

Impact of globalization, employment opportunities in Indian manufacturing industry

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Abstract

Objectives: To find the generation of employment in Indian manufacturing industries.

Methods/Statistical analysis: The data has been collected from Annual Survey of Industry (ASI), Economic and Political Weekly Research Foundation (EPWRF), Mumbai 2002. Compound Annual Growth Rate (CAGR) has been calculated. The study variables are: Number of factories, fixed capital, workers and value of output. The study period is from 1980-81 to 2002-03.

Findings: During the post globalization period, manufacture and refining of sugar industry is converted into capital intensive industry. Manufacture of beverages and tobacco and related products groups industry provided more employment during the study period. The manufacture of textile products provided more employment to the workers. In case of manufacture of wood and wood products, three digit industries output CAGR was positively increased. Manufacture of rubber, plastic, petroleum and coal products, and processing of nuclear fuels, pre and post globalization periods, factories, workers, fixed capital and output CAGR was positively significant.

Improvements/Applications: Government has to give some incentive to labour intensive industries.

Keywords: Globalisation, Employment, Manufacturing industry, India.

1. Introduction

Globalisation has put many challenges and opportunities to the Indian economy. After New Economic Reforms (NEP), India faced many serious challenges, among them employment creation was a big challenge for the Indian people. There is complexity in those problems. The complexity arises from three basic facts [1-2]. Firstly, very few people are regular full time wage employees. The rest of the vast majority of workers work on irregular basis either as self-employed or as casual wage laborers. Secondly, as there is no well-developed system of social security, unemployment was not an option except for the poor have to work in order to survive even when the return from this work is inadequate for basic subsistence. Finally, J.B. Say's termed as law of employment, into which supply of labour creates own demand. Globalisation has created many opportunities [3] in the India's manufacturing industry. Manufacturing industry is increase in the employment opportunities to the workers, and also improvement in quality of jobs, in terms of better earnings, and improved condition of work. Secondly, whenever there is an increase in employment opportunities then automatically the purchasing power also increases. These two things lead to increase to economic growth. The liberalization, globalisation effect foreign institutional investment flows into India, this leads to economic support to the Indian manufacturing industries. Wherever, employment opportunities arose then automatically the competition increase and this effect increase acquire of quality of labour.

Grew of Indian economy at a decent rate in early 1980s, but the economic growth rate couldn't improve the overall conditions in the country. After 1980s the industries did not provide more employment to Industry and had not implemented the service intensive, but the capital intensive. Indian organized manufacturing industries have not played a role in transferring labour from low-productivity to high- productivity activities. Due to globalization the Indian manufacturing industries employment growth rate plunged.

During 1993-94 to 1999-2000 the Indian manufacturing industry's employment growth rate was 2.53 %. In the era of liberalization and globalization on one hand the new economic policy created competition and foreign technology allowed other side. Objective of the paper is to investigate the generation of employment in Indian manufacturing industries.

2. Methodology

The data has been collected from Annual survey of Industry (ASI), Economic and Political Weekly Research Foundation (EPWRF), Mumbai 2002. CAGR has been calculated a different variables like, number of factories, fixed capital, workers and value of output. It is important to remember that till 1988-89, the industrial classification was based on the National Industrial Classification 1970(NIC-1970). Some industries had to be combined to build an equal series for the period 1987-88 and 1989-90 and past 1989-90 periods. The remaining industries were adjusted using the procedure outlined in the Central Statistical Organization (CSO) document (1987) to arrive at a comparable series. The study followed NIC classification. The study has converted four digit industries into three digit industries. The study converted to 1980-81 to 1993-94 series (1980-81 prices were converted to 1993-94 prices).

3. Results and Discussion

1. Performance of manufacturing industry

Indian manufacturing factories establishment CAGR was 1.1% in pre globalization period. There was a 0.1% declined in post globalization period due to merger and acquisition. But in pre and post globalization periods the total growth rate was 1.8%. In case of workers, the growth rate was -0.9% in post globalization period as compared to pre globalization period. In pre globalization period the growth rate was 0.1%. But in pre and post globalization periods the growth rate was 0.5%, it shows that the significance of workers in Indian economy. Fixed capital growth rate was 14.13% in pre globalization period and it was 9.95% in post globalization period. In post globalization period the fixed capital growth rate was declined as compared to pre globalization period. The value of output growth rate is also declined in post globalization period and it was 11.22% as compared to pre globalization period which was 13.61%. During the period (1980-81 to 2002-03) output growth rate was 14.00% (Table1). It says that output growth rate has been increased.

Table1. Pre and post globalization in Indian manufacturing industry CAGR

Years	Factories	Workers	Employment	Fixed capital	Value of output
1980-81 to 1990-91	1.1	0.1	0.3	14.13	13.61
1991-92 to 2002-03	1.0	-0.9	-1.0	9.95	11.22
1980-81 to 2002-03	1.8	0.5	0.6	13.60	14.00

Source: The authors calculated on the data source of EPWRF and ASI various issues

The performances of Indian manufacture industries during 1981-82 factories growth rate was 8.84%, but the fixed capital was 18.16%. At the same time, the workers growth rate was very less and the value of output growth rate was 20.61%. It shows that during 1981-82 the workers percent was very less, but output percent was very high. During 1982-83 to 1995-96 the number of factories establishment percentage was up and downs were there. During 1982-83 the fixed capital used by industries growth rate was 18.16%. In the similar way during the period 1982-83 to 1990-91, the fixed capital per cent changes are differing. In 1991-92 due to fluctuation of the Indian economy fixed capital percent was negatively significant and it was 26.97%. During 1982-83 the industrial workers percentage was up and downs was there. The value of output negatively declined in the year 1998-99 due to fluctuations (Table2).

Table2. Performance of Indian manufacturing industry

Years	Factories	%change	Fixedcapital	% change	Workers	% change	Value ofoutput	% change
1980-81	96503		3470259		6046592		6108403	
1981-82	105037	8.84	4100600	18.16	6105622	0.98	7367247	20.61
1982-83	93166	-11.30	4860554	18.53	6312673	3.39	8623768	17.06
1983-84	96706	3.80	5484211	12.83	6158837	-2.44	9353741	8.46
1984-85	96947	0.25	6008524	9.56	6091409	-1.09	10556600	12.86
1985-86	101016	4.20	6723094	11.89	5819169	-4.47	12015540	13.82
1986-87	97957	-3.03	7847463	16.72	5806866	-0.21	13304354	10.73
1987-88	102596	4.74	8909887	13.54	6061786	4.39	15397307	15.73
1988-89	104077	1.44	10692778	20.01	6026328	-0.58	18434878	19.73
1989-90	107992	3.76	13364756	24.99	6326541	4.98	23065940	25.12
1990-91	110179	2.03	15190200	13.66	6307143	-0.31	27056353	17.30
1991-92	112286	1.91	19287139	26.97	6269039	-0.60	29919581	10.58
1992-93	119494	6.42	22441333	16.35	6649310	6.07	36861377	23.20
1993-94	121594	1.76	24483494	9.10	6632323	-0.26	42574425	15.50
1994-95	123010	1.16	31683609	29.41	6970116	5.09	51798702	21.67
1995-96	134571	9.40	37393806	18.02	7632297	9.50	67051425	29.45
1996-97	134556	-0.01	41017831	9.69	7405858	-2.97	69251963	3.28
1997-98	135551	0.74	44015771	7.31	7604907	2.69	82542261	19.19
1998-99	131706	-2.84	39115145	-11.13	6564464	-13.68	78377081	-5.05
1999-00	131558	-0.11	40186473	2.74	6280659	-4.32	89793835	14.57
2000-01	131268	-0.22	39960422	-0.56	6135238	-2.32	92690185	3.23
2001-02	128549	-2.07	43196013	8.10	5957848	-2.89	96245663	3.84
2002-03	127957	-0.46	44475938	2.96	6161493	3.42	113056111	17.47

Source: ASI various issues & EPWRF

2. Manufacture of food products

Only few industries provided more employment opportunities to the workers in post globalization period and that industry code is 200. And said industry provided more employment opportunities to the workers and contributed to high output growth rate. In similar way industry code 202, provided employment to the workers and CAGR was 7.3% in the post globalization period. There was factories establishment CAGR was significant. Growth rates of fixed capital and output increased in the above industries. Industry code 203 is also contributed 4.6% CAGR, and factories (2.7%), fixed capital (18.3%) and output (10.9%). But, in post globalization period output growth rate was declined to 1.5% as compared to post globalization period. Grain milling industry's fixed capital CAGR increased in post globalization period, but output growth rate was declined. The industry (205) factories CAGR declined in post globalization, but fixed capital and output growth rates were also increased in post globalization period. It shows that, after post globalization, this industry converted into capital intensive industry; as a result, workers growth rate was declined. In case of industry code, 206+207, factories CAGR was negatively significant in pre and post globalization periods. But fixed capital and output growth rates increased during globalization. During post globalization, this industry was converted into capital intensive industry that's why the workers CAGR declined (Table 3).

3. Manufacture of beverages and tobacco and related products

Few industries were contributed more employment opportunities to the workers in post globalization period, that manufacturing industry is manufacture of wine (221) and it contributed workers CAGR was 9.3%, fixed capital growth rate was 20.1% and output growth rate was 21.1%. Here we can say that this manufacturing industry performance was good in post globalization. But, above said industry workers CAGR were declined in post globalization period.

During total study period (from 1980-81 to 2002-03) only manufacture of ice (216+224) industry factories establishment CAGR was low as compared same group industries. All beverages industry group employment opportunities provided more. But in case of fixed capital CAGR was 18.6, 20.0, 17.2 and 22.3 respectively.

This group of industries fixed capital CAGR was increased in both periods (1980-81 to 2002-03). Output CAGR was also increased in all industries except manufacture of ice + manufacture of soft drinks and syrups (216+224) industry (Table 3). Beverages tobacco industries could not provide more employment.

Table3. Selected 3 digit manufacturing industries compound annual growth rate (CAGR)

Sl.No	Industry code	Pre globalization (1980-81 to 1990-91)				Post globalization (1991-92 to 2002-03)				Both period (1980-81 to 2002-03)			
		FA	WO	FC	OU	FA	WO	FC	OU	FA	WO	FC	OU
Food and food products													
1	200	1.4	-1.6	6.5	8.9	6.0	11.1	24.2	17.0	3.4	4.9	21.9	18.2
2	201	5.2	4.7	15.8	17.4	5.2	2.5	13.4	12.5	5.7	3.9	14.6	14.9
3	202	3.0	2.7	18.1	11.7	7.5	7.3	21.1	18.7	5.0	4.4	21.3	15.0
4	203	-2.7	0.6	7.1	12.4	2.7	4.6	18.3	10.9	1.9	6.1	21.5	16.5
5	204	2.9	3.5	13.2	15.0	1.9	2.3	11.3	13.2	2.4	2.7	13.0	12.5
6	205	3.8	5.5	19.1	16.6	2.6	2.0	14.2	11.6	3.0	3.5	15.9	14.4
7	206+207	-6.0	-6.3	13.3	15.1	-2.9	-2.0	12.2	8.7	-4.3	-2.6	14.2	11.5
9	209	5.5	7.7	29.7	19.3	5.6	3.3	20.3	16.3	5.4	6.7	27.1	19.2
10	213+etc	0.5	-3.9	15.4	15.1	1.6	1.8	11.4	-6.4	1.5	1.4	14.8	5.7
Manufacture of beverages, tobacco and related products													
11	220+223	5.0	3.8	17.0	17.2	0.9	0.2	13.6	10.7	3.3	3.0	18.6	15.9
12	221	7.1	6.6	25.9	17.0	5.3	9.3	19.0	221.1	5.9	2.7	20.0	15.2
13	222	3.6	2.5	19.9	18.8	3.2	1.5	12.8	8.3	4.0	2.9	17.2	13.7
14	224+216	1.8	4.5	20.1	15.3	2.7	7.1	25.4	-25.7	1.9	3.5	22.3	-0.6

Source: the authors calculated on the data source of EPWRF and ASI various issues,

Note: FA= Factories, WO= Workers, FC=Fixed capital and OU= Output

4. Manufacture of textile products

Textile products, factories and fixed capital CAGR increased in post globalization as compared to pre globalization. But, output growth was declined in post globalization. During total study (1980-81 to 2002-03) period, industry code 262+9, factories CAGR was 2.0. It is less growth rate as compared to other same group industries. In case of workers all this group industries provided more employment except blankets, shawls, carpets (263+4) industry and its CAGR was -0.3 and it indicated that negatively declined (Table 4).

5. Manufacture of wood and wood products

Wood products was not contributed more employment opportunities to the workers in post globalization period. In post globalization period workers, fixed capital and output growth rate was declined. Only wooden and cane boxes & etc (273) and wooden industrial goods (274+5+9) fixed capital growth rates were increased in post globalization period.

Table4. Selected manufacturing industries growth rates

S.L No	Industry code	Pre globalization (1980-81 to 1990-91)				Post globalization (1991-92 to 2002-03)				Both period (1980-81 to 2002-03)			
		FA	WO	FC	OU	FA	WO	FC	OU	FA	WO	FC	OU
Manufacture of textile products													
15	260	1.9	7.6	20.1	15.8	4.2	8.4	22.9	13.9	4.7	8.5	23.8	17.1
16	261	5.9	5.4	23.6	16.8	4.1	7.8	11.8	8.5	5.6	5.8	17.7	13.0
17	262+269	-3.6	-1.0	26.6	16.1	5.2	10.3	22.8	-5.9	2.0	4.9	25.3	9.5
18	263+264	-2.1	-7.2	11.8	16.2	8.6	11.3	15.0	-10.2	2.6	-0.3	13.3	7.4
19	267+268	5.7	1.5	20.9	0.2	8.0	12.4	21.2	48.8	7.3	7.9	20.6	18.8
Manufacture of wood and wood products, furniture and fixtures													
20	270	-3.8	-5.2	2.3	4.7	-4.0	-8.0	2.2	6.0	-2.7	-5.6	3.6	6.0
21	271	10.1	20.1	18.3	16.4	6.6	-2.0	9.8	9.0	7.6	0.6	15.1	12.9
22	272	7.0	3.0	20.5	20.9	-0.8	1.5	15.9	11.7	2.4	1.5	16.4	13.8
23	273	-4.0	-2.4	8.3	3.6	0.9	-0.6	14.9	10.6	-2.4	-2.3	11.7	7.1
24	274+etc	-3.8	-5.0	-1.4	14.3	-1.0	-1.3	11.6	-20.1	-2.8	-2.1	9.0	1.9

But wooden and cane boxes &etc (273) industries output growth rate was increased in post globalization period. During the total study period (1980-81 to 2002-03) factories CAGR was negatively declined. In the case of workers, only structural wooden &etc provided more employment. But all industries fixed capital CAGR was increased. All these three digit industries output CAGR was positively increased (Table 4).

6. Manufacture of paper and paper products and printing, publishing and allied industries

Few manufacturing industries were contributed more employment to the workers in post globalization. The industry code 286 + 289 also provided employment opportunities to the workers, but the CAGR was only 1.3% in the post globalization. And remaining of the manufacturing industries output CAGR was declined. In both period (1980-81 to 2002-03) factories CAGR was increased in all manufacturing industries except industry code 285 and industry CAGR was negatively significant. In case of workers industry code 281, CAGR was 5.0; it was positively significant, but other industries workers CAGR was declined. Some industries were negatively significant. All this group of industries fixed capital CAGR was increased in both periods.

7. Manufacture of basic chemicals and chemicals products

Only few manufacturing industries were provided more employment to the workers in post globalization, that industry code is 300. And this industry worker CAGR was 3.4%. Factories, CAGR was 5.1% in post globalization period, that's why fixed capital and workers growth rate was increased, but output growth rate was declined in post globalization. All this group of manufacturing industries, factories CAGR was positively significant in both study periods (1980-81 to 2002-03). But, in case of workers only a few manufacturing industries were provided more employment. In case of fixed capital, all industries positively increased. And also output CAGR also positively significant (Table 5).

Table 5. Selected 3 digit manufacturing industries growth rates

S.L No	Industry code	Pre globalization (1980-81 to 1990-91)				Post-globalization (1991-92 to 2002-03)				Both period (980-81 to 2002-03)			
		FA	WO	FC	OU	FA	WO	FC	OU	FA	WO	FC	OU
Manufacture of paper and paper products and printing, publishing and allied industries													
25	280	3.9	-0.4	12.1	17.0	1.1	-0.4	12.3	8.6	2.2	0.6	13.3	12.8
26	281	4.9	2.9	15.4	14.3	6.2	6.1	14.8	12.6	5.9	5.0	18.8	14.8
27	284	0.2	0.2	17.2	15.2	3.1	1.5	17.5	10.8	2.3	1.0	18.0	14.6
28	285	-2.9	-2.9	11.2	10.5	-15.0	-18.9	-3.6	-1.5	-6.6	-7.3	4.9	7.3
29	286+289	0.2	-0.6	10.1	13.4	3.0	1.3	16.3	3.5	1.3	0.4	14.7	10.7
30	287 etc	-0.8	-2.6	8.9	12.6	-1.3	-3.2	4.7	-45.4	-1.6	-2.4	10.3	-7.1
Manufacture of basic chemicals and chemical products (except products of petroleum and coal)													
33	300	2.4	2.4	14.0	14.6	5.1	3.4	14.2	12.0	4.4	3.0	15.2	13.9
34	301	1.6	2.0	10.6	13.5	3.7	1.1	8.9	9.4	2.8	2.0	12.3	13.5
35	302	2.7	-4.6	17.0	11.6	1.4	3.3	24.5	22.8	1.4	-1.1	22.3	18.7
36	303	3.9	0.9	12.4	13.9	-3.0	-5.3	3.5	4.0	2.8	0.5	13.6	12.1
37	304	4.1	2.0	14.8	14.9	3.0	3.1	24.3	12.4	4.6	3.6	21.2	15.6
38	305	5.0	4.1	13.5	13.5	3.1	2.4	11.4	11.1	3.6	2.5	14.6	12.3
39	307+etc	0.4	1.5	20.4	13.9	2.6	0.4	10.7	-10.3	2.4	1.7	18.2	6.5

8. Manufacture of rubber, plastic, petroleum and coal products, and processing of nuclear fuels

The manufacture of industry code 310 and 312, factories establishment CAGR was increased in post globalization period as compared to pre globalization. In similar way, industry code 313 workers CAGR was 6.1% in post globalization period and remaining industries were not able to provide more employment to the workers. But all industries fixed capital and output CAGR was declined in post globalization as compared to pre globalization. In study period (1980-81 to 2002-03) factories, workers, fixed capital and output growth was positively significant (Table 6).

9. Manufacture of non-metallic mineral products

Only few manufacturing industries were contributed more employment opportunities to the workers and those industries codes are 322+323, 326 and 327. Fixed capital and output CAGR declined due to factories establishment growth rate was declined. This is the main reason to declined workers, fixed capital and output growth in post globalization. Here, there is a correlation between factories, workers, fixed capital and output. In the similar way the industry code 326 and 327 industries were provided more employment to the workers (Table 6).

10. Manufacture of metal products and parts except machinery and equipment

Only few manufacturing industries were provided more employment to the workers in post globalization period, those industries codes are 345, 349 and rest of the manufacturing industries CAGR was declined in post globalization, as compared to pre globalization. In case of fixed capital, manufacturing industry code 349 CAGR increased in post globalization. During study period (1980-81 to 2002-03) only few manufacture industries factories CAGR increased and those industries codes are 340, 345, 349, and remaining of the industries factories CAGR declined. Same thing happen in case of workers, but fixed capital and output CAGR was increased in the study period (Table 6). Here we can say that few industries affected to globalization.

Table6. Selected 3 digit industries growth rates

S. N	Manufacturing industry code	Pre globalization(1980-81 to 1990-91)				Post globalization (1991-92 to 2002-03)				Both period(1980-81 to 2002-03)			
		FA	WO	FC	OU	FA	WO	FC	OU	FA	WO	FC	OU
Manufacture of rubber, plastic, petroleum and coal products; processing of nuclear fuels													
40	310	3.0	3.2	13.2	15.9	4.0	0.5	6.1	6.2	4.2	2.8	14.9	1.34
41	312	2.0	0.3	17.1	10.9	1.2	1.4	13.8	7.8	2.7	2.0	16.6	12.3
42	313	4.9	6.1	23.9	19.5	5.2	6.1	18.4	13.9	5.7	6.4	23.5	18.5
Manufacture of non-metallic mineral products													
43	320	4.1	2.5	18.3	13.9	0.6	-1.1	10.9	6.4	2.4	0.1	15.0	12.0
44	321	-0.4	-2.0	16.4	14.0	-1.1	-1.5	17.0	10.3	0.1	-0.9	21.2	13.3
45	322 +323	1.9	-0.7	20.7	14.0	1.2	2.8	5.3	-16.3	1.9	0.1	11.8	3.8
46	324	9.3	3.5	24.1	19.8	3.1	-0.5	15.7	9.7	6.1	1.8	17.5	14.5
47	325 +329	1.3	1.4	12.5	17.7	-13.8	-10.4	6.3	-20.9	-4.2	-3.4	11.5	2.8
48	326	5.1	2.8	18.9	15.8	4.2	8.9	10.9	15.6	5.3	5.7	20.4	18.6
49	327	4.4	-3.1	15.4	8.7	27.1	17.2	23.5	15.9	11.2	4.2	15.8	12.0
Manufacture of metal products and parts, except machinery and equipment													
50	340	4.6	7.2	24.1	19.6	1.1	-2.4	5.2	6.2	3.5	2.3	17.5	15.2
51	341	-1.1	-0.1	14.7	13.2	-7.0	-5.3	3.4	0.1	-2.4	-1.7	12.2	8.2
52	343+346	-1.2	-2.2	10.2	15.1	-4.0	-3.1	9.7	-1.8	-1.7	-1.6	10.9	9.1
53	345	3.4	4.4	18.7	20.2	2.9	5.7	16.5	15.1	3.0	3.1	17.5	12.9
54	349	2.3	3.4	16.0	17.0	20.3	18.8	22.1	23.9	11.2	11.2	20.8	20.6

11. Manufacture of machinery and equipment other than transport equipment

Only few manufacture industries provided more employment to the workers in post globalization period. Manufacturing industry code number 369 contributed more employment to the workers. This industry factories, workers fixed capital and output CAGR was increased in post globalization period due to factories CAGR was increased. That is why, rest of the workers, fixed capital and output growth rates are increased. During both study period manufacturing industry code 366, factories CAGR was -3.0, and remaining manufacturing industries CAGR was positively significant. But, only two industries provided more employment opportunities to the workers, those industries codes are 368 and 369. In case of fixed capital and output, all industries CAGR were positively significant (Table 7).

12. Manufacture of transport equipment parts

All the manufacturing industries were not provided more employment to the workers in post globalization. And also, factories, fixed capital and output CAGR rate was declined in post globalization. These industries may be affected to globalization. In the total study period, 375 codemanufacturing industry provided more employment to the workers and remaining manufacturing industries were not. Fixed capital and output CAGR has been increased in the study period (Table 7).

13. Othermanufacture industry

Majority of the manufacturing industries were not contributed more employment to the workers. Those industries codes are 382 and 386. These industries factories, fixed capital and output CAGR also declined in post globalization. And rest of the manufacturing industries provided more employment to the workers.

In both study periods, manufacturing industry code 382 and 386 industries factories CAGR was declined in the study period. In case of industry code 386, industries workers declined (-6.4) in both period (1980-81 to 2002-03). But in the case of fixed capital and output CAGR was increased in the study period (Table 7).

Table 7. Selected 3 digit manufacturing industries compound annual growth rate (CAGR)

S.NO	Code	Pre globalisation (1980-81 to 1990-91)				Post globalization (1991-92 to 2002-03)				Both period (1980-81 to 2002-03)			
		FA	WO	FC	OU	FA	WO	FC	OU	FA	WO	FC	OU
Manufacture of machinery and equipment other than transport equipment													
55	351	3.7	1.8	18.7	14.4	0.5	-2.2	11.8	7.7	2.1	-0.3	13.1	11.3
56	353	-1.6	-2.9	12.7	12.2	0.5	-2.8	8.1	5.1	0.1	-1.7	12.2	10.5
57	361	2.4	1.1	17.5	13.4	1.5	0.3	11.9	9.6	2.6	1.1	15.5	12.0
58	362	5.8	-1.5	16.1	12.0	4.3	3.3	21.3	10.2	5.4	0.6	17.6	10.9
59	366	2.7	-2.0	18.5	21.1	-6.7	-2.6	16.6	14.0	-3.0	-4.1	14.2	15.4
60	368	5.1	9.0	24.9	27.4	4.8	8.4	21.8	19.4	5.5	7.7	22.6	23.2
61	369	-1.4	2.7	21.0	14.0	15.6	12.2	24.6	18.3	4.3	3.8	19.4	14.6
Manufacture of transport equipment and parts													
62	371+372	0.4	-3.4	1.1	10.5	-0.3	-23.0	-14.1	-8.0	0.4	-10.1	-1.5	3.6
63	375	8.3	9.1	30.6	26.3	3.7	3.8	15.8	16.1	5.0	5.4	18.1	19.6
64	376	0.1	3.5	18.6	15.4	-2.7	-2.0	9.8	6.7	-0.4	1.4	14.6	12.6
65	377	2.4	-1.8	10.5	18.8	3.1	-10.8	1.0	-9.2	5.4	-1.6	9.6	6.9
Other manufacturing industries													
66	380	0.1	0.9	14.9	13.8	3.0	4.9	19.1	22.0	1.8	2.6	18.9	18.3
67	381	1.7	3.9	26.8	10.2	2.9	24.0	15.0	18.6	3.0	13.4	27.2	19.9
68	382	-2.1	4.1	19.4	15.7	-3.2	-3.7	0.5	8.8	-1.4	1.4	11.7	13.0
69	383+384	-4.1	5.2	12.5	14.9	6.0	8.6	23.1	33.0	3.0	10.6	22.4	22.8
70	385	4.2	0.1	10.7	8.7	5.7	8.2	32.3	20.2	4.1	5.2	21.2	17.8
71	386	2.6	-1.9	10.3	0.6	-1.2	-11.9	-4.8	-14.0	-1.8	-6.4	6.4	3.4
72	387+389	-0.7	3.6	13.8	5.1	-0.1	4.7	12.0	24.7	1.6	5.5	21.7	24.9

4. Conclusion

In the above discussion reveals that in post globalization period some manufacturing industries have provided more employment to the workers. The main findings of the study are: In post globalization period manufacture and refining of sugar industry is converted into capital intensive industry that's why the workers CAGR declined. All manufacture of beverages and tobacco and related products groups industry study period, employment provided more. Manufacture of textile products all this group industries provided more employment to the workers, except blankets, shawls, carpets and rugs & etc. Manufacture of wood and wood products three digit industries output CAGR was positively increased. Manufacture of paper and paper products and printing, publishing and allied industries group of industries fixed capital CAGR was increased in both periods.

In case of fixed capital, manufacture of basic chemicals and chemicals products all industries positively increased. Manufacture of rubber, plastic, petroleum and coal products, and processing of nuclear fuels, pre and post globalization study period, factories, workers, fixed capital and output CAGR was positively significant. In case of fixed capital and output manufacture of machinery and equipment other than transport equipment all industries CAGR was positively significant in the study period.

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