

Impact of Trade Liberalization on India's Manufactured Exports

Mathanraj .T

Research Scholar, Department of Economics,

Scott Christian College (Autonomous), Nagercoil-629003,

Affiliated to Manonmaniam Sundaranar University, Tirunelveli-12, Tamil Nadu, India

ABSTRACT

Manufacturing exports of a country plays a crucial role in the growth of an economy. The development of this sector is an indicator of the economic strength of a country. It helps in raising productivity, generating employment and also supports other sectors of the Indian economy. The main objectives of the study are as follows: (i) To analyze the trends and growth rates of India's manufactured exports during 1991-92 to 2016-17. (ii) To study the composition of India's manufactured exports. (iii) To examine the impact of trade post-liberalization of India's manufactured exports. The present study is based on secondary data collected from various published sources of Government Agencies. The data has been gathered from Handbook of Statistics on Indian economy, Reserve Bank of India (RBI), Govt. of India. This analysis of trade post liberalization on manufactured export performance in India has examined by using growth rate percentages, the linear modal, semi log model and compound growth rate (CGR) are used to examine the impact of trade post-liberalization of India's manufactured exports. The analysis is based on the 26 years starting from 1991-92 to 2016-17.

Keywords: International trade, manufacturing export, growth rate

1. INTRODUCTION

Foreign trade was recognized as the most significant determinants of economic development of a country, all over the world. For providing, regulating and creating necessary environment for its orderly growth, several Acts had been put in place. The foreign trade of a country consists of inward and outward movement of goods and services, which results into outflow and inflow of foreign exchange (Export-Import Bank, 2005). India had become one of the fastest growing economics in the world over the last two decades, undoubtedly aided in this performance by economic reforms. The striking aspect of India's recent growth had been the dynamism of the service sector, while, in contrast, manufacturing has been less robust (Planning commission Government of India). Exporting had been the most popular and fastest-growing form of international market entry, favored especially by small and medium-sized firms. Exporting, compared with other international strategy, doesn't need many resources and is associated with lesser. Exporting was crucial business activity for nations' economic health, as it significantly contributes to employment, trade balance, economic growth, and higher standard of living (Seyed Hossein Jalali 2002). Export performance was regarded as one of the key indicators of the success of a firm's operations. As per the study by Papadopoulos and Martin Martin (2010) export performance represents the outcome of a firm's activities in export markets. Export performance

can also be defined as the results from the firm's international activities. From this viewpoint, export performance is the extent to which the firm achieves its objectives when exporting a product to a foreign market (Navarro et al., 2010). Manufacturing had the potential to emerge as one of the high growth sectors in India. The Prime Minister's 'Make in India' programme focuses on placing India on the world map as a manufacturing hub and gaining global recognition for the Indian economy. India had expected to become the fifth largest manufacturing country in the world by the end of 2020, and the government had set an ambitious target of increasing the contribution of manufacturing output to 25 per cent of gross domestic product (GDP) by 2025, this would be a 9 per cent point increase from the current level of 16 per cent (IBEF, March 2017).

2. SIGNIFICANCE FOR THE STUDY

Export performance is one of the key objectives of liberalization reforms in India. At present, global trade is a vital part of development approach and it can be valuable instrument of poverty reduction, create more employment, financial development, earns foreign currency, increases output, mobilizes of domestic resources and saving optimally so that the economic benefits reach to the wider group of people (Mathanraj.T 2019).Export is indispensable for the growth of economy as it leads to the earning of foreign exchange which helps in the growth of the economy. More growth of the economy leads to more prosperous nation. Exports in India have evolved a lot since independence. Export performance of a firm replicates a firm-specific performance in leveraging its resources and capabilities in an international frame at a particular point of time. Firm's export performance is regarded as one of the key indicators of the success of its operations, and as such, it has been an extensively studied phenomenon. Manufacturing exports of a country plays a crucial role in the growth of an economy. The development of this sector is an indicator of the economic strength of a country. It helps in raising productivity, generating employment and also supports other sectors of the Indian economy (Harpreet Kaur 2016). The study brings into light the impact of trade liberalization measures on India's manufactured exports. It would be helpful for the policymaker to enact suitable policies for encouraging trade. This study will also be helpful for the upcoming researcher in the field of International economics.

3. OBJECTIVES OF THE STUDY

The main objective of the present study is to make a comprehensive analysis of India's manufactured exports growth in the post-liberalization period.

1. To analyze the trends and growth rates of India's manufactured exports during 1991-92 to 2016-17.
2. To study the composition of India's manufactured exports.
3. To examine the impact of trade post-liberalization of India's manufactured exports.

4. RESEARCH METHODOLOGY

The present study is based on secondary data collected from various published sources of Government Agencies. The data has been gathered from Handbook of Statistics on Indian economy, Reserve Bank of India (RBI), Govt. of India. This analysis of trade post liberalization on manufactured export performance in India has examined by using growth rate percentages, the linear modal, semi log model and compound growth rate (CGR) are used to examine the impact of trade post-liberalization of India's manufactured exports. The analysis is based on the 26 years

starting from 1991-92 to 2016-17. This analysis was done by the use of SPSS and Excel. (Mathanraj.T, 2019).

LINEAR MODEL

Further the researcher has used percentage and the simple linear growth rate model. The linear growth rate model

$$Y = a + b_t$$

Where, Y - Dependent variable, T – Time, ‘a’ and ‘b’ are the parameters. The linear growth rate is obtained from the ‘b’ value.

SEMI LOG MODEL & COMPOUND GROWTH RATE (CGR)

Further the researcher has used the Semi log model, In order to compute the Instantaneous Growth Rate and the Compounded Annual Growth Rate (CAGR) the Semi-log is used and was computed using the following models. If Y_t = Variable at time t and Y₁ = initial year value of the variable, simple compounding is explained as

$$\log Y = a + b_t$$

$$CGR = (\text{Anti log } b - 1)100$$

IMPACT OF TRADE LIBERALIZATION ON INDIA’S MANUFACTURED EXPORTS

The present study examines the impact of trade reform on Indian’s manufactured exports in 1991-92 to 2016-17. The annual average growth and the trend values are presented in Table No.1.1

INDIA’S MANUFACTURING EXPORTS DURING 1991-92 TO 2016-17

YEAR	TOTAL EXPORTS	MANUFACTURED GOODS	AAGR (%)	TREND	SHARE
1990-91	18143	13229		-26950	72.9
1991-92	17865	13262	0.2	-18317	74.2
1992-93	18537	14099	6.3	-9684	76.1
1993-94	22238	16803	19.2	-1052	75.6
1994-95	26331	20602	22.6	7581	78.2
1995-96	31795	23984	16.4	16214	75.4
1996-97	33470	24938	4	24846	74.5
1997-98	35006	26860	7.7	33479	76.7
1998-99	33219	26096	-2.8	42112	78.6
1999-00	36822	29153	11.7	50745	79.2
2000-01	44560	35181	20.7	59377	79
2001-02	43827	33792	-3.9	68010	77.1
2002-03	52719	41070	21.5	76643	77.9
2003-04	63843	49103	19.6	85275	76.9
2004-05	83536	59324	20.8	93908	71
2005-06	103091	74200	25.1	102541	72
2006-07	126414	86730	16.9	111173	68.6
2007-08	162904	104905	21	119806	64.4
2008-09	185295	123110	17.4	128439	66.4

2009-10	178751	120167	-2.4	137071	67.2
2010-11	251136	173263	44.2	145704	69
2011-12	305964	201237	16.1	154337	65.8
2012-13	300401	190237	-5.5	162969	63.3
2013-14	314416	199648	4.9	171602	63.5
2014-15	310352	207076	3.7	180235	66.7
2015-16	262004	191107	-7.7	188867	72.9
2016-17	276547	203255	6.4	197500	73.5

Source: Hand Book of statistics on Indian Economy (RBI)

TABLE NO 1

It is observed from the Table No.1.1 that the manufactured export was the highest in 2014-15 and the lowest in 1991-92. The manufactured exports were gradually increased from \$13,262 million US dollar in 1991-92 to \$20,602 million US dollar in 1994-95 to \$29,153 million US dollar in 1998-99 \$74,200 million US dollar in 2000-01 to \$2, 07,076 million US dollar in 2008-09, declined to \$2, 03,255 million US dollar in 2016-17. Similarly, its share in Indian total exports also incessantly enlarged from 74.2 per cent to 78.2 per cent then to 79.2 per cent then fell down to 72.0 per cent and to 66.7 per cent finally reached to 73.5 per cent during the corresponding period. The annual growth rate of manufactured exports was gradually increased from 0.2 per cent in 1991-92 to 6.4 per cent in 2016-17.

TEXTILES EXPORTS IN INDIA FROM 1991-92 TO 2016-17

year	Textiles	AAGR (%)	Trend	Share
1991-92	4024		2109	30.3
1992-93	4315	7.2	2960	30.6
1993-94	4739	9.8	3811	28.2
1994-95	6352	34.0	4662	30.8
1995-96	7220	13.7	5513	30.1
1996-97	7829	8.4	6364	31.4
1997-98	8640	10.4	7216	32.2
1998-99	8457	-2.1	8067	32.4
1999-00	9351	10.6	8918	32.1
2000-01	9086	-2.8	9769	25.8
2001-02	8079	-11.1	10620	23.9
2002-03	9041	11.9	11471	22.0
2003-04	9626	6.5	12322	19.6
2004-05	9410	-2.2	13173	15.9
2005-06	12517	33.0	14025	16.9
2006-07	13111	4.7	14876	15.1
2007-08	14337	9.4	15727	13.7
2008-09	15052	5.0	16578	12.2
2009-10	14392	-4.4	17429	12.0
2010-11	14524	0.9	18280	8.4
2011-12	18039	24.2	19131	9.0
2012-13	20455	13.4	19982	10.8

2013-14	24691	20.7	20833	12.4
2014-15	26295	6.5	21685	12.7
2015-16	25828	-1.8	22536	13.5
2016-17	26034	0.8	23387	12.8

Source: Hand Book of statistics on Indian Economy (RBI)

TABLE NO 2

The above Table No.1.2 shows that the manufactured export earnings, textiles export increased from \$4,024 million US dollar in 1991-92 to \$26,034 million US dollar in 2016-17. The annual growth rate of Textiles export was gradually increased from 7.2 per cent in 1992-93 to 2.9 per cent in 2016-17. The textiles export share of India in manufactured exports declined from 30.3 percent in 1991-92 to 0.8 per cent in 2016-17.

COIR YARN EXPORTS IN INDIA FROM 1991-92 TO 2016-17

YEAR	COIR YARN AND MANUFACTURES	AAGR (%)	TREND	SHARE
1991-92	28		-2	0.2
1992-93	31	10.7	8	0.2
1993-94	41	32.3	18	0.2
1994-95	55	34.1	28	0.3
1995-96	63	14.5	38	0.3
1996-97	61	-3.2	48	0.2
1997-98	69	13.1	58	0.3
1998-99	75	8.7	68	0.3
1999-00	44	-41.3	78	0.2
2000-01	48	9.1	88	0.1
2001-02	62	29.2	98	0.2
2002-03	73	17.7	109	0.2
2003-04	78	6.4	119	0.2
2004-05	101	30.0	129	0.2
2005-06	133	31.7	139	0.2
2006-07	146	9.7	149	0.2
2007-08	160	9.8	159	0.2
2008-09	148	-7.6	169	0.1
2009-10	160	8.1	179	0.1
2010-11	159	-0.6	189	0.1
2011-12	212	33.3	199	0.1
2012-13	196	-7.5	209	0.1
2013-14	231	17.9	219	0.1
2014-15	282	22.1	229	0.1
2015-16	262	-7.0	239	0.1
2016-17	296	12.9	249	0.1

Source: Hand Book of statistics on Indian Economy (RBI)

TABLE NO 3

Table No.1.3 shows that the manufactured export earnings, Coir yarn and manufactured export increased from \$28 million US dollar in 1991-92 to \$296 million US dollar in 2016-17. The annual growth rate of Coir yarn and manufactured export was gradually increased from 10.7 per cent in 1992-93 to 12.9 per cent in 2016-17. The Coir yarn and manufactured export share of India in manufactured exports declined from 0.2 percent in 1991-92 to 0.1 per cent in 2016-17.

JUTE EXPORTS IN INDIA FROM 1991-92 TO 2016-17

YEAR	JUTE MANUFACTURES INCL TWIST & YARN	AAGR (%)	TREND	SHARE
------	-------------------------------------	----------	-------	-------

1991-92	159		105	1.2
1992-93	123	-22.6	116	0.9
1993-94	124	0.8	127	0.7
1994-95	151	21.8	138	0.7
1995-96	186	23.2	150	0.8
1996-97	155	-16.7	161	0.6
1997-98	187	20.6	172	0.7
1998-99	138	-26.2	183	0.5
1999-00	119	-13.8	195	0.4
2000-01	204	71.4	206	0.6
2001-02	128	-37.3	217	0.4
2002-03	187	46.1	228	0.5
2003-04	242	29.5	240	0.5
2004-05	218	-10.0	251	0.4
2005-06	298	36.7	262	0.4
2006-07	260	-12.7	273	0.3
2007-08	326	25.3	285	0.3
2008-09	299	-8.3	296	0.2
2009-10	218	-27.1	307	0.2
2010-11	459	110.6	319	0.3
2011-12	465	1.3	330	0.2
2012-13	390	-16.1	341	0.2
2013-14	401	2.8	352	0.2
2014-15	316	-21.1	364	0.2
2015-16	313	-1.1	375	0.2
2016-17	311	-0.5	386	0.2

Source: Hand Book of statistics on Indian Economy (RBI)**TABLE NO 4**

Table No.1.4 shows that the manufactured export earnings, Jute export increased from \$159 million US dollar in 1991-92 to \$311 million US dollar in 2016-17. The annual growth rate of Jute export was gradually increased from -22.7 per cent in 1992-93 to -0.5 per cent in 2016-17. The Jute export share of India in manufactured exports declined from 1.2 percent in 1991-92 to 0.2 per cent in 2016-17.

LEATHER EXPORTS IN INDIA FROM 1991-92 TO 2016-17

year	Leather	AAGR (%)	Trend	Share
1991-92	1269		496	9.6
1992-93	1277	0.6	690	9.1
1993-94	1300	1.8	884	7.7
1994-95	1611	23.9	1078	7.8
1995-96	1731	7.4	1273	7.2
1996-97	1580	-8.7	1467	6.3
1997-98	1631	3.2	1661	6.1

1998-99	1580	-3.1	1855	6.1
1999-00	1502	-4.9	2050	5.2
2000-01	1951	29.9	2244	5.5
2001-02	1910	-2.1	2438	5.7
2002-03	1848	-3.2	2632	4.5
2003-04	2163	17.0	2826	4.4
2004-05	2323	7.4	3021	3.9
2005-06	2691	15.8	3215	3.6
2006-07	3017	12.1	3409	3.5
2007-08	3396	12.6	3603	3.2
2008-09	3464	2.0	3798	2.8
2009-10	3361	-3.0	3992	2.8
2010-11	3909	16.3	4186	2.3
2011-12	4803	22.9	4380	2.4
2012-13	4888	1.8	4574	2.6
2013-14	5741	17.5	4769	2.9
2014-15	6191	7.8	4963	3.0
2015-16	5549	-10.4	5157	2.9
2016-17	5327	-4.0	5351	2.6

Source: Hand Book of statistics on Indian Economy (RBI)

TABLE NO 5

Table No.1.5 shows that the manufactured export earnings, Leather export increased from \$1269 million US dollar in 1991-92 to \$5327 million US dollar in 2016-17. The annual growth rate of Leather export was gradually declined from 0.6 per cent in 1992-93 to -4.0 per cent in 2016-17. The Leather export share of India in manufactured exports declined from 9.6 percent in 1991-92 to 2.6 per cent in 2016-17.

HANDICRAFTS EXPORTS IN INDIA FROM 1991-92 TO 2016-17

year	Handicrafts	AAGR (%)	Trend	Share
1991-92	3387		3373	25.5
1992-93	3783	11.7	3285	26.8
1993-94	4768	26.0	3198	28.4
1994-95	5328	11.7	3110	25.9
1995-96	6129	15.0	3023	25.6
1996-97	5665	-7.6	2935	22.7
1997-98	936	-83.5	2848	3.5
1998-99	1177	25.7	2760	4.5
1999-00	1277	8.5	2673	4.4
2000-01	1116	-12.6	2585	3.2
2001-02	924	-17.2	2498	2.7
2002-03	1186	28.4	2410	2.9
2003-04	1059	-10.7	2323	2.2
2004-05	936	-11.6	2235	1.6

2005-06	1284	37.2	2148	1.7
2006-07	1337	4.1	2060	1.5
2007-08	1433	7.2	1973	1.4
2008-09	1063	-25.8	1885	0.9
2009-10	950	-10.6	1798	0.8
2010-11	1293	36.1	1710	0.7
2011-12	1123	-13.1	1623	0.6
2012-13	1188	5.8	1535	0.6
2013-14	2685	126.0	1448	1.3
2014-15	2736	1.9	1360	1.3
2015-16	3077	12.5	1273	1.6
2016-17	3413	10.9	1185	1.7

Source: Hand Book of statistics on Indian Economy (RBI)

TABLE NO 6

Table No.1.6 shows that the manufactured export earnings, Handicrafts export increased from \$3387 million US dollar in 1991-92 to \$3413 million US dollar in 2016-17. The annual growth rate of Handicrafts export was gradually declined from 11.7 per cent in 1992-93 to 10.9 per cent in 2016-17. The Handicrafts export share of India in manufactured exports declined from 25.5 percent in 1991-92 to 1.7 per cent in 2016-17.

GEMS AND JEWELLERY EXPORTS IN INDIA FROM 1991-92 TO 2016-17

YEAR	GEMS AND JEWELLERY	AAGR (%)	TREND	SHARE
1991-92	2738		-5083	20.6
1992-93	3072	12.2	-3157	21.8
1993-94	3996	30.1	-1232	23.8
1994-95	4501	12.6	694	21.8
1995-96	5275	17.2	2620	22.0
1996-97	4753	-9.9	4546	19.1
1997-98	5346	12.5	6471	19.9
1998-99	5929	10.9	8397	22.7
1999-00	7636	28.8	10323	26.2
2000-01	7384	-3.3	12248	21.0
2001-02	7306	-1.1	14174	21.6
2002-03	9030	23.6	16100	22.0
2003-04	10573	17.1	18026	21.5
2004-05	13734	29.9	19951	23.2
2005-06	15529	13.1	21877	20.9
2006-07	15977	2.9	23803	18.4
2007-08	19679	23.2	25728	18.8
2008-09	27958	42.1	27654	22.7
2009-10	29000	3.7	29580	24.1
2010-11	40509	39.7	31506	23.4
2011-12	44888	10.8	33431	22.3

2012-13	43405	-3.3	35357	22.8
2013-14	41381	-4.7	37283	20.7
2014-15	41248	-0.3	39208	19.9
2015-16	39319	-4.7	41134	20.6
2016-17	43534	10.7	43060	21.4

Source: Hand Book of statistics on Indian Economy (RBI)

TABLE NO 7

Table No.1.7 shows that the manufactured export earnings, Export of Gems and jewellery increased from \$2,738million US dollar in 1991-92 to \$43,534 million US dollar in 2016-17. The annual growth rate of Gems and jewellery exports were gradually fell down from 12.2 per cent in 1992-93 to 10.7 per cent in 2016-17. The Gems and jewellery export share of India in manufactured exports increased from 20.6 percent in 1991-92 to 21.4 per cent in 2016-17.

CHEMICALS AND ALLIED EXPORTS IN INDIA FROM 1991-92 TO 2016-17

YEAR	CHEMICALS AND ALLIED PRODUCTS	AAGR (%)	TREND	SHARE
1991-92	1583		-7236	11.9
1992-93	1378	-13.0	-5393	9.8
1993-94	1813	31.6	-3550	10.8
1994-95	2434	34.3	-1708	11.8
1995-96	2945	21.0	135	12.3
1996-97	3229	9.6	1977	12.9
1997-98	3684	14.1	3820	13.7
1998-99	3378	-8.3	5663	12.9
1999-00	3810	12.8	7505	13.1
2000-01	5002	31.3	9348	14.2
2001-02	4684	-6.4	11191	13.9
2002-03	5880	25.5	13033	14.3
2003-04	7598	29.2	14876	15.5
2004-05	9719	27.9	16719	16.4
2005-06	11935	22.8	18561	16.1
2006-07	14212	19.1	20404	16.4
2007-08	17354	22.1	22247	16.5
2008-09	18635	7.4	24089	15.1
2009-10	22911	22.9	25932	19.1
2010-11	28905	26.2	27775	16.7
2011-12	37032	28.1	29617	18.4
2012-13	46008	24.2	31460	24.2
2013-14	35877	-22.0	33303	18.0
2014-15	37335	4.1	35145	18.0
2015-16	37389	0.1	36988	19.6
2016-17	46001	23.0	38830	22.6

Source: Hand Book of statistics on Indian Economy (RBI)

TABLE NO 8

Table No.1.8 shows that the manufactured export earnings, Export of chemicals and allied products increased from \$1,583 million US dollar in 1991-92 to \$46,001 million US dollar in 2016-17. The annual growth rate of chemicals and allied export was gradually increased from -13.0 per cent in 1992-93 to 23.0 per cent in 2016-17. The chemicals and allied export share of India in manufactured exports increased from 11.9 percent in 1991-92 to 22.6 per cent in 2016-17.

MACHINERY TRANSPORT METAL EXPORTS IN INDIA FROM 1991-92 TO 2016-17

YEAR	MACHINERY , TRANSPORT METAL MANUFACTURED	AAGR (%)	TREND	SHARE
1991-92	2234		-11547	16.8
1992-93	2458	10.0	-8508	17.4
1993-94	3024	23.0	-5468	18.0
1994-95	3486	15.3	-2428	16.9
1995-96	4358	25.0	612	18.2
1996-97	4910	12.7	3652	19.7
1997-98	5254	7.0	6692	19.6
1998-99	4393	-16.4	9732	16.8
1999-00	4947	12.6	12772	17.0
2000-01	6976	41.0	15812	19.8
2001-02	6939	-0.5	18852	20.5
2002-03	8983	29.5	21892	21.9
2003-04	12321	37.2	24932	25.1
2004-05	16614	34.8	27972	28.0
2005-06	21315	28.3	31012	28.7
2006-07	29429	38.1	34052	33.9
2007-08	37207	26.4	37092	35.5
2008-09	47155	26.7	40132	38.3
2009-10	38171	-19.1	43172	31.8
2010-11	49815	30.5	46212	28.8
2011-12	58555	17.5	49252	29.1
2012-13	62479	6.7	52292	32.8
2013-14	61976	-0.8	55332	31.0
2014-15	70958	14.5	58372	34.3
2015-16	58713	-17.3	61412	30.7
2016-17	65087	10.9	64452	32.0

Source: Hand Book of statistics on Indian Economy (RBI)

TABLE NO 9

The above Table No.1.9 shows that the manufactured export earnings, machinery, transport metal increased from \$2,234 million US dollar in 1991-92 to \$65,087 million US dollar in 2016-17. The annual growth rate of machinery, transport metal export was gradually increased from 10.0 per cent in 1992-93 to 10.9 per cent in 2016-17. The machinery, transport metal export share of India in manufactured exports increased from 16.8 percent in 1991-92 to 32 per cent in 2016-17.

FIGURE NO.1.1, SHARE COMMODITY-WISE EXPORT IN INDIA'S MANUFACTURED EXPORTS

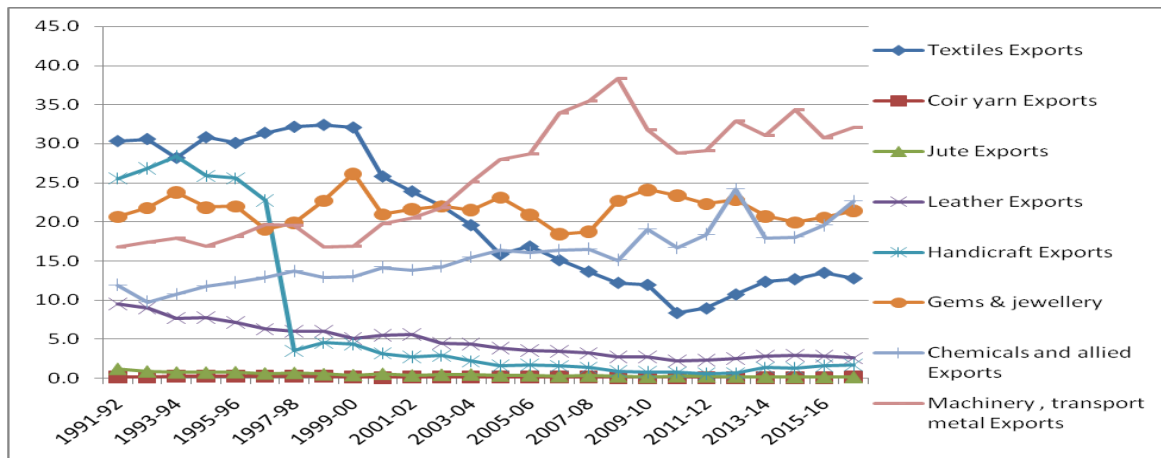


Figure No.1.1 presents a study of commodity-wise export in India's manufactured exports is showing significantly a rising trend.

TREND AND GROWTH RATE OF MANUFACTURED EXPORT IN INDIA FROM 1991-92 TO 2016-17

VARIABLE	LINEAR MODEL				SEMI LOG MODEL				CGR
	a	b	t	R ²	a	b	t	R ²	
Textiles fabrics, made ups etc	1257.76 (972.82)	851.11 (62.992)	13.511	0.883	8.374 (0.032)	0.0695 (0.05013)	21.408	0.950	7.1
Coir yarn and manufactures	-9.089 (11.316)	9.952 (0.724)	13.738	0.891	3.429 (0.074)	0.087 (0.005)	18.535	0.937	9.1
Jute manufactures include twist & Yarn	93.404 (25.506)	11.258 (1.633)	6.895	0.674	4.770 (0.096)	0.048 (0.006)	7.769	0.724	4.9
Leather manufactures	323.294 (238.259)	193.488 (15.252)	12.686	0.875	6.946 (0.052)	0.067 (0.003)	20.186	0.947	6.9
Handicrafts	3569.259 (635.252)	-91.186 (40.665)	12.242	0.179	7.912 (0.260)	-0.028 (0.017)	11.678	0.109	2.8
Chemicals and allied products	-8755.740 (2521.054)	1831.737 (161.381)	11.350	0.849	7.092 (0.074)	0.149 (0.005)	31.541	0.977	16.1
Machinery , transport metal manufactures	13931.409 (3548.771)	3017.792 (227.168)	13.284	0.885	7.493 (0.104)	0.155 (0.007)	23.337	0.959	16.8

Others	-14936.55 (282.41)	3141.770 (4361.48)	11.125	0.837	6.743 (0.0129)	0.198 (0.1995)	15.369	0.907	21.9
Manufactured	- 31916.354 (1024.227)	8949.936 (667.288)	13.412	0.887	9.339 (0.066)	0.122 (0.004)	28.987	0.973	13.0

Source: Calculated by the researcher

TABLE NO 10

(Figures in bracket indicate Standard Error)

From the above Table No.1.10 it could be known that the t values of the trend co-efficient were found to be statistically significant at one per cent level. The R^2 values were also found to be satisfactory. Among the manufactured products exporting commodities, machinery and transport metal manufactured product had the highest annual average export value of US \$3017.79 million per year. Chemical and allied product had the second largest annual average export value of US \$1831.73 million per annum. The third rank secured by all textile materials fabrics product which had the average annual export value of US \$851.11million per year followed by leather manufactured (US \$193.48 million), jute manufactured (US \$11.25 million), coir yarn and manufactured (US\$9.95 million) per annum. Handicrafts and textiles fabrics had the lowest annual average export value of US \$ -91.18 and US \$-191.18 million per year.

As far as the growth rate of the exports of manufactured goods was concerned machinery and transport metal manufactured had the top most growth rate of 15.5 per cent per year, chemical and allied products had the second largest export growth rate of 14.9 per cent per year all textile materials fabrics product had the third place in export growth rate with 6.9 per cent per annum followed by coir yarn and manufactured (8.7 per cent), leather manufactured (6.7 per cent), jute manufactured (4.8 per cent) per year. The lowest export growth rate was witnessed in handicrafts which has -2.8 per cent per annum. Regarding the compound growth rate of manufactured goods export was concerned, machinery and transport metal had the highest compound growth rate of 16.8 per cent per annum and handicrafts had the lowest compound growth rate of 2.8 per cent per annum.

5. CONCLUSION

International trade occupied an important place in the economic development of any country. The trade reform measures had introduced in various sectors of the economy but manufacturing sector, which contribute about more than 70 per cent of the country's exports. The manufactured export was the highest in 2014-15 and the lowest in 1991-92. The Manufactured exports was gradually increased from US \$13,262 million dollar in year 1991-92 to US \$2,03,255 million dollar in year 2016-17. Similarly, its share in Indian total exports also incessantly declined from 74.2 per cent to 73.5 per cent during the corresponding period. The annual growth rate of manufactured exports was gradually increased from 0.2 per cent in the year 1991-92 to 6.4 percent in the year 2016-17. In the manufactured products exports, machinery and transport metal manufactures product had the highest export value of US \$3017.79 million followed by Chemical and allied product (US \$1831.73 million), textile materials fabrics product (US \$851.11 million).On the other hand

handicrafts and textiles fabrics had the decreased by US \$91.18 million per year and US \$191.18 million per year respectively. The compound growth rates of these were exports concerned, machinery and transport metal had the highest compound growth rate of 16.8 per cent per annum whereas, handicrafts had the lowest compound growth rate of 2.8 per cent per annum. The first position that the Machinery, transport metal export emerged as the largest group of India's manufactured exports, thereby putting Chemicals and allied export at the second position. The Chemicals and allied exports had continuously over the years dominated India's manufactured exports. The Third position, Gems & jewellery export has continuously over the year's future dominated India's manufactured exports. The Machinery, transport metal export sector registered a steep increase of 32 per cent in 2016-17. The other sectors showing a steep growth during the period comprised Chemicals and allied export (22.6 per cent), Gems & jewellery exports (21.4 per cent), Textiles exports (12.84 per cent), Leather Exports (2.64 per cent), Handicraft exports (1.74 per cent), Jute exports (0.24 per cent), Coir yarn exports (0.14 per cent).

6. REFERENCE

- [1] Harpreet Kaur (2016) "Manufacturing Sector of India: Challenging the 'Make in India' Campaign" IRACST, International Journal of Commerce, Business and Management (IJCBM), ISSN: 2319-2828 Vol. 5, No.1, Jan-Feb 2016 Page No.9-18.
- [2] Export-Import Bank (2005) Export-Import Procedures, Documentation and Logistics
- [3] Planning commission Government of India, "Strategies for accelerating growth of manufacturing in India in the 12th Five year plan and beyond" The Manufacturing Plan
- [4] IBEF. (March 2017). Manufacturing sector in India. Retrieved from <https://www.ibef.org/industry/manufacturing-sector-india.aspx> (last accessed on 12 April 2017)
- [5] Seyed Hossein Jalali (2012). Export Barriers and Export Performance: Empirical Evidence from the Commercial Relationship between Greece and Iran, South-Eastern Europe Journal of Economics, 1, 53-66.
- [6] Papadopoulos, N., and Martín Martín, O.(2010). Toward a model of the relationship between internationalization and export performance. International Business Review, 19, 388-406.
- [7] Navarro, A., Losada, F., Ruzo, E., and Diez, J.A. (2010). Implications of perceived competitive advantages, adaptation of marketing tactics and export commitment on export performance, Journal of World Business, 45, 49-58.
- [8] Mathanraj.T and M.G Vincely Jebakar 2019, "Trade Post Liberalization and its impact on India's exports" International Journal of Research and Analytical Reviews (IJRAR) www.ijrar.org IJRAR19J2092 © 2019 IJRAR February 2019, Volume 6, Issue 1, www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138).
- [9] Mathanraj.T, M.G Vincely Jebakar, and Dr. P. Jaya Prapakaran, 2019, "Impact of Trade Liberalization on Indian Exports" Journal of Emerging Technologies and Innovative Research (JETIR) www.jetir.org, ©2019 JETIR June 2019, Volume 6, Issue 6, www.jetir.org (ISSN-2349-5162).
- [10] Hand Book of statistics on Indian Economy (Reserve Bank of India).