	0.18	1.97
$\Delta^2$ Migration	-5.652348	-4.120054	-3.021452	-2.690439	0.00	2.14
Trade	2.372563	-3.523014	-3.120294	-2.673459	0.84	2.25
$\Delta$ Trade	-2.035642	-3.754896	-3.084152	-2.681330	0.16	2.19
$\Delta^2$ Trade	-5.654720	-4.0412036	-3.102546	-2.701103	0.00	2.02

\*Mackinnon (1996) one- sided p-values

DW: Durbin- Watson stat

Note:  $\Delta$  denotes first difference operator and  $\Delta^2$  denotes second difference operator.

Table 4.2 reveals that the ADF test statistics of migration without differencing (-1.750236) is greater than its critical values (-3.980320 and -3.095405) at the 1% and 5% level of significance respectively. Also, the probability value (0.49) is greater than the significant level (0.01 and 0.05) that suggests us to accept null hypothesis. It indicates that migration has a unit root and data is non-stationary. Further, the Durbin-Watson statistics is 1.68, which is not very close to 2. This indicates result is not reliable and it has autocorrelation problem. In case of trade also, ADF test statistics without differencing (2.372563) is greater than its critical values (-3.523014 and -3.120294) at the 1% and 5% level of significance respectively. Also, the probability value (0.84) is greater than the significant level (0.01 and 0.05) that suggests us to accept null hypothesis. It indicates that trade has a unit root and data is non-stationary. Further, the Durbin-Watson statistics is 2.25, which is not very close to 2. Therefore, there is need to covert non-stationary data into stationary series. Hence, at first difference, results for migration and trade again exhibited non-stationary series at 1% and 5% level of significance. The data series for both migration and trade become stationary after the second difference. The ADF statistics in migration and trade is less than the critical values at both 1% and 5% level after taking the second difference. Also, at second difference, the Durbin-Watson statistics is close to 2, that indicate there is no autocorrelation and the result is reliable.

#### **4.3.2 Cointegration Test**

Johansen's Cointegration analysis is used to identify the long run relationship among the two or more variables having unit roots. Here, two test statistics (trace statistics and maximum likelihood test) are used for testing the cointegration. Since, both the variables migration and trade are integrated of order two  $I(2)$ , it confirms that long run economic relationship between these two variables can be examined. But, to test for Granger cause and cointegration, there is need to find optimal lag intervals to include. The criteria for choosing number of lags is done through Final prediction error (FPE), Akaike information criterion (AIC), Schwarz information criterion (SC) and Hannan-Quinn information criterion (HQ). As shown in the table 4.3, all these test preferred three lags which is indicated by the symbol “\*” in the results. Thus, here we will use three lags in the bivariate model.

**Table 4.3: Lag Order Selection Criteria**

Lag	Log L	LR	FPE	AIC	SC	HQ
0	-128.8681	NA	8724373.	22.61002	21.75893	21.65415
1	-109.2369	47.12652	165953.5	17.58390	17.83565	17.52131
2	-86.68147	16.21171*	50083.91	16.41381	16.84839	16.32449
3	-91.71636	7.360172	32236.72*	15.80252*	16.41092*	15.67746*
4	-84.01257	0.996176	68416.41	16.16886	16.95109	16.00807

\* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

**Table 4.4: Unrestricted Cointegration Rank Test  
(Trace) and (Maximum Eigenvalue)**

H0	Eigen value	Trace Statistic	0.05Critical Value	Prob.**	Max-Eigen Statistic	0.05 Critical Value	Prob.**	Hypothesized No. of CE(s)
r=0	0.845421	25.81579	16.24471	0.0010	24.32466	14.15460	0.0016	None *
r<=1	0.188332	2.745124	3.753066	0.1037	2.745124	3.641466	0.1038	At most 1

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level and Max-eigen value test indicates 1 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

For determining the number of cointegrating vectors, there is a sequential procedure. First, we test H0 (r= 0) i.e. no cointegration against H1 (r=r+1). If this null hypothesis is not rejected, we conclude that there is no cointegrating vector among the variables and if it is rejected, it shows there is cointegration between the variables. This procedure is continued until we fail to reject null hypothesis. Table 4.4 shows the cointegration results of the maximum eigen-value and trace statistics. Result depicts that the trace and maximum eigen-value test statistics for migration and trade are 25.81579 and 24.32466 greater than the critical values of 16.24471 and 14.15460 at 5% level of significance for r=0. This indicates that the null hypothesis of no cointegration is rejected



and there is long run relationship between migration and trade. In the second case, the values of trace and maximum eigen-value test statistics are 2.745124 and 2.745124 less than the critical values of 3.753066 and 3.641466 at 5% level of significance for  $r \leq 1$ . Therefore, we cannot reject the null hypothesis and conclude that there is at least one cointegrating equation in model.

### 4.3.3 Granger Causality Test

According to the results of unit roots and cointegration statistics, the appropriate Granger causality equation can be examined. It shows the direction of causality between the variables. Here, to check the causality between Indian migrants in UAE and UAE's trade with India, Granger model involves the following relationship i.e. whether migration causes the trade or trade causes the migration.

**Table 4.5: Pairwise Granger Causality Tests (Lags 3)**

Null Hypothesis:	Obs	F-Statistic	Prob.	Decision
Trade does not Granger Cause Migration	12	76.0015	0.0011	Reject
Migration does not Granger Cause Trade		0.95123	0.4345	Accept

$$Y_t = \sum_{i=1}^n \alpha_i X_{t-i} + \sum_{j=1}^n \beta_j Y_{t-j} + u_t \quad (\text{if causality goes from trade to migration})$$

$$X_t = \sum_{i=1}^n \gamma_i Y_{t-i} + \sum_{j=1}^n \delta_j X_{t-j} + v_t \quad (\text{if causality goes from migration to trade})$$

Where:  $u_t$  and  $v_t$  are uncorrelated,  $Y$ = India's migrants to UAE,  $X$ = UAE's total trade with India,  $t$ = time period.

Table 4.5 shows the results of causation between Migration and Trade. In the first case, probability value of 0.00 is less than 0.05, so the null hypothesis of Trade doesn't Granger causes Migration is rejected at 5% level of significance at the lag length 3. Thus, the alternative hypothesis of trade causes migration is accepted. In the second case, p-value of 0.43 is greater than 0.05, where the null hypothesis of migration doesn't Granger causes Trade is accepted at 5% level of significance. Hence, the results reveal that there is existence of uni-directional causality between migration and trade i.e. trade has an effect

on migration but not vice-versa. The same case can also be seen during the different phases in the trend of Indian migrant workers to UAE. It shows that events such as FTA and MoU between the two nations have increased the number of migrants from India to UAE. Similarly, when there was decline in trade activities during global financial crisis, migrants were forced to return their home country. Schiff 1994, in his study, concluded that in the developing countries, migration costs may be a constraint on migration. But trade liberalization and other factor flows (i.e. foreign aid and remittances) in a labour-abundant country will increase income of labour and improve their ability to cover the costs of migration which further increases the number of migration. Similarly, the trade liberalization between UAE and India has stimulated trade flows that has also improved their mutual relationship in other economic fields and promoted international factor movement. This has positively affected migration from India to UAE.

Despite migration between the two, foreign direct investment was another important factor, which played significant role in the development of origin and destination country. India and UAE were keen to investing in each other's economy. It had strengthened the economic and trade cooperation between them.

#### **4.4 Foreign Direct Investment**

Since the beginning of twentieth century, economic development; and economic growth have been at the core of the economic debate. The great depression, the huge economic collapses, the destruction occurred by the World Wars, poverty and high rate of unemployment in developed economies made the situation worse in the developing countries during the earlier period of colonialism. Therefore, they felt difficulties to manage the high level of backwardness in their economies. Then, the situation was improved somewhat with the introduction of new features in international economic relations such as capital transfers. After the Second World War, transformation of resources has become more varied through foreign aid and loans. It was helpful for the developing nations to handle social and financial problems more suitably by the external resources. In this view, foreign resource transfers advanced in size and structure gaining a continuously greater importance with the each passing day. After the golden period of 1950s-60s, developing economies experienced a huge debt. This led to continually rising resource outflow due to the interest payments and repayment of debt. At the same time, an

immersion of financial resource occurred in the developed countries. Therefore, toward the start of the 1970s it became evident that markets were limited and the search for new channels for final products produced in the developing countries became more rigorous and so did the needs to obtain cheap raw materials. This prompts a first theory in relation with the immersion of financial resources i.e. financial capital was now being mobilised for uneconomic reasons and this implied investment projects in the developing economies without establishing a macroeconomic rationale (Akrami, 2008). To be sure, new multinational corporations (MNCs) emerged as specialists of private foreign investment in developing nations.

The next change occurred when the debt crisis deepened in the early 1980s. Interest payment and amortization declined sharply due to the high Latin American debt. In the meantime, FDI was carried out by transnational corporations (TNCs). During this period, the global FDI has increased its importance by transferring technologies and skills; generating employment and trade along with its affect on domestic investment and innovation; and establishing marketing and procuring networks for efficient production and sales internationally. This showed a new dimension for foreign direct investment. In 1990s, this trend intensified and was influenced by the events such as the dissolution of USSR and Eastern bloc economies where regional agreements, new international institutions and mutual integrations had developed. With the integration of foreign capital markets, global FDI transfers grew robustly. Since East Asian financial crisis in 1997, the relationship between FDI, foreign trade and economic growth gained importance and attention among the researchers and policy makers. The concept of ‘Investment led Economic Development’ particularly in developing countries was emerged as these countries required huge amount of financial resources for promoting their economic development (Ray, 2012). As we know that Capital is scarce resource in developing countries, and the rate of saving is low. Since saving controls the volume of investment, domestic investment is also low and followed by the rate of economic growth. Hence, their domestic resources were insufficient to meet their financial requirements. As a consequence, FDI has become the most important source of external flow of resources to these countries that is required to complement domestic investment and to increase the rate of economic growth.

#### **4.4.1 Foreign Direct Investment in India**

After independence in India, FDI got attention of the policy makers for obtaining modern technologies and to transfer the foreign exchange resources. In the 1960s and 1970s, Indian government policies towards FDI were very much restrictive and selective. FDI was only allowed in a selected group of industries. The Monopolies and Restrictive Trade Practice (MRTP), Foreign Exchange Regulation Act (FERA) were imposed in 1973 to restrict foreign ownership of shares in companies incorporated in India. These acts discouraged the FDI flows and the growth of domestic industries. Then, the mid 1980s brought a positive change with Rajiv Gandhi's outward oriented industrialization policy. The industries started to get modernized with the liberalization of the economy (Rao, Murthy, & Ranganathan, 1999). But the economy was fully liberalized with the introduction of New Industrial Policy in July 1991. This policy measures included the liberalization of FDI regime which put emphasis on attracting a huge amount of foreign capital. Thus, foreign investment became as a major source of scarce capital, managerial skills and technology that were considered basic in an open and competitive world economy. New Industrial Policy introduced a two-way approval process for FDI. This was the automatic route approval, where all the proposed manufacturing items did not require any industrial licenses. But, the companies were required to inform the RBI after issuing the shares to a foreign company. To encourage modernization and technological upgradation in the small scale industries, equity participation not exceeding 24 per cent of the total shareholding was allowed in the sector by other industrial undertaking. The limit for foreign investment was increased from 51 per cent to 74 per cent of the equity capital in some selected industries in 1997 (Hameedu, 2014). But, now FDI policy in India is broadly figured to be among the most liberal in the rising economies and FDI up to 100% is allowed under the automatic route in many sectors and activities of the economy. India has not only allowed foreign investment in almost all the sectors, but also allowed foreign portfolio investment in the economy.

Other incentive to attract the foreign investors was the country's attention into Special Economic Zones. These zones permit the Indian government to give a number of incentives in a simplified and improved manner. It gives three types of incentives for enterprises to operate their business in India. One, SEZs provide financial; tariff; and tax

incentives by stating it as free trade enclaves. Second, SEZs develop the general bureaucratic and regulatory circumstances that many organizations face when locating in India. Third, these zones provide infrastructure facility that is not always available elsewhere in the country. Thus, these SEZs offer favoured trading terms and other stimulus to foreign investment (Bloodgood, 2007).

**Table 4.6: India's FDI Inflows and Outflows: 1996-2015**

Year	Inflows (US\$ Million)	Percentage Share of Inflows		Outflows (US\$ Million)	Percentage Share of Outflows	
		In World	In Developing Countries		In World	In Developing Countries
1996	2525.00	0.65	1.68	240.00	0.06	0.37
1997	3619.00	0.74	1.88	113.00	0.02	0.15
1998	2633.00	0.37	1.39	47.00	0.01	0.10
1999	2168.00	0.20	0.93	80.00	0.01	0.11
2000	3587.99	0.25	1.35	514.45	0.04	0.35
2001	5477.64	0.65	2.42	1397.44	0.18	1.52
2002	5629.67	0.90	3.27	1678.04	0.32	3.76
2003	4321.08	0.72	2.19	1875.78	0.32	3.62
2004	5777.81	0.78	2.03	2175.37	0.24	1.92
2005	7621.77	0.76	2.23	2985.49	0.33	2.12
2006	20327.76	1.37	4.70	14284.99	1.00	5.89
2007	25349.89	1.27	4.29	17233.76	0.76	5.27
2008	47138.73	2.59	7.05	21147.36	1.06	6.25
2009	35657.25	2.92	6.70	16031.30	1.37	5.79
2010	27431.23	1.93	4.23	15932.52	1.09	3.79
2011	36190.40	2.13	4.99	12456.13	0.73	2.95
2012	24195.77	1.82	3.32	8485.70	0.63	1.93
2013	28199.45	1.94	3.62	1678.74	0.12	0.37
2014	34582.10	2.71	4.95	11783.50	0.89	2.64
2015	44208.02	2.51	5.78	7501.43	0.51	1.98
<b>Average (1996- 2015)</b>	<b>18328.39</b>	<b>1.43</b>	<b>3.75</b>	<b>6883.92</b>	<b>0.52</b>	<b>3.07</b>

Source: World Investment Report, UNCTAD (Various Issues).

Table 4.6 shows inflows and outflows of India's FDI from 1996 to 2015. During the study period, India experienced a tremendous increase in both FDI inflows and outflows. In absolute term, it rose from US\$ 2525 million and US\$ 240 million in 1996 to US\$ 44208.02 million and US\$ 7501.43 million in 2015 respectively. The average for the period 1996-2015 is calculated to be US\$ 18328.39 million and US\$ 6883.92 million

respectively. Besides this, the average of India's percentage share in world and developing countries' FDI inflows (i.e. 1.43 per cent and 3.75 per cent respectively) were higher than that of outflows (i.e. 0.52 per cent and 3.07 per cent respectively). The countries namely, Mauritius, Singapore, USA, Cyprus, Japan Netherlands, UK, Germany, UAE, France has emerged as the largest sources for FDI to India. As clear from the table that India experienced a sharp jump in both FDI inflows and outflows during the period 2006. According to World Investment Report (2007), sharp increase in FDI outflows during this period was mainly dominated by privately owned corporations such as Tata Group. Tata steel was merged with Corus Group in 2007 and created Tata Group that was the world's fifth largest steel maker by revenue. On the other side, Rapid economic growth and the sustained growth in income have made the country highly attractive to market-seeking FDI. Therefore, multinational retailers such as Wal-Mart have started to enter Indian market. At the same time, several large Japanese TNCs such as Nissan and Toyota; and United States TNCs such as IBM and General Motors were rapidly increasing their presence in India. This strengthened the foreign investment inflows in the country remarkably.

The major sectors attracting FDI in India have been service sector, drugs and pharmaceuticals, computer software and hardware, telecommunication, construction development (township, housing, built-up infrastructure), automobile industry, etc. The continuous inflow of FDI clearly shows the confidence that international investors have in the Indian economy. Government of India has taken many initiatives in recent years i.e. relaxing FDI norms in 2013, in selected sectors such as PSU oil refineries, defence, power exchanges, telecom and stock exchanges among others. During the same year, global brands like Singapore Airlines, Etihad and Tesco lined up to invest in the country as the Indian government opened several sectors to foreign investment. Besides this, India's cabinet has cleared a proposal of 100 per cent FDI allowed in railway infrastructure excluding operations. This allows the foreign companies to supply the trains rather to operate them in India; The Union Cabinet has increased FDI in private insurance corporations from 26 per cent to 49 per cent; FDI up to 100% under automatic route permitted in teleports, direct to home, cable networks and mobile TV, etc.; The Reserve Bank of India has permitted various foreign investors to invest on the basis of repatriation

in redeemable or non-convertible preference shares or debentures; and a major national initiative taken by the government was “Make in India” to increase world investment opportunities in India. Thus, these policy regimes of Indian government and a healthy business environment have confirmed that foreign capital resource keep flowing into the country.

#### **4.4.2 Foreign Direct Investment in UAE**

FDI is one of the bases of a country’s further economic development. It is a life-blood of any economy that improves quality of life, drives reform, increases trade flows and transfers knowledge & technology. For UAE also, FDI is a significant factor in building a sustainable and expanded knowledge-based economy. It is considered as one of the pillars for the structural change of the economy as it reduces dependence on natural resources and diversifies UAE’s economy in the long term. Ministry of Cabinet Affairs (2011) emphasizes that in making a sustainable and diversified economy, domestic entrepreneurship is to be stimulated and foreign investment to be attracted. Table 4.7 shows inflows and outflows of UAE’s FDI from 1996 to 2015. As shown in this table that UAE’s average inflows and outflows for the period 1996-2015 were US\$ 6276.22 million and US\$ 4039.95 million respectively. However, the level of investment flows grew highly after the year 2002 with the initiatives taken by UAE government. They planned to move towards a few new free trade areas to make the emirate as a worldwide centre for trade in gold bullion, research and development of technology and financial activities. Relaxed constraints for foreign investment in particular real estate projects and allowed 100 per cent foreign ownership of corporations in several non-hydrocarbon sectors. Also, UAE decreased corporate income tax on foreign companies and the foreign investor’s access to local markets was improved. All these government steps helped in increasing the FDI in the country during the last decade. Though oil remains centre of the UAE economy, but non-oil sector has become the main source of growth in the past few years (Ramady, 2012).

Sectors which attracted the more FDI during the study period were oil and gas sector; Financial and insurance sector; trade and car repairs; real estate; manufacturing sector; and construction. Importantly, government’s outward-oriented development strategies and rise in international oil and gas prices stimulated domestic and foreign

investment, which led to high growth in construction and services sectors of the economy. It is also clear from the table that the average of UAE's percentage share in world's FDI inflows (i.e. 0.52 per cent) was higher than that of outflows (i.e. 0.29 per cent). But the average of UAE's percentage share in developing countries' FDI inflows (i.e. 1.35 per cent) was lesser than that of outflows (i.e. 1.81 per cent). The countries namely, UK, Japan, Hong Kong, Switzerland, Kuwait, Qatar, India, China, etc. has emerged as the largest sources for FDI to UAE.

**Table 4.7: UAE's FDI Inflows and Outflows: 1996-2015**

Year	Inflows (US\$ Million)	Percentage Share of Inflows		Outflows (US\$ Million)	Percentage Share of Outflows	
		In World	In Developing Countries		In World	In Developing Countries
1996	300.52	0.08	0.20	128.61	0.03	0.20
1997	232.43	0.05	0.12	231.13	0.05	0.32
1998	257.66	0.04	0.14	127.30	0.02	0.26
1999	-985.34	-0.09	-0.42	317.11	0.03	0.45
2000	-506.33	-0.04	-0.19	423.67	0.03	0.29
2001	1183.84	0.14	0.52	213.70	0.03	0.23
2002	95.30	0.02	0.06	441.12	0.08	0.99
2003	4255.96	0.70	2.16	991.15	0.17	1.91
2004	10003.50	1.36	3.51	2208.00	0.24	1.94
2005	10899.93	1.09	3.19	3750.30	0.41	2.66
2006	12805.99	0.86	2.96	10891.76	0.76	4.49
2007	14186.52	0.71	2.40	14567.73	0.64	4.45
2008	13723.60	0.75	2.05	15820.30	0.79	4.68
2009	4002.70	0.33	0.75	2722.90	0.23	0.98
2010	5500.34	0.39	0.85	2015.00	0.14	0.48
2011	7678.69	0.45	1.06	2178.00	0.13	0.52
2012	9601.91	0.72	1.32	2536.01	0.19	0.58
2013	10487.95	0.72	1.35	2905.24	0.21	0.64
2014	10823.38	0.85	1.55	9019.07	0.68	2.02
2015	10975.83	0.62	1.44	9264.31	0.63	2.45
<b>Average (1996- 2015)</b>	<b>6276.22</b>	<b>0.52</b>	<b>1.35</b>	<b>4039.95</b>	<b>0.29</b>	<b>1.81</b>

Source: World Investment Report, UNCTAD (Various Issues).

UAE leads the Middle East region in terms of investors' confidence, with Dubai as the main hub and followed by Abu Dhabi. Dubai, one of the Emirates, became an access point for several investors due to its central hub location, advances in various sectors,



business-friendly policies and the availability of a world-class infrastructure for various business operations. Dubai also facilitates foreign investors a competitive environment by focusing on ease of working and its zero tax system. For setting up a business in Dubai, investors have several options to choose from, consisting over 23 free zones that permit 100 per cent foreign ownership and repatriation of profits and income. It also provides more opportunities across the sectors such as services, trade, tourism and aviation, transport, hospitality, real estate, construction, Information technology, etc. The measures were backed up by strategies to make partnerships to attract enterprise and expertise in each of these sectors (Kane, 2014). Dubai keeps on developing its plans and strategies with a high attention on bringing high value of FDI. The major share of FDI inflows to Dubai comes from US, UK, India, Africa and Middle East. Thus, this emirate emerged as an attractive FDI destination which helps in UAE's economic development.

#### **4.4.3 Mutual Investment between India and UAE**

The growing trade between India and UAE, particularly in the non-oil sector, is a reflection of growth of the two economies. Their companies are highly involved in pursuing projects and investments in each other's economy to benefit from the attractive returns on investments. It has given an immense scope for establishing stable and long-run relationship between them. The impressive economic relationship between the two economies over the recent decade has enhanced cross border investments. Total FDI from UAE to India has been estimated to be around US\$ 3.01 billion in 2015 that makes UAE position among the top ten investors in India. UAE have huge potential for investing in different sectors of Indian economy for their mutual advantage. UAE has also emerged as the top investor in India among all the GCC six nations. According to Embassy of India: Abu Dhabi-United Arab Emirates 2016, UAE's investors concentrated in the following Indian sectors: power (13.09%), metallurgical industries (9.90%), construction development (15.52%), services sector (9.58%), and computer software & hardware (4.90%). The major UAE companies invested in India are EMAAR Group, a real estate company of Dubai government has set up a major township in Hyderabad; Dubai Ports (DP) World is now working on 6 major Ports in India at Navi Mumbai, Nhava Sheva, Mundra, Chennai, etc., following its acquisition of the P&O of U.K. DP World constructed the International Container Transshipment Terminal (ICTT) in Kochi; UAE

tile manufacturer and RAK Ceramics India, has established a tile plant in Ahmedabad with an investment of US\$ 150 million; Dubai-based private equity firm Abraaj Group has announced in 2013, an investment of US\$ 17.5 million in Rainbow Hospitals in Andhra Pradesh. Some other important UAE companies such as Nakheel, Estisalat DB Telecom, ETA Star Group, SS Lootah Group, Emirates Techno Casting FZE, Damas Jewellery, Abu Dhabi Commercial Bank, etc. are also operating business in India.

Correspondingly, India has also emerged as one of the important investors in UAE. Total FDI from India to UAE has been estimated to be around US\$ 1.45 billion in 2014. Indian companies have invested in several areas of UAE such as tourism, retail, service and manufacturing sector, electronic equipments, health, hospitality, etc. Hinduja Group has established manufacturing units in Ras-al-Khaimah. Several Indian companies have set up their units either as joint ventures or in SEZs for cement, textiles, consumer electronics, engineering products, etc.; Taj Group of Hotels have invested in the hospitality, tourism, catering, retail, education and health sectors; the EMKE Group has established an Indian national dominates the retail sector in UAE; Indian cement manufacturer JK Cement has invested US\$ 14.97 million to set up a white cement plant in Fujairah free trade zone; Ashok Leyland, Mahindra, Dabur, Tata Power and Zurari Agro Chemicals are also establishing units in Ras Al Khaimah; Essar Steel Group has started service centre facility in Dubai to cater the requirements of Middle East customers; some other major Indian companies such as L&T, Punj Lloyd, Dodsal, etc. have also been able to obtain significant number of contracts in the UAE.

To further attract investments, a High Level Task Force (HLTF), co-chaired by Shri Anand Sharma, Union Minister for Commerce, Industry & Textiles and HH Sheikh Hamed bin Zayed Al Nahyan, Chairman of the Abu Dhabi Crown Prince Court was formed in May 2012. It was established to address the bilateral issues related with existing investments between the two nations and to facilitate and to promote investments between them. The first meeting of the India-UAE HLTF on Investments was held on 18 February, 2013 at Abu Dhabi, which included wide-ranging discussions on priority sectors of engagement. The discussion was related to establish sub-committees in the areas such as infrastructure, energy, investment and trade, manufacturing and technology, aviation and transport for investment purposes. Since then, work done by the High Level Task Force

was to strengthen the mutual relations in the field of investments ended in the signing of a Bilateral Investment Promotion and Protection Agreement between the two countries in December, 2013. It was presented as an important step for promotion and reciprocal legal protection of investments in both the countries. UAE has invested US\$ 2 billion in Indian infrastructure projects and supported the establishment of a strategic oil reserve in India. UAE has also invited many Indian companies in the renewable energy area. Further, the second meeting of India-UAE High Level Joint Task Force on Investments was held on 3 March, 2014 in Mumbai. This meeting made progress on a number of fronts: Discussions were held on supporting the establishment of a petroleum reserve in India and based on the principles of long term strategic partnership and cooperation. They have decided to set up another joint working group to make progress on this effort; discussions took place for channelling investments in the two countries; the meeting also covered on expediting the resolution of pending issues related with existing UAE investments in India by Etisalat, Emaar & DP World. Thus, with the discussions and decisions taken during the inaugural meeting of the HLTFI, several joint working groups have been established to address the problem of their mutual interest in several sectors. Further, the visit of Prime Minister of India, Shri. Narendra Modi, to UAE in 2015 made an attempt to attract UAE's investors for investing in India's various infrastructural projects especially in ports, roads, railways, airports, industrial corridors and parks. Thus, all these combined efforts will definitely help two countries to further strengthen their bilateral trade relations and to achieve a similar growth path for investment between them.

#### **4.5 Conclusion**

Growing trade relations between India and UAE have strengthened the movement of Indian migrants to UAE. UAE has been reportedly one of the biggest ethnic community that constituting more than 30 per cent of the country's population. It has emerged as the important destinations for the semi-skilled and low skilled Indian workers. The number of Indian migrants in UAE increased from 153,380 in 1970 to 6 million (approximately) in 2015. These numbers grew gradually due to heavy inflows of remittances from UAE. This was helpful in addressing the problems of unemployment, low per capita income, etc. in India. Also, the number of workers increased after signing an FTA between India and GCC countries in 2004; and MoU in the field of manpower signed by the government of

India and the government of UAE in year 2006. This MoU was then revised in year 2011. Further, Granger Causality model has been applied in order to explore cause and effect relations between migration and trade. Empirical results reveal that there is uni directional Granger cause exists or in other words, trade has an effect on migration but migration doesn't affect trade. These two variables have long run relationship, which will be helpful in the development and growth of two countries' trade and economic relations in future.

Further, inflows and outflows of FDI of India and UAE have been examined. FDI is an important factor in economic growth. It impacts the host country through the transfer of technology, scarce capital and managerial skills which are the key ingredients in an open and competitive world. As emerging economies have not enough financial resources to compete with the developed nations, foreign investment is an important source of these resources to the developing nations to compete with the advanced nations. Similarly, India and UAE as developing nations have put many efforts to attract foreign direct investments in order to meet their financial resources. This investment inflow in both the countries was higher than the outflow during the period from 1996 to 2015. Also, they have been emerged an important investors in each other's economy. Indian and UAE's several major companies were actively involved in pursuing investments and projects in both the countries. This played an important role in economic growth of the two. UAE have huge potential for investing in different sectors of Indian economy for their mutual advantage. UAE investors have shown keen interest in sectors such as power, metallurgical industries, construction development, services sector, and computer software & hardware. But, the tourism sector is also one of the fields that have high potential for future growth. There is also a good scope for UAE to invest in the tourism sector in India that can pull tourists visiting to the country as well. Also, the government of both the countries has taken many initiatives to strengthen investment opportunities between two countries.

## **CHAPTER 5**

### **MUTUAL GAINS FROM TRADE: INDIA-UAE**

#### **5.1 Introduction**

Today, the economies are more interconnected than any other in history. Since the middle of the last century, declining trade barriers around the world has driven a rapid rise in international trade. Also, countries are different in their wants. They are also different in terms of technological possibility, natural resource endowment and the variables which determine the capacity of production of a nation that directly went to meet those different wants or needs. So, due to different production capacity, their level of income and taste & preferences results in difference in prices of products. This formed the basis for international trade among the countries. As Ohlin stated that the disadvantages of unequal geographical distribution of productive resource were diminished by international trade. With the ease of trade, these gains have multiplied and remained an important concern in international trade theory. The theory of gains from trade is at the centre of classical theory of international trade. According to Adam Smith, the gains from trade depend upon division of labour and specialization both at national and international level. The size of gains from trade for a country depends upon the terms of trade. John Stuart Mill measured the gains from trade by using reciprocal demand that depends upon the terms of trade. It shows the outer limits of the terms of trade which is determined by the relative strength of a particular country's demand for its partner country's commodities. In simple words, cost of production measure the outer limits to the terms of trade, whereas reciprocal demand measures what the actual terms of trade exists within these limits. He was the first, who has introduced the concept of terms of trade which is an appropriate technique to show whether trade has been beneficial or not to a particular country (Chishti, 1973).

According to the modern analysis, gains from international trade arise due to gains from specialization and gains from exchange. Viner (1937) identified the following three different methods for determining gains from international trade: difference in comparative costs; increase in level of national income; and terms of trade. The terms of trade method has been in trend to determine the gains from international trade. The terms of trade refer to the rate at which the goods of one country are exchanged for the goods of

another country. If the export prices of one country are greater than its import prices, then its terms of trade are said to have improved. The improved terms of trade indicates that now a country has larger quantity of imports in exchange for a given quantity of exports. On the other side, when its import prices are greater than its export prices, its terms of trade are said to have worsened.

As we know that during the recent past, India and UAE have emerged as an important trading partner for each other, their economic links, especially merchandise trade has increased tremendously. UAE has been one of the favorite destinations for India's export basket. In fact, for last few years, UAE has been placed at first position in India's export destination list. Many new commodities have also been included in India's export list. This chapter pertains to the mutual gains from trade between India and UAE. The gains from trade are analysed with the help of terms of trade.

## **5.2 Theoretical and Empirical Evidences on Terms of Trade**

It has been argued that a country gains from trade due to its potential that affects international division of labour and product specialization. The gains are in the form of economies of scale, more production, greater magnitude of goods, and diversification of production. It increases a nation's wealth, the value of possessions and the means of enjoyment. Singer (1950) proposed that fluctuations in the terms of trade dramatically affected the credit available to developing countries for capital formation, and hence growth. But, he missed an opportunity by failing to stay on this point and concentrated instead on the implications of a secular deterioration in the terms of trade.

The literature on the proposed secular deterioration is long and controversial. It is certainly possible to look back from 1950 and notice a downward shift in the commodity terms of trade. Prebisch (1950) studied the board of trade's mean price indices for British exports and imports. He argued that the terms of trade had continually moved against producers of primary products from the period 1860s to the year leading up to the Second World War. Along with this study, Singer stated that it is a fundamental fact that price of these commodities would fall relative to the price of manufactures items in the long run. Thus, the terms of trade and income of exporters of primary commodity would decline over time. Spero and Hart (2009) also supported the above view and stated that the trade between developing and a developed country is the process of unequal exchange. In the

international market, there is a full control of developed or capitalist countries which causes the terms of trade against the developing countries. This happened because the international trade forced to the developing countries to focus on traditional forms of production which prevent development.

The structure of a commodity and factor market is highly monopolistic in the developed countries than the developing countries. Prebisch and Singer argued that the direction of terms of trade is affected by the progressive technology than the stationary technology. The results of technical progress are different among developed and developing countries. Also, the income and price trend behave differently in the developed and developing countries which result from the change in productivity. Further, the wages in the developed countries rise when there are upswing of the cycle in economy and are rigid during downswing of cycle (Khan, 1971). The reward of the productivity shifts from the developing countries to the developed countries in the form of lower prices, whereas the reward of technical progress in developed countries remained in these countries in the form of higher wages and profits. Developed countries have reduced demand of raw material from developing countries due to the availability of synthetic substitutes. Prebisch in the beginning focused on cyclical behaviour of terms of trade. Later, he argued that due to non-organized labour, wages remained low in developing countries and then he agreed with Lewis that surplus labour in developing countries keeps the wages down (Tandon, 1985). Hence, there are so many issues of terms of trade explored from many aspects.

There are various attempts have been made to analyse a country's terms of trade. Nurkse (1953) stated that market of developed countries would not absorb the goods producing in developing countries because of low elasticity of demand for their products. Thus, it was a challenged that there was a secular tendency for terms of trade of the developing countries to move adversely and implying a bias in the distribution of the gains from trade.

Sarkar (1983) analysed the Net Barter Terms of Trade (NBTT) for the period from 1952 to 1972 for world trade by using the United Nation's data. He concluded that the real prices of exports of primary products declined by 1.31 per cent per annum during the study period. Net Barter Terms of Trade of exports of primary products in relation to

manufactures dropped by an annual average rate of 1.51 per cent. The overall Net Barter Terms of Trade of the developing countries fall by approximately 0.56 per cent per annum as compared with an improvement of 0.58 per cent per annum of the developed countries.

Cuddy (1987) explored the NBTT for the period from 1960 to 1982 for three groups of the developing countries. These groups were namely commodity exporters, oil exporters and major exporters of manufactures. He found that these terms of trade clearly deteriorated for the exporters of primary goods and improved for the exporters of manufacture items during the study period. The index shows that oil exporters increased sharply from 38 in 1960 to 190 in 1982. But, the index was declined for both commodity exporters and manufactures exporters i.e. from 103 and 109 in 1960 to 74 and 60 in 1982 respectively.

Barro and Sala-i-Martin (1995) empirically examined factors affecting economic growth by using cross-country data. They observed that the growth rate in real per capita GDP was positively related with an improvement in the world prices. But, there is no theoretical reasoning was mentioned in the study. In the context of small open economy, conventional static trade theory exposes that an improvement in the terms of trade will cause to an increased “absolute level” of national income of a country. However, this framework fails to explore the impact of terms of trade on the economic growth rate. On the other hand, by using a dynamic trade model of a small open economy, the study shows relationship between an improvement in the terms of trade and the “growth rate” of national income. Further, trade pattern was found to determine the impact of the terms of trade on the growth rate of national income.

Sachs, Warner, Aslund and Fischer (1995) observed that resource-rich countries in the world tend to grow more slowly than resource-poor countries. They prefer the crowding out effect, whereby production of primary commodities crowds out manufacturing activities. The study also predicted a negative correlation between terms of trade improvements and growth which often referred to as the resource curse. A political economy approach serves an alternative that relying on some type of government incompetence or corruption. Tornell and Velasco (1992) recommended that resource-rich developing countries have undeveloped property rights, so that gains are moved to rich countries for protection and terms of trade booms convert into capital flight.



Kipici (1996) analysed the hypothesis that when a country's terms of trade improves, the level of its real income will rise and when part of that increase will fall on saving, the improvement in the terms of trade improves the trade balance of a country. He used this hypothesis for Turkey. The models within the inter-temporal optimizing framework, however, emphasize that the relationship between the terms of trade and trade balance depends on the relative importance of consumption-smoothing and consumption-tilting motives which are governed by the inter-temporal elasticity of substitutions. When there are non tradable goods, the intra-temporal elasticity of substitution also plays a significant role.

The relationship between trends in terms of trade and economic development depends on the productivity of natural resource activities. But, some studies reveal that natural resource sectors are inherently unproductive as they encourage rent-seeking behavior and fail to boost human capital accumulation. The alternative view typically disregards political economy consideration and assumes that natural resource activities create the same externalities as do manufacturing activities. Mendoza (1997) considered this view and stated that increased export prices raise the expected rate of return on investment in that sector, hence expanding accumulation and growth of economy. He also studied the impact of terms of trade on economic growth of a sample of 40 countries in order to demonstrate the relation between terms of trade and economic growth. He used cross country evidence over the period 1971-1991 for a sample of 9 developed countries and 31 developing countries. The result of his study reveals that there is a positive relation between terms of trade and growth of an economy.

Hadass and Williamson (2001) studied the relationship between terms of trade and economic growth of a country by using cross-country evidence for the period from 1870 to 1940. In their study, countries were categorized according to the core and periphery, which were defined according to labour scarcity and level of development criteria. They concluded that, though, it is the primary commodity exporters who are preferential by the movement in terms of trade. But, it slowed their economic growth. Moreover, there is very small impact of terms of trade on economic growth. In the pre-war period, fluctuations in terms of trade explained less than one-fifth of economic growth, which is expressed by the GDP per capita growth rate.

Broda and Tille (2003) explored the impact of exchange rate regime adopted by the developing countries on their ability to adjust the fluctuations in terms of trade. They found that the terms of trade shocks will have a very less impact on growth under a flexible exchange rate system. This happens due to the movements in exchange rate which will absorb the effects of the shock. Under a fixed exchange rate, however, this shock is absent and the adjustment will drop primarily on growth. Therefore, a worsening of the terms of trade will lead to a reduction in output. Further, the analysis has also shown that movements in the terms of trade represent a substantial source of instability for developing countries.

One set of theories claims that improvement in terms of trade raises the rate of returns on investment and the value of output in developing countries. Therefore, it predicts a positive relation between these improvements and growth. Basu and McLeod (1991) developed a stochastic growth model in which imported inputs make production more efficient, but a fall in export prices make such inputs more expensive and lead to reduction in output. The study also reveals that transitory terms of trade shocks have constant effects on output levels in a sample of 12 primarily Latin American countries. Kose and Riezman (2001) constructed a dynamic, stochastic, two-sector model of a small open African country. They found that since both sectors use imported goods as factors of production, terms of trade shocks have a direct effect on country's output. In a numerical simulation of their model, these shocks account for 45 per cent of the fluctuations in aggregate output and 86 per cent of the fluctuations in investment.

### **5.3 Studies on India's Terms of Trade**

There are various studies available on India's terms of trade based on different time series data. Datar (1972) examined India's terms of trade with the East European countries. The study also discusses about whether the prices India receives for its exports and pays for its imports from trading partners are comparable to those it would have received from and paid to the rest of the countries; and whether the import purchasing power of exports of a country is comparable in both the cases. The results showed that the East European countries set higher prices for some export commodities, but offered lower prices for others. The prices from East European countries and others were comparable in case of imports of raw material. Therefore, it would come out that India's NBTT was

comparable for merchandise trade alone. But, the study did not exclude comparison of imports of machinery and equipment. Prices of these commodities from the East European countries were higher than prices offered by other countries in the international market. Imports of machinery shared approximately 50 per cent of India's total imports from East European countries. Thus, taking into account both exports and imports, India's NBTT was worst with the East European countries than rest of the world.

The systematic analysis of India's terms of trade for the period from 1930-31 to 1967-68 was given by Chishti (1974). She has divided the overall study period into five sub-periods. She found that India's Net Barter Terms of Trade was remained unfavourable for the first sub period i.e. from 1930-31 to 1938-39. The trade was favourable from 1939-40 to 1948-48, except the period 1941-42. Then, it was again unfavourable for third sub-period i.e. from 1949-50 to 1953-54. During both fourth (1949-50 to 1953-54) and fifth (1960-61 to 1967-68) sub periods, it was favourable.

Sen (1976) studied India's terms of trade from 1871-72 to 1892-93. He suggested in his study that it was really improbable that India's net merchandise terms of trade reduced for the period from 1871-72 to 1892-93. The fall in exchange rate of rupee was result in a downward force on the net merchandise terms of trade, even though, the force was likely weakened when India enjoyed a large share of imports of items like cotton piece goods. This downward force was more than counterbalance by the decline in gold prices mainly in the most important source (UK) of Indian imports and the index of unit value of imports with the fall in oceanic freights. Thus, the net merchandise terms of trade of both India and UK in relation to each other might improve on account of the sharp decline in oceanic freights.

Brar (1996) analysed India's Net Barter Terms of Trade with European Union countries and its four member countries namely Belgium, UK, France and former West Germany. He studied terms of trade for the period from 1979-80 to 1988-89. The index was favourable for India with European Union for four years i.e. 1983-84; 1985-86; 1987-88; and 1988-89, whereas it was unfavourable for five years i.e. 1980-81; 1981-82; 1982-83; 1984-85; and 1986-87. On the other hand, among the European Union the index with France, UK and former West Germany remained unfavourable, while with Belgium, it was favourable for majority of the years. Leonard (1993) examined India's Net Barter

Terms of Trade with Japan for the period from 1977-78 to 1984-85 by taking base year is 1980-81. He found that India's Net Barter Terms of Trade was favourable for the study period except the year 1979-80. During this period, the index was declined and reached to 93.49.

Tondon and Hatti (1987) found that from 1960 to 1970, India's NBTT remained favourable. The index was improved from 111 in 1960 to 113.7 in 1966 and reached to 116 in 1970. The study was based upon 92 per cent of exports and 84 per cent of imports of India. Tondon (1978) analysed that India's Net Barter Terms of Trade was highly favourable for the period from 1958-59 to 1968-69 and the index was increased rapidly from 100 in 1958-59 to 119.7 in 1968-69. Therefore, it shows that India experienced favourable terms of trade in sixties.

Veni (2006) examined the India's terms of trade during the period from 1980-81 to 2002-03. The author found that the index of Net Barter Terms of Trade was unfavorable for India in the early few years of the study period. However, since 1983-84, it exhibited a favorable trend. Further, it is noted that the Gross Barter Terms of Trade was favorable throughout the study period. The Income Terms of Trade points out that the capacity of India to import was encouraging almost in the whole study period.

#### **5.4 India's Terms of Trade with UAE**

Terms of trade exhibits the ratio of exchange between exports and imports of a country. There are various concepts of terms of trade, these are as follows: first, terms of trade related to the ratio of international exchange between products (i.e. net barter terms of trade, gross barter terms of trade and income terms of trade); second, those terms of trade which related to the interchange between productive resources (i.e. single factorial terms of trade and double factorial terms of trade); and third, terms of trade which explain gains from trade on the basis of utility analysis (i.e. real cost terms of trade and utility terms of trade). Though, all the concepts are considered in measuring the imports of factors like economic growth, international transfer payments and change in income, etc. All of these concepts have their own merits and demerits. But, to measure the gains from international trade, Net Barter Terms of Trade is the most widely used concept. This concept is also known as commodity or merchandise terms of trade. The nature of data availability also permitted us to use this concept only. It has also been suggested that the

price of exports should be measured in terms of imports. Therefore, this concept is used to analyse India's terms of trade with UAE. It is obtained by dividing the export price index by import price index with the quotient expressed as a percentage and it can be written as follows:

$$\text{Net Barter Terms of Trade} = \frac{\text{Unit Value Index of Export}}{\text{Unit Value Index of Import}} \times 100$$

The index shows the relationship between the prices at which a country sells its exports and the prices it pays for its imports. If the prices of a country's exports increase relative to the prices of its imports, it reveals that a country's terms of trade have moved in a favourable direction. In other words, the rise in index shows a country has received a large volume of imports in exchange for the given volume of exports on the basis of price relations. Index of export unit value and Import unit value has been computing by using Passche's index number. Passche index is based upon the current year weight index i.e.  $\frac{\sum P_1Q_1}{\sum P_0Q_1}$ . There is one another major problem arises in the construction of index numbers is the selection of base year. According to the literature, the base year must be one which was not affected by the strong economic and other fluctuations in the economy. So, to calculate India's terms of trade with UAE for the period from 1996-97 to 2015-16, the year 1999-00 has been taken as base year. Also, here it was very difficult to take all the commodities entering India-UAE export import basket for constructing index numbers, because, some of the data has value without quantity and some are not homogenous in a group. Therefore, we avoided clubbing these heterogeneous groups which would affect unit values. So, data has been collected at disaggregate level. With regards to exports, for calculating NBTT with UAE from 1996-97 to 2015-16, fifteen commodities were selected. Their share in India's total exports to UAE was hovered between 40 per cent and 70 per cent. In case of imports too, fifteen commodities were selected and their contribution in India's total imports from UAE was varied between 36 per cent and 64 per cent during the study period. The less percentage share of imports was due to the non-availability and inappropriate volume data for some major commodities.

Table 5.1 shows India's terms of trade with UAE from 1996-97 to 2015-16 with base year 1999-00. India enjoyed favourable NBTT with UAE during the study period,

except 1998-99, 2005-06 and 2012-13. During these three years, the index was below hundred (i.e. 53.95, 39.77 and 95.42 respectively). In 1997-98, though India's NBTT with UAE were favourable, but it was deteriorated from 203.31 to 180.33 due to increase in import price index (i.e. from 105.62 to 114.78) and decrease in export price index (i.e. from 214.74 to 206.98).

**Table 5.1: India's Terms of Trade with UAE from 1996-97 to 2015-16**  
(Base Year 1999-00)

Year	Export Unit Value Index	Import Unit Value Index	Net Barter Terms of Trade
1996-97	214.74	105.62	203.31
1997-98	206.98	114.78	180.33
1998-99	117.56	217.89	53.95
1999-00	100	100	100
2000-01	113.56	96.53	117.64
2001-02	168.88	124.97	135.14
2002-03	205.36	145.23	141.40
2003-04	216.46	158.47	136.59
2004-05	256.45	187.53	136.75
2005-06	86.25	216.86	39.77
2006-07	298.56	221.45	134.82
2007-08	179.35	118.05	151.93
2008-09	206.78	117.35	176.21
2009-10	311.56	102.84	302.96
2010-11	118.78	111.25	106.77
2011-12	278.45	195.78	142.23
2012-13	119.72	125.46	95.42
2013-14	115.23	95.39	120.80
2014-15	117.24	110.56	106.04
2015-16	116.58	109.78	106.19

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

In 1998-99, a sharp rise in import unit value index and fall in export unit value index was resulted in unfavourable terms of trade for India. Fall in export unit value index occurred because of fall in prices of jewellery and parts of precious metal except silver; nuts, iron or steel, etc. during that period. In year 2000-01, 17.64 per cent improvement in the terms of trade was due to effect of two factors simultaneously. One, there was a 13.56 per cent increase in export price index and another was decline in the import price index by 3.47 per cent. Further, in the following years i.e. 2001-02, 2002-03, 2003-04 and 2004-05, highly increased export unit value index than import unit value index led to India's favourable terms of trade with UAE. But, in year 2005-06, again India's NBTT fall due to

huge decline in export prices of commodity namely jewellery and parts of precious metal except silver. There was also decline in prices of other major commodities like woven h-ten filament, nylon, polyamide or polyester; t-shirts, singlets and other vests, knit; and diamonds unworked or simply sawn, cleaved, etc. during that period.

However, from 2006-07 to 2011-12, India again enjoyed favourable terms of trade, but the index was deteriorated in 2010-11 because of decrease in export price index and increase in import price index with UAE. In 2012-13, the index value fall and reached to 95.42, mainly due to decrease in export prices of major jewellery products which exported to UAE; light petroleum distillates; cashew nuts, shelled; and carpet of wool or fine animal hair, knotted, etc. Further, in 2013-14, 2014-15 and 2015-16, the value was above hundred that shows India's favourable terms of trade. Thus, during all the periods, when there was high fall in export unit values than import unit values, India's NBTT also declined over the previous year, though it exhibits favourable terms of trade during those periods. The ups and downs in both export as well as import unit value indices continued throughout the period but on the whole, result shows that imports from UAE were relatively cheaper than exports to UAE. Therefore, India had favourable NBTT during the study period except only few years.

### **5.5 Gains from Trade: Unit Value Realisation**

Along with the above analysis, there is also need to draw a comparative picture which showing whether or not India gained from its trade with UAE than other major trading partners in terms of unit value realisation. This analysis is important in order to give answer of the following two questions: (1) whether India has received higher prices for its exports to UAE; (2) whether India has paid higher prices for its imports from UAE. However, to answer these two questions is not easy due to the quality variations in both exports as well as imports. But, the comparison of unit value reveals the relative attractiveness of different markets in trade. If any market offers lower prices continuously in all years, then it demands high attention. Here, we were restricted our analysis to specific top commodities rather than commodity groups in order to avoid mixing up the higher and lower value commodities. Therefore, export and import unit value realisation on selected commodities has been presented below.

**Table 5.2: Unit Value Realisation of India's Exports of Jewellery and  
Parts of Precious Metal except Silver per kg**

(Value in Lacs)

<b>Year</b>	<b>UAE</b>	<b>Singapore</b>	<b>Hong Kong</b>	<b>UK</b>	<b>USA</b>
1996-97	5.86	2.96	1.18	1.60	6.49
1997-98	5.04	4.53	2.15	5.59	5.79
1998-99	0.88	0.99	1.49	1.90	1.15
1999-00	0.34	0.52	0.99	4.10	5.20
2000-01	4.80	1.05	1.74	1.08	1.04
2001-02	1.93	1.90	1.68	1.18	1.16
2002-03	3.39	1.19	3.48	1.33	3.11
2003-04	5.93	2.85	3.17	4.00	4.16
2004-05	6.63	3.16	4.98	4.11	4.22
2005-06	3.82	5.53	2.52	2.63	6.21
2006-07	0.72	2.76	2.83	2.62	1.34
2007-08	9.64	2.27	2.44	1.67	0.45
2008-09	8.57	5.07	5.51	7.63	1.64
2009-10	16.38	13.29	14.48	15.63	14.49
2010-11	21.78	22.66	32.66	12.76	12.66
2011-12	8.46	5.60	1.34	7.05	1.21
2012-13	50.07	46.66	21.21	48.01	44.88
2013-14	31.71	45.23	21.27	45.59	35.63
2014-15	27.52	23.40	22.71	41.64	36.66
2015-16	26.42	19.45	19.65	32.15	27.19

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

Table 5.2 shows the unit value realisation of India's exports of jewellery and parts of precious metal except silver to UAE and to some of its major partner countries from period 1996-97 to 2015-16. It shows that during 1996-97, UAE paid 5.86 lacs per kg of this commodity, as compared to 2.96 lacs paid by Singapore, 1.18 lacs paid by Hong Kong and 1.60 lacs paid by UK. During this period, India received higher prices from UAE than other major consumers except USA, which paid 6.49 lacs per kg. In 1997-98, India received higher prices from UAE (i.e. 5.04 lacs) than Singapore and Hong Kong (i.e. 4.53 lacs and 2.15 lacs respectively), but lesser unit prices from UK and USA (i.e. 5.59 lacs and 5.79 lacs respectively). Further, values of period 1998-99 and 1999-00 shows, UAE paid lower prices than all other major export destinations for jewellery and parts, silver, including plated silver. During the periods 2000-01, 2001-02, 2002-03, 2003-04, 2004-05, 2007-08, 2008-09, 2009-10, 2011-12 and 2012-13, India was receiving highest unit prices from UAE (i.e. 4.80, 1.93, 3.59, 5.93, 6.63, 9.64, 8.57, 16.38, 8.46 and 50.07 lacs respectively) than all other its major exporting countries for this commodity.



But, in 2013-14 UAE paid higher prices than Hong Kong only but paid lesser than rest of the three major partner countries and in 2014-15 and 2015-16, UAE paid higher unit prices than Singapore and Hong Kong, but lesser than USA and UK.

**Table 5.3: Unit Value Realisation of India's Exports of Diamond Worked but not Mounted or Set per carat**

(Value in Lacs)

Year	UAE	China	Thailand	Brazil	USA
1996-97	0.72	0.66	0.94	1.33	2.24
1997-98	1.53	0.95	1.05	1.45	1.33
1998-99	3.56	7.56	5.47	8.68	4.01
1999-00	1.93	1.72	1.23	1.76	1.48
2000-01	1.11	1.19	1.03	1.52	1.09
2001-02	0.93	0.88	0.86	1.02	1.15
2002-03	0.93	0.89	0.85	1.36	1.00
2003-04	1.07	0.72	1.15	1.04	1.79
2004-05	1.34	1.02	1.50	1.14	1.27
2005-06	1.22	0.97	1.30	1.05	1.39
2006-07	1.45	1.23	1.42	1.82	1.76
2007-08	1.39	1.09	2.76	0.95	1.15
2008-09	1.37	0.56	2.80	1.22	1.32
2009-10	1.59	1.25	1.15	1.57	1.48
2010-11	1.88	1.13	1.47	2.16	1.63
2011-12	2.28	2.02	2.39	2.17	1.95
2012-13	1.99	1.12	3.89	0.90	2.39
2013-14	2.22	1.16	3.74	2.12	2.25
2014-15	2.57	2.21	2.17	2.31	2.53
2015-16	2.48	1.18	2.05	2.35	2.42

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

Another commodity of India's major exports to UAE was diamond worked during the study period. The unit value realisation of this commodity is presented in table 5.3. It indicates that during 1996-97, India received comparatively better prices from China. But Thailand, Brazil and USA paid still higher prices. For this commodity, there are very few years (i.e. 1997-98, 1999-00, 2009-10, 2014-15 and 2015-16) for which UAE paid highest unit prices (i.e. 1.53, 1.93, 1.59, 2.57 and 2.48 lacs per carat respectively) to India than all the other major export destinations. The picture was mixed between 2000-01 and 2008-09 with UAE, paying higher prices in some cases and lower prices in the other. In 2010-11, UAE paid 1.88 lacs per carat, as compared to 1.13 lacs paid by China, 1.47 lacs paid by Thailand and 1.63 lacs paid by USA. Further, in 2011-12, UAE paid higher prices than

China, Brazil and USA but lower than Thailand. In 2012-13 and 2013-14, India received higher prices from UAE than China and Brazil but received lower prices than Thailand and USA. Overall the table reveals that UAE paid lower prices for this commodity than the average unit prices.

**Table 5.4: Unit Value Realisation of India's Exports of  
Light petroleum distillates per ton**

(Value in Lacs)

Year	UAE	Netherland	Saudi Arabia	Singapore	Brazil
1996-97	-	0.04	0.06	0.04	0.06
1997-98	-	0.05	0.06	0.03	-
1998-99	-	-	0.05	0.05	-
1999-00	-	-	0.05	0.03	-
2000-01	-	0.07	0.11	0.08	0.10
2001-02	0.10	0.11	0.09	0.07	0.12
2002-03	0.12	0.10	0.11	0.11	0.13
2003-04	0.14	0.13	0.12	0.12	0.11
2004-05	0.17	0.14	0.16	0.15	0.13
2005-06	0.24	0.20	0.21	0.20	0.18
2006-07	0.25	0.20	0.22	0.24	0.24
2007-08	0.28	0.23	0.27	0.26	0.25
2008-09	0.31	0.30	0.31	0.32	0.29
2009-10	0.23	0.26	0.30	0.20	0.29
2010-11	0.27	0.25	0.28	0.21	0.29
2011-12	0.34	0.23	0.31	0.26	0.31
2012-13	0.41	0.35	0.42	0.42	0.40
2013-14	0.43	0.55	0.50	0.49	0.52
2014-15	0.38	0.46	0.47	0.34	0.35
2015-16	0.45	0.44	0.43	0.39	0.40

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

Table 5.4 presents the unit value comparison of prices received by India for its exports of light petroleum distillate product to UAE and some other top destinations. The share of this commodity in India's total exports to UAE was increased highly during the study period. In 2001-02, UAE paid higher prices (i.e. 0.10 lacs per ton) than Saudi Arabia and Singapore (i.e. 0.09 and 0.07 lacs respectively), but paid less than Netherland and Brazil (i.e. 0.11 and 0.12 lacs respectively). In 2002-03, UAE paid higher prices (i.e. 0.12 lacs per ton) than Netherland, Saudi Arabia and Singapore (i.e. 0.10, 0.11 and 0.11 lacs respectively), but paid lower than Brazil (i.e. 0.13 lacs per ton). UAE paid highest prices than all the other four top destination countries during the period 2003-04, 2004-05,

2005-06, 2006-07, 2007-08, 2011-12 and 2015-16. From 2008-09 to 2014-15, except 2011-12, the situation was mixed where UAE paid comparatively higher prices in some cases and lower prices in other.

**Table 5.5: Unit Value Realisation of India's Exports of Rice,  
Semi- Milled or Wholly Milled per kg  
(Value in Thousands)**

Year	UAE	Kuwait	Nigeria	Saudi Arabia	Iran
1996-97	0.14	0.09	0.13	0.12	0.04
1997-98	0.17	0.16	0.05	0.11	0.03
1998-99	0.19	0.11	0.13	0.14	0.14
1999-00	0.21	0.19	0.11	0.20	0.16
2000-01	0.22	0.20	0.14	0.20	0.15
2001-02	0.17	0.14	0.16	0.14	0.14
2002-03	0.18	0.15	0.17	0.15	0.16
2003-04	0.16	0.11	0.14	0.13	0.15
2004-05	0.17	0.16	0.16	0.09	0.11
2005-06	0.17	0.13	0.16	0.11	0.14
2006-07	0.23	0.15	0.16	0.15	0.19
2007-08	0.30	0.23	0.24	0.24	0.28
2008-09	0.31	0.25	0.26	0.29	0.30
2009-10	0.50	0.51	0.49	0.53	0.44
2010-11	0.45	0.46	0.44	0.48	0.47
2011-12	0.42	0.40	0.35	0.39	0.38
2012-13	0.32	0.31	0.31	0.29	0.31
2013-14	0.31	0.30	0.28	0.30	0.29
2014-15	0.36	0.32	0.31	0.30	0.32
2015-16	0.41	0.30	0.39	0.40	0.39

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

Table 5.5 presents the unit value realisation of India's export of rice, semi-milled and wholly milled to UAE and other major destinations (i.e. Kuwait, Nigeria, Saudi Arabia and Iran) during the period 1996-97 to 2015-16. This table indicates that India enjoyed its exports of this commodity to UAE because India received highest unit prices from UAE for almost all the study period except 2009-2010 and 2010-11. In 2009-10, UAE paid 0.50 thousands per kg, as compared to 0.49 thousands paid by Nigeria and 0.44 thousands paid by Iran. But, UAE paid lower prices than Kuwait (i.e. 0.51 thousands) and Saudi Arabia (i.e. 0.53 thousands). In 2010-11, UAE paid higher prices than Nigeria, but paid lower than the rest of three major destinations i.e. Kuwait, Saudi Arabia and Iran. The table also depicts that UAE paid higher prices than the average unit prices.

**Table 5.6: Unit Value Realisation of India's Exports of T-Shirts, Singlets  
and Other Vests of Cotton, Knit per unit**

(Value in Thousands)

<b>Year</b>	<b>UAE</b>	<b>Germany</b>	<b>France</b>	<b>UK</b>	<b>USA</b>
1996-97	0.09	0.05	0.08	0.08	0.07
1997-98	0.10	0.12	0.11	0.11	0.13
1998-99	0.21	0.20	0.11	0.23	0.22
1999-00	0.31	0.37	0.29	0.38	0.32
2000-01	0.55	0.46	0.42	0.51	0.51
2001-02	0.52	0.51	0.49	0.48	0.51
2002-03	0.45	0.42	0.43	0.42	0.42
2003-04	0.24	0.21	0.21	0.21	0.23
2004-05	0.18	0.16	0.15	0.17	0.17
2005-06	0.40	0.32	0.30	0.38	0.35
2006-07	0.36	0.34	0.39	0.31	0.35
2007-08	0.34	0.30	0.32	0.31	0.28
2008-09	0.35	0.31	0.34	0.31	0.32
2009-10	0.22	0.21	0.16	0.20	0.21
2010-11	0.21	0.19	0.20	0.19	0.18
2011-12	0.28	0.30	0.29	0.29	0.28
2012-13	0.32	0.33	0.36	0.34	0.36
2013-14	0.29	0.32	0.33	0.28	0.29
2014-15	0.27	0.29	0.31	0.28	0.26
2015-16	0.21	0.23	0.29	0.25	0.26

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

The unit value realisation of India's exports of t-shirts, singlets and other vests of cotton, knit to UAE and some other top destinations (i.e. Germany, France, UK and USA) has been presented in table 5.6. This commodity exhibits that during 1996-97, 2000-01, 2001-02, 2002-03, 2003-04, 2004-05, 2005-06, 2007-08, 2008-09, 2009-10 and 2010-11, UAE paid highest prices than all the other top destinations. As is clear from the table, during 1997-98, UAE paid the lowest prices i.e. 0.10 thousands per unit as compared to 0.12 thousands paid by Germany; 0.11 thousands paid by France and UK; and 0.13 thousands paid by USA. In 1998-99, UAE paid higher prices (i.e. 0.21 thousands per unit) than Germany (i.e. 0.20 thousands per unit) and France (i.e. 0.11 thousands per unit), but paid lower than UK (i.e. 0.23 thousands per unit) and USA (i.e. 0.22 thousands per unit). In 1999-00, UAE paid higher prices (i.e. 0.31 thousands per unit) than France only and paid lower than rest of the three major destinations. Between the period 2011-12 and 2015-16, UAE paid lower prices than other countries in almost all the cases.

**Table 5.7: Unit Value Realisation of India's Imports of Petroleum Oils, Oils from Bituminous Minerals, Crude per ton**

(Value in Lacs)

Year	UAE	Kuwait	Nigeria	Saudi Arabia	Iraq
1996-97	-	-	-	0.05	0.06
1997-98	-	-	-	0.05	0.05
1998-99	-	0.02	-	0.02	0.03
1999-00	-	0.06	-	0.07	0.06
2000-01	0.10	0.11	0.12	0.11	0.11
2001-02	0.10	0.11	0.11	0.11	0.11
2002-03	0.38	0.39	0.49	0.39	0.40
2003-04	0.09	0.12	0.11	0.11	0.13
2004-05	0.21	0.22	0.35	0.22	0.24
2005-06	0.19	0.20	0.18	0.16	0.17
2006-07	0.21	0.22	0.20	0.20	0.20
2007-08	0.23	0.22	0.26	0.22	0.23
2008-09	0.28	0.30	0.30	0.29	0.30
2009-10	0.25	0.28	0.29	0.29	0.26
2010-11	0.28	0.29	0.29	0.30	0.30
2011-12	0.40	0.39	0.40	0.41	0.37
2012-13	0.44	0.42	0.43	0.40	0.42
2013-14	0.49	0.42	0.46	0.41	0.40
2014-15	0.41	0.41	0.42	0.41	0.40
2015-16	0.41	0.42	0.42	0.42	0.42

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

Table 5.7 presents a comparative picture of the prices paid by India for its imports of petroleum oils, oils from bituminous minerals, crude from UAE and its other major source countries (i.e. Kuwait, Nigeria, Saudi Arabia and Iraq) from 1996-97 to 2014-15. The share of this commodity in India's total imports from UAE was increased over the study period. This table indicates that during the periods 2000-01, 2001-02, 2002-03, 2003-04, 2004-05, 2008-09, 2009-10, 2010-11 and 2015-16, India paid lowest prices to UAE as compared to other major sources. In 2005-06 and 2006-07, India paid lower prices to UAE (i.e. 0.19 lacs and i.e. 0.21 lacs respectively) than Kuwait (i.e. 0.20 lacs and i.e. 0.22 lacs respectively), but paid higher than Nigeria (i.e. 0.18 lacs and i.e. 0.20 lacs respectively), Saudi Arabia (i.e. 0.16 lacs and i.e. 0.20 lacs respectively) and Iraq (i.e. 0.17 lacs and i.e. 0.20 lacs respectively). In 2007-08, UAE charges lower prices (i.e. 0.23 lacs per ton) than Nigeria (i.e. 0.26 lacs per ton), but received higher prices than Kuwait (i.e. 0.22 lacs per ton), Saudi Arabia (i.e. 0.22 lacs per ton) and Iraq (i.e. 0.23 lacs per ton). It also reveals that India paid lower prices to Saudi Arabia during most of the period.

Between 2011-12 and 2014-15, India paid lower unit prices to UAE in some cases and paid higher in other.

**Table 5.8: Unit Value Realisation of India's Imports of Gold in Unwrought Forms per kg**

(Value in Lacs)

Year	UAE	South Africa	Switzerland	Australia	USA
1996-97	2.03	2.75	1.31	1.25	1.25
1997-98	2.36	1.65	2.42	1.38	2.76
1998-99	3.66	3.96	4.69	4.64	3.83
1999-00	2.15	1.80	2.24	1.68	2.17
2000-01	3.78	3.84	4.22	3.96	4.14
2001-02	4.13	4.86	4.53	5.13	4.80
2002-03	5.00	5.08	4.81	4.28	5.18
2003-04	0.83	2.26	5.39	2.03	1.57
2004-05	6.07	5.10	6.54	5.50	6.95
2005-06	6.56	6.64	7.01	6.98	6.82
2006-07	9.28	9.51	9.50	8.62	7.80
2007-08	9.65	9.98	9.67	9.72	9.82
2008-09	12.42	12.82	14.62	12.76	12.51
2009-10	16.09	15.94	15.28	16.18	17.03
2010-11	19.43	19.32	19.00	19.02	20.85
2011-12	25.10	25.31	25.11	26.00	25.11
2012-13	29.08	29.57	28.84	28.80	28.90
2013-14	25.45	25.61	25.36	24.18	25.94
2014-15	24.55	22.86	24.69	24.74	23.64
2015-16	25.42	22.48	26.73	25.75	21.80

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

The unit value realisation of India's imports of gold in unwrought forms non monetary from UAE and other top sources has been presented in table 5.8. The share of this commodity in India's total imports from UAE was hovered between 1.48 per cent and 25.40 per cent during the study period. This table shows that India paid lowest prices to UAE during 1998-99, 2000-01, 2001-02, 2003-04, 2005-06, 2007-08, 2008-09 and 2011-12. India paid 3.66, 3.78, 4.13, 0.83, 6.56, 9.65, 12.42 and 25.10 lacs per kg to UAE during the mentioned periods and no other major source country charge lower than these prices. It indicates that imports from UAE were cheaper than from South Africa, Switzerland, Australia and USA. In 1996-97, India paid higher prices to UAE than Switzerland, Australia and USA. In 1997-98 and 1999-00, India paid higher prices than South Africa and Australia, but paid lower than Switzerland and USA. In 2009-10 and

2010-11, India paid higher prices (i.e. 16.09 and 19.43 lacs per kg) than South Africa (i.e. 15.94 and 19.32 lacs per kg), Switzerland (i.e. 15.28 and 19.00 lacs per kg) and Australia (i.e. 16.18 and 19.02 lacs per kg). Further, in 2012-13, India paid lower prices to UAE than South Africa. In 2013-14, India paid lower prices than South Africa and USA. In 2014-15 and 2015-16, India paid lower prices than Switzerland and Australia, but paid higher prices than South Africa and USA. Thus, the unit value realisation of this commodity shows that India paid comparable prices for its imports.

**Table 5.9: Unit Value Realisation of India's Imports of Diamond Unworked or Simply Sawn, Cleaved per carat**  
(Value in Lacs)

Year	UAE	China	Russia	Belgium	UK
1996-97	0.11	0.10	0.13	0.08	0.12
1997-98	0.19	0.15	0.12	0.20	0.16
1998-99	0.22	0.23	0.22	0.23	0.23
1999-00	0.26	0.24	0.24	0.24	0.27
2000-01	0.28	0.26	0.19	0.28	0.26
2001-02	0.17	0.20	0.17	0.18	0.20
2002-03	0.18	0.18	0.18	0.18	0.20
2003-04	0.13	0.16	0.18	0.23	0.17
2004-05	0.17	0.18	0.24	0.24	0.21
2005-06	0.14	0.20	0.23	0.18	0.17
2006-07	0.13	0.22	0.21	0.25	0.18
2007-08	0.17	0.22	0.19	0.22	0.19
2008-09	0.23	0.24	0.25	0.29	0.24
2009-10	0.21	0.26	0.28	0.33	0.30
2010-11	0.31	0.32	0.40	0.35	0.36
2011-12	0.50	0.54	0.50	0.51	0.59
2012-13	0.55	0.56	0.58	0.56	0.62
2013-14	0.54	0.59	0.60	0.55	0.59
2014-15	0.59	0.62	0.63	0.60	0.60
2015-16	0.55	0.60	0.59	0.58	0.59

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

Table 5.9 presents the comparative prices paid by India for its imports of diamond unworked from UAE vis-à-vis other top suppliers for the period from 1996-97 to 2015-16. During the study period, UAE, China, Russia, Belgium and UK were the main suppliers of this commodity to India. The share of diamond unworked in India's total imports from UAE was hovered between 0.20 per cent and 26.06 per cent during the study period. The high percentage of UAE's presence in this commodity shows UAE's capacity to export of

this commodity at comparatively cheaper prices. Therefore, during most of the study periods, India paid lowest amount to UAE for this commodity than all the other major sources. This table shows that in 1996-97, India paid lower prices to UAE (i.e. 0.11 lacs per carat) for diamond unworked than Russia (i.e. 0.13 lacs per carat) and UK (i.e. 0.12 lacs per carat), but paid higher prices than China (i.e. 0.10 lacs per carat) and Belgium (i.e. 0.08 lacs per carat). In 1997-98 and 2000-01, India paid lower prices to UAE than Belgium only and paid higher prices than other major sources. In 1999-00, India paid lower prices (i.e. 0.26 lacs per carat) to UAE than UK (i.e. 0.27 lacs per carat). During rest of the periods, India's imports of diamond unworked from UAE were cheaper than all the other major source countries.

**Table 5.10: Unit Value Realisation of India's Imports of Diamond Worked but not Mounted or Set per carat**

(Value in Lacs)

Year	UAE	China	Japan	Belgium	USA
1996-97	0.45	0.44	0.46	0.47	0.43
1997-98	0.50	0.50	0.49	0.47	0.45
1998-99	0.56	0.59	0.60	0.58	0.58
1999-00	0.55	0.56	0.56	0.56	0.59
2000-01	0.57	0.60	0.65	0.62	0.59
2001-02	0.73	0.70	0.75	0.69	0.72
2002-03	0.57	0.59	0.59	0.64	0.61
2003-04	0.40	0.53	0.56	0.69	0.66
2004-05	0.68	0.75	0.79	0.85	0.82
2005-06	0.67	0.78	0.77	0.80	0.82
2006-07	0.96	0.97	1.01	0.97	0.98
2007-08	1.14	1.06	1.11	1.16	1.04
2008-09	1.13	0.90	1.10	1.13	1.01
2009-10	1.74	1.69	1.67	1.78	1.76
2010-11	2.08	2.11	2.10	2.10	2.14
2011-12	1.74	1.75	1.86	2.00	1.93
2012-13	3.03	2.89	2.86	3.02	3.15
2013-14	5.21	4.48	4.64	4.87	5.19
2014-15	3.26	2.96	3.15	3.53	3.56
2015-16	3.56	3.45	3.12	3.62	3.51

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

Table 5.10 shows the unit value realisation of India's imports of diamond worked from UAE and other top sources. The share of this commodity in India's total imports was hovered between 0.09 per cent and 39.86 per cent. It shows this share was highly



significant in India's imports from UAE, but its prices remained competitive. During 1996-97, India paid higher prices to Japan (i.e. 0.46 lacs per carat) and Belgium (i.e. 0.47 lacs per carat), than it did to UAE (i.e. 0.45 lacs per carat). China (i.e. 0.44 lacs per carat) and USA (i.e. 0.43 lacs per carat) were the countries that India paid lower prices than UAE during the same period. In 1997-98, India paid lower prices to Japan, Belgium and USA (i.e. 0.49, 0.47 and 0.45 lacs per carat) than UAE (i.e. 0.50 lacs per carat). For the periods from 1998-99 to 2000-01; 2002-03 to 2006-07; and 2010-11 to 2011-12, UAE emerged as the dominant supplier of diamond worked to India with lower unit prices as compared to the other major supplier countries. Further, it shows from 2012-13 to 2015-16, however, the unit prices were highly competitive, but, India was able to obtain this commodity more cheaply from UAE than Belgium and USA.

**Table 5.11: Unit Value Realisation of India's Imports of Gold,  
Semi-Manufactured Forms per kg**  
(Value in Lacs)

Year	UAE	Switzerland	Australia	UK	USA
1996-97	3.26	3.14	3.57	3.83	3.25
1997-98	3.46	3.92	3.49	3.08	3.83
1998-99	4.00	3.37	3.53	3.78	3.72
1999-00	4.88	5.07	4.97	4.96	4.85
2000-01	4.12	4.82	4.87	4.12	4.14
2001-02	4.35	4.39	4.83	4.45	4.42
2002-03	4.77	5.00	5.03	5.12	4.91
2003-04	5.85	4.82	5.21	5.74	5.45
2004-05	6.02	6.11	6.09	6.16	6.20
2005-06	6.93	6.79	6.54	6.46	6.98
2006-07	9.27	9.40	9.61	8.74	9.47
2007-08	9.83	9.85	9.91	9.73	9.84
2008-09	11.72	11.74	11.79	12.15	11.88
2009-10	16.60	15.60	16.96	16.21	16.33
2010-11	19.80	19.94	19.94	19.90	21.67
2011-12	24.12	25.33	26.63	25.47	27.35
2012-13	29.94	28.13	29.15	29.74	31.75
2013-14	25.14	24.86	26.19	22.29	24.88
2014-15	24.51	26.52	24.18	26.68	23.28
2015-16	25.14	25.00	26.45	24.18	22.46

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

Commodity namely gold, semi-manufactured forms also exhibited a significant share in India's total imports from UAE during the study period. Its share was hovered

between 0.17 per cent and 18.94 per cent. The unit price realisation of India's imports of this commodity from UAE and other top sources has been presented in table 5.11. It shows that during very few years India paid the lowest unit prices to UAE than all the other major sources and paid higher prices to UAE for gold, semi-manufactured forms during most of the years. In 1996-97, India paid 3.26 lacs per kg to UAE as compared to 3.14 lacs per kg to Switzerland and 3.25 lacs per kg to USA. But, India paid lower prices to UAE than Australia (i.e. 3.57 lacs per kg) and UK (i.e. 3.83 lacs per kg). In 1997-98, India paid to UAE lower prices than Switzerland, Australia and USA. In 1998-99, India paid higher prices to UAE than all the other major sources. In other words, no other major country charged higher unit prices than UAE. A similar situation has been seen during 2003-04. In 2005-06, the prices charged by UAE were comparable with USA. UAE received higher prices than Switzerland, Australia and UK during the same period. But, during 2006-07 and 2007-08, imports from UAE were slightly cheaper than other major sources, whereas, during the 2012-13, 2013-14, 2014-15 and 2015-16, unit prices were highly competitive and comparable.

## **5.6 Conclusion**

The analysis of Net Barter Terms of Trade revealed that India enjoyed favourable terms of trade with UAE during the study period except few years i.e. 1998-99, 2005-06 and 2012-13. During these periods, index was less than 100, because the prices of India's exports to UAE decreased sharply and prices of India's imports from UAE increased sharply over their previous year. The reason for decrease in prices of export commodities was the decrease in prices of various jewellery products, iron & steel, textile products, etc. On the other side, India's favourable terms of trade with UAE was mainly due to India's cheaper imports from UAE as compared to its dearer exports to UAE. Further, the gains from trade have been computed by using unit value realisation approach. It has given a comparative picture which shows India's advantageous/disadvantageous position with UAE as against other countries. Results of unit value realisation of exports and imports analysis showed a mixed picture as India received higher prices for its exports to UAE than from most of the other major export destination countries in some cases and received lower prices from UAE than other major destinations in other cases. Similarly, in case of imports, India paid lower prices to UAE as compared to its other major sources in some

cases and paid higher prices to UAE in other cases. But, it exhibits that India had better prices for its imports from UAE than from other partners during the study period. To improve their terms of trade further, India need to increase its imports of those commodities in which UAE has capacity to export at globally competitive prices.

## CHAPTER 6

### INSTABILITY AND COMPETITIVENESS OF INDIA'S EXPORTS TO UAE

#### 6.1 Introduction

Exports have been assumed most important factor in the development process of an economy. It plays a significant role in generating investible surpluses and financing of imports. So, export stability is important due to its effects on rate of economic growth, internal economic stability and the distribution of income and wealth. It also affects the internal and external policies of many economies. The various fluctuations in prices, volume and total value of exports have a serious adverse impact on the overall growth of the countries. Therefore, any change in exports of a country brings a major change in the economy. Similarly, export competitiveness is another essential factor for promoting economic development and survival in this globalised world. Hence, more emphasis is now being given to the policy of promoting export competitiveness with the gradual fall in trade barriers led by the globalisation. For developing countries like India, exports play an important role in securing much needed foreign exchange in order to meet international payments and simultaneously, to promote economic growth and development. So, for a better export performance, a country should focus on both the stability and competitive factors of its exports. After liberalization, UAE has emerged as one of the leading destinations for Indian exports. Thus, it is of great importance to analyse the instability and competitiveness of Indian exports to UAE.

#### 6.2 Instability of Exports

It is a matter of concern that developing countries usually suffer from wider fluctuations in their export earnings. The exports of underdeveloped countries are unstable in the sense that they exhibit a trend of deficits and surpluses. These fluctuations make serious problems in national income, balance of payment, investment and may also create the negative impact on overall growth of a country. The instability in export earnings of a country may also generate income instability in other countries because these nations have been synchronizing with the development of globalization. It affects the domestic economy through variations in prices and foreign exchange receipts. This creates fluctuations in domestic activities which in turn make the process of planned development

uncertain and complicated. It also reduces the efficiency with which investment resources are allocated, and generate so many problems in estimating the expected return on investment which raises the cost of capital needed for greater risk (Aggarwal, 1982).

Keeping such facts in view, most of the developing countries have been trying hard to stabilize their economies by retaining macro-economic variables stable. Export stability is important because, it shows positive effects on the rate of economic growth, internal economic stability and distribution of income. It is also considered important because of its effects on internal and external policies of other countries (Coppock, 1962). Therefore, the stable flow of exports and the resulting stable income flows provide the basis for a stable growth for any economy. Moreover, exports not only ease the burden on the balance of payments but also generate employment opportunities and can rise intra-industry trade. It helps the economy to integrate in the global market and diminish the impact of external shocks on the domestic country. But the trade capacity in developing countries has increasingly been undermined with the impact of fluctuations in export earnings.

There are various studies available that deal with the causes and consequences of export instability in less developed nations. These nations have substantially higher degree of export earnings instability than the developed nations. In the short run, according to Myrdal (1958), export price instability creates inflation as there is a sluggish downward response of prices in developing nations. Besides, the fiscal deficit responds counter cyclically to economic activities. The final phenomenon shows the existence of a ratchet effect and therefore, a positive relationship between fiscal deficit and export earnings instability. Friedman (1954) and Hirschman (1958) analysed that in the short run, shortfalls in export earnings reduce hugely manufactured import items and thus favor domestic production. On the other side, income instability favors the saving rate according to the permanent income theory. In the long run, according to Nurkse, Haberler, and Stern (1962) instability generates uncertainties which negatively affect investment decisions and technological improvements in a country.

Cairncross (1962) and Meier (1964) argued that the economic growth of the developing countries is negatively impacted by the export instability mainly because they were the exporters of primary commodities. Hence, the developing countries largely

suffered by the export earnings instability than developed ones. Macbean (1966) found that the higher export instability in developing nations was not due to the fact of commodity and geographic concentration of trade, but it was depended largely on the type of commodities exported. In a similar way, Coppock (1962), Massell (1964) and Kingston (1973) stated that there is weak relationship between export instability and concentration of exports.

Erb and Schiavo-Campo (1969) analysed that both developed and developing countries marked less export instability during 1954-66 than in 1946-58. In both time periods, results showed that export instability of developing nations was more than twice as high as that for the developed ones. Kenen and Voivodas (1972) did not find any relationship between the degree of export instability and the rate of economic development. Glezakos (1973) analysed that the export instability was larger in case of developing countries than developed countries during 1953-66. So, the instability was more harmful to the economic growth in developing nations but not to that in developed ones. Askari and Weil (1974) examined export instability for 70 developing nations over the period from 1954 to 1968. Results rejected the conventional approach that the exporters of primary commodities suffered from a higher degree of export earning instability. They stated that the instability emerged to be a larger problem for the exporters of manufactured items than for those of non-manufactured.

Massell (1970) found an important relationship between export instability and concentration of exports. So, he suggested that if producers diversify their exports it would apparently reduce instability. According to Soutar (1977), developing nations encountered export instability majorly because of their exports were concentrated in primary products as well as in few correlated products that comprised a large fraction of their exports. Love (1979) analysed that the contribution of concentrated markets and products differ considerably among the sample of 52 developing countries, out of which 46 countries shows the concentrated market and product contributed disproportionately to instability in total export earnings.

Knudsen and Parnes (1975) reviewed that excessive variations in foreign trade derive from fluctuations in demand or supply or some other economic and non-economic factors. But, most of the literature based on statistical evidences concluded that export

instability index is positively related with the degree of commodity concentration and with the ratio of export receipts obtained from the trade of primary goods. On the other hand, index is negatively related with the per capita income and with the concentration of exports by geographical area of destination country.

Mullor-Sebastian (1988) tested the hypothesis that export instability is associated to industrialization in a way determined by the product cycle theory of comparative advantage; explored the evolution of export instability over time; and explained why diversification has often failed to reduce export instability in less developed countries. The relationship between export instability and industrialization was analyzed in terms of the life cycle of commodity and the role of residual suppliers of growth items in developing countries. Hence, it was recommended that the export instability of growth items is higher for developing countries than for developed countries, whereas the export instability of mature items is not much affected by industrialization. Ozler and Harrigan (1988) used cross-section data and found that there is relationship between GDP growth rate and export instability index. Output exhibited a negative correlation between economic growth and export instability.

Gyimah-Brempong (1991) used average data for the period 1960-86 for 34 Sub-Saharan African countries. He has used the following three different approaches to measure export instability: the coefficient of variations of export earnings; average of the squares of the ratio of actual export earnings to trend earnings; and the mean of the absolute difference between actual export earnings and trend value, normalized around the trend value of export earnings. He found that all the methods exhibit same result i.e. there is a negative impact of export instability on economic growth.

Sinha (1999) used the time series data to explore the relationship between export instability and economic growth for the following Asian countries: India, South Korea, Malaysia, Japan, Pakistan, Myanmar, Philippines, Thailand and Sri Lanka. The study exhibits a variety of results between two variables. For India, the result was mixed. For Malaysia, Japan, Philippines and Sri Lanka, results revealed a negative relationship between export instability and economic growth. For South Korea, Myanmar, Pakistan and Thailand, the evidence suggested a positive relationship between export instability and economic growth.

Salvatore (2007) explained that developing countries regularly experience natural variations in the prices of their primary exports. This is because of the both inelastic and unstable demand and supply. The demand for many primary exports of these nations is price inelastic because individual households in developed countries spend only a less proportion of their income on such commodities as tea, coffee, cocoa and sugar. Demand for many minerals is price inelastic due to the availability of few substitutes. Also, the demand for the primary exports of developing countries is unstable due to business cycle fluctuations in developed nations. On supply side, the supply of the primary exports of developing countries is price inelastic due to inflexibilities and internal rigidities in resources uses in these countries. Supply of products is unstable because of weather conditions, pests, etc.

Lanceiri (2014) used a large sample of 101 countries for the period from 1961 to 1972. He applied Spearman's Rank Correlation coefficient method and found that export earning instability negatively impacted the following four factors i.e. economic size of countries (in terms of national income); size of exports (in terms of value); per capita income; and the growth rate of national income.

India, like many other developing countries, has been suffering from the problem of export earning instability. The relationship between India's export instability and economic development has been studied by many researchers such as Gill (1983), Mukherjee (1987), Das and Pant (1989), Kaur and Singhal (1989), Brar (1996), etc. Like, most of the above studies, the present study is also based on the Coppock's Instability index. A widely used this index gives a close approximation of the average year-to-year percentage variation in the value of the variable. In the present chapter, an attempt has been made to ascertain instability in India's exports to UAE. As we know that UAE has been emerged as the top most export destination country for India's exports, it showed the huge dependence of India upon UAE for the supply of foreign exchange. Therefore, there is need to check the stabilization effect of UAE market on India's export trade.

### **6.2.1 Stabilization Effect of UAE**

Instability index of India's major export commodities to UAE has been calculated in terms of value, volume and unit value for the period from 1996-97 to 2015-16. The analysis is operated at disaggregate level. The commodities studied include diamonds



unworked or simply sawn, cleaved; diamonds worked but not mounted or set; jewellery and parts of precious metal except silver; light petroleum distillates; rice, semi-milled or wholly milled; t-shirts, singlets and other vests, of cotton, knit; woven hi-ten filament, nylon, polyamide or polyester; screws, bolts, nuts, rivets, washers, etc, iron, steel; generating sets, diesel, output > 375 kva; and cashew nuts, shelled. To check the stabilization effect of these commodities, following Coppock's Instability Index (CII) techniques has been used.

$$\log V = \sum \frac{(\log \frac{X_{t+1}}{X_t} - m)^2}{N - 1}$$

$$CII = [Antilog \sqrt{\log V} - 1] \times 100$$

Where  $X_t$  is the value of a reporter country's exports in year  $t$ ;  $X_{t+1}$  is the value of a reporter country's exports in year  $t+1$ ;  $N$  is number of years;  $m$  is arithmetic mean of the difference between logs of  $X_t$  and  $X_{t+1}$ , etc.; and  $\log V$  is the logarithmic variance of the data series.

It exhibits the instability indices of India's major commodities exported to UAE, to the world and to rest of the world (RoW). Here, rest of the world refers to India's exports to the whole world minus UAE. The criteria applied is that if the overall instability index value for the world is less than the index value for rest of the world, then the movement of India's exports to UAE has been compensatory.

#### **(a) Value Instability**

Table 6.1 shows instability indices relating to the value of India's major commodities exported to UAE, to the world and to the rest of the world. It is clear from the table that all the exported commodities do not show the same pattern of instability. The extent of instability varied from commodity to commodity. In value terms, with UAE, the degree of the instability was highest in the case of the commodity called generating sets, diesel, output > 375 kva (235.25) and lowest in the case of t-shirts, singlets and other vests, of cotton, knit (25.25). Out of ten commodities studied, in the case of eight commodities i.e. diamonds unworked or simply sawn, cleaved; diamonds worked but not mounted or set; light petroleum distillates; rice, semi-milled or wholly milled; t-shirts,

singlets and other vests, of cotton, knit; screws, bolts, nuts, rivets, washers, etc, iron, steel; generating sets, diesel, output > 375 kva; and cashew nuts, shelled, the world instability indices (i.e. 21.17, 90.39, 23.72, 40.30, 20.76, 28.74, 29.91 and 46.13) were lower than those for rest of the world (i.e.40.56, 102.59, 24.01, 40.56, 22.19, 30.17, 30.27 and 48.87). These values indicate that UAE had a stabilizing effect on India's exports of these eight commodities. While for the rest of two commodities i.e. jewellery and parts of precious metal except silver; and woven hi-ten filament, nylon, polyamide or polyester, UAE had a destabilizing effect, because the world instability indices (i.e. 13.78 and 16.28 respectively) were higher than the rest of the world (i.e. 13.59 and 15.59 respectively).

**Table 6.1: Coppock's Instability Indices Pertaining to the Value of India's Major Exports to UAE, World and RoW (1996-97 to 2015-16)**

Commodities	UAE	World	RoW
Diamonds unworked or simply sawn, cleaved	59.02	21.17	40.56
Diamonds worked but not mounted or set	123.26	90.39	102.59
Jewellery and parts of precious metal except silver	40.12	13.78	13.59
Light petroleum distillates	30.49	23.72	24.01
Rice, semi-milled or wholly milled	46.10	40.30	40.56
T-shirts, singlets and other vests, of cotton, knit	25.25	20.76	22.19
Woven hi-ten filament, nylon, polyamide or polyester	42.10	16.28	15.59
Screws, bolts, nuts, rivets, washers, etc, iron, steel	34.57	28.74	30.17
Generating sets, diesel, output > 375 kva	235.25	29.91	30.27
Cashew nuts, shelled	53.69	46.13	48.87

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

### **(b) Volume Instability**

Table 6.2 shows instability indices relating to the volume of India's exports to UAE, to the world and to the rest of the world. It exhibits the instability indices of the volume of India's exports to UAE for ten commodities varied between 26.24 and 210.58. The highest degree of instability was marked in the case of diamonds worked but not mounted or set at 210.58 and the lowest was in the case of rice, semi-milled or wholly milled at 26.24. UAE had a stabilizing effect upon volume of nine commodities, i.e.

diamonds unworked or simply sawn, cleaved; diamonds worked but not mounted or set; jewellery and parts of precious metal except silver; light petroleum distillates; rice, semi-milled or wholly milled; t-shirts, singlets and other vests, of cotton, knit; woven hi-ten filament, nylon, polyamide or polyester; screws, bolts, nuts, rivets, washers, etc, iron, steel; and cashew nuts, shelled. Because, for these nine commodities, the world instability indices (i.e. 113.69, 109.76, 33.73, 62.30, 34.03, 64.01, 24.73, 96.54 and 28.54) were lower than those for rest of the world (i.e. 117.34, 120.32, 36.32, 63.35, 35.18, 66.38, 26.97, 100.59 and 29.32). Only in a single case, i.e. generating sets, diesel, output > 375 kva, UAE had a destabilizing effect because the indices of instability of the export to the world (41.40) exceeded those of the export to rest of the world (38.59).

**Table 6.2: Coppock’s Instability Indices Pertaining to the Volume of India’s Major Exports to UAE, World and RoW (1996-97 to 2015-16)**

Commodities	UAE	World	RoW
Diamonds unworked or simply sawn, cleaved	147.61	113.69	117.34
Diamonds worked but not mounted or set	210.58	109.76	120.32
Jewellery and parts of precious metal except silver	30.33	33.73	36.32
Light petroleum distillates	96.68	62..30	63.35
Rice, semi-milled or wholly milled	26.24	34.03	35.18
T-shirts, singlets and other vests, of cotton, knit	71.17	64.01	66.38
Woven hi-ten filament, nylon, polyamide or polyester	34.31	24.73	26.97
Screws, bolts, nuts, rivets, washers, etc, iron, steel	36.12	96.54	100.59
Generating sets, diesel, output > 375 kva	61.01	41.40	38.59
Cashew nuts, shelled	34.98	28.54	29.32

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

### (c) Unit Value Instability

Table 6.3 shows instability indices pertaining to unit value of India’s exports to UAE, to the world and to the rest of the world. In unit value terms, the highest degree of instability with UAE was marked in case of generating sets, diesel, output > 375 kva (637.12) and the lowest was marked in case of articles of rice, semi-milled or wholly milled (12.77). UAE had stabilizing effect upon seven commodities i.e. diamonds worked

but not mounted or set; jewellery and parts of precious metal except silver; rice, semi-milled or wholly milled; woven hi-ten filament, nylon, polyamide or polyester; screws, bolts, nuts, rivets, washers, etc, iron, steel; generating sets, diesel, output > 375 kva; and cashew nuts, shelled, because for these seven commodities world instability indices (i.e. 128.39, 33.44, 28.90, 15.25, 90.58, 54.94, 19.32) were lower than those for the rest of the world (i.e. 147.70, 34.28, 31.25, 15.50, 93.46, 55.95, 19.52). While for rest of the three commodities i.e. diamonds unworked or simply sawn, cleaved; light petroleum distillates; and t-shirts, singlets and other vests, of cotton, knit, UAE had a destabilizing effect on India's exports of these commodities.

**Table 6.3: Coppock's Instability Indices Pertaining to the Unit Value of India's Major Exports to UAE, World and RoW (1996-97 to 2015-16)**

Commodities	UAE	World	RoW
Diamonds unworked or simply sawn, cleaved	123.62	105.10	104.15
Diamonds worked but not mounted or set	217.69	128.39	147.70
Jewellery and parts of precious metal except silver	27.97	33.44	34.28
Light petroleum distillates	47.55	27.27	22.63
Rice, semi-milled or wholly milled	12.77	28.90	31.25
T-shirts, singlets and other vests, of cotton, knit	42.77	24.34	22.97
Woven hi-ten filament, nylon, polyamide or polyester	23.21	15.25	15.50
Screws, bolts, nuts, rivets, washers, etc. iron, steel	14.13	90.58	93.46
Generating sets, diesel, output > 375 kva	637.12	54.94	55.95
Cashew nuts, shelled	19.74	19.32	19.52

Source: Calculated from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata.

In nutshell, it can be said that out of ten commodities, UAE had stabilized the value of eight commodities, volume of nine commodities and unit value of seven commodities. It indicates that UAE had more of stabilizing effect on India's exports than the destabilizing effect. In other words, India's export earnings from UAE were subject to very less variations. The export earnings were unstable because of both instability of export prices and volume exported to UAE. Further, the above tables also show that index

of instability for volume with UAE was higher than that for unit value in the eight out of ten commodities during the study period. The rest two commodities which exhibited volume indices lower than those for unit values were diamonds worked but not mounted or set; and generating sets, diesel, output > 375 kva. This implied that barring these two commodities, in all others, the instability in value of Indian exports to UAE were high due to the instability in volume exported than due to the fluctuations in unit prices with UAE. It showed that much of the total instability had been due to shifts in supply. Thus, by amending the supply side we can certainly reduce the fluctuation in export earnings. It is also observed that for some commodities the export unit value and volume fluctuations compensated each other and for others they reinforced each other.

### **6.3 Competitiveness of Exports**

A country's exports contain special attention in the economic literature due to their critical contribution to the economic stability and long-term growth and development of any economy. The numerous contributions of exports are evident in accelerating the economic growth not only through increased production but also through facilitating the imports of goods and services, transferring the new ideas, skills and technologies. Furthermore, exports also contribute to resolving the problems at macro level like unemployment and external debt which is of great importance when their current dimension in developing countries is considered. Thus, export performance is essential to have positive effects on any particular economy. The export performance of a country depends upon many factors such as (i) Growth of world demand; (ii) Changes in market distribution of exports; (iii) Changes in the commodity composition of exports; (iv) Changes in competitiveness of exports.

It is being held that a country cannot maintain its share in the world trade, if they are facing declining world demand; concentrated on the stagnating market; exporting those commodities which are income inelastic; and low competitiveness of their exports. It is clear that any change in country's exports can somewhat caused by change in world demand for its products. It depends upon the absorption capacity or purchasing power of the importer country. This effect can be determined by foreign income elasticity, growth of foreign income and change in tastes and preferences etc. (Brar, 1996). Given the market distribution, a country can maintain its share in the world exports if its export

basket is going to rapidly growing market rather than relatively stagnant markets. On the other side, a country may lose its share in the world trade if the demand for its exports is growing relatively slow. This would be true for the countries whose exports are mainly in primary products and other commodities having income inelastic demand which grow at a slower pace. Therefore, an unchanging commodity composition of a country might become a major constraint.

Further, the competitiveness of exports affects a country's export performance. This can be viewed as the capability of exporting country to improve its exports in the international markets in terms of price and non-price factors. Prices of exports have been considered as the critical factor of the competitiveness of exports. In any market there are many exporters competing with each other for the selling of their similar products. As a general rule, the products with lesser prices would be clearly in a profitable position if exports facing downward sloping demand curves when other things remain constant. So, the competitiveness depends upon the relative prices rather than absolute prices. However, price is not only the determinant of export competitiveness. In fact, it also involves so many other factors which affect competitiveness of country's exports.

Export prices are directly related to costs that can be determined by factor productivity and factor prices. It follows that country's competitiveness would have been influenced by changes in the cost structure of its exports industries. The difference in the cost of production between competing markets can be explained in terms of differences in factor prices (Nayyar, 2007). Similarly, the force of domestic demand is likely to have an effect on the price competitiveness of exports. If the domestic market is more profitable, then exporters would like to sell in the home country and vice versa. Also the supply constraints in the export industries affect the price competitiveness and availability of exports. The exports share of a country in world trade can also decline due to the lack of export surplus, though it might be competitive.

Trade policies of an economy significantly influence the competitiveness of exports. Change in exchange rates is an important variable of trade policy available to the governments for attaining external balances. Such changes directly affect the returns of exporters and hence influence competitiveness. The undervalued currencies and the subsidization of exports positively affect export competitiveness of a country. Besides

exchange rate, tariff and non-tariff barriers imposed by the importing country also have an effect on competitiveness of exports (Singla, 2011). In addition to relative prices, export competitiveness also depends upon some factors that are not reflected in prices. The role of non-price factors in competitiveness of exports has also been increased over the period. These factors are known as product quality, product designing, delivery schedule, product marketing network, advertisements, packaging and attractiveness of specific brand names etc. These factors have an important effect on a country's potential for expanding exports. So, two types of competitiveness i.e. price and non-price impact highly on export performance of a country. In order to raise the country's exports share, it will have to confront the above two factors. Thus, export competitiveness of a country is a multi-dimensional phenomenon that embracing the effect of many factors.

Since the establishment of new economic policy in 1991, India's exports grew substantially. Its share in world exports increased continuously, though it was low. It was increased from 0.93 per cent in 1991 to 1.60 per cent in 2015. During this period, the direction of India's exports also changed and UAE has been emerged as the leading destination for India's exports. UAE's share in India's overall exports increased rapidly from 4.13 per cent in 1991 to 10.60 per cent in 2015. Therefore, it becomes an important condition to identify various factors responsible for this sharp increase in India's exports to UAE. But, before starting this task, here it is essential to view some studies about India's export competitiveness.

### **6.3.1 Studies on India's Exports Competitiveness**

There are many studies available that thoroughly examined competitiveness of India's exports by taking different time series data sets. A few of them have been discussed here to place the present study in the proper perspective. Bhagwati (1970) assessed the competitiveness of India's exports from 1959 to 1968. He analysed that the currency over-valuation negatively impacted on export competitiveness. Whereas the weakening over-valuation by giving exports subsidies had put positive impact on export competitiveness. The analysis mainly showed the need of avoidance of overvalued currency and other measures that hinder the growth of exports from developing countries.

Nayyar (1987) examined India's export performance for the period from 1970 to 1985 and for two sub-periods i.e. 1970-78 and 1978-85. He discussed that during first sub

period (1970-78), different internal factors such as increased domestic demand for manufactured goods and decrease in agriculture production were responsible for slow growth of India's export, but after 1978, external factors contributed to slowing down of export growth. While analyzing the impact of export promotion measures, he discussed that export incentives contributed only 10 per cent of fob value of overall exports. Besides, it was observed that the impact of import liberalization on exports was also very sluggish.

Agarwal (1988) analysed a comparative analysis of India's export performance for the period 1965-80 by using CMS model. He found that in contrast to the export behaviour of 13 developing countries in Asia and Latin America, the share of India's exports of manufactures, agriculture and non-oil raw material was decline due to fall in non-price competitive factor.

Kapur (1991) made an attempt to examine the export performance of India over the period 1962-84 by using Constant Market Share (CMS) model. The analysis revealed that India's exports were competitive in the markets of Belgium, Netherlands, former West Germany and Italy; whereas they were non-competitive in the markets of UK, USA, Japan and France. Further, he concluded that both the external factors (favourable market distribution and commodity composition) as well as internal factors (improved competitiveness) were responsible for making India's non-traditional exports more competitive than its traditional exports to developed market economies.

Hosamane and Bisaliah (2006) used CMS to examine the export behaviour of India during the post-reform period. He concluded that openness leads to economic growth and increased the volume of country's foreign trade in developing and transitional economies. It has also increased the export of manufactured goods of an economy. The study revealed that during liberalization era, 53.5 per cent increase in India's exports were because of the competitiveness of its products in the world market. Hence, the globalization helped Indian economy to raise its export competitiveness in the world market.

Veeramani (2007) made an attempt to investigate the sources of India's export growth during the pre and post reform periods by using CMS model. In contrast to the pre-reform period, India's exports grew faster than the rate of world exports during the



post-reform period. However, the pace of exports growth was not distinctly high in most part of post-reform period. Further, the study revealed that the negative commodity composition effect and negative competitiveness effect had been the major impeding factors of export growth in the pre-reform period, whereas there was an improvement in the overall competitiveness of India's exports during post reform.

Bhatt (2008) analysed that export performance of India was unsatisfactory due to low competitiveness. Therefore, Indian government had made some efforts to reform trade policies to make Indian exports more competitive globally. The author made an attempt to measure India's trade competitiveness and examine the impact of exchange rate policy in trade competitiveness. The analysis revealed that appreciation of nominal and real exchange rate improves the export price competitiveness but it deteriorates the competitiveness of profitability.

Thus, all the studies have measured the competitiveness of India's exports by taking different time series data sets. Most of the studies have used the Constant Market Share model to analyse the competitiveness of India's exports as this model is very popular for its simplicity and applicability to ready to use data at a reasonable level of disaggregation. The basic structure is an identity that describes the total export level of a country as the sum of individual commodities exported to a single foreign market or to the rest of the world. This identity is decomposed into many elements like market share and commodity share of a country's trade (Milana, 1988). Therefore, the present study has used this model to analyse the competitiveness of India's exports to UAE. It examined various factors responsible for the intense rise in India's exports to UAE.

### **6.3.2 The Constant Market Share Model**

The Constant Market Share Model is very popular method of measuring the export performance of a particular country. The method is also known as shift and share analysis. This was initially used in the empirical studies of structural changes in regional and industrial economics. This model was developed by Daniel Creamer in 1940s. Later, it was used in applied international economics by Tyszynski (1951) and then by Baldwin (1958), Spiegelglas (1959) and Naya (1967). It has been increasingly used and improved despite critically discussed by Richardson (1971). It has emerged as one of the most important analysis method, which studies the reason of growth of foreign trade and the

change of competitiveness of export commodities. According to the modified CMS model given by Leamer and Stern (1970), we suppose that  $X(t)$  = India's exports value to UAE in period  $t$ ;  $X_i(t)$  = India's exports of commodity  $i$  to UAE in period  $t$ ;  $X(0)$  = India's exports value to UAE in period 0;  $X_i(0)$  = India's exports of commodity  $i$  to UAE in period 0;  $\Delta Q$  = Change of exports value from period 0 to period  $t$ ;  $\Delta Q_i$  = Change of exports of commodity  $i$  from period 0 to period  $t$ ;  $g$  = growth rate of UAE's total imports from period 0 to period  $t$ ;  $g_i$  = growth rate of UAE's imports of commodity  $i$  from period 0 to period  $t$ .

At the first level of analysis, exports are completely undifferentiated as to the commodity and destination region. So, here exports may be viewed as a single commodity destined for a single destination. If focus country maintained its share in this destination market, then exports would increase by  $gX(0)$ , and this can be written as the following identity:

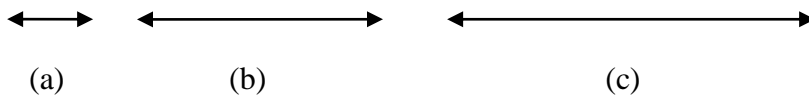
$$\Delta Q = gX(0) + [X(t) - X(0) - gX(0)] \quad (1)$$

The above equation is termed as one-level analysis. It divides the growth in India's exports into a part associated with the increase in demand of importing country (UAE) and unexplained residuals i.e. the competitiveness effect. Further, when exports consists of diverse set of commodities, equation (1) will be written as

$$\Delta Q_i = g_i X_i(0) + [X_i(t) - X_i(0) - g_i X_i(0)] \quad (2)$$

Then, the change of India's exports to UAE can be expressed as follows:

$$\begin{aligned} \Delta Q &= X(t) - X(0) = \sum_{i=1}^n g_i X_i(0) + \sum_{i=1}^n X_i(t) - \sum_{i=1}^n X_i(0) - \sum_{i=1}^n g_i X_i(0) \\ &= \sum_{i=1}^n g_i X_i(0) + g \sum_{i=1}^n X_i(0) - g \sum_{i=1}^n X_i(0) + \sum_{i=1}^n X_i(t) - \sum_{i=1}^n X_i(0) - \sum_{i=1}^n g_i X_i(0) \\ &= g \sum_{i=1}^n X_i(0) + \sum_{i=1}^n [(g_i - g) X_i(0)] + \sum_{i=1}^n [X_i(t) - X_i(0) - g_i X_i(0)] \\ &= gX(0) + \sum_{i=1}^n [(g_i - g) X_i(0)] + \sum_{i=1}^n [X_i(t) - X_i(0) - g_i X_i(0)] \end{aligned} \quad (3)$$



Therefore, equation (3) represents a two-level analysis, in which the growth of India's exports is divided into three main aspects: (a) the influence of demand for a

commodity of a country can be measured by the change in the global value of imports of that commodity. So, for all the commodities exported by India to UAE, the positive change in exports occurs due to the value of UAE's overall imports grow faster (demand effect); (b) the commodity composition effect of India's exports to UAE in period 0 i.e. the initial year. This effect is positive, if the exports of India mainly concentrated in the fast-growing commodities or focused on different varieties of products that has a faster growth in UAE's imports; (c) the competitiveness effect shows that the country can compete effectively with the other exporting countries. It includes the effect of both price and non-price factors. Although, the CMS approach suffers from certain limitations such as, it cannot separate the impact of competitiveness factor into price and non-price factors; it cannot show any cause and effect relationship on its own; and the model is sensitive to the choice of beginning and end-period, yet it helps in analyzing the country's exports performance in the importing country.

### **6.3.3 Competitiveness of India's Exports to UAE**

The CMS model has been implemented to measure the competitiveness of India's export performance to UAE. The analysis is made for the period from 1996 to 2015 and for two sub periods, i.e. first sub period (1996 to 2004) and second sub period (2004 to 2015). The reason for choosing these two sub periods is that, it shows India's export performance to UAE in its pre and post period of engaging in FTA with the Gulf countries in 2004. The analysis is undertaken at aggregate level (i.e. total exports) and further has been extended to the level of commodities (at HS 2-digit level of classification).

Results of the decomposition of growth rate of India's exports to UAE are presented in table 6.4. It is evident that India has not fully exploited the available trade opportunities with UAE during the period 1996-2015. Between 1996 and 2015, India's exports to UAE in absolute term were increased by US\$ 35812.20 million. During this period, demand effect and commodity composition effects remained positive. However, demand effect played an important role in augmenting India's exports to UAE. This effect was increased by US\$ 1491394 million. The role of commodity composition effect was also an important one as it increased by US\$ 364822.10 million. This positive effect indicates that India's exports to UAE were heavily concentrated in the fast-growing

commodities importing by UAE. Though, these two positive effects uplifted Indian export basket to UAE, but simultaneously, it indicates that the actual export growth was below the potential. The failure to exploit the opportunity is mainly due to the negative competitiveness effect. Therefore, it indicates India's exports to UAE held low competitiveness.

During the different sub-periods, India's exports growth to UAE has been characterized by almost the same trends as during the overall period (1996-2015). As clear from the table, during the period of 1996-2004, India's exports to UAE grew by US\$ 6333.89 million. This export growth was majorly attributed to positive demand effect (US\$ 442363.61 million) and positive commodity composition effect (US\$ 86692.73 million). That indicates the specialization of India's exports to UAE was in right commodities. Same as the overall period, during this pre FTA period also, the potential export growth was much higher than the actual export growth of India to UAE. The factor behind the slowdown in export growth was the negative competitiveness effect. During this period, Indian industries were majorly competing with USA, Japan and UK for exports of machinery and electronic equipments in UAE. Therefore, the period 1996-2004 was a period of steady growth of India's exports to UAE. From 2004 to 2015, all the effects were improved and increased gradually. However, the data indicates that the potential offered by rapidly growing UAE's total demand (US\$ 1356512 million) was much higher than the actual export growth of India (US\$ 29478.31 million), but India had maintained its market share and emerged as the top source of UAE's imports during post FTA period. It shows the performance was better compared to the pre FTA. The positive commodity composition effect (US\$ 577318.10 million) and the improved value of the residual from -US\$ 522722.46 million to -US\$ 1904352 million have contributed significantly to this performance.

Thus, it can be concluded that the actual increase in Indian exports to UAE remained below the potential during the whole study period, which shows the unsatisfactory performance of Indian exports. Rapidly increasing UAE's demand proved to be very important for the rapid growth of Indian exports to this country. Besides, the increasing demand effect, the positive commodity composition effect indicates that Indian exports have specialization in rapidly growing commodities. But, the negative

competitiveness effect during all the periods exhibits that India is missing in terms of competitiveness structure of its export commodities to UAE. This factor is very important in determining the prospect of export sector of any country. Therefore, if India wants to maintain its exports growth in near future, policy makers should take some initiatives to make India as a center of globally competitive items.

**Table 6.4: Decomposition of Growth of India's Exports to UAE during 1996-2015 (US\$ Million)**

Year	Actual Increase in India's Exports	Demand Effect	Commodity Composition Effect	Residual Competitiveness Effect
1996-2015	35812.20	1491394	364822.10	-1820404
1996-2004	6333.89	442363.61	86692.73	-522722.46
2004-2015	29478.31	1356512	577318.10	-1904352

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

Same analysis has been done at commodity level to determine which commodities are competitive in Indian export basket to UAE. Table 6.5 presents the commodity-wise growth decomposition regarding to India's merchandise exports of selected top ten commodities to UAE at HS 2-digit level of classification during the study period i.e. from 1996 to 2015. Table clearly shows that in case of all top ten commodities analysed, growth of Indian exports to UAE is solely attributed to the UAE's demand effect which contributes a greater percentage share than other effects. The competitiveness effect was positive in case of only two commodity groups i.e. mineral fuels, oils, distillation products, etc.; and manmade filaments. But the effect was negative in case of the rest of the eight commodities. India's top export of pearls, precious stones, metals, coins, etc. to UAE may hold negative competitiveness effect because around 90 per cent of the players of India's gems and jewellery sector operate in the unorganized sector mostly in the family run businesses. This nature prevents it from achieving economies of scale. Further, labour-intensive and indigenous technology of this sector affects their growth prospects. Therefore, the sector finds it difficult to improve their global competitiveness due to the problems in adoption of new technologies as a result of inadequate capital and high labour costs per unit.

**Table 6.5: Commodity-Wise Analysis of Decomposition of Growth of Selected  
Commodities in India's Exports to UAE during 1996-2015**  
(US\$ Million)

<b>Commodity (HS Code)</b>	<b>Actual Increase in India's Exports to UAE</b>	<b>Demand Effect</b>	<b>Commodity Composition Effect</b>	<b>Competitiveness Effect</b>
Pearls, precious stones, metals, coins, etc. (71)	21024.85	187985.69	864515.28	-1031476.10
Mineral fuels, oils, distillation products, etc.(27)	6747.24	807.96	473.89	5465.39
Articles of apparel, accessories, not knit or crochet (62)	317.70	278856.23	-200870.90	-77667.63
Electrical, electronic equipment (85)	1249.58	34292.25	-10407.64	-22635.03
Nuclear reactors, boiler, machinery, etc. (84)	816.99	43992.83	-9509.64	-33666.20
Cereals (10)	574.02	24835.12	-7796.19	-16464.91
Articles of iron or steel (73)	476.23	56730.18	44448.79	-100702.74
Articles of apparel, accessories, knit or crochet (61)	465.11	73651.08	-15630.06	-57555.91
Manmade filaments (54)	404.83	62965.34	-63811.55	1251.04
Iron and steel (72)	458.50	34123.63	12597.62	-46262.75

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

The exporters of other commodities i.e. articles of apparel, accessories, not knit or crochet; electrical, electronic equipment; nuclear reactors, boiler, machinery, etc.; cereals; articles of iron or steel; articles of apparel, accessories, knit or crochet; iron and steel also faces difficulties in competing globally. They were majorly competing with international firms on factors like product quality, product design, research and development; reputation for high quality and innovation, especially in audio and video electronic gadgets of Japanese electronics companies; lower power cost, lower interest cost, stable currency in China; and demand for raising wages for the workers due to inflation in India. This indicates that India didn't do well in showing the competitiveness edge over its exported commodities to UAE in both price and non-price factors.

In nutshell, commodity-wise results exhibit almost the similar effect as the performance of India's overall exports to UAE. The increase in India's exports of these commodities to UAE was mainly due to increase in demand for these commodities. But the negative competitiveness effect of these top selected items impacted negatively on Indian export basket to UAE. Therefore, it is an alarming for the Indian policy makers about the frequently negative competitiveness effect that can impede the export growth in future if not considered.

#### **6.4 Conclusion**

The analysis of instability of India's exports to UAE reveals that UAE had stabilized effect on the value of eight commodities, volume of nine commodities and unit value of seven commodities. It indicates that India's export earnings from UAE were subject to very less fluctuations. These fluctuations occurred primarily due to the dominance of volume exported to UAE, because the volume instability indices were higher than that for unit values in case of eight out of ten commodities during the study period. These commodities are namely diamonds unworked or simply sawn, cleaved; jewellery and parts of precious metal except silver; light petroleum distillates; rice, semi-milled or wholly milled; t-shirts, singlets and other vests, of cotton, knit; woven hi-ten filament, nylon, polyamide or polyester; screws, bolts, nuts, rivets, washers, etc. iron, steel; and cashew nuts, shelled. The values reveal that instability in India's export earnings from UAE was due to the fluctuation in supply side. But, on the other side, it also shows that UAE has been emerged as the most stable market for Indian exports which depicted that an increase in its import share from the pre-FTA period to the post-FTA period. So, there is need to be focused on maintenance of price and quality requirements of the importing country so as to reduce instability. Proper awareness need to be given to the exporters on these aspects, so that the commodities with stabilized effect will be encouraged in order to sustain the long run export earnings of India.

Further, the analysis of competitiveness of exports helps us in understanding the behavior of India's exports in UAE market and forces underlying the observed export performance. The analysis makes it clear that during overall period as well as sub-periods, increasing UAE's imports has played a significant and crucial role in the satisfactory performance of India's export. Apart from expanding UAE demand, India's

export performance primarily depends upon its commodity composition effects, as it shows that Indian exports have specialization in rapidly growing commodities for all the study periods. Simultaneously, the results proved that the actual export growth of India was below the potential and the failure to exploit the opportunity was mainly due to the negative competitiveness effect. Indian exporters were competing globally on factors like product quality, product design, research and development, etc. Further, commodity-wise analysis shows that some commodities exhibited the positive competitiveness and others the negative. This factor is important in determining the prospect of export sector of any country. Therefore, if India wants to maintain its export growth with UAE in near future, policy makers should take some initiatives to make India as a center of globally competitive items. There is also need to focus on the appropriate economic policies and diversify the export basket along with better quality for increasing competitiveness of exported item lines.



## CHAPTER 7

### REVEALED COMPARATIVE ADVANTAGE IN EXPORTS: INDIA-UAE

#### 7.1 Introduction

Theory of international trade suggested that the pattern of trade flows between two or more nations is measured by the pattern of comparative advantage among them which in turns is the consequence of the nature of factor endowment structures in them. The method used to determine in what sectors, industries or commodities a country has comparative advantage is the “Revealed Comparative Advantage” (RCA), which was first introduced by Liesner (1958) and later developed by Balassa (1965). The approach emerged from the problems in measuring an industry’s actual comparative advantage in production and trade. Specifically, given the problems in (a) accounting for all the factors, which affect an industry's comparative advantage, and (b) actually measuring and comparing these factors between countries and industries, Bella Balassa argued that the adequate indicator of an industry’s comparative advantage would be the revealed performance of that industry’s trade pattern (Hamilton & Svensson, 1984).

The Classical theory of comparative advantage showed that gains from exchange maximize welfare and free trade would lead to world economic wealth. Technically, the policy of RCA reveals that if a country’s share in world exports of a particular commodity is greater than its overall share in total world exports, then the country has a revealed comparative advantage in exporting that commodity. In other words, RCA says if a country can produce a commodity at a lower relative cost than other countries, then that country has to sacrifice less of its labour and other productive resources which could be used in the production of other commodities. Through international trade, that country can import other commodities at a lower price, in exchange for the good in which it has a comparative advantage (Thompson, 2006).

Many economists have supported this approach in their models in international trade. According to them, there are so many factors which determine a country’s comparative advantage in a commodity or industry. Heckscher-Ohlin theory stated that the difference in relative factor abundance and prices is the cause of the difference in relative commodity prices between two countries. The difference in relative commodity

prices among countries then determines comparative advantage (Salvatore, 2007); the sources of comparative advantage in international trade based on the commodity composition of trade and factor endowments of a large number of industrial and developing countries (Leamer, 1980); a small country is likely to specialize in standardized products whereas a large country is likely to be a net exporter in scale-intensive industries based on economies of scale and trade costs (Helpman & Krugman, 1985); product differentiation and international technology differences are the determinants of comparative advantage in international trade (Trefler, 1995); factors explaining trade specialisation consists those related to inter-country differences in demand and national consumer preferences (Lundback & Torstennson, 1998); differences in market size effect, and industry characteristics such as factor intensities lead to comparative advantage of a country (Torstennson, 1998).

Similarly, reduction in trade barriers makes competitive forces and the potential for technology transfer in order to get productivity gains and restructuring of an economy toward its comparative advantage. It is well known that India and UAE have agreed on cooperation in the form of free trade. The purpose of the agreement was to achieve free trade by reducing or eliminating trade barriers, increase market access services, and investment opportunity in order to increase welfare. Due to all these factors, UAE remains a favourite export destination of Indian products. The country's major exports at aggregate level include pearls, precious stones, metals, coins; and mineral fuels, oils, distillation products, etc. In the light of an increasingly competitive international environment, it is useful to determine where India's comparative advantage lies. This chapter, therefore, seeks to empirically reveal or examine India's comparative advantage in UAE market by using international trade data to compare exports in particular industries or commodities.

## **7.2 Global and Indian studies on Comparative Advantage**

Several studies have been undertaken using the concept of RCA. Balassa (1977) analysed the pattern of comparative advantage of developed nations for the period from 1953 to 1971. The study supports the available evidence on foreign trade in research intensive products which indicating the continuous renewal of the product cycle. Based on the standard deviation of the revealed comparative advantage indices for different nations,

a relationship between size and diversification has also been examined. Balassa's results showed that while the extent of export diversification tends to increase with the degree of technological development a reversal takes place at higher levels.

Leu (1998) determined whether there is a systematic shift of comparative advantage in East Asian countries. To measure this shift, he has used the revealed comparative advantage of ten selected East Asian countries in the US market. The results indicated that there was a significant change occurred in comparative advantage of East Asian countries since 1980s. The author also found that Korea, Taiwan and Singapore have taken over some Japan's export share in the US market but Hong Kong and Singapore faced higher competition from Indonesia and Malaysia respectively.

Barry and Hannan (2001) investigated empirically the predictive power of Revealed Comparative Advantage. The objective of the study was to identify a serious defect in the methodology of RCA as well as to confirm the accurate predictive powers of the methodology under certain country-specific conditions. The study tested the predictions of RCA methodology on 10 manufacturing sectors into which pre-EU-accession and post-EU-accession Irish data were classified. Through calculations of RCA index, the study successfully explained that reliance on RCA for future trade would have failed completely to predict post-EU-accession changes in Ireland's sectoral structure and export performance. The study also argued that the post-EU developments were instead driven by the economy's success in attracting FDI, and the sectoral destinations of these Greenfield, FDI inflows were unrelated to measures of the country's pre-accession RCA.

Richardson and Zhang (2001) applied the index of RCA for the U.S. in order to explore the patterns of deviation across time, sectors and regions. They found the patterns for different parts of the world, for different time periods, and also for different levels of aggregation of the export data. These deviations or differences are accounted by variables such as geographical proximity of trading partners and per capita income with the extent of influence of these variables varying over time and across sectors or sub sectors.

Yue (2001) studied statistically whether China's export pattern correspond with the law of comparative advantage and whether there are differences exist in export patterns between coastal region and interior region. Regressions were also run to test the impacts of real effective exchange rate and comparative advantage strategy on the flow of exports.

The results of RCA indices indicated clearly that the general pattern of China's exports have changed from a distortion to correspond perfectly with the law of comparative advantage, along with the gradual liberalization of external trade barriers and exchange controls. While the interior region is exporting a large amount of technology and capital intensive goods in which the interior region has no comparative advantage at all.

Bandara and Smith (2002) measured trade flows between Australia and SAARC nations by using Revealed Comparative Advantage and Trade Intensity Index. They suggested that it was necessary for Australian exporters to increase their exports to South Asian region within those sectors or commodity group in which they had a comparative advantage and increased their penetration levels in this market.

Bender and Li (2002) analysed the performance of manufacture exports in a number of Asian and Latin American countries for the period from 1981 to 1997. They also examined the revealed comparative advantage indices between countries in East Asia, Southeast Asia and Latin America. The evidence strongly recommended that even though the strong export performance experienced by East Asian economies, they are losing their comparative advantage to the lower-tier countries in Southeast Asia and Latin America.

Ferto and Hubbard (2003) applied both Balassa (1965) RCA indices and Vollrath (1991) three alternative specifications of revealed comparative advantage in order to analyze the competitiveness of Hungary's agri-food revealed comparative advantage for the period from 1992 to 1998. The results of various indices showed that Hungary had revealed comparative advantages for eleven out of the twenty two aggregated product groups i.e. live animals; meat; vegetables and fruit; sugar; cereals; beverages; oilseeds; cork and wood; and animal, vegetable materials, oils and fats. The study also noted that its results complemented previous studies on the same country that using price and cost based methods and had found the country's arable production to be internationally competitive.

Batra and Khan (2005) examined the pattern of revealed comparative advantage for India and China by using Balassa's index. The index was calculated sector wise and commodity wise level based on harmonized system of classification. They also studied revealed comparative advantage according to factor intensity approach. The analysis

exhibited broad similarities in the structure of RCA for India and China. Both the nations enjoyed RCA for labour and resource-intensive sectors in the world market.

Seyoum (2007) used RCA methodology to measure comparative advantages in the following selected services: business, transport, financial and travel services in the developing countries in relation to that of the rest of the world for the period from 1998 to 2003. The results of indices showed that there is a strong comparative advantage for many developing countries in transport, and travel services. Also, there is substantial room for improvement in financial and business services. Trade liberalization and lack of adequate preparation indicated weakening of their comparative advantages over the years. However, their revealed comparative advantages remain stable and do not show a fundamental shift in the structure of their comparative advantages.

Kowalski (2008) argued that even though India was relatively abundant in skilled labour and capital, its manufactured export items were strongly concentrated in low-technology items and the share of high-technology manufactured items in its total exports had barely changed since the mid of 1990s and remained under five per cent as compared to thirty per cent for China. He showed that India's export structure was mainly skewed towards jewellery, furniture, petroleum products, chemical products, textile and wearing apparel, etc. This structure resembled to some extent the structure of exports of China at the beginning of 1990s. Most of the products in which India was estimated to have a comparative advantage belong to the primary or labour intensive sections.

Shinoj and Mathur (2008) have determined the changes in comparative advantage status of India's main agricultural export items vis-a-vis other Asian players during the post reform period from 1991 to 2004. They found that in exports of certain commodities such as cashew and oil meals, India has been able to maintain its comparative advantage. But, in case of tea, coffee, marine products, spices, etc. have been negatively affected. India has also been found losing out its comparative advantage in export of some of the agricultural products to other Asian competitors during the period after economic reforms.

Pradhan and Das (2014) analysed India's trade relations with the Gulf region comprising six member countries. They also calculated RCA for India and Gulf region. They found that India possessed a moderate revealed comparative advantage in several SITC categories at a 1-digit aggregate level. In fact, India has possessed an advantage in

all categories except for SITC 7 (Machines, transport equip) over the period 2000 to 2008. An important commodity for India was rice (042). India possessed a strong revealed comparative advantage in this commodity with values in 2005 and 2008 of over 14. In contrast, the Gulf region's RCA was different than India, as their exports was predominantly concentrated to hydrocarbon, petrochemicals and other chemicals.

### **7.3 Measurement of Revealed Comparative Advantage**

The Revealed Comparative Advantage index has been generally used in the literature to discuss the comparative advantageous commodities of the countries in which they have competitive sharpness or ability to compete in the international market. In simple words, RCA is an index that seeks to reveal whether a selected commodity or commodity group is more important for a country's total exports than it is for other trade partners individually or collectively (Laurson, 1998). Empirical measures of RCA at aggregate level identifies the overall direction in which a country's investment and trade should take place in order to exploit international differences in supply and demand of products and factors. On the other side, RCA at disaggregated level shows socially desirable trade specialization patterns along narrow product lines. The popularity of this methodology is its relative simplicity, its dependability as an indicator of actual changes in comparative advantage and its ability to utilize comparable data sets. Besides, the identification of commodities having RCA would enable policy makers to formulate an appropriate strategy which would help to increase exports of these commodities. It would also be helpful to develop those sectors or industries which have the potential to earn maximum foreign reserves for the country. Thus, RCA index considers the intrinsic advantage of a specified export commodity in world market.

In this study, Balassa's index of RCA has been used which considers a country's share of world export of a commodity divided by its share of total world exports. The index is calculated by the formula as follows:

$$RCA_{ij} = \frac{X_{ij} / X_{wj}}{X_i / X_w}$$

Where,  $RCA_{ij}$  denotes Revealed Comparative Advantage index for country  $i$  of commodity  $j$ ;  $X_{ij}$  is the  $i^{\text{th}}$  country's export of commodity  $j$ ;  $X_i$  is the total exports of

country  $i$ ;  $X_{wj}$  is world exports of commodity  $j$ ; and  $X_w$  is total world exports. All these exports are in either a partner country or in a region or for the whole world. The RCA index greater than unity indicates country  $i$  has a strong comparative advantage, whereas index less than unity shows that country  $i$  has comparative disadvantage in a specified commodity.

This chapter examines the structure of comparative advantage enjoyed by India and UAE in each other's market. For this purpose, RCA analysis has been used for India's exports to UAE and UAE's exports to India by using the data at HS 2-digit level of classification. As it is possible that the pattern of comparative advantage may differ across different levels of dis-aggregation, the study also analysis RCA at more disaggregated level i.e. HS 6-digit level of classification.

### **7.3.1 The Analysis of Revealed Comparative Advantage: India**

The measurement of Revealed Comparative Advantage for India shows that India enjoyed comparative advantage in 40 commodities in UAE market in the year 1996. These commodities constituted 64.21 per cent share of India's total exports to UAE. Table 7.1 shows that at the aggregated level, India's top ten commodities on the basis of RCA index in 1996. India enjoyed highest comparative advantage in cotton (i.e. 12.10). This was followed by the other commodities namely articles of apparel, accessories, knit or crochet (i.e. 7.21); tin and articles thereof (i.e. 5.25); fish, crustaceans, molluscs, aquatic invertebrates nes (i.e. 5.11); lac, gums, resins, vegetable saps and extracts nes (i.e. 4.96); miscellaneous chemical products (i.e. 4.41); vegetable plaiting materials, vegetable products nes (i.e. 4.33); organic chemicals (i.e. 4.00); silk (i.e. 3.99); and electrical, electronic equipment (i.e. 3.98).

But at the disaggregated level, results are somewhat different for the same period. India had comparative advantage in 985 product lines from the list of 4067 HS 6-digit level. The list of top ten commodities which constituted larger number of product lines with  $RCA > 1$  has been presented in table 7.2. The maximum numbers of product lines with comparative advantage in UAE market were concentrated in organic chemicals. The organic chemicals, with 85 product lines contributed about 8.63 per cent of the total comparative advantage which India held in UAE market. This was followed by commodities namely articles of apparel, accessories, not knit or crochet (6.19 per cent);

cotton (5.58 per cent); iron and steel (4.67 per cent); inorganic chemicals, precious metal compound, isotopes (4.57 per cent); nuclear reactors, boilers, machinery, etc. (4.16 per cent); articles of apparel, accessories, knit or crochet (3.86 per cent); manmade staple fibres (3.55 per cent); manmade filaments (3.35 per cent); electrical, electronic equipment (2.74 per cent).

**Table 7.1: Top Ten Commodities with the Index of RCA>1 in 1996: India**

Commodity (HS Code)	RCA	Rank
Cotton (52)	12.10	1
Articles of apparel, accessories, knit or crochet (61)	7.21	2
Tin and articles thereof (80)	5.25	3
Fish, crustaceans, molluscs, aquatic invertebrates nes (3)	5.11	4
Lac, gums, resins, vegetable saps and extracts nes (13)	4.96	5
Miscellaneous chemical products (38)	4.41	6
Vegetable plaiting materials, vegetable products nes (14)	4.33	7
Organic chemicals (29)	4.00	8
Silk (50)	3.99	9
Electrical, electronic equipment (85)	3.98	10

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

**Table 7.2: Top Ten Commodities Based on Constituent Numbers with RCA>1 in 1996: India**

Commodity (HS Code)	Constituent Number of Commodities	Rank
Organic chemicals (29)	85	1
Articles of apparel, accessories, not knit or crochet (62)	61	2
Cotton (52)	55	3
Iron and steel (72)	46	4
Inorganic chemicals, precious metal compound, isotopes (28)	45	5
Nuclear reactors, boilers, machinery, etc. (84)	41	6
Articles of apparel, accessories, knit or crochet (61)	38	7
Manmade staple fibres (55)	35	8
Manmade filaments (54)	33	9
Electrical, electronic equipment (85)	27	10

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).



Other than cotton; articles of apparel, accessories, knit or crochet; organic chemicals; and electrical, electronic equipment, no other commodities which ranks among the top ten according to the values at HS 2-digit level was able to hold the top rankings of comparative advantage at HS 6-digit level. Therefore, the pattern of RCA varied at different level of disaggregation. The trends of comparative advantage at disaggregation level were as follows: in terms of the value of index of RCA, precious metal ores and concentrates except silver (261690) ranks at the top and followed by product lines namely gold/silversmith wares of/clad with precious metal nes (711419); cortisone, hydrocortisone, prednisone, prednisolone, bulk (293719); coal tar distillation products nes (270799); and heterocyclic compounds with an unfused thiazole ring (293410), etc.

In year 2005, India had comparative advantage in 37 commodities that constituted 61.34 per cent share of India's total exports to UAE. In comparison to 1996, there were 30 out of 40 commodities, which retained their comparative advantage in 2005 and 10 commodities lose their advantage. Also, seven new commodities gained comparative advantage during this year. Table 7.3 shows India's top ten commodities on the basis of RCA index in 2005. It shows that how much there is a change in India's comparative advantage after a decade. As clear from the table that the commodities namely cotton; silk; and organic chemicals hold their position in top ten commodities in 2005 also. During this year, India enjoyed highest comparative advantage in copper and articles thereof (18.23) and followed by silk (8.35); cotton (7.12); organic chemicals (6.63); pearls, precious stones, metals, coins, etc. (6.41); articles of apparel, accessories, not knit or crochet (6.20); impregnated, coated or laminated textile fabric (4.08); ores, slag and ash (3.42); coffee, tea, mate and spices (3.01); and wool, animal hair, horsehair yarn and fabric thereof (2.22).

Likewise 1996, the results at disaggregate level in 2005 are also different from the aggregated results. There were 1145 product lines in which India had comparative advantage in 2005. The list of top ten commodities which constituted larger number of product lines with  $RCA > 1$  has been presented in table 7.4. The maximum numbers of product lines with comparative advantage in UAE market were concentrated in organic chemicals. This commodity with 77 product lines contributed about 6.72 per cent of the total comparative advantage which India held in UAE market in 2005. This was followed

by the commodities namely articles of iron or steel (5.15 per cent); articles of apparel, accessories, not knit or crochet (4.37 per cent); cotton (3.49 per cent); salt, sulphur, earth, stone, plaster, lime and cement (2.88 per cent); edible fruit, nuts, peel of citrus fruit, melons (2.62 per cent); pearls, precious stones, metals, coins, etc. (2.09 per cent); manmade filaments (1.83 per cent); wood and articles of wood, wood charcoal (1.66 per cent); and wool, animal hair, horsehair yarn and fabric thereof (1.57 per cent).

**Table 7.3: Top Ten Commodities with the Index of RCA>1 in 2005: India**

Commodity (HS Code)	RCA	Rank
Copper and articles thereof (74)	18.23	1
Silk (50)	8.35	2
Cotton (52)	7.12	3
Organic chemicals (29)	6.63	4
Pearls, precious stones, metals, coins, etc. (71)	6.41	5
Articles of apparel, accessories, not knit or crochet (62)	6.20	6
Impregnated, coated or laminated textile fabric (59)	4.08	7
Ores, slag and ash (26)	3.42	8
Coffee, tea, mate and spices (9)	3.01	9
Wool, animal hair, horsehair yarn and fabric thereof (51)	2.22	10

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

**Table 7.4: Top Ten Commodities Based on Constituent Numbers with RCA>1 in 2005: India**

Commodity (HS Code)	Constituent Number of Commodities	Rank
Organic chemicals (29)	77	1
Articles of iron or steel (73)	59	2
Articles of apparel, accessories, not knit or crochet (62)	50	3
Cotton (52)	40	4
Salt, sulphur, earth, stone, plaster, lime and cement (25)	33	5
Edible fruit, nuts, peel of citrus fruit, melons (8)	30	6
Pearls, precious stones, metals, coins, etc. (71)	24	7
Manmade filaments (54)	21	8
Wood and articles of wood, wood charcoal (44)	19	9
Wool, animal hair, horsehair yarn and fabric thereof (51)	18	10

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

During this year, other than cotton; organic chemicals; articles of apparel, accessories, not knit or crochet; and wool, animal hair, horsehair yarn and fabric thereof, no other commodities which ranks among the top ten according to the values at HS 2-digit level was able to hold the top rankings of comparative advantage at HS 6-digit level. Therefore, the pattern of Revealed Comparative Advantage varied at different level of disaggregation for this year also. The trends of comparative advantage at disaggregation level were as follows: in terms of the value of index of RCA, salts & esters of tartaric acid (291813); yarn >85% other synth staple fibres, single not retail (550941); natural cork, raw or simply prepared (450110); gold/silversmith wares of/clad with precious metal nes (711419); and cotton yarn >85% single combed 714-232 dtex, not retail (520522), etc. There were also some commodities where India was comparatively disadvantageously positioned at the aggregate level but reveal significant comparative advantage at the constituent commodity level.

In year 2015, India had comparative advantage in 38 commodities that constituted 60.00 per cent share of India's total exports to UAE. In comparison to 2005, there were 29 out of 37 commodities, which retained their comparative advantage in 2015 and 8 commodities lose their advantage. Also, nine new commodities gained comparative advantage during this year. Table 7.5 shows India's top ten commodities on the basis of RCA index in 2015. During this year, India enjoyed highest comparative advantage in salt, sulphur, earth, stone, plaster, lime and cement (i.e. 22.12). This was followed by the other commodities namely electrical, electronic equipment (i.e. 7.32); aluminium and articles thereof (i.e. 5.64); carpets and other textile floor coverings (i.e. 5.25); ships, boats and other floating structures (i.e. 5.21); silk (i.e.5.15); iron and steel (i.e. 3.69); lead and articles thereof (i.e. 3.51); nickel and articles thereof (i.e. 3.31); and articles of apparel, accessories, not knit or crochet (i.e. 3.30).

The results at disaggregate level in 2015 are also different from the aggregated results. There were 1427 product lines in which India had comparative advantage in 2015. The list of top ten commodities which constituted larger number of product lines with  $RCA > 1$  has been presented in table 7.6. The maximum numbers of product lines with comparative advantage in UAE market were concentrated in nuclear reactors, boilers, machinery, etc. This commodity with 104 product lines contributed about 7.29 per cent of

the total comparative advantage which India held in UAE market in 2015. This was followed by the commodities namely organic chemicals (5.75 per cent); cotton (4.98 per cent); articles of apparel, accessories, not knit or crochet (4.96 per cent); iron and steel (4.84 per cent); articles of apparel, accessories, knit or crochet (4.41 per cent); manmade staple fibres (3.99 per cent); inorganic chemicals, precious metal compound, isotopes (3.08 per cent); electrical, electronic equipment (3.07 per cent); and articles of iron or steel (2.94 per cent).

**Table 7.5: Top Ten Commodities with the Index of RCA>1 in 2015: India**

Commodity (HS Code)	RCA	Rank
Salt, sulphur, earth, stone, plaster, lime and cement (25)	22.12	1
Electrical, electronic equipment (85)	7.32	2
Aluminium and articles thereof (76)	5.64	3
Carpets and other textile floor coverings (57)	5.25	4
Ships, boats and other floating structures (89)	5.21	5
Silk (50)	5.15	6
Iron and steel (72)	3.69	7
Lead and articles thereof (78)	3.51	8
Nickel and articles thereof (75)	3.31	9
Articles of apparel, accessories, not knit or crochet (62)	3.30	10

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

**Table 7.6: Top Ten Commodities Based on Constituent Numbers with RCA>1 in 2015: India**

Commodity (HS Code)	Constituent Number of Commodities	Rank
Nuclear reactors, boilers, machinery, etc. (84)	104	1
Organic chemicals (29)	82	2
Cotton (52)	71	3
Articles of apparel, accessories, not knit or crochet (62)	71	4
Iron and steel (72)	69	5
Articles of apparel, accessories, knit or crochet (61)	63	6
Manmade staple fibres (55)	57	7
Inorganic chemicals, precious metal compound, isotopes (28)	44	8
Electrical, electronic equipment (85)	44	9
Articles of iron or steel (73)	42	10

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

Other than articles of apparel, accessories, not knit or crochet; iron and steel; and electrical machinery and equipment, no other commodities which ranks among the top ten according to the values at HS 2-digit level was able to hold the top rankings of comparative advantage at HS 6-digit level. Therefore, like 1996, the pattern of Revealed Comparative Advantage varied at different level of disaggregation for this year also. The trends of comparative advantage at disaggregation level were as follows: in terms of the value of index of RCA, natural cork, raw or simply prepared (450110) ranks at the top and followed by product lines namely yarn <85% synthetic staple fibres, retail not sewing (551120); cotton yarn >85% single uncombed 192-125 dtex, not ret (520514); yarn >85% other synth staple fibres, single not retail (550941); and cotton yarn >85% single combed 714-232 dtex, not retail (520522), etc. There were also some commodities where India was comparatively disadvantageously positioned at the aggregate level but reveal significant comparative advantage at the constituent commodity level.

### **7.3.2 The Analysis of Revealed Comparative Advantage: UAE**

All the Emirates got independence in pursuing an economic strategy based on their respective comparative advantages. Abu Dhabi has exploited its comparative advantage in large scale capital and energy intensive downstream industries such as fertilizers and petrochemicals. Dubai, with its depleting oil resources has pursued an outward oriented strategy to develop as a commercial hub with entrepot trade, finance and tourism. While cement production is one of the oldest industries in Ras-al-Khaimah, other industries such as pharmaceuticals have also emerged. Sharjah has traditionally developed small scale light manufacturing and tourism industries. The Northern Emirates developed in the areas of shipping, mining, agriculture and quarrying. The Emirates of Fujairah is a popular tourist destination due to its temperate climate. Thus, the export structure of UAE has evolved from a dependence on domestic industry based products such as petrochemicals, fertilizers, cement and aluminum to more diversified products such as electronics, light machinery and transport equipments.

Based on the results of RCA with India in year 1996, UAE had comparative advantage in 35 commodities in Indian market. Table 7.7 shows that at the aggregated level, UAE's top ten commodities on the basis of RCA index in 1996. With the UAE diversified export structure, the country enjoyed highest comparative advantage in meat,

fish and seafood food preparations nes (i.e. 13.22). This was followed by the other commodities namely stone, plaster, cement, asbestos, mica or similar materials (i.e. 11.27); pearls, precious stones, metals, coins, etc. (i.e. 6.85); articles of apparel, accessories, not knit or crochet (i.e. 4.61); umbrellas, walking-sticks, seat-sticks, whips, etc. (i.e. 3.70); animal, vegetable fats and oils, cleavage products, etc. (i.e. 3.16); coffee, tea, mate and spices (i.e. 2.09); mineral fuels, oils, distillation products, etc. (i.e. 2.08); manmade filaments (i.e. 1.91); and articles of apparel, accessories, knit or crochet (i.e. 1.71).

At the disaggregated level also, results shows that UAE was diversifying and specializing in the non-oil commodities. UAE had comparative advantage in 753 product lines from the list of 4067 HS 6-digit level. The list of top ten commodities which constituted larger number of product lines with  $RCA > 1$  in year 1996 has been presented in table 7.8. The maximum numbers of product lines with comparative advantage in Indian market were concentrated in optical, photo, technical, medical, etc. apparatus. The optical, photo, technical, medical, etc. apparatus with 48 product lines contributed about 6.37 per cent of the total comparative advantage which UAE held in Indian market. This was followed by commodities namely plastics and articles thereof (5.44 per cent); articles of iron or steel (4.51 per cent); paper & paperboard, articles of pulp, paper and board (3.72 per cent); glass and glassware (2.25 per cent); rubber and articles thereof (1.59 per cent); manmade filaments (1.46 per cent); mineral fuels, oils, distillation products, etc. (1.33 per cent); articles of apparel, accessories, not knit or crochet (1.32 per cent); and pearls, precious stones, metals, coins, etc. (1.06 per cent).

Only four commodity groups (i.e. manmade filaments; mineral fuels, oils, distillation products, etc.; articles of apparel, accessories, not knit or crochet; and pearls, precious stones, metals, coins, etc.) which ranks among the top ten according to the values at HS 2-digit level was able to hold the top rankings of comparative advantage at HS 6-digit level. Therefore, the pattern of RCA varied at different level of disaggregation. The trends of comparative advantage at disaggregation level were as follows: in terms of the value of index of RCA, petroleum oils, oils from bituminous minerals, crude (270900) at the top and followed by coal tar distillation products nes (270799); limestone materials for

manufacture of lime or cement (252100); diamonds (jewellery) worked but not mounted or set (710239); and pile knit or crochet fabric, of manmade fibres (600192), etc.

**Table 7.7: Top Ten Commodities with the Index of RCA>1 in 1996: UAE**

Commodity (HS Code)	RCA	Rank
Meat, fish and seafood food preparations nes (16)	13.22	1
Stone, plaster, cement, asbestos, mica or similar materials (68)	11.27	2
Pearls, precious stones, metals, coins, etc. (71)	6.85	3
Articles of apparel, accessories, not knit or crochet (62)	4.61	4
Umbrellas, walking-sticks, seat-sticks, whips, etc. (66)	3.70	5
Animal, vegetable fats and oils, cleavage products, etc. (15)	3.16	6
Coffee, tea, mate and spices (9)	2.09	7
Mineral fuels, oils, distillation products, etc. (27)	2.08	8
Manmade filaments (54)	1.91	9
Articles of apparel, accessories, knit or crochet (61)	1.71	10

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

**Table 7.8: Top Ten Commodities Based on Constituent Numbers with RCA>1 in 1996: UAE**

Commodity (HS Code)	Constituent Number of Commodities	Rank
Optical, photo, technical, medical, etc. apparatus (90)	48	1
Plastics and articles thereof (39)	41	2
Articles of iron or steel (73)	34	3
Paper & paperboard, articles of pulp, paper and board (48)	28	4
Glass and glassware (70)	17	5
Rubber and articles thereof (40)	12	6
Manmade filaments (54)	11	7
Mineral fuels, oils, distillation products, etc. (27)	10	8
Articles of apparel, accessories, not knit or crochet (62)	10	9
Pearls, precious stones, metals, coins, etc. (71)	8	10

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

In year 2005, UAE had comparative advantage in 36 commodities that constituted 62.12 per cent share of UAE's total exports to India. In comparison to 1996, there were 26 out of 35 commodities, which retained their comparative advantage in 2005 and 9

commodities lose their advantage. Also, ten new commodities gained comparative advantage during this year. Table 7.9 shows UAE's top ten commodities on the basis of RCA index in 2005. During this year, UAE enjoyed highest comparative advantage in manufactures of plaiting material, basketwork, etc. (i.e. 12.29). This was followed by the other commodities namely glass and glassware (i.e. 10.45); electrical, electronic equipment (i.e. 9.42); articles of apparel, accessories, not knit or crochet (i.e. 9.20); stone, plaster, cement, asbestos, mica, etc. articles (i.e. 8.61); mineral fuels, oils, distillation products, etc. (i.e.6.09); inorganic chemicals, precious metal compound, isotopes (i.e. 5.65); pearls, precious stones, metals, coins, etc. (i.e. 5.37); carpets and other textile floor coverings (i.e 3.62); fertilizers (i.e. 2.17). Other than pearls, precious stones, metals, coins, etc.; and glass and glassware, no other commodities which ranks among the top ten rankings of RCA in 1996 was able to hold the top rankings of RCA in 2005.

The results at disaggregate level in 2005 were somewhat different from the aggregated results. There were 861 product lines in which UAE had comparative advantage in 2005. The list of top ten commodities which constituted larger number of product lines with  $RCA > 1$  has been presented in table 7.10. The maximum numbers of product lines with comparative advantage in Indian market were concentrated in electrical, electronic equipment. This commodity with 62 product lines contributed about 7.20 per cent of the total comparative advantage which UAE held in Indian market. This was followed by the commodities namely articles of apparel, accessories, not knit or crochet (5.34 per cent); rubber and articles thereof (5.23 per cent); tools, implements, cutlery, etc. of base metal (4.29 per cent); pearls, precious stones, metals, coins, etc. (2.90 per cent); mineral fuels, oils, distillation products, etc. (2.44 per cent); impregnated, coated or laminated textile fabric (2.09 per cent); essential oils, perfumes, cosmetics, toiletries (1.74 per cent); fertilizers (1.39 per cent); nickel and articles thereof (1.16 per cent). This table also shows that some commodities (i.e. electrical, electronic equipment; articles of apparel, accessories, not knit or crochet; mineral fuels, oils, distillation products, etc.; pearls, precious stones, metals, coins, etc.; and fertilizers) which ranks among the top ten according to the values at HS 2-digit level, hold the top rankings of comparative advantage at HS 6-digit level. Therefore, like 1996, the pattern of Revealed Comparative Advantage varied at different level of disaggregation for this year also. The



trends of comparative advantage at disaggregation level were as follows: in terms of the value of index of RCA, the top product lines were mainly Platinum unwrought or in powder form (711011); Gold in unwrought forms non-monetary (710812); Glass table or kitchenware, except low expansion glass (701339); Nitrogen-phosphorus-potassium fertilizers, pack >10kg (310520); and Diamonds (jewellery) worked but not mounted or set (710239), etc.

**Table 7.9: Top Ten Commodities with the Index of RCA>1 in 2005: UAE**

Commodity (HS Code)	RCA	Rank
Manufactures of plaiting material, basketwork, etc. (46)	12.29	1
Glass and glassware (70)	10.45	2
Electrical, electronic equipment (85)	9.42	3
Articles of apparel, accessories, not knit or crochet (62)	9.20	4
Stone, plaster, cement, asbestos, mica, etc. articles (68)	8.61	5
Mineral fuels, oils, distillation products, etc. (27)	6.09	6
Inorganic chemicals, precious metal compound, isotopes (28)	5.65	7
Pearls, precious stones, metals, coins, etc. (71)	5.37	8
Carpets and other textile floor coverings (57)	3.62	9
Fertilizers (31)	2.17	10

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

**Table 7.10: Top Ten Commodities Based on Constituent Numbers with RCA>1 in 2005: UAE**

Commodity (HS Code)	Constituent Number of Commodities	Rank
Electrical, electronic equipment (85)	62	1
Articles of apparel, accessories, not knit or crochet (62)	46	2
Rubber and articles thereof (40)	45	3
Tools, implements, cutlery, etc. of base metal (82)	37	4
Pearls, precious stones, metals, coins, etc. (71)	25	5
Mineral fuels, oils, distillation products, etc. (27)	21	6
Impregnated, coated or laminated textile fabric (59)	18	7
Essential oils, perfumes, cosmetics, toiletries (33)	15	8
Fertilizers (31)	12	9
Nickel and articles thereof (75)	10	10

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

In year 2015, UAE had comparative advantage in 33 commodities that constituted 59.9 per cent share of UAE's total exports to India. In comparison to 2005, there were 28 out of 36 commodities, which retained their comparative advantage in 2015 and 8 commodities lose their advantage. Also, five new commodities gained comparative advantage during this year. Table 7.11 shows UAE's top ten commodities on the basis of RCA index in 2015. This table shows that UAE comprised less comparative advantage in commodity namely mineral fuels, oils, distillation products, etc. unlike as in 1996. In 2015, UAE enjoyed highest comparative advantage in pearls, precious stones, metals, coins, etc. (i.e. 15.36). This was followed by the other commodities namely tobacco and manufactured tobacco substitutes (i.e. 6.09); sugars and sugar confectionery (i.e. 5.56); essential oils, perfumes, cosmetics or toiletries (i.e. 3.80); manmade filaments (i.e. 3.22); glass and glassware (i.e. 3.21); aluminium and articles thereof (i.e. 3.16); musical instruments, parts and accessories (i.e. 3.11); ceramic products (i.e. 2.26); cocoa and cocoa preparations (i.e. 2.01).

Other than pearls, precious stones, metals, coins, etc.; and manmade filaments, no other commodities which ranks among the top ten rankings of RCA in 1996 was able to hold the top rankings of RCA in 2015. The results at disaggregate level in 2015 were somewhat different from the aggregated results. There were 974 product lines in which UAE had comparative advantage in 2015. The list of top ten commodities which constituted larger number of product lines with  $RCA > 1$  has been presented in table 7.12. The maximum numbers of product lines with comparative advantage in Indian market were concentrated in iron and steel. This commodity with 51 product lines contributed about 5.24 per cent of the total comparative advantage which UAE held in Indian market. This was followed by the commodities namely nuclear reactors, boilers, machinery, etc. (5.03 per cent); pearls, precious stones, metals, coins, etc. (4.93 per cent); articles of apparel, accessories, not knit or crochet (3.39 per cent); aluminium and articles thereof (2.77 per cent); plastics and articles thereof (2.57 per cent); mineral fuels, oils, distillation products, etc. (1.96 per cent); salt, sulphur, earths and stone, plaster, lime and cement (1.95 per cent); essential oils, perfumes, cosmetics, toiletries (1.23 per cent); sugars and sugar confectionery (1.13 per cent). Other than pearls, precious stones, metals, coins, etc.; sugars and sugar confectionery; essential oils, perfumes, cosmetics, toiletries; and

aluminium and articles thereof, no other commodities which ranks among the top ten according to the values at HS 2-digit level was able to hold the top rankings of comparative advantage at HS 6-digit level.

**Table 7.11: Top Ten Commodities with the Index of RCA>1 in 2015: UAE**

Commodity (HS Code)	RCA	Rank
Pearls, precious stones, metals, coins, etc. (71)	15.36	1
Tobacco and manufactured tobacco substitutes (24)	6.09	2
Sugars and sugar confectionery (17)	5.56	3
Essential oils, perfumes, cosmetics, toiletries (33)	3.80	4
Manmade filaments (54)	3.22	5
Glass and glassware (70)	3.21	6
Aluminium and articles thereof (76)	3.16	7
Musical instruments, parts and accessories (92)	3.11	8
Ceramic products (69)	2.26	9
Cocoa and cocoa preparations (18)	2.01	10

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

**Table 7.12: Top Ten Commodities Based on Constituent Numbers with RCA>1 in 2015: UAE**

Commodity (HS Code)	Constituent Number of Commodities	Rank
Iron and steel (72)	51	1
Nuclear reactors, boilers, machinery, etc. (84)	49	2
Pearls, precious stones, metals, coins, etc. (71)	48	3
Articles of apparel, accessories, not knit or crochet (62)	33	4
Aluminium and articles thereof (76)	27	5
Plastics and articles thereof (39)	25	6
Mineral fuels, oils, distillation products, etc. (27)	19	7
Salt, sulphur, earth, stone, plaster, lime and cement (25)	19	8
Essential oils, perfumes, cosmetics, toiletries (33)	12	9
Sugars and sugar confectionery (17)	11	10

Source: United Nations Commodity Trade Statistics Database (UN Comtrade).

Thus, the pattern of Revealed Comparative Advantage varied at different level of disaggregation for this year also. The trends of comparative advantage at disaggregation level were as follows: in terms of the value of index of RCA, the top product lines were mainly jewellery and parts of precious metal except silver (711319); semi-finished bars, i/nas <0.25%C, rectangular, nes (720712); sections, nes, i/nas, nfw hot-roll/drawn/extruded (721610); bars, rods & profiles, copper alloy nes (740729); and bituminous mix, mastic from asphalt, bitumen/tar/pitch (271500), etc. Thus, the results reveal that, though, UAE is oil rich country but it has very less comparative advantage in this commodity in Indian market. The reason behind this fact is that UAE dependency on oil sector has been reduced sharply among all the GCC countries. The measurement of oil dependency ratio recorded as UAE has gone from being one the most oil dependent country (about 90 per cent) in 1980s to one the least oil dependent country (about 50-60 per cent) in 2004. This non-oil exports diversification was enhanced with the openness to trade, trade facilitation and a favourable business environment.

#### **7.4 Conclusion**

The analysis shows the comprehensive picture of RCA of two countries' exports. It reveals that the pattern of comparative advantage varies at different levels of commodity disaggregation. Commodities which ranked among the top ten according to the index of RCA at HS 2-digit commodity level were not able to retain their place when ranked according to comparative advantage at the HS 6-digit constituent commodity level. In case of India, other than articles of apparel, accessories, not knit or crochet; iron and steel; and electrical, electronic equipment, no other commodities that ranked among the top ten according to the comparative advantage at aggregated level retained its position at the disaggregated level in year 2015. For UAE, other than pearls, precious stones, metals, coins, etc.; sugars and sugar confectionery; essential oils, perfumes, cosmetics, toiletries; and aluminium and articles thereof commodities were so positioned. Simultaneously, there were also some commodities where both India and UAE may be disadvantageously placed at the aggregate level but enjoyed comparative advantage at the constituent commodity level. Though, the countries have already been expanding their exports by specializing in different commodities, yet, they should look upon those product lines

which are gaining comparative advantage during the study period to achieve competitiveness in this rapidly globalised world.

## CHAPTER 8

### INDIA'S EXPORTS TO UAE: PROBLEMS AND SUGGESTIONS

#### 8.1 Introduction

The international trade has opened a variety of opportunities in terms of determining the social and economic performance of a country as well as the prospects of country around the world. It provides opportunities like unlimited market access, market and product diversification and competing position in relation to other competitive countries. Despite the fact that foreign trade offers better opportunities for long term growth and profitability of an economy, but simultaneously it has brought so many challenges and barriers to the countries' exporters when they export their products in international market. Some barriers occur due to the government policies and regulations whereas some are hidden barriers. A country's political disturbance can also change its attitude towards foreign companies at any time. This instability causes an unfavorable environment for the international trade. All types of barriers to trade impact negatively on the foreign market access. These barriers affect more the developing countries than the developed ones. There are so many internal forces as well as external forces which measures the marketing strategy in exports of a country.

These barriers or forces are natural to the firm and are generally related with insufficient organisational resources for export marketing. These problems are basically regarding to the poor organization or management of export departments of a country and the firm's lack of competent employees to administer exporting activities in a country (Yang, Leone, & Alden, 1992); and the inability to finance exports influence export performance of a country. Firm capabilities and constraints greatly affect their choice of marketing strategy and ability to perform that marketing strategy (Porter, 1980). Key assets, skills and knowledge of a firm constitute its source of competitive advantage. These assets and skills enable an exporter to identify or recognize the opportunities in the export market and to develop appropriate export marketing strategy and implement it effectively. If an exporter found such problems in their export activities, these may be known as marketing knowledge and information, financial resources and human resources (Katsikeas & Morgan, 1994). Some export problems are related to lack of knowledge of

foreign markets, competition, business practices, and lack of management to generate foreign sales. Lack of knowledge to locate foreign opportunities and promising markets is perceived to be a major barrier in exports of developing countries (Colaiacovo, 1982; Dymsha, 1983; Bodur, 1986; Karafakioglu, 1986; Weaver & Pak, 1990; Ling-Yee, 2004).

Product Quality is another most significant determinant for entering and remaining in the international markets (Christensen, Da Rocha, & Gartner, 1987). It is related to packaging, meeting importers quality standards and setting up the suitable design and image of a product for export markets. There are different types of quality standards in developing countries. However, many of the quality barriers occur due to inadequate knowledge about product characteristics, production technologies and the market requirements. A product feature which may require when it exports to a developing country may not require at all in a developed country (Lall, 1991). Across the industries, the intensity of export activities and the nature of export marketing strategies does not same. Kerin, Mahajan, and Vadarajan (1990) considered industry structure is a key factor of a firm's strategy in the context of domestic market. It is important to consider the differences between market systems, firm sizes and presence of foreign competitors in order to develop a proper export marketing strategy. The firm size is a key determinant of the propensity to export. It shows that large size of firms can take an advantage over the smaller firms and it usually impact positively on the export activity.

Exporters also face procedural barriers due to lack of similarity of legal and regulatory frameworks of the exporting and importing countries. Exports of a country require knowledge about export procedures. One of the most cited problems with regard to exports is the time and paperwork which is required to fulfill the foreign and domestic market regulations. There is not only the government which imposes these procedural requirements, but also the banks, shipping organisations and insurance companies have their own procedural work. Lack of information about the export procedures has been mentioned as an export barrier in various studies (Haidari, 1999). So, a firm that wants to enter the export market or intends to increase its exports in international market will have to acquire the full knowledge and skill to deal with all administrative procedures. Government authorities and agencies can increase direct as well as indirect export barriers. They impose tariff and non-tariff barriers. Other obstacles which may beyond the

firm's control such as unfavourable exchange rates, lack of trade institutions, cost of transportation, the absence of a stimulating national export policy and international agreements. Besides, lack of export promotion and assistance programmes sponsored by the government were noted as export problems in developing countries (Kaleka & Katsikeas, 1995; Figueiredo & Almeida, 1988).

## **8.2 Studies on Problems Faced by Indian Exporters**

India as developing country also faces the above mentioned export barriers or challenges when it exports commodities in international market. Kumar, (2013); Lamba & Saini, (2015) identified the problems that effect gems and jewellery export units in India. They showed that more and more buyers across the world are now turning to Indian gems and jewellery products because of their referred source of the quality for these products. Despite that there were a lot of problems faced by Indian exporters when they export in international market. The major barrier for this industry is over-reliance on imports i.e. India imports around 90 per cent of raw material for gems and jewellery and its supply is limited. India imports rough diamond as raw material around 50 per cent. These imports are mainly from Belgium, UK, UAE and Israel, etc. While gold jewellery is imported from Switzerland, South Africa, UAE, Australia, etc. So, the sector being dependent completely on imports of raw material, it shows that more export should lead to more import. Other major problems faced by exporters of this sector are emerging rivals, changing fashion, manual way of crafting, imbalance growth of products, financial problems, issues such as high rate of interest imposed by the bank on export credit, etc., scarcity of dollar credit for sourcing rough diamonds, complex procedures, etc. Shameek and Shahana (2012) analyzed India's export performance of cotton industry; gems and jewellery; and electronic goods industry. He found that it is highly affected by macroeconomic variables in the country such as inflation rate, exchange rate, tariff and non-tariff barriers imposed by the government, world demand and export competitiveness. Ramachandran (2001) found that however Indian textile industry has several strengths i.e. a supply of cheap cotton; low wages; and possible emergence as a competitive supplier of manmade. But there are several serious problems as well. These are mainly lack of efficiency of infrastructure, problems related to credit facility, transportation cost and uncompetitive firms within the industry continue to deplete resources. Singh (2016)



explained that issues with Indian food exports failing to stand in the line with international food safety standards. UAE as one of the top four destinations for Indian fruit and vegetables; and world largest importer of India's mangoes, has decided to ban on import of mangoes and cucumbers due to low quality. Prasad, Sathish, and Singh (2014) showed sector specific issues or challenges faced by Indian exporters. (a) Agriculture sector faces issues related to unorganized market in India; high rate of tax is levied on the products manufactured by rubber industry in Karnataka, etc. (b) Mining sector faces problems such as low grade iron ore fines exported by India; railway freight costs issues, etc. (c) Problems related to the non-availability of certain fabrics locally in adequate quantum; manpower workforce, etc. in textiles industry. (d) Problems such as licensing system; procedural work; duties imposed by Indian government, etc. in gems and jewellery industry as well as in leather industry. Bhardwaj, et al. (2011) showed that India is the largest producer and the consumer of the spices in the world. The demand for spices and its products are ever increasing in international markets. The major destinations for Indian spices are US, Japan, East Asian and Middle East countries. It produces almost all kinds of spices and through exports of these spices the country earns the much needed foreign exchange over a long period of time. But still this sector has not achieved the required level of development due to the challenges or problems in the pre and post-harvesting activities, marketing, supply chain and competitive price for their production, quality requirements and training of farmers, etc.

Thus, the studies show that exporting is a crucial trade activity for countries' economic development, as it highly contributes to employment, economic growth, trade balance, and higher standard of living (Lee & Habte-Giorgis, 2004). Enhancing export performance is crucial mainly for the firms in developing countries that view the international market as a means to ensure growth and competitiveness, etc. (Matanda & Freeman, 2009). Therefore, it is important to find out barriers which threaten the export performance of firms in order to improve their competitiveness in the international market. As we know that with regard to the volume of bilateral trade, India and UAE are important trading partners for each other. But, India's export basket to UAE is not very much diversified. India's actual export growth with UAE was below the potential during the study period. Therefore, in order to exploit India's export potential with UAE it is

important to study the barriers or problems faced by Indian exporters when they export their products to UAE.

### **8.3 Data Analysis**

In this section, the results of collected data have been presented. Descriptive analysis has been used to analyse the major problems or difficulties faced by Indian exporters of top commodities to UAE. Besides, it shows the areas where Indian exporters need government's assistance so that they can send their products in UAE market without facing any challenges. It will obviously improve India's trade ties with UAE in future.

#### **Pearls, Precious Stones, Metals, Coins, etc.**

Six exporters responded to the questionnaire. Their exports comprise gold jewellery, diamond, polki, silver ornaments, etc. Four exporters have experienced in UAE market for a period of between 6-10 years, then followed by two exporters have experienced between 2-5 years. Two exporters export 10 per cent to 25 per cent to UAE of their total exports. Three exporters export 25 per cent to 50 per cent and one exporter export 50 per cent to 75 per cent to UAE of their total exports. Their main competitor countries in UAE market are China, USA and Switzerland. The key problems and difficulties faced by Indian exporters when they export to UAE are summarized in table 8.1. From this table, it is clear that there are seven major problems in case of export of pearls, precious stones, metals, coins, etc. All the seven problems had a mean score of 4 and above. These include shortage of skilled manpower and training; fluctuations in exchange rate; recession in world market; tariff barriers; non tariff barriers; competitions from other countries; and competitor country's products have better quality than your products. China is becoming the major rival country for Indian exporters because China has cheap economic labour, infrastructure as well as technology where the Indian gems and jewellery sector faces a major difficulty. Also, India has not enough design development centers to innovate the latest designs of the ornaments in order to catch up with fashion needs of the international customers. Though, manufacturers produce specific type of jewellery products according to the market demand. But due to change of fashion, demand of that particular type of products start decreasing and ultimately it finishes.

**Table 8.1: Problems Faced by Indian Exporters of Pearls, Precious Stones, Metals, Coins, etc. to UAE**

<b>Problems Faced by Exporters</b>	<b>Mean</b>	<b>Problems Faced by Exporters</b>	<b>Mean</b>
Non availability of raw material	3.17	Tariff barriers	4.50
Poor infrastructure	2.67	Non tariff barriers	4.17
Financing difficulties	2.83	Problem in preparing documents	2.67
Shortage of skilled manpower and training	4.50	Regulatory delays or red tape	2.83
Increased costs of production	3.33	Problems related to Special Economic Zones in India	2.67
Delivery problems	3.00	Corruption, informal payments	3.50
Increased transportation cost	2.83	Competitions from other countries	4.00
Fluctuations in exchange rate	4.50	Competitor country's products are cheaper than your products	3.67
Recession in world market	4.33	Competitor country's products have better quality than your products	4.00
Licensing requirement policies	3.33	Problem of subsidies by developed countries	3.00

Source: Primary Survey.

**Table 8.2: Different Areas where Exporters Need Government's Assistance: Pearls, Precious Stones, Metals, Coins, etc.**

<b>Areas Need Government's Assistance</b>	<b>Mean</b>	<b>Areas Need Government's Assistance</b>	<b>Mean</b>
Reduction in tariff rates	4.00	Proper utilization of government expenditure on export promotion activities	4.00
Training programmes for Workers	4.33	Government should set up joint venture abroad	3.17
Design and development centers to be set-up	4.17	Duty free imports for export oriented firms	4.67
Quality of infrastructure to be improved	3.67	Formulation of strategic policies for industrial upgradation	3.83
Easy availability of capital	3.50	Increase in investment for improving productive capacities	3.33
Marketing and promotion efforts	4.50	Government should focus on the operations of Special Economic Zones in India	3.67
Control room for exports	4.17	Proper management of information	4.33
Training facility for export marketing	4.67		

Source: Primary Survey.

Use of traditional methods of polishing and manufacturing of gems and jewellery is another major problem for Indian exporters. Some players of this sector use the same type of tools in the process of cutting and polishing jewellery as were used a century ago that leads to the lack of productivity. Therefore, exporters from this sector need the government assistance in order to improve their export activities. Table 8.2 shows the areas where they need government support. It includes reduction in tariff rates; training programmes for workers; design and development centers to be set-up; marketing and promotion efforts; control room for exports; training facility for export marketing; proper utilization of government expenditure on export promotion activities; duty free imports for export oriented firms; and proper management of information.

### **Mineral Fuels, Oils, Distillation Products, etc.**

Three exporters responded to the questionnaire for this commodity. Their exports comprise naphtha, met coke, foundry coke, coal, lubricant grease and synthetic cutting oil, etc. One exporter has experienced in UAE market for a period of between 2-5 years and two exporters have experienced between 6-10 years. One exporter export 10 per cent to 25 per cent to UAE of their total exports. Two exporters export 25 per cent to 50 per cent to UAE of their total exports. Their main competitor countries in UAE market are Saudi Arabia, Kuwait and China. The key problems and difficulties faced by Indian exporters when they export to UAE are summarized in table 8.3. From this table, it is clear that there are three major problems in case of export of mineral fuels, oils, distillation products, etc. These include increased transportation cost; fluctuations in exchange rate; and recession in world market. However, India's international exports of oil products are very less but UAE contribute larger share in India's total exports of these products where naphtha and coal plays an important role. Naphtha is used as a raw material to produce polymer and it is also used in the manufacturing of motor spirit. In India polymer production is based on gas as well as naphtha. Therefore, demand for naphtha is increasing recently from the polymer sector in India and growing domestic demand for naphtha leads to fall in exports of this commodity. Further, table 8.4 shows the areas where the exporters want government support to improve their export business in UAE market. It includes formulation of strategic policies for industrial upgradation; and increase in investment for improving productive capacities.

**Table 8.3: Problems Faced by Indian Exporters of Mineral Fuels, Oils, Distillation Products, etc. to UAE**

<b>Problems Faced by Exporters</b>	<b>Mean</b>	<b>Problems Faced by Exporters</b>	<b>Mean</b>
Non availability of raw material	3.00	Tariff barriers	3.67
Poor infrastructure	3.33	Non tariff barriers	3.33
Financing difficulties	3.00	Problem in preparing documents	3.00
Shortage of skilled manpower and training	3.33	Regulatory delays or red tape	3.00
Increased costs of production	3.67	Problems related to Special Economic Zones in India	3.33
Delivery problems	3.67	Corruption, informal payments	3.33
Increased transportation cost	4.33	Competitions from other countries	3.67
Fluctuations in exchange rate	4.33	Competitor country's products are cheaper than your products	2.00
Recession in world market	4.00	Competitor country's products have better quality than your products	2.67
Licensing requirement policies	3.67	Problem of subsidies by developed countries	3.67

Source: Primary Survey.

**Table 8.4: Different Areas where Exporters Need Government's Assistance: Mineral Fuels, Oils, Distillation Products, etc.**

<b>Areas Need Government's Assistance</b>	<b>Mean</b>	<b>Areas Need Government's Assistance</b>	<b>Mean</b>
Reduction in tariff rates	3.33	Proper utilization of government expenditure on export promotion activities	3.67
Training programmes for Workers	2.67	Government should set up joint venture abroad	3.33
Design and development centers to be set-up	2.67	Duty free imports for export oriented firms	3.33
Quality of infrastructure to be improved	3.67	Formulation of strategic policies for industrial upgradation	4.33
Easy availability of capital	3.00	Increase in investment for improving productive capacities	4.33
Marketing and promotion efforts	3.67	Government should focus on the operations of Special Economic Zones in India	3.33
Control room for exports	3.67	Proper management of information	3.00
Training facility for export marketing	2.67		

Source: Primary Survey.

### **Articles of Apparel, Accessories, Not Knit or Crochet**

Seven exporters responded to the questionnaire. Their exports comprise readymade garments, girl's tops, tunic, shirts, shawls, scarves, stoles, lycra suiting, polyester cotton fabrics and georgette suits. Two exporters have experienced in UAE market for a period up to 1 year, then followed by two exporters have experienced between 2-5 years and three exporters experienced 6-10 years. Two exporters export 0 per cent to 10 per cent to UAE of their total exports. Three exporters export 10 per cent to 25 per cent and two exporters export 25 per cent to 50 per cent to UAE of their total exports. Their main competitor countries in UAE market are China, USA and Germany. Table 8.5 shows the major problems faced by Indian exporters when they export to UAE. These include shortage of skilled manpower and training; increased cost of production; increased transportation cost; and competitions from other countries. Exporters of this commodity are not able to sell their products in UAE market because of lack of information regarding proper channel of export and hence, they have to restrict themselves to the domestic market. Some exporters are facing problem of non-recovery of dues and the problem of cancellation of orders. Indian exports are also less competitive in terms of price as compared to China, Bangladesh, Pakistan and Vietnam, etc.

**Table 8.5: Problems Faced by Indian Exporters of Articles of Apparel, Accessories, Not Knit or Crochet to UAE**

<b>Problems Faced by Exporters</b>	<b>Mean</b>	<b>Problems Faced by Exporters</b>	<b>Mean</b>
Non availability of raw material	2.86	Tariff barriers	3.43
Poor infrastructure	3.29	Non tariff barriers	3.00
Financing difficulties	3.43	Problem in preparing documents	3.71
Shortage of skilled manpower and training	4.43	Regulatory delays or red tape	3.71
Increased costs of production	4.14	Problems related to Special Economic Zones in India	3.43
Delivery problems	2.71	Corruption, informal payments	3.86
Increased transportation cost	4.00	Competitions from other countries	4.29
Fluctuations in exchange rate	3.57	Competitor country's products are cheaper than your products	3.43
Recession in world market	2.86	Competitor country's products have better quality than your products	3.00
Licensing requirement policies	2.86	Problem of subsidies by developed countries	3.57

Source: Primary Survey.

**Table 8.6: Different Areas where Exporters Need Government's Assistance:  
Articles of Apparel, Accessories, Not Knit or Crochet**

<b>Areas Need Government's Assistance</b>	<b>Mean</b>	<b>Areas Need Government's Assistance</b>	<b>Mean</b>
Reduction in tariff rates	3.71	Proper utilization of government expenditure on export promotion activities	3.14
Training programmes for Workers	4.57	Government should set up joint venture abroad	2.86
Design and development centers to be set-up	4.71	Duty free imports for export oriented firms	3.29
Quality of infrastructure to be improved	3.00	Formulation of strategic policies for industrial upgradation	4.00
Easy availability of capital	3.57	Increase in investment for improving productive capacities	3.86
Marketing and promotion efforts	4.29	Government should focus on the operations of Special Economic Zones in India	3.14
Control room for exports	3.71	Proper management of information	3.86
Training facility for export marketing	4.00		

Source: Primary Survey.

Indian not-knit garment exporters usually face price bargaining problems, but they are not able to offer low prices due to their high input cost. Cost of Indian textile products is higher because of bottlenecks in custom procedures, poor infrastructure, unavailability of quality raw material, power shortage. Also, the modernization or the use of latest technology is very poor in textile sector and this increases the cost of the product. So, in order to reduce such kind of problems, exporters need assistance from the government. This has been summarized in table 8.6. It includes training programmes for workers; design and development centers to be set-up; marketing and promotion efforts; training facility for export marketing; and formulation of strategic policies for industrial upgradation.

### **Electrical, Electronic Equipment**

Five exporters responded to the questionnaire. Their exports comprise electric motor, automobile spare parts, engineering goods, electronic items, LED TVs, DVD and sound bar. One exporter has experienced in UAE market for a period of between 2-5 years, then followed by two exporters have experienced between 6-10 years and two exporters experienced 11-15 years. One exporter export 10 per cent to 25 per cent to UAE

of their total exports. Four exporters export 25 per cent to 50 per cent to UAE of their total exports. Their main competitor countries in UAE market are Japan and China.

**Table 8.7: Problems Faced by Indian Exporters of Electrical, Electronic Equipment to UAE**

<b>Problems Faced by Exporters</b>	<b>Mean</b>	<b>Problems Faced by Exporters</b>	<b>Mean</b>
Non availability of raw material	2.80	Tariff barriers	4.00
Poor infrastructure	3.40	Non tariff barriers	4.20
Financing difficulties	3.40	Problem in preparing documents	3.40
Shortage of skilled manpower and training	3.80	Regulatory delays or red tape	3.60
Increased costs of production	4.00	Problems related to Special Economic Zones in India	3.40
Delivery problems	2.80	Corruption, informal payments	3.80
Increased transportation cost	4.00	Competitions from other countries	4.40
Fluctuations in exchange rate	4.00	Competitor country's products are cheaper than your products	4.20
Recession in world market	3.80	Competitor country's products have better quality than your products	3.80
Licensing requirement policies	4.20	Problem of subsidies by developed countries	3.80

Source: Primary Survey.

**Table 8.8: Different Areas where Exporters Need Government's Assistance: Electrical, Electronic Equipment**

<b>Areas Need Government's Assistance</b>	<b>Mean</b>	<b>Areas Need Government's Assistance</b>	<b>Mean</b>
Reduction in tariff rates	3.60	Proper utilization of government expenditure on export promotion activities	3.80
Training programmes for Workers	2.80	Government should set up joint venture abroad	3.00
Design and development centers to be set-up	4.20	Duty free imports for export oriented firms	3.80
Quality of infrastructure to be improved	3.40	Formulation of strategic policies for industrial upgradation	3.80
Easy availability of capital	2.80	Increase in investment for improving productive capacities	4.20
Marketing and promotion efforts	4.20	Government should focus on the operations of Special Economic Zones in India	3.60
Control room for exports	3.80	Proper management of information	3.80
Training facility for export marketing	4.40		

Source: Primary Survey.



However, UAE has become the second largest destination of India's electronic products. But, the exporters from this sector face so many challenges when they export their products to UAE. Table 8.7 shows there are eight key challenges in case of export of electrical and electronic equipments, etc. All the eight problems had a mean score of 4 and above. These include increased costs of production; increased transportation cost; fluctuations in exchange rate; licensing requirement policies; tariff barriers; non tariff barriers; competitions from other countries; and competitor country's products are cheaper than your products. Also, inadequate infrastructure in India hinders the competitiveness of its electronic industry in international market. New technologies, changing standards and shorter product life cycles constantly challenge the exporters of electronic goods. That is why UAE increasing its imports of upgraded electronic gadgets from Japan.

Therefore, to keep a step ahead of the competition and to satisfy the UAE customers' changing demand, Indian electronic industry should focus on new technology developments. Also, less expenditure on Research and Development by this industry increases India's dependence on electronic imports that have been growing over the years. Thus, it is important to increase the Research and Development programmes in electronic industry. This will help in improving the Indian electronic industry and will also promote the Indian products in international market. Table 8.8 also shows some areas where exporters need government support. It includes design and development centers to be set-up; marketing and promotion efforts; training facility for export marketing; and increase in investment for improving productive capacities.

### **Nuclear Reactors, Boiler, Machinery, etc.**

Five exporters responded to the questionnaire. Their exports comprise machine tools, agricultural machinery, printing rollers, machinery spare parts and generator sets. One exporter has experienced in UAE market for a period of between 16-20 years which export 0 per cent to 10 per cent to UAE of their total exports. Two exporters have experienced between 6-10 years and two exporters experienced 11-15 years. Three exporters export 10 per cent to 25 per cent and one exporter export 25 per cent to 50 per cent to UAE of their total exports. Their main competitor countries in UAE market are USA, Japan and China.

**Table 8.9: Problems Faced by Indian Exporters of Nuclear Reactors,  
Boiler, Machinery, etc. to UAE**

<b>Problems Faced by Exporters</b>	<b>Mean</b>	<b>Problems Faced by Exporters</b>	<b>Mean</b>
Non availability of raw material	3.40	Tariff barriers	3.80
Poor infrastructure	2.80	Non tariff barriers	3.60
Financing difficulties	4.00	Problem in preparing documents	2.80
Shortage of skilled manpower and training	2.80	Regulatory delays or red tape	3.20
Increased costs of production	4.40	Problems related to Special Economic Zones in India	3.20
Delivery problems	4.00	Corruption, informal payments	3.60
Increased transportation cost	4.40	Competitions from other countries	4.00
Fluctuations in exchange rate	4.40	Competitor country's products are cheaper than your products	3.80
Recession in world market	3.80	Competitor country's products have better quality than your products	3.20
Licensing requirement policies	3.80	Problem of subsidies by developed countries	3.80

Source: Primary Survey.

**Table 8.10: Different Areas where Exporters Need Government's Assistance:  
Nuclear Reactors, Boiler, Machinery, etc.**

<b>Areas Need Government's Assistance</b>	<b>Mean</b>	<b>Areas Need Government's Assistance</b>	<b>Mean</b>
Reduction in tariff rates	3.60	Proper utilization of government expenditure on export promotion activities	4.40
Training programmes for Workers	3.00	Government should set up joint venture abroad	4.20
Design and development centers to be set-up	3.40	Duty free imports for export oriented firms	2.00
Quality of infrastructure to be improved	3.40	Formulation of strategic policies for industrial upgradation	3.80
Easy availability of capital	3.20	Increase in investment for improving productive capacities	3.80
Marketing and promotion efforts	4.00	Government should focus on the operations of Special Economic Zones in India	3.00
Control room for exports	3.00	Proper management of information	3.60
Training facility for export marketing	3.40		

Source: Primary Survey.

In case of India's exports of nuclear reactors, boiler, machinery, UAE became the second largest market only after USA. But, the value of India's export of this product to UAE has been decline since 2012-13. This clearly reflects the loss of competitiveness in domestic industries. This has also been affected by the substantial increase in protectionism by way of technical barriers to trade. Table 8.9 shows some major problems facing by Indian exporters of this sector when they export in UAE market. These include financing difficulties; increased costs of production; delivery problems; increased transportation cost; fluctuations in exchange rate; and competitions from other countries. Further, table 8.10 shows in which areas exporters need help from the government in order to improve their export activities. It includes marketing and promotion efforts; proper utilization of government expenditure on export promotion activities; and government should set up joint venture abroad.

### **Cereals**

Eight exporters responded to the questionnaire. Their exports comprise basmati rice, corn flour, brown rice, wheat, pickle, cereal, maize, salt, parmal rice, sugar, organic spices and paddy seeds. Two exporters have experienced in UAE market for a period of between 6-10 years, then followed by four exporters have experienced between 11-15 years and two exporters experienced 16-20 years. Two exporters export 10 per cent to 25 per cent to UAE of their total exports. Four exporters export 25 per cent to 50 per cent and two exporters export 50 per cent to 75 per cent to UAE of their total exports. Their main competitor countries in UAE market are Brazil, Pakistan, Nigeria and Mexico. These countries sell their products at lower prices but products' quality is marginally inferior. Indian exporters of above mentioned agriculture products are facing lot of difficulties in export activities. These problems have been summarized in table 8.11. These are as follows: financing difficulties; increased transportation cost; licensing requirement policies; problem in preparing documents; regulatory delays or red tape; corruption, informal payments; and competitions from other countries. Poor product quality, insufficient infrastructure facility for cleaning, lack of credit, scientific methods of processing, packaging of the products are some another challenges facing by exporters. One of the exporters mentioned that the available market information services are restricted to a few areas and sections and often fails to identify the factors to get a

competitive edge in export of rice, wheat and spices. Also, lack of awareness among the exporters about the UAE market is the major challenge for them.

**Table 8.11: Problems Faced by Indian Exporters of Cereals to UAE**

<b>Problems Faced by Exporters</b>	<b>Mean</b>	<b>Problems Faced by Exporters</b>	<b>Mean</b>
Non availability of raw material	2.00	Tariff barriers	3.75
Poor infrastructure	3.50	Non tariff barriers	3.88
Financing difficulties	4.13	Problem in preparing documents	4.63
Shortage of skilled manpower and training	3.25	Regulatory delays or red tape	4.25
Increased costs of production	3.63	Problems related to Special Economic Zones in India	3.25
Delivery problems	2.38	Corruption, informal payments	4.25
Increased transportation cost	4.00	Competitions from other countries	4.13
Fluctuations in exchange rate	3.38	Competitor country's products are cheaper than your products	3.00
Recession in world market	3.38	Competitor country's products have better quality than your products	2.75
Licensing requirement policies	4.13	Problem of subsidies by developed countries	3.38

Source: Primary Survey.

**Table 8.12: Different Areas where Exporters Need Government's Assistance:**

**Cereals**

<b>Areas Need Government's Assistance</b>	<b>Mean</b>	<b>Areas Need Government's Assistance</b>	<b>Mean</b>
Reduction in tariff rates	3.75	Proper utilization of government expenditure on export promotion activities	4.50
Training programmes for Workers	4.00	Government should set up joint venture abroad	4.00
Design and development centers to be set-up	4.13	Duty free imports for export oriented firms	2.88
Quality of infrastructure to be improved	3.75	Formulation of strategic policies for industrial upgradation	4.13
Easy availability of capital	4.25	Increase in investment for improving productive capacities	4.00
Marketing and promotion efforts	4.38	Government should focus on the operations of Special Economic Zones in India	3.88
Control room for exports	4.25	Proper management of information	4.25
Training facility for export marketing	3.75		

Source: Primary Survey.

Therefore, to reduce these difficulties in export market, exporters need assistance from the government. This has been summarized in table 8.12. It includes training programmes for Workers; design and development centers to be set-up; easy availability of capital; marketing and promotion efforts; control room for exports; proper utilization of government expenditure on export promotion activities; government should set up joint venture abroad; formulation of strategic policies for industrial upgradation; increase in investment for improving productive capacities; and proper management of information.

### **Articles of Iron or Steel**

Four exporters responded to the questionnaire. Their exports comprise nut, bolts, iron grills, threaded rods, articles of steel, blades and kitchen sinks. One exporter has experienced in UAE market for a period of between 6-10 years, then followed by two exporters have experienced between 11-15 years and one exporter experienced 16-20 years. One exporter export 10 per cent to 25 per cent to UAE of their total exports. Two exporters export 25 per cent to 50 per cent and one exporter export 50 per cent to 75 per cent to UAE of their total exports. Their main competitor countries in UAE market are China, USA, Japan and South Korea. The key problems faced by Indian exporters when they export to UAE are summarized in table 8.13. From this table, it is clear that there are seven major problems in case of export of articles of iron or steel. All the seven problems had a mean score of 4 and above. These include shortage of skilled manpower and training; increased costs of production; increased transportation cost; fluctuations in exchange rate; recession in world market; problem in preparing documents; and problems related to special economic zones in India. Also, the developed countries are set with latest technologies capable of converting raw material into final goods on a large scale. On the other hand, Indian industries suffer from lack of technical knowledge and modern tools. Therefore, they have to use outdated technologies which lead to loss in international markets. Hence, to reduce these difficulties in export market, exporters want government support and this has been summarized in table 8.14. It includes quality of infrastructure to be improved; easy availability of capital; marketing and promotion efforts; duty free imports for export oriented firms; formulation of strategic policies for industrial upgradation; government should focus on the operations of special economic zones in India; and proper management of information.

**Table 8.13: Problems Faced by Indian Exporters of Articles of Iron or Steel to UAE**

<b>Problems Faced by Exporters</b>	<b>Mean</b>	<b>Problems Faced by Exporters</b>	<b>Mean</b>
Non availability of raw material	3.50	Tariff barriers	3.75
Poor infrastructure	3.50	Non tariff barriers	3.75
Financing difficulties	3.50	Problem in preparing documents	4.00
Shortage of skilled manpower and training	4.25	Regulatory delays or red tape	3.75
Increased costs of production	4.50	Problems related to Special Economic Zones in India	4.00
Delivery problems	3.75	Corruption, informal payments	3.50
Increased transportation cost	4.25	Competitions from other countries	2.75
Fluctuations in exchange rate	4.00	Competitor country's products are cheaper than your products	3.50
Recession in world market	4.00	Competitor country's products have better quality than your products	3.50
Licensing requirement policies	3.75	Problem of subsidies by developed countries	4.50

Source: Primary Survey.

**Table 8.14: Different Areas where Exporters Need Government's Assistance:****Articles of Iron or Steel**

<b>Areas Need Government's Assistance</b>	<b>Mean</b>	<b>Areas Need Government's Assistance</b>	<b>Mean</b>
Reduction in tariff rates	3.50	Proper utilization of government expenditure on export promotion activities	3.75
Training programmes for Workers	3.50	Government should set up joint venture abroad	3.50
Design and development centers to be set-up	3.75	Duty free imports for export oriented firms	4.25
Quality of infrastructure to be improved	4.25	Formulation of strategic policies for industrial upgradation	4.00
Easy availability of capital	4.75	Increase in investment for improving productive capacities	3.75
Marketing and promotion efforts	4.25	Government should focus on the operations of Special Economic Zones in India	4.00
Control room for exports	3.25	Proper management of information	4.00
Training facility for export marketing	3.75		

Source: Primary Survey.

### Articles of Apparel, Accessories, Knit or Crochet

Seven exporters responded to the questionnaire. Their exports comprise cotton knitted, synthetic garments, blankets, lycra jersey, t-shirts, velour and terry knitted fabrics, crocheted dress, pull overs and polyester fabrics. Three exporters have experienced in UAE market for a period of between 6-10 years, then followed by three exporters have experienced between 11-15 years and one exporter experienced 16-20 years. Two exporters export 0 per cent to 10 per cent to UAE of their total exports. Four exporters export 10 per cent to 25 per cent and one exporter export 25 per cent to 50 per cent to UAE of their total exports. Their main competitor countries in UAE market are China, USA and Germany. Exporters of knit or crochet garments faces almost same kind of problems as in the case of exporters of not knitted garments. Their major problems for this commodity are given in table 8.15. These are as follows: increased transportation cost; licensing requirement policies; tariff barriers; non tariff barriers; problem in preparing documents; regulatory delays or red tape; and problems related to special economic zones in India. The lack of availability of skilled labour is another problem in this sector. Use of advanced technology and skilled labour needs for institutional training to skilled manpower in order to meet the changing demand for a product in UAE market.

**Table 8.15: Problems Faced by Indian Exporters of Articles of Apparel, Accessories, Knit or Crochet to UAE**

<b>Problems Faced by Exporters</b>	<b>Mean</b>	<b>Problems Faced by Exporters</b>	<b>Mean</b>
Non availability of raw material	3.57	Tariff barriers	4.29
Poor infrastructure	3.29	Non tariff barriers	4.14
Financing difficulties	3.43	Problem in preparing documents	4.14
Shortage of skilled manpower and training	3.57	Regulatory delays or red tape	4.00
Increased costs of production	3.86	Problems related to Special Economic Zones in India	4.00
Delivery problems	3.71	Corruption, informal payments	3.71
Increased transportation cost	4.00	Competitions from other countries	3.71
Fluctuations in exchange rate	3.57	Competitor country's products are cheaper than your products	3.71
Recession in world market	3.86	Competitor country's products have better quality than your products	3.86
Licensing requirement policies	4.00	Problem of subsidies by developed countries	3.86

Source: Primary Survey.

**Table 8.16: Different Areas where Exporters Need Government’s Assistance:  
Articles of Apparel, Accessories, Knit or Crochet**

Areas Need Government’s Assistance	Mean	Areas Need Government’s Assistance	Mean
Reduction in tariff rates	3.86	Proper utilization of government expenditure on export promotion activities	3.57
Training programmes for Workers	4.00	Government should set up joint venture abroad	4.00
Design and development centers to be set-up	4.00	Duty free imports for export oriented firms	4.14
Quality of infrastructure to be improved	3.43	Formulation of strategic policies for industrial upgradation	4.57
Easy availability of capital	4.00	Increase in investment for improving productive capacities	4.57
Marketing and promotion efforts	3.71	Government should focus on the operations of Special Economic Zones in India	4.86
Control room for exports	3.86	Proper management of information	4.29
Training facility for export marketing	3.71		

Source: Primary Survey.

But, lack of proper training facilities; institutions and willingness; and high opportunity cost to spare time are the main factors contributing to huge skill gap which directly affect negatively Indian exports of these products. Therefore, to increase exports in UAE market, exporters need government help to facilitate them. This has been summarized in table 8.16. It includes training programmes for workers; design and development centers to be set-up; easy availability of capital; government should set up joint venture abroad; duty free imports for export oriented firms; formulation of strategic policies for industrial upgradation; increase in investment for improving productive capacities; government should focus on the operations of special economic zones in india; and proper management of information. Also, some knitting & knitwear service centers should be set up in different parts of the country. There is a need to start some courses to develop a specialized skilled manpower for the industry.

### **Manmade Filaments**

Six exporters responded to the questionnaire. Their exports comprise fleece fabric, rib knit fabric, sewing thread, woolen yarn, knitting yarn, polyester yarn, acrylic yarn,



cotton and cotton yarn. Four exporters have experienced in UAE market for a period of between 6-10 years, then followed by two exporters have experienced between 11-15 years. Four exporters export 10 per cent to 25 per cent and two exporters export 25 per cent to 50 per cent to UAE of their total exports. Their main competitor countries in UAE market are China, USA and Japan. The major problem in exports of yarn is that increasing cost of Indian yarn. Costs of both man-made yarn and cotton yarn have been increased during last few years. It adversely impacted the margins of fabric manufacturers which tend to fall in exports of yarn in international market. Therefore, it has directly affected on Indian exports of yarn in UAE market. UAE has increased its demand for these products from China due to lower prices offered by China. Some other key problems faced by Indian exporters are given in table 8.17. These include increased transportation cost; fluctuations in exchange rate; non tariff barriers; and competitions from other countries. To remove these problems exporters need government's assistance which has been summarized in table 8.18. These are as follows: marketing and promotion efforts; control room for exports; training facility for export marketing; proper utilization of government expenditure on export promotion activities; government should set up joint venture abroad; and proper management of information.

**Table 8.17: Problems Faced by Indian Exporters of Manmade Filaments to UAE**

<b>Problems Faced by Exporters</b>	<b>Mean</b>	<b>Problems Faced by Exporters</b>	<b>Mean</b>
Non availability of raw material	1.83	Tariff barriers	3.67
Poor infrastructure	2.33	Non tariff barriers	4.00
Financing difficulties	3.50	Problem in preparing documents	3.83
Shortage of skilled manpower and training	3.33	Regulatory delays or red tape	3.67
Increased costs of production	2.33	Problems related to Special Economic Zones in India	3.50
Delivery problems	3.50	Corruption, informal payments	3.83
Increased transportation cost	4.33	Competitions from other countries	3.67
Fluctuations in exchange rate	4.17	Competitor country's products are cheaper than your products	3.17
Recession in world market	3.67	Competitor country's products have better quality than your products	3.17
Licensing requirement policies	3.33	Problem of subsidies by developed countries	2.83

Source: Primary Survey.

**Table 8.18: Different Areas where Exporters Need Government's Assistance:****Manmade Filaments**

Areas Need Government's Assistance	Mean	Areas Need Government's Assistance	Mean
Reduction in tariff rates	3.33	Proper utilization of government expenditure on export promotion activities	4.33
Training programmes for Workers	3.83	Government should set up joint venture abroad	4.00
Design and development centers to be set-up	3.67	Duty free imports for export oriented firms	3.50
Quality of infrastructure to be improved	3.83	Formulation of strategic policies for industrial upgradation	3.83
Easy availability of capital	3.67	Increase in investment for improving productive capacities	3.50
Marketing and promotion efforts	4.17	Government should focus on the operations of Special Economic Zones in India	3.67
Control room for exports	4.00	Proper management of information	4.00
Training facility for export marketing	4.33		

Source: Primary Survey.

**Iron and Steel**

Five exporters responded to the questionnaire. Their exports comprise cable wire, shutter spring, scrap, iron scrap, steel bar and steel wire. Two exporters have experienced in UAE market for a period of between 6-10 years, then followed by Three exporters have experienced between 11-15 years. Three exporters export 10 per cent to 25 per cent and two exporters export 25 per cent to 50 per cent to UAE of their total exports. Their main competitor countries in UAE market are China, Turkey and Qatar and Thailand. India's export market for iron and steel has been more diversified. UAE has emerged as India's topmost destination for its export of iron and steel products. It consists of raw materials or of low value added intermediates thus the main challenge in this sector also is to increase value addition through technological upgradation. Besides, there are also some major challenges facing by Indian exporters when they export these products in UAE market. These problems are summarized in table 8.19. These are basically increased transportation cost; recession in world market; licensing requirement policies; corruption, informal payments; competitions from other countries; competitor country's products are cheaper

than your products; competitor country's products have better quality than your products; and problem of subsidies by developed countries.

**Table 8.19: Problems Faced by Indian Exporters of Iron and Steel to UAE**

<b>Problems Faced by Exporters</b>	<b>Mean</b>	<b>Problems Faced by Exporters</b>	<b>Mean</b>
Non availability of raw material	2.00	Tariff barriers	3.80
Poor infrastructure	3.60	Non tariff barriers	3.80
Financing difficulties	3.60	Problem in preparing documents	3.60
Shortage of skilled manpower and training	3.60	Regulatory delays or red tape	3.60
Increased costs of production	3.80	Problems related to Special Economic Zones in India	3.40
Delivery problems	3.40	Corruption, informal payments	4.00
Increased transportation cost	4.00	Competitions from other countries	4.20
Fluctuations in exchange rate	3.80	Competitor country's products are cheaper than your products	4.00
Recession in world market	4.00	Competitor country's products have better quality than your products	4.00
Licensing requirement policies	4.00	Problem of subsidies by developed countries	4.00

Source: Primary Survey.

**Table 8.20: Different Areas where Exporters Need Government's Assistance:  
Iron and Steel**

<b>Areas Need Government's Assistance</b>	<b>Mean</b>	<b>Areas Need Government's Assistance</b>	<b>Mean</b>
Reduction in tariff rates	4.00	Proper utilization of government expenditure on export promotion activities	4.20
Training programmes for Workers	4.20	Government should set up joint venture abroad	4.00
Design and development centers to be set-up	4.00	Duty free imports for export oriented firms	3.80
Quality of infrastructure to be improved	4.20	Formulation of strategic policies for industrial upgradation	3.80
Easy availability of capital	4.00	Increase in investment for improving productive capacities	3.60
Marketing and promotion efforts	3.60	Government should focus on the operations of Special Economic Zones in India	4.00
Control room for exports	3.80	Proper management of information	3.60
Training facility for export marketing	4.40		

Source: Primary Survey.

Further, table 8.20 shows analysis of the areas where exporters need assistance to increase their export products to UAE. It includes reduction in tariff rates; training programmes for workers; design and development centers to be set-up; quality of infrastructure to be improved; easy availability of capital; training facility for export marketing; proper utilization of government expenditure on export promotion activities; government should set up joint venture abroad; and government should focus on the operations of special economic zones in india.

#### **8.4 Conclusion**

This chapter shows the analysis of problems faced by Indian exporters of major commodities to UAE. The value of India's top ten export products in UAE market fluctuated over the period. This is directly affected by challenges exist in India's domestic export policies and procedures. The analysis reveals that exporters of different commodities face different kind of problems when they export to UAE. There are also some common problems in export to UAE. These are mainly low upgradation of technology in Indian industries; less competitive in terms of price; shortage of skilled manpower in India due to lack of training institutions, etc. China is becoming the major rival country for Indian exporters of almost all the selected commodities. This occurs because China has cheap economic labour, infrastructure, technology and price competitiveness. All these factors cause increase in demand for Chinese products from UAE. Further, it was found that to maintain India's export share in UAE market, Indian exporters need government's assistance. The proper control of these problems will lead to an increase in exports from India. There is need to conduct some courses or training programmes for workers where they can learn how to use new technology and how to deal with changing demand for their products in UAE market. Also, they want from government to set-up design and development centers; availability of capital as well as duty free imports for export oriented firms. The documentation procedure should be short and easy so that most of the exporters don't get faded up with these procedures. There is need to formulate some strategic policies for industrial upgradation which will be helpful in expanding Indian export basket in UAE market.

## **CHAPTER 9**

### **CONCLUSION AND POLICY IMPLICATIONS**

India and UAE have shared economic and trade relationship through centuries. The trade between these two countries was mainly dominated by traditional items such as dates, pearls and fishes, which underwent a sharp change after the discovery and extraction of oil in UAE. Their economic and trade relations got flourished with the emergence of UAE as a unified entity in 1971. However, the real impetus started after the economic liberalization process started in India by early 1990s and about the same time, Dubai positioned itself as a regional trading hub. The volume of their bilateral trade increased when the two countries became a member of World Trade Organization in 1996. This increased volume shows that this is an exciting time in the history of India-UAE economic relations. Both the countries made so many efforts to strengthen these ties for mutual benefits.

With each passing day, merchandise trade between both the countries is rising rapidly. Their trade grew tremendously from US\$ 2,803.72 million in 1996-97 to US\$ 49,729.88 million in 2015-16. India's exports to UAE increased sharply, i.e. from US\$ 1,476.01 million in 1996-97 to US\$ 30,308.35 million in 2015-16. On the other side, India's imports from UAE increased from US\$ 1,327.71 million in 1996-97 to US\$ 19,421.53 million in 2015-16. During this period, there was less variability and more stability in case of India's exports to UAE, whereas India's imports from UAE were having more variability. It shows that India's balance of trade with UAE was remained in surplus except few years. The two economies have given more importance to their mutual trade links after signing an agreement of FTA between India and GCC region in 2004. Both the countries have played an important role in each other's economy. The role of India in UAE's international trade has increased from 5.98 per cent in 1996 to 11.10 per cent in 2015. India has already been emerged as an important trading partner of UAE. On the other side, role of UAE in India's foreign trade has been increased sharply. As is clear from the direction of India's foreign trade, the share of developed nations in India's total trade has decreased whereas the share of developing countries has increased. The share of UAE in India's exports and imports grew gradually from 4.41 per cent and 3.39 per cent

in 1996-97 to 11.57 per cent and 5.10 per cent in 2015-16 respectively. But, the mutual trade was limited by narrowness of their trade basket. However, UAE's export basket to India is found to be more concentrated or less diversified as compared to India's export basket to UAE. The two way trade was mainly dominated by two broad commodity groups i.e. pearls, precious stones, metals, coins, etc.; and mineral fuels, oils, distillation products, etc. Thus, the two countries contained exports and imports of differentiated commodities of the same industry. It shows that India and UAE still have to exploit their mutual trade potentials over a vast range of commodity groups. The main reasons for growth of trade in these two commodities were several initiatives taken by the government to promote the exports of the two commodities.

Further, Indian diaspora in UAE played a significant role in growth of their mutual trade. Indian migrant workers are working in Gulf countries since long. India was the only country which provided large workforce in GCC when it was facing the problem of shortage of labour in various projects such as oil refineries, recreational infrastructure and construction of industries, etc. Saudi Arabia and UAE became the leading destinations for Indian migrants. There has been rapid increase in the number of labour outflow from India to UAE over the past four decades. It was increased from 21,584 in 1970 to 2,268,200 in 2015. This number grew significantly especially after the year 2000 when the FTA was signed between India and GCC. The workers' concentration was actually high in UAE because they were receiving high remittance from UAE i.e. US\$ 12,573 million in 2015. Also, the government of India and the government of UAE signed Memorandum of Understanding in the field of manpower in year 2006, which was revised in year 2011. However, this MoU specified that all the Indian workers shall be protected under the regulation and labour law in UAE. But, migrant workers were continued to experience high level of exploitation and abuse in UAE. Further, Granger Causality model shows that there is uni directional Granger cause exists or in other words, trade has an effect on migration but migration doesn't affect trade. These two variables i.e. trade and migration has long run relationship, which will be helpful in the development and growth of India-UAE trade and economic relations in future. Besides, inflows and outflows of FDI of India and UAE have been examined. FDI is an important factor in economic growth. Emerging economies have not enough financial resources to compete with the developed

nations. Thus, foreign investment is an important source of these resources to the developing nations to compete with the advanced nations. Similarly, India and UAE as developing nations have put many efforts to attract foreign direct investments in order to meet their financial resources. This investment inflow in both the countries was higher than the outflow during the period from 1996 to 2015. Also, they have been emerged an important investors in each other's economy. Indian and UAE's several major companies were actively involved in pursuing investments and projects in both the countries. This played an important role in economic growth of the two. Total FDI from UAE to India was estimated to be around US\$ 3.01 billion in 2015. This made UAE position among the top ten investors in India. UAE have huge potential for investing in different sectors of Indian economy for their mutual advantage. The tourism sector is one of the fields that have high potential for future growth. Emiratis going to India are now using Indian health services, including spas and the ayurvedic establishments. The major UAE companies invested in India were Emaar Group, Al Nakheel, DP world, UAE tile manufacturer, Estisalat DB Telecom, ETA Star Group, SS Lootah Group, Emirates Techno Casting FZE, Damas Jewellery and Abu Dhabi Commercial Bank. Likewise, India has also emerged as one of the important investors in UAE. Total FDI from India to UAE was estimated to be around US\$ 1.45 billion in 2014. Indian companies have invested in several areas of UAE's economy. These areas are namely tourism, retail, service and manufacturing sector, electronic equipments, health, hospitality, etc. Indian companies such as Ashok Leyland, Mahindra, Dabur, Tata Power, Essar Steel Group, L&T, Punj Lloyd, Hinduja Group, etc. have carried projects in the UAE. The two economies have also established High Level Joint Task Force and Bilateral Investment Promotion and Protection Agreement to promote and facilitate the investment opportunities in both the countries. Despite favourable conditions for investment in both the countries, they are facing some problems. For example: Indian businessmen facing challenges due to different norms practised by UAE regarding FDI i.e. the electricity tariff system charged in Abu Dhabi is different from Sharjah and Dubai; Lack of updated database and official documents are some other challenges in process of investment flow and trade with UAE. The absence of printed documents related to economic policies, rules and regulations adversely impacts foreign investors. On the other hand, UAE also found fault with India

related to non-tariff barriers like import licensing, quantitative limits, export subsidies, mandatory testing and certification for a big number of merchandise items.

India's terms of trade with UAE depicts that its Net Barter Terms of Trade was favourable during the study period except 1998-99, 2005-06 and 2012-13. During these three years, the index was below hundred (i.e. 53.95, 39.77 and 95.42 respectively). However, during some periods, India's NBTT with UAE was favourable, but it was highly deteriorated due to increase in import price index and decrease in export price index. Fall in export unit value index mainly occurred because of fall in prices of jewellery and parts of precious metal except silver; nuts, iron or steel; woven hi-ten filament, nylon, polyamide or polyester; t-shirts, singlets and other vests, knit; and diamonds unworked or simply sawn, cleaved, etc. The ups and downs in both export as well as import unit value indices continued throughout the period but on the whole, result shows that imports from UAE were relatively cheaper than exports to UAE. Further, the unit value realisation approach has been used in order to give answer of the following two questions i.e. whether India has received higher prices for its exports to UAE; and whether India has paid higher prices for its imports from UAE. Result of this approach showed a mixed picture as India received higher prices for its exports to UAE than from most of the other major export destination countries in some cases and received lower prices from UAE than other major destinations in other cases. On the other side, India paid lower prices for a large number of its imports from UAE than it did to then major sources and in a some cases, it paid higher prices to UAE than it did to other competing countries.

The analysis of instability shows that India's export earnings from UAE were subject to very less fluctuations and these fluctuations occurred primarily due to the dominance of volume exported to UAE. It also reveals that UAE had stabilized effect on the value of eight commodities, volume of nine commodities and unit value of seven commodities. It indicates that UAE emerged as the most stable market for Indian exports which depicted that an increase in its import share from the pre-FTA period to the post-FTA period. Further, competitiveness of exports helps us in understanding the behavior and performance of India's exports in UAE market. During overall study period as well as sub periods, the actual increase in India's exports to UAE was majorly attributed to



positive demand effect and positive commodity composition effect which shows the specialization of India's exports to UAE were in right commodities. But, this actual increase remained below the potential during the whole study period, which shows the unsatisfactory performance of Indian exports. This was mainly due to negative competitiveness effect. This effect was positive only in case of mineral fuels, oils, distillation products, etc.; and manmade filaments. The exporters of other selected commodities were facing problems in competing globally on factors like product quality, product design, research and development, etc. This indicates that India didn't do well in showing the competitiveness edge over its exported commodities to UAE in both price and non-price factors.

The analysis of Revealed Comparative Advantage for India's exports to UAE shows that based on an aggregated data set, India had comparative advantage in 40 commodities in 1996, 37 commodities in 2005 and 38 commodities in 2015. At the disaggregated level of data, the results were almost different during all the years. Most of the commodities which rank among the top ten according to the index of RCA were not able to retain their place when ranked according to comparative advantage at the HS 6-digit constituent commodity level. On the other side, the results of RCA for UAE's exports to India were also exhibited the same pattern. Here, it is worth mentioning that the commodities in which India and UAE have comparative advantage constituted more than 60 per cent share in their exports to each other's economy.

Further, the analysis of problems faced by Indian exporters of major commodities to UAE shows that the Indian exporters of commodities such as pearls, precious stones, metals, coins, etc.; mineral fuels, oils, distillation products, etc.; articles of apparel, accessories, not knit or crochet; electrical, electronic equipment; nuclear reactors, boiler, machinery, etc.; cereals; articles of iron or steel; articles of apparel, accessories, knit or crochet; manmade filaments; and iron and steel, faces so many problems or difficulties when they export their product in UAE market. The major common problems are low upgradation of technology in Indian industries; less competitive in terms of price; shortage of skilled manpower in India due to lack of training institutions; increased transportation cost; fluctuations in exchange rate; tariff barriers; non tariff barriers; and competitions from other countries, etc. China has become the major rival country for

Indian exporters of almost all the selected commodities. This occurs because China has cheap economic labour, infrastructure, technology and price competitiveness. This led to increase in demand for Chinese products from UAE. Hence, to maintain India's export share in UAE market, Indian exporters need government's assistance.

### **Policy Implications**

On the basis of the study, following policy implications are offered to further strengthen India-UAE economic and trade relations:

As the findings reveal that though India-UAE trade is growing by leaps and bounds but still it is limited in the sense that trade basket is very narrow and restricted to only few commodity groups. Therefore, these two nations should focus on expanding their trade baskets and look upon the possibility of increasing trade in other commodity groups such as articles of apparel, accessories, not knit or crochet; electrical, electronic equipment; nuclear reactors, boiler, machinery, etc.; iron and steel; plastics and articles thereof; aluminium and articles thereof, etc. Further, to enhance their trade relations, the two countries should cooperate with each other bilaterally in areas like defence and security, so they can become partners in the global fight against extremism and terrorism. Hence, to enhance and sustain the growth of bilateral trade, both the countries should find out the existing potential and immediately start working to that side.

Further, it is suggested that the MoU in the field of manpower between two countries should specify that migrant laborers should not surrender their passports to UAE's employers or intermediaries at any stage. This is important because it is a main factor leading to forced worker situations and complaint procedure, so that workers can lodge their complaints without any fear of threats. There should also build a model for employment contracts and specification of minimum reference wages. In discussion with the relevant host country, it is important to make a plan for an efficient joint evaluation of the MoU before its automatic renewal, with a perspective to identifying required revisions or modifications. Government should work on latest technology to manage the migrant workers. Smart cards can be introduced, which contains all the relevant information related to the workers. One copy of that information should be given to the Indian embassies in host country.

To enhance investment cooperation between two countries, it is suggested that the tariff structure should be common within a country. Further, to strengthen transparency in trade and investment, India must work with the emirate to make official databases and policies widely accessible by placing them in the public domain and updating these regularly. Also, active state visits by high officials and business delegates should be increased on both sides.

To improve their terms of trade further, India need to increase its imports of those commodities in which UAE has capacity to export at globally competitive prices.

In order to reduce India's export instability, country should focus on maintenance of price and quality requirements of the importing country. Proper awareness needs to be given to the exporters on these aspects, so that the commodities with stabilized effect can be encouraged to sustain the long run export earnings of India.

If India wants to maintain its export growth with UAE in near future, policy makers should take some initiatives to make India as a center of globally competitive items. There is also need to focus on the appropriate economic policies and diversify the export basket along with better quality for increasing competitiveness of exported item lines. The countries should look upon those product lines which are gaining comparative advantage during the study period to achieve competitiveness in this rapidly globalization world.

To increase Indian exports to UAE market, there is need to formulate some strategic policies for industrial upgradation. The information related to the standard and regulations should be communicated to the exporters on time. Some courses or training programmes for workers should be organised so that they can learn how to use new technology and how to deal with changing demand for their products in UAE market. There should set-up design and development centers; easy availability of capital; and duty free imports for export oriented firms. The documentation procedure should be short and easy so that most of the exporters don't get faded up with these procedures. Thus, it specified some lines of action that would be helpful in gaining the benefits from the changing global scenario.

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## ANNEXURE- 1

### List of Agreements/MoUs Signed between India and UAE

No.	Agreements	Month/Year of Signing
1	Culture Cooperation Agreement	January 1975
2	Civil Aviation Agreement	March 1989
3	Double Tax Avoidance Agreement (DTAA)	April 1992
4	Agreement on trafficking in narcotics drugs and psychotropic substances	January 1994
5	Agreement on Mutual Assistance in Criminal Matters	October 1999
6	Extradition Treaty	October 1999
7	Agreement on judicial and judicial cooperation in civil and commercial matters for the service of summons, judicial documents, judicial commissions, execution of judgment and arbitral awards	October 1999
8	Information cooperation agreement between Emirates News Agency(WAM) and Press Trust of India(PTI)	April 2000
9	Channel carriage Agreement between Prasar Bharti and Emirates cable TV and Multimedia LLC (E-vision)	September 2000
10	Agreement concerning cooperation in the field of Defence	July 2003
11	MoU for cooperation in the field of Manpower	December 2006
12	Agreement for cooperation between Emirates Centre for Strategic Studies and Research (ECSSR), Abu Dhabi and Indian Council of World Affairs (ICWA)	December 2008
13	Framework agreement for developing Industrial Relations	March 2007
14	MoU on Technical Cooperation between Bureau of Indian Standards(BIS) and Emirates Authority for Standardization and Metrology	March 2007
15	MoU on Technical Cooperation in accreditation activities between National Accreditation Board for Testing and Calibration Laboratories and Emirates Authority for Standardization and Metrology	March 2007
16	MoU between Securities and Exchange Board of India(SEBI) and Emirates Securities and Commodities Authority (ESCA) for assistance and mutual cooperation on the exchange of information	March 2007
17	Agreement on Electronic International Money Order Services through IFS/STEFI	December 2007

18	MoU to hold Regular Political Consultation	June 2011
19	Security Cooperation Agreement	November 2011
20	Agreement on transfer of Sentenced Persons	November 2011
21	Agreement on Cooperation and Mutual Assistance in Custom Matters	April 2012
22	MoU on the establishment of a Joint Committee for Consular Affairs	April 2012
23	Bilateral Investment Promotion and Protection Agreement (BIPPA)	December 2013
24	Air Services Agreement between India and the UAE	January 2014
25	MoU on Renewable Energy Cooperation	January 2014
26	MoU in the field of Tourism (signed during the 11th Session of India-UAE Joint Committee Meeting held in New Delhi from September 2-3, 2015.)	September 2015
27	MoU on cooperation in Higher Education & Scientific Research (MoU signed during the 11th Session of India-UAE Joint Committee Meeting held in New Delhi from September 2-3, 2015.)	September 2015
28	MoU on Telecom Regulatory Authorities of India and UAE (MoU signed during the 11th Session of India-UAE Joint Committee Meeting held in New Delhi from September 2-3, 2015.)	September 2015
29	MoU On Establishing a Framework for Facilitating the Participation of UAE institutional investors in Infrastructure Investments in India	February 2016
31	General Framework Agreement on Renewable Energy Cooperation	February 2016
32	MoU on Technical Cooperation in Cyber Space and Combating Cyber Crime	February 2016
33	MoU between the Indian Space Research Organization and the UAE Space Agency on Cooperation in the Exploration and use of Outer Space for Peaceful Purposes	February 2016
34	MoU for bilateral cooperation between the Insurance Regulatory and Development Authority of India (IRDAI) and the Insurance Authority of UAE	February 2016
35	Executive Programme for Cultural Cooperation (EPCC) between India and UAE	February 2016
36	Letter of Intent between the Ministry of Skill Development and Entrepreneurship and National Qualifications Authority of UAE on Cooperation for Skill Development and Recognition of Qualifications	February 2016

37	MoU between Dubai Economic Council (DEC) and Export-Import Bank of India	February 2016
38	MoU between Reserve Bank of India and Central Bank of India on Currency Swaps	February 2016

**ANNEXURE- 2**

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**Questionnaire**

**Problems Faced by Indian Exporters of Major Commodities to UAE and Suggest Some Policy Implications for Improving their Trade Ties Further.**

Dear Respondent,

I am student of Lovely Professional University, conducting a study on “India- UAE Economic Relations: With Special Reference to Merchandise Trade” as part of my Ph.D Program. You are requested to spare some time for the information required in the survey. The information provided by you will be used for academic purpose only. Your participation is completely voluntary and all responses will be anonymous.

Heena Goel

**Section 1**

**General Information**

1. Factory/Unit/Organization Name:

Address

Contact person's name

Mobile

Email

2. Please specify the product(s) you export to UAE?

3. Please indicate duration of your firm's international experience in UAE market?

Up to 1 year	<input type="checkbox"/>	2-5 years	<input type="checkbox"/>
6-10 years	<input type="checkbox"/>	11-15 years	<input type="checkbox"/>
16-20 years	<input type="checkbox"/>	More than 20 years	<input type="checkbox"/>

4. What is the percentage share of your exports to UAE?

0-10%	<input type="checkbox"/>	10-25%	<input type="checkbox"/>
25-50%	<input type="checkbox"/>	50-75%	<input type="checkbox"/>
75-100%	<input type="checkbox"/>		

5. Which countries are your main competitors in UAE market?

China	<input type="checkbox"/>	USA	<input type="checkbox"/>
Switzerland	<input type="checkbox"/>	Saudi Arabia	<input type="checkbox"/>
Iran	<input type="checkbox"/>	Japan	<input type="checkbox"/>

Any other (please specify)

**Section 2**

**Problems/ Difficulties**

1. What problems do you normally encounter when you export to UAE?

Kindly tick your level of agreement with the following statements highlighting the problems/ difficulties faced by exporters on a likert scale of 1 to 5 where 1= Strongly Disagree, 2= Disagree, 3= Neither Agree or Disagree, 4= Agree, 5= Strongly Agree

		Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
S. No.	Problems faced by exporters	1	2	3	4	5
1	Non availability of raw material					



<b>2</b>	Poor infrastructure					
<b>3</b>	Financing difficulties					
<b>4</b>	Shortage of skilled manpower and training					
<b>5</b>	Increased costs of production					
<b>6</b>	Delivery problems					
<b>7</b>	Increased transportation cost					
<b>8</b>	Fluctuations in exchange rate					
<b>9</b>	Recession in world market					
<b>10</b>	Licensing requirement policies					
<b>11</b>	Tariff barriers					
<b>12</b>	Non tariff barriers					
<b>13</b>	Problem in preparing documents					
<b>14</b>	Regulatory delays or red tape					
<b>15</b>	Problems related to Special Economic Zones in India					
<b>16</b>	Corruption, informal payments					
<b>17</b>	Competitions from other countries					
<b>18</b>	Competitor country's products are cheaper than your products					
<b>19</b>	Competitor country's products have better quality than your products					
<b>20</b>	Problem of subsidies by developed countries					

3. In your opinion, are there other problems/ difficulties faced by exporters? If yes, kindly mention below:

**Section 3**  
**Suggestions/ Policy Implications**

1. In your opinion, which of the following areas need government's assistance?

Kindly tick your level of agreement with the following statements highlighting the areas need government's assistance on a likert scale of 1 to 5 where 1= Strongly Disagree, 2= Disagree, 3= Neither Agree or Disagree, 4= Agree, 5= Strongly Agree

		Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
S. No.	Areas need government's assistance	1	2	3	4	5
1	Reduction in tariff rates					
2	Training programmes for Workers					
3	Design and development centers to be set-up					
4	Quality of infrastructure to be improved					
5	Easy availability of capital					
6	Marketing and promotion efforts					
7	Control room for exports					
8	Training facility for export marketing					
9	Proper utilization of government expenditure on export promotion activities					
10	Government should set up joint venture abroad					
11	Duty free imports for export oriented firms					
12	Formulation of strategic policies for industrial upgradation					
13	Increase in investment for improving productive capacities					
14	Government should focus on the operations of Special Economic Zones in India					
15	Proper management of information					

2. In your opinion, are there other policy supports you need from the government? If yes, kindly mention below:

A Research Proposal  
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In partial fulfillment of the requirements for the award of degree of  
**DOCTOR OF PHILOSOPHY**  
**IN**  
**ECONOMICS**

**Submitted by:**

**Heena Goel**

**Supervised by:**

**Dr. Surinder Kumar Singla**

**FACULTY OF BUSINESS AND APPLIED ARTS**  
**LOVELY PROFESSIONAL UNIVERSITY**  
**PUNJAB**

## **INTRODUCTION**

During eighties and nineties, structural reforms and the new economic policies of foreign trade and investment had occurred all over the world. The openness of international trade has proposed variety of opportunities and scope for unconventional coalition in the world trade. This whole process has strengthened a believe among the nations that they cannot survive in isolation. With the intensive globalization, the bilateral and multilateral trade relations are getting strengthened. The growing economic interaction between India and United Arab Emirates (UAE) is the example for this. The data reveals that their economic relations especially the trade relations have grown at a tremendous pace. This is the result of these growing trade relations that UAE has already emerged as the top trading partner of India since 2009.

The economic relations between India and UAE are not established recently. In fact, their economic relations established centuries back through the establishment of cultural, religious and political relations. Further, the overall relationship between India and UAE were strengthened after the accession of His Highness Sheikh Zayed Bin Sultan Al Nahyan, ruler of Abu Dhabi in 1966 and then the formation of UAE federation in 1971. He made many efforts to improve relationship between the two countries (Government of India, 2013). UAE is one of the Gulf countries and it is worth mentioning that the entire Gulf region is the important trading partner for India because it provides many opportunities to India for cooperation in energy, trade, investment and manpower etc. But for India, UAE has remained the centre of attraction due to its trade sustainability and non-oil trade with UAE has a largest proportion in the overall trade (Dahiya, 2014).

Bilateral engagements between India and UAE have strengthened from time to time with their official visits. This includes Presidential visits, Prime ministerial visits, Foreign Ministers' visits and some other important ministerial visits at different levels. Foreign Affairs Minister of UAE; Abdullah Bin Zayed al Nahyan visited India on 17-18 May, 2012. In that meeting, both the countries have decided to explore opportunities in investments by setting up a joint task force. The energy requirement of India was also discussed in the meeting and UAE assured that in the coming future they will extend energy exports especially crude oil to India (Shrivastav, 2012).

India and UAE have also signed a number of Memorandum of Understanding (MoUs) covering various fields related to economic, political, hydrocarbons, science & technology and security cooperation. They signed first economic agreement for avoidance of double taxation on income and capital gains in April, 1992 and the treaty was notified in 1993. Further, to enhance their trade and economic connections, both the countries have revised their agreements many a times. Recently they have signed agreement related to mutual assistance in customs cooperation in April, 2012 to curb the customs violations or execution of ban/restriction. All these agreements and MoUs helped both the countries to intensify their trade relations.

UAE has also become one of the major destinations for non-resident Indians (NRIs). Thus, the movement of labour from India to UAE is also opening up the ways for stronger economic cooperation between the two countries. More than 1.5 million Indian people live in UAE and are performing an important role in its economic development (Gulf Research Centre, 2009). Further, Investment opportunities have also given an immense scope for establishing stable and long-run relationship between the two countries. The UAE investors prefer to invest mainly in the eastern economies, especially in India's developing sectors, namely real estate, retail sector, fertilizer industries and petrochemical due to their promises of high return on the foreign investments. UAE has been India's tenth biggest investor and had invested US \$2.36 billion in November, 2012 (Zakir Hussain, 2012). Several Indian companies have set up manufacturing segments either as in Special Economic Zones (SEZs) or as joint ventures. Indian companies such as ESSAR Steel Processing and Distribution, Dodsai, TCIL, L&T, Punj Lloyd, etc. have invested in the UAE. Prominent UAE companies, such as, DP World, RAK Group, EMAAR Group, Estisalat DB Telecom etc. have invested in various sectors of the Indian economy. Recently to strengthen their economic relations, India and UAE have signed an agreement to promote mutual investment i.e. bilateral investment promotion agreement (BIPA) and protection agreement. India has signed this investment agreement in order to obtain capital inflows from the UAE to finance their huge infrastructure projects (Federation of Indian Chambers of Commerce and Industry, 2013).

With all these developments in the relations of India and UAE, the trade interactions attracted much attention of researchers, academicians and policy makers. With each passing day, the trade connections between both the nations are increasing by leaps and bounds. India

and UAE trade increased basically after Liberalization, Privatization and Globalization (LPG) policies adopted by the former. After the adoption of LPG policies in India, the merchandise trade between both the countries increases rapidly in the last two decades (Embassy of India, 2013). With the growing trade, UAE ranked first in the list of India's top trading partners since 2009. UAE comprised 9.45 percent share in India's global trade in 2012. This growth of total trade with UAE is due to the growth of both exports and imports as UAE comprised 12.35 percent share in India's global exports and 7.73 percent share in India's global imports. Further, the India's export basket to UAE and UAE's export basket to India are also getting diversified as many items are included in these export baskets. India's major exports to UAE are readymade garments, manmade yarns, gems and jewellery, marine products and linoleum commodities etc. Whereas India's major imports from UAE are gold and silver, pearls, precious stones, ore, crude oil and chemicals etc. According to the Hongkong and Shanghai Banking Corporation (HSBC, 2013) UAE will remain India's top export destination in the years to 2030 due to robust demand growth in which non-oil export value has increased thirtyfold during the period 1981-2009. It is worth mentioning that India's imports from UAE also comprise non-oil products.

Thus, India and UAE merchandise trade has increased rapidly since 1991. However, their trade relations got momentum after the Free Trade Agreement (FTA) in 2006 between India and Gulf region. This FTA has paved the way for trade interaction between these two countries. Despite the tremendous growth in their merchandise trade, very few studies have been conducted to examine the overall picture of this growth. Whatever studies are available are either partial or covering small time period. Hence, the present study is an attempt to explore the comprehensive picture of India's merchandise trade with UAE.

## **LITERATURE REVIEW**

Krishnaswamy and Shaw (2014) have recognized that gold, jewellery and diamonds have played an important role in their bilateral trade. According to the study, two commodity groups, namely pearls and precious stones, metals; mineral fuel and oil accounted 63 percent share in India's total imports from UAE in 2000-01 which further increased to 90.4 percent in 2012-13 and exports of pearls and precious stones to UAE was more than half of India's

total exports in 2012-13. These shares have grown because Indian government had cut the 3 percent duties on imports of these commodities in 2007.

Banu and Amit (2013) have studied about the trend of Indian expatriation and the role of India's recruitment agency. The movement of Indian workers to UAE was increased in the twentieth century. But the unskilled and semi-skilled workers were facing problem in the Emirate. In order to resolve these problems, recruitment Agency in India gives extra precautions to India's unskilled labour and housemaids in United Arab Emirates. The main role of consultancy is helping vulnerable workers to come back to India by paying the contract breaking payment to the company and also give training to unskilled or semi skilled workers before sending them from home country to host country which has helped to maintain India's relation with UAE.

Wadhvani (2013) has attempted to analyze India's economic and trade relations with UAE, which is one of the prominent nations of Middle East since 1986. He has examined the foreign trade of India, trade of UAE and performance of their bilateral trade. He found that trade between the two countries has grown 300 percent in the five years between 2005-2006 and 2009-2010 and also 60 percent share of India's total exports were to GCC states in 2009-2010. Further, he found that Indian diaspora in United Arab Emirates and investments between the two countries are the main factors for future growth in their bilateral trade.

Alpen Capital (2012), a research group has examined the current situation of investment and trade between GCC States and India. Merchandise trade between the two regions has grown remarkably than the service trade. Among all the GCC States, UAE continues the largest trading partner for India. India's service and power sector are the major destination for UAE investors. The study reveals that the trade intensity between India and United Arab Emirates was highest with the share of more than 10 during 2009-2010.

Feiler (2012) has concluded that India has enjoyed economic and political relations with Middle East countries mainly Arab and Israel. It shows how the collapse of Israeli- Arab peace process affected India's economic relations with Israel and its neighbor countries. Among the Middle East, UAE ranked at 1<sup>st</sup> position with 10.81 percent in India's total trade, whereas Israel contributed only 0.85% and placed at 31<sup>st</sup> position during the fiscal year 2010-2011. India's focus in the Arab and Israel was not only due to its oil reserves but also in the field of defence and technology for its future development.



Hussian (2012) has indicated that India has experienced strategic relations in the Gulf region, but has special relations with UAE due to their balanced trade journey as both countries' exports is almost equal to their imports and also non-oil trade has occupied greater importance. UAE invested in India's growing sectors such as energy, services, programming, construction and tourism & hotels with 19.1 percent, 9.3 percent, 7.8 percent, 6.8 percent and 5.6 percent respectively of the total FDI during the period from 1991 to November 2009. Their links goes exceeding the trade and investment. The two countries support to each other on security, defence and economic issues.

Sheshagiri et al. (2012) has analysed that UAE shows an increasing trade trend with India since 2000. The authors have studied about the dimensions and growth trend in trade and examined their trade linkages in future. They found that UAE's share in India's total exports has grown continuously and also India's almost 50 percent oil demand is derived from the Gulf States. Between the two countries, diversification in their exports and imports would be responsible for future growth in their trade connections.

Yahia (2012) has examined the effect of trade relationship between United Arab Emirates and its three largest trading partners. The author has applied simultaneous equation model by using 2 stage least square method of estimation to check trade relationship effect and concluded that UAE exports to Japan and Imports from India has positively affected to UAE's GDP. UAE imports from India are influenced by income elasticity. The short-run income elasticity was 1.36 and long- run elasticity was 1.83. Which shows an increase in the income of UAE and subsequently UAE will import more from India.

Jain (2011) has examined that economic reforms has opened up India's economy to the world competitive atmosphere. India's connections and its trade trend with United Arab Emirates have on an increasing path in the post liberalization period. Among the seven Emirates, India and Dubai trade grew rapidly from US\$ 2.5 billion in 2002 to US\$ 10.9 billion in 2009. Free Trade Agreement helped the two countries in boosting their trade and economic ties. The two countries' trade is expected to grow in future also by exploring the opportunities in investment, defence and energy sector etc.

Kaur and Saleem (2011) have found that India's floriculture industry is observed as a future high growth industry. The price of cut (modern) flowers and its demand from International markets have been increasing. The study included the trade flows of cut flowers

with countries such as; Japan, United Arab Emirates, Italy, China and Australia. Among all these countries, United Arab Emirates imports of flowers from India have increased in case of both value- wise and quantity- wise. Also India's imports of modern flowers from United Arab Emirates have decreased from year 2007 to 2009, which shows a positive sign for India in trade with UAE.

Pradhan (2011) has analysed that India's look west policy in 2005 has boosted India's trade with the West Asian neighbour countries. India's high desire in the Gulf States continues in the areas of energy supply and movement of workers from India to Gulf. UAE and Saudi Arabia are the main source of income in the entire GCC countries. UAE remains to be significant for India's energy security. UAE supplies almost 5,448.84 million tonnes of crude to India. Thus, India could get benefits from its look west policy and has become an emerging economic and political country in Asia and the World.

Diab (2010) has examined that economic dynamics and investment climate are the key aspects of the growing economic relations of India with UAE. He has also analysed India's volume of non-oil foreign export and import with the world and UAE, which was classified by the HS code, classification of goods. According to him, Gulf region has become a main destination for India's exports of food (fruits and vegetables, dairy products, meat and sweets). Money, power, experience and advanced technologies are the important factors in India and UAE have encouraged the implementation of economic cooperation and large projects between the two countries.

Pradhan (2009) has estimated the India's export potential to six countries of GCC by using gravity model. He analysed that India's export potential is largest in Oman, Qatar, Kuwait and Bahrain, but lowest in Saudi Arabia and UAE. It shows that India is presently overtraded with Saudi Arabia and UAE as both the countries are leading trading partners of India. The study suggested that India's export basket should be diversified in order to explore its exports.

Seshadri (2009) has analysed that India's external trade in order to trade direction and traded items has now been changed in the recent years. Textile exporting sector has ranked below the manufacturing goods exports in the year 2000-01. In terms of direction, US were at the top in ranking but its percentage share has dropped in India's total trade from 13 percent in 2000-01 to 10 percent in 2007-08. Whereas percentage share of United Arab

Emirates has increased from 3.4 percent (ranking 8<sup>th</sup>) in 2000-01 to 7.02 percent (ranking 3<sup>rd</sup>) in 2007-08. Increase in the percentage share of UAE was due to increase in India's exports of several petroleum products and jewellery to UAE.

Karayil (2007) has analysed that India's exports to Gulf Cooperation Council (GCC) countries have been affected by Indian diaspora. Migration-trade relationship has verified with the use of gravity model. An empirical evidences given by the study proves that migrant society is the main source of India's exports to the Gulf States. The study also examined that among the GCC countries, UAE was the most important market for India's exports as well as its imports, which may influenced by large number of Indian migrants in United Arab Emirates.

Zachariah et al. (2004) have examined the working condition and structure of Indian migrants to the United Arab Emirates. The study reveals that since 1996, UAE government had diminished the demand for unskilled and half-skilled workers from India due to its trade and business recession; privatization policies; execution of large infrastructure projects. The author has founded that 36 percent share of Indian unskilled, half-skilled workers were absorbed in production, transportation and construction work and one-fifth of the skilled workers were engaged in technical, electrical, professional, computer & clerical activities. Majority of the unskilled workers were facing problems such as non-payment of salaries, refusing to release the passport and denial of wages etc.

Azhar (2003) has concluded that the performance of India and UAE economic cooperation in the 1990s were Improved. Trade links between both the countries were increased. Indian diaspora in UAE over 0.4 million were the principal source of foreign exchange revenues for India. The author has also examined that Indian exports to the UAE grew faster than the growth in India's exports to the world and also percentage share of UAE in India's overall imports and exports has increased during the same decade.

Vasudeva (2000) has suggested that Indian government should bring the law on Sanitary and Phytosanitary agreement in order to expand their exports of fruit juices, vegetables, fresh fruit, meat products and meat, processed food products and marine products like crabs, fish, lobsters plants and dairy products. UAE has stopped their imports of meat products from 10 Indian companies, which were situated in Delhi, Hyderabad and Mumbai as they were failed to stick to the SPS measures as put down in the agreement. The

legislation of Sanitary and Phytosanitary agreement will also help to retain inspect on the imports of unhygienic food products.

Chatterjee (1987) has stated that India has expanded its export and import commodities from the UAE. Before the British came to India, its major export commodities to UAE were incense, spices, condiments and mainly log wood. Further, he examined that high oil prices in the Arab countries during 1974-75 have led to increase in the Emirates' revenue, which could attract foreign investments to build its infrastructure and industrial economy, due to which UAE has increased its demand for workers from India and flourished its economic relations with India. In 1980s, food and live animals; crude oil and petroleum products had contributed high share in UAE's imports and exports to India.

Sarbadhikari (1977) has analysed that with the extraction and trade of oil in UAE, first in Abu Dhabi emirate since 1962 and later in Dubai since 1969 had transformed the economic perspective of the Arab. It had rapidly altered the international involvement of the state. With the ending of all existing agreements with Britain in 1971, UAE had been transforming from a region of pearls, herding, fishing and agriculture to an advanced Emirate with the high level of per capita income. Subsequently visits from India and United Arab Emirates have exchanged and India has appointed its first resident ambassador to the UAE in 1973, which became the cause of strong bonding between India and UAE.

Thus, the literature reveals that both the countries are continuously making efforts to improve their trade relations which boosted up the growth of their merchandise trade. But the existing literature does not cover all the aspects of their bilateral trade. The studies mainly cover their historical and cultural relations. Though some studies have explored the trade relationship between India and the entire Gulf countries as a region but still no study is available which has analysed the trade relationship between India and UAE in a comprehensive manner. Whatever studies are available is either partial or covering very less time period. Hence, the present study will be an attempt to examine the bilateral trade relations between India and UAE during the period from 1991 to 2012. The researcher will try to cover all the aspects relating to their trade relations.

## **AN OVERVIEW OF INDIA'S TRADE RELATIONS WITH UNITED ARAB EMIRATES:**

### **From 1950 to 1990**

India and Gulf trade has developed in the 1950s, when the merchandise trade between them was included mainly of food and textile products. The development of the oil industry associated with the discovery and extraction of crude oil in Kuwait, Saudi Arabia and the entire gulf region required a huge and low-cost labour force and employment were made mainly from India and some other neighboring countries. But India's trade relations with UAE got more intensified than any other Gulf country. That was mainly due to the creation of UAE federation in 1971 (Chatterjee, 1987). A number of agreements in several sectors had been signed between them from time to time. The first agreement between India and UAE was signed in 1975 that was Cultural Cooperation agreement. Through this agreement, they enjoyed cultural exchange with the organized seminars, arts and exhibitions etc. This experience has placed India at the top of industrial and trade exchange with the UAE, in addition to non-oil sector (Rajamony, 2013). Thereafter, the growth of free zone in Dubai has attracted a number of Indian expatriates and flourished their trade relations. Further, during 1986, India became the largest exporter of gold jewellery to UAE because Indian gold jewellery was prepared by new techniques. On the other hand, exports of UAE to India were majorly includes of petroleum products and crude oil. At times, India started more imports of aluminium waste, chemicals, fertilizers and scrap metal. UAE accounted 1.5 per cent share in India's overall exports in 1986. One reason behind that, UAE was home for more than 1.5 million Indian workers and in order to support the work force, larger imports of food and other necessities of life became essential. Hence, 'migration and development' process exist since ancient times and has the positive effect in case of Indian workers in UAE (Kumar, n.d.). Infact Iran-Iraq war of 1980s and air attack of neutral shipping in the Persian Gulf had not much influenced the trade between India and UAE. Thus, the period from 1951 to 1990 has proved good for their bilateral trade relations. But their trade could not get much momentum during that period which may be due to the restrictive trade practices of both the countries. However, since 1991, after the opening up of the Indian economy, their trade relations increased at much rapid pace.

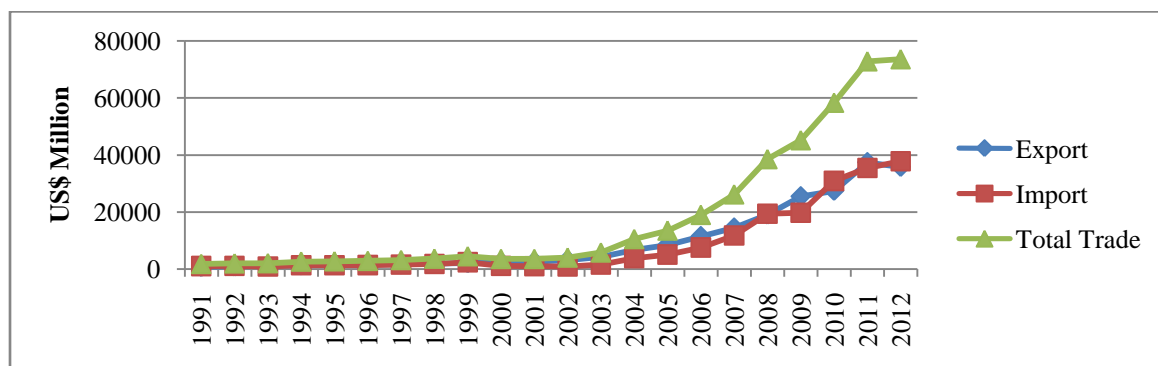
## **Since 1991**

India has experienced important policy changes in early 1990s. With the liberalization of Indian economy, tremendous economic development has taken place in each sector of the economy. On the same time, UAE situated itself as a geographical trading centre and concentrated on tourism and free trade to stimulate the economy. These new economic policies were the sign of trade growth between India and United Arab Emirates. They signed an economic treaty of Double Taxation Avoidance Agreement (DTAA) in 1992. Government of India had involved into DTAA with UAE in order to reduce tax rates on interest, dividend and royalties etc. The strategies of both the countries were to prevent discrimination between the taxpayers in other's country and the provisions for bilateral exchange of tax related information. The agreement has been amended in 2012 in Abu Dhabi during India-UAE Joint Commission meeting. Thereafter, to improve their trade relations, India and GCC countries had entered into a Free trade Agreement in 2004, which was negotiated in 2005. It has helped to enhance bilateral trade flows between India and United Arab Emirates to greater heights. According to the government of India, UAE has emerged India's top trading partner in 2008-2009. Since then it occupied the same position in the list of India's top trade partners. UAE investment in India has also grown in recent years. UAE is the 10<sup>th</sup> leading FDI investor in India. According to the embassy of India, the major sectors where UAE has made investment are power (15 percent), metallurgical industries (12 percent), construction (11 percent), service sector (10 percent) and computer hardware and software (5 percent). On the other hand, Indian major companies like Tata, Reliance, Wipro, ESSAR, Punj, L&T, Lloyd etc. have obtained number of contracts in UAE. Thus, the economic scene between India and UAE is getting stronger.

The past two decades have witnessed tremendous growth in imports and exports trade between India and the United Arab Emirates. India's exports to UAE rose from US\$ 739.85 million in 1991 to US\$ 35781.39 million in 2012, which shows a 44 fold increase. India's imports from UAE have also increased from US\$ 993.77 million to US\$ 37799.11 million during the same period, with near 33 fold increase. Figure 1 shows trade flows between India and UAE from 1991 to 2012. As is clear since 2003, curves of exports, imports and total trade start rising at rapid pace. From 1991 to 2002, India's total trade with UAE increased from US\$ 1733.62 million to US\$ 3977.44 million and from 2003 to 2012, it increased from

US\$ 5755.53 million to US\$ 73580.50 million. It is also worth mentioning that India's exports to and imports from UAE are both increasing almost at same pace.

Figure 1: Total Trade between India and the United Arab Emirates (US\$ Million)



Source: UN Comtrade Database.

Table 1 shows top ten trading partners of India from 1991 to 2011. Since 1991, India's trade with UAE is increasing continuously. UAE's rank improved in the list of India's export partners. It was placed at 6<sup>th</sup> position with 4.13 percent share in 1991, which grew and stood at 2<sup>nd</sup> position with 5.86 percent share in 2001 and stood at 1<sup>st</sup> position with 12.4 percent share in 2011. India's top most exporting products to UAE contains readymade garments, manmade and cotton yarns, gems and jewellery, fabrics, accessories, machinery and instrument, marine products and linoleum commodities, meat, fruits and vegetables etc. One reason for increasing these trends might be due to the participation of Indian companies in trade events, like exhibitions and fairs organised in UAE. Similarly, UAE's percentage share in India's overall imports has also grown in the last two decades. UAE stood at 7<sup>th</sup> position with 5.09 percent share in 1991. But the share was declined in 2001 and UAE ranked at 14<sup>th</sup> position during the same period. The reason for UAE's decreased share might be due to India's imports fell in 1999-2000, because of increase in oil prices. But subsequent years have viewed a continue rise in the value of imports. Petroleum, oil, lubricants (POL) and non-petroleum, oil, lubricants import growth has been noticed in 2000s. Non- POL imports grew due to hike in gold and silver imports. UAE has a largest share in exporting gold and silver to India (Singh, n.d.). Further, UAE's share in India's global imports has increased. UAE ranked at 2<sup>nd</sup> position with 7.67 percent share in 2011. The key commodities India imports from the United Arab Emirates include gold and silver, pearls, precious stones, ores, metafiles, non-ferrous metals, pyrites, crude oil, organic and chemicals etc.

Table1: Top Ten Trading Partners of India (1991-2011) (Percentage share)

Exports						Imports					
1991		2001		2011		1991		2001*		2011	
Country	Percentage	Country	Percentage	Country	Percentage	Country	Percentage	Country	Percentage	Country	Percentage
USA	16.35	USA	19.15	UAE	12.4	USA	9.69	Switzerland	6.75	China	12
Japan	9.24	UAE	5.86	USA	10.92	Germany	7.95	USA	6.37	UAE	7.67
USSR	9.18	Hong Kong	5.51	China	5.55	Belgium-Luxembourg	7.15	UK	5.44	Switzerland	6.78
Germany	7.11	UK	5.01	Singapore	5.18	Japan	6.99	Belgium	4.91	Saudi Arabia	6.15
UK	6.37	Germany	4.07	Hong Kong	4.17	UK	6.08	Germany	3.76	USA	4.88
UAE	4.13	Japan	3.54	Netherlands	3.22	Saudi Arabia	5.69	China	3.61	Iraq	3.77
Belgium-Luxembourg	3.74	Belgium	3.19	UK	2.95	UAE	5.09	Japan	3.53	Germany	3.22
China	3.44	Italy	2.89	Germany	2.74	Iran	3	South Africa	2.77	Kuwait	3.18
Italy	3.25	Bangladesh	2.42	Belgium	2.45	France	2.97	Singapore	2.67	Indonesia	3.02
France	2.38	France	2.25	Indonesia	2.12	Australia	2.87	Australia	2.45	Nigeria	2.94

Note: \* In year 2001, UAE stood at 14<sup>th</sup> position in India's Total imports.

Source: UN Comtrade Database.



## **JUSTIFICATION**

There are possibly few issues that academics, policy makers and market participants regard as new chapters in the history. The growth of India and UAE merchandise trade is probably one of them. Their mutual economic interaction has remained at a lower level till 1991. Though after 1991, their merchandise trade increased slowly but could not get momentum upto the early 21<sup>st</sup> century. That may be one of the reasons why no systematic and comprehensive studies are available focusing exclusively upon their trade relationship. The existing literature mainly deals with the aspects other than economic particularly cultural, historical and geostrategic. The events like accession of UAE to WTO in 1996 and the FTA between India and Gulf countries in 2006, have paved the way for mutual trade between India and UAE. Further, the number of trade, technology, capital and service sector related agreements and protocols have been signed between the two countries. These events and mutual agreements have fueled the growth of merchandise trade between the two countries. Due to all these experiences, UAE has become number one trade partner of India since 2009. Though all these has attracted the attention of many researchers, academicians and policy makers. But up till now no comprehensive and inclusive study related to their trade relations is available, which can be used as ready reckoner. Hence, the present study is useful keeping in view their economic interaction in general and trade interaction in particular.

## **TENTATIVE OBJECTIVES**

1. To examine the growth, direction and composition of mutual trade between India and UAE.
2. To analyze the role of Indian diaspora in UAE and their mutual investment.
3. To study India's gains from trade with UAE.
4. To estimate the instability, elasticity and competitiveness of India's exports to UAE.
5. To compare the revealed comparative advantage of India and UAE.
6. To identify the problems faced by Indian exporters of major commodities to UAE and suggest some policy implications for improving their trade ties further.

## **HYPOTHESES**

1. India's merchandise trade with UAE grew at more rapid pace after India's Free Trade Agreement with Gulf countries.
2. India's export basket to UAE is more diversified as compared to UAE's export basket to India.
3. India experienced favourable terms of trade with UAE as compared to its overall terms of trade.
4. India's export earnings from UAE are more stable as compared to rest of the world.
5. Competitiveness, diversification and UAE's global import demand have affected India's exports growth to UAE equally.
6. India is exporting those commodities to UAE, in which it has comparative advantage.

## **METHODOLOGY**

India and UAE, at present, fall in the list of fast growing developing countries, strongly following the process of market based economic reforms and adjusting their external trade in the multilateral framework as enshrined by the WTO and other global institutions. Among the economic interactions, the mutual trade between the two countries has grown tremendously with the free trade agreement between India and Gulf countries in the early years of 21<sup>st</sup> century. UAE has already emerged as the largest trade partner of India, the overriding goal of the study is to evaluate their mutual trade relations. The study will try to present a comprehensive picture of the merchandise trade between the two countries by placing the things in a comparative and distributive manner. The growth of their mutual trade will be analysed by using trend growth rates. The direction and composition of their trade will be analysed with the help of percentage and ratio methods over the time period. Moreover, for the deep analysis, the various trade indices; trade Intensity Index, Concentration Index, Intra-Industry Trade Index, Economic Distance Index and Trade Overlap Index etc. will also be evaluated. The gains from trade would be assessed by using Net Barter Terms of Trade (NBTT) and Relative Terms of Trade Index (RTTI). For this purpose, import and export unit values will be used as proxy for prices. To fulfill the

objective of stabilization effect of India's export to United Arab Emirates, Coppock's Instability Indices will be used. Elasticity of India's exports to UAE will be calculated by using the Ordinary Least Square method. To check the Competitiveness of India's exports to UAE will be examined by using relative market Share and unit values. Further, the total change in India's exports to UAE will be decomposed into three effects, namely demand effect, competitiveness effect and product-diversification effect. The Comparative Advantage of the two countries, in different sectors of economy will be computed by using Bela Balassa's Revealed Comparative Advantage (RCA) index. Primary data will be used in order to determine the problems faced by Indian exporters by contacting and interviewing them. The study will be mainly confined to the period starting from 1991 to 2012, i.e. the period since the beginning of economic reforms in India and up to the latest availability of data. The results will be presented in tabular form.

## **DATA SOURCES**

The study is entirely based on secondary data. The researcher will collect the data from the following sources:

1. United Nations Commodity Trade Statistics Database (UN Comtrade);
2. Monthly statistics of foreign trade of India, Directorate General of Commercial Intelligence and Statistics (DGCI&S);
3. Statistics of Foreign Trade of India by Countries, DGCI&S;
4. Balance of Payment Statistics Yearbook, International Monetary Fund (IMF);
5. Direction of Trade Statistics Yearbook, IMF;
6. Handbook of statistics, UNCTAD;
7. Embassy of The United Arab Emirates, New Delhi, India;
8. World Development Report, The World Bank;
9. World Development Indicators, The World Bank;
10. Key Indicators, Asian Development bank (ADB);
11. Economic Survey, Government of India;
12. Handbook of Statistics on Indian Economy, RBI; and
13. Embassy of India, Abu Dhabi-United Arab Emirates.

## **TENTATIVE CHAPTER SCHEME**

1. Introduction.
2. Review of Literature.
3. India-UAE Merchandise Trade: Growth, Direction and Composition.
4. Indian diaspora in UAE and Mutual Investment between Two Countries.
5. India-UAE: Mutual Gains from Trade.
6. Instability, Elasticity and Competitiveness of India's Exports to UAE.
7. India-UAE: Revealed Comparative Advantage.
8. India's Exports to UAE: A Primary Analysis.
9. Summary of Conclusions and Policy Implications.

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