A Study of Significance of Financial Leverage in Manufacturing Companies in India

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Abstract: *The current paper aims to study the significance of Financial Leverage in manufacturing companies in India. The selected companies are old, established and matured. It has been noticed that the leverage plays less significant role in these companies and moreover these companies are having less Debt to Equity ratio as observed. There is heavy reliance on internal accruals arise over a period of time. The primary focus is to look the fundamental aspect of financial leverage and utilisation of financial resources by these manufacturing companies.*

Introduction: Financial leverage means investment of funds obtained at fixed interest charge. It can be defined as the ratio of long term borrowed capital to total capital employed. Leverage is introduced in financial management with anticipation to earn more on the funds than what it would cost which in consequence would improve income of the owners. The principle of leverage is very popular. To increase the company's return on equity capital and more importantly when it is not viable to improve operating efficiency of the business and subsequently increasing return on total capital employed. Financial leverage gives an organisation opportunity for "Trading on Equity". As the rate of interest on borrowed funds are anticipated to be lesser than the cost of equity, the earnings on borrowing which results in improvement of total earnings and earnings of shareholders.
Manufacturing Sector in India: Manufacturing sector comes under secondary sector of economy. India's manufacturing sector has shown rising trends over past decade. The growth has peaked up later after the existing government took charge in 2014. Various policies have been introduced during last few years to give further boost to manufacturing sector. The sector grew at a Compounded growth rate of 4.34% during FY12 and FY18 as per the second advance estimates of annual national income published by the Government of India.
Investment in manufacturing sector has witnessed huge flow of capital post "Make in India" drive launched by central government back in 2015. Global firms like GE, Siemens, HTC and Toshiba have either established or in the process of establishing their manufacturing plant in India. Cumulative Foreign Direct Investment (FDI) in India's manufacturing sector reached US$ 73.70 billion during April 2000-December 2017. India is an attractive hub for foreign investments in the manufacturing sector. Several mobile phone, luxury and automobile brands, among others, have set up or are looking to establish their manufacturing bases in the country.

Objective of Study

The following objectives are considered while studying the existing topic:

a) To study the fundamental aspect of financial leverage
b) To study the utilisation of financial resources in a manufacturing companies in India
c) To study the debt equity ratio and Earning per share pattern of the select companies
d) To study efficiency of the companies with respect to receivables and payables

Research Methodology:

For the existing study, the sample of 19 manufacturing companies has been taken from diverse sectors in the economy sector. The companies selected are from following sector:

- Capital goods - 2
- Consumer durables – 3
- Pharmaceutical – 3 ,
- Metal – 2
- Oil & gas – 2
- Power – 2
- Energy – 2
- Auto – 3
- Method of selection

Method of selection of these companies was done on random basis. Data of these companies required for analysis is Debt Equity ratio, EPS, ROCE, ROE, efficiency ratio of receivable and payables, equity and reserve positions, reserve to equity ratio for last 5 years from 2012 – 13 to 2016 – 17.

Data Analysis & Interpretation with the help of data collected
Finding, Conclusion and suggestions

Table A:

Sr. No	Name of the Company	**Debt to Equity Ratio**				
		2012-13	**2013-14**	2014-15	2015-16	2016-1
1	Bharat Forge Ltd	0.64	0.54	0.47	0.4	0.4
2	Maruti Suzuki India Ltd.	0.07	0.08	0.01	0	0.01
3	Exide Industries Ltd.	0	0	0	0.02	0.03
4	Bharat Heavy Electricals Ltd.	0.04	0.08	0	0	0
5	Larsen & Toubro Ltd.	0.24	0.16	0.22	0.2	0.15
6	Titan Company Ltd	0	0.31	0.03	0.03	0
7	Bajaj Electricals Ltd.	0.22	0.49	0.57	0.26	0.63
8	Alkem Laboratories Ltd.	0.04	0.01	0.01	0	0
9	Cadila Healthcare Ltd.	0.56	0.38	0.27	0.16	0.42
10	Glenmark Pharmaceuticals Ltd	0.12	0.12	0.07	0.1	0.29
11	Hindustan Zinc Ltd.	0	0	0	0	0.25
12	Tata Steel Ltd.	0.46	0.42	0.39	0.43	0.6
13	HPCL	2.36	2.13	1.06	0.79	0.84
14	BPCL	1.42	1.03	0.52	0.5	0.7
15	Petronet LNG Ltd.	0.61	0.58	0.41	0.32	0.17
16	NTPC Ltd.	0.66	0.72	0.96	0.97	1.04
17	Reliance Power Ltd.	0.11	0.14	0.26	0.3	0.39
18	Tata Power Company Ltd.	0.9	0.78	0.76	0.76	0.84
19	Balrampur Chini Mills Ltd.	1.12	1.11	1.43	1.22	1.11

Table B: Findings

Year	2012-13	2013-14	2014-15	2015-16	2016-17
D/E ratio greater than 1	3	3	2	1	2
D/E ratio is between 0.5 to 1	5	4	4	4	5
D/E ratio is between 0 to 0.5	8	10	10	10	9
D/E ratio is equal to 0	3	2	3	4	3

Finding of Debt to equity ratio over a period of study

	D/E declined over years	D/E increased over years	D/E negligible or zero over years	D/E unchanged over years
No. Of Companies	6	7	3	3

From the table A and Table B, it has been noticed that manufacturing companies in India have maintained a low level of debt to equity ratio during the concerned period under which study has been done. Out of 19 manufacturing companies, on 7 companies have increased their debt level in their capital structure constitute around 35% of sample. 65% of the companies have either reduced or unchanged or negligible their debt to equity ratio.

Table C: Earning per Share

Sr. No	Name of the Company	Earning Per Share (%)				
		2012-13	2013-14	2014-15	2015-16	2016-17
1	Bharat Forge Ltd	656.5	859	1544	1505.5	1256.5
2	Maruti Suzuki India Ltd.	1583.8	1842.6	2460	3026.6	4858.2
3	Exide Industries Ltd.	615	573	642	733	816
4	Bharat Heavy Electricals Ltd.	1351.5	100	290	-186.5	101.5
5	Larsen & Toubro Ltd.	4000	2950	2700	2853.5	2924.5
6	Titan Company Ltd	817	835	927	795	858
7	Bajaj Electricals Ltd.	257	-26.5	-69.5	474	532.5
8	Alkem Laboratories Ltd.	3693	2670	1835	1840	1950
9	Cadila Healthcare Ltd.	487	882.6	1241.6	1931	647
10	Glenmark Pharmaceuticals Ltd	758.3	302.5	147.8	95.3	301.4
11	Hindustan Zinc Ltd.	816.5	817	967.5	966.5	984
12	Tata Steel Ltd.	502.8	642.1	644.9	486.7	336.7
13	HPCL	267.2	512	807.2	1140.7	611.2
14	BPCL	365.5	561.6	703.2	1027.8	613.1
15	Petronet LNG Ltd.	153.2	94.9	117.7	121.9	227.4
16	NTPC Ltd.	150	130	120	124.2	113.8
17	Reliance Power Ltd.	18.3	2	0.9	14.4	2.3
18	Tata Power Company Ltd.	344	350	330	236	63
19	Balrampur Chini Mills Ltd.	663	15	-236	406	2426

Finding of Earning per share over a period of study

	Declined over years	Increased over years	Fluctuating but increased	Fluctuating but decreased
No. Of Companies	6	5	5	3

Table reveals that the EPS of the companies are mostly increasing over a period or stable in many cases.

Table D:

Sr. No	Name of the Company	Return on Capital Employed				
		2012-13	2013-14	2014-15	2015-16	2016-17
1	Bharat Forge Ltd	7.77	9.38	13.65	13.18	10.87
2	Maruti Suzuki India Ltd.	11.95	12.39	15	16.38	19.43
3	Exide Industries Ltd.	21.96	19.53	19.75	20.07	19.08
4	Bharat Heavy Electricals Ltd.	30	14.43	6.56	-4.35	3.02
5	Larsen & Toubro Ltd.	18.03	18.03	15.72	14.31	12.94
6	Titan Company Ltd	53.79	33.12	35.6	25.16	27.06
7	Bajaj Electricals Ltd.	12.86	6.91	7.9	27.11	17.53
8	Alkem Laboratories Ltd.	16.08	14.4	12.79	20.43	19.28
9	Cadila Healthcare Ltd.	14.09	19.6	26.04	34.24	6.94
10	Glenmark Pharmaceuticals Ltd	14.95	16.35	26.99	21.81	24.08
11	Hindustan Zinc Ltd.	24.37	21.41	22.13	23.15	26.86
12	Tata Steel Ltd.	12.8	13.37	9.25	9.03	10.95
13	HPCL	7.31	8.54	14.68	19.41	25.47
14	BPCL	14.57	18.52	23.35	27.43	22.77
15	Petronet LNG Ltd.	25.65	16.16	15.85	17.05	26.92
16	NTPC Ltd.	12.56	11.01	8.08	7.46	8.35
17	Reliance Power Ltd.	0.68	0.91	1.01	2.66	1.53
18	Tata Power Company Ltd.	10.18	10.09	9.22	9.16	8.59
19	Balrampur Chini Mills Ltd.	12.61	5.08	0.94	12.95	24.33

Table E

Year	2012-13	2013-14	2014-15	2015-16	2016-17
ROCE ratio greater than 20	5	2	5	8	8
ROCE ratio is between 20 to 10	11	12	7	6	6
ROCE ratio is less than 10	3	5	7	5	5

Finding of Return on Capital employed ratio over a period of study

	ROCE declined over years	ROCE increased over years	ROCE unchanged over years
No. Of Companies	5	7	7

From the table D and Table E, it has been noticed that manufacturing companies in India have maintained an average level of return on capital employed ratio during the concerned period under which study has been done. Out of 19 manufacturing companies, 5 companies have shown decline in their return on capital employed ratio constitute around 25% of sample. 75% of the companies have either increased or unchanged or negligible changes in their return on capital employed ratio.

Table F:

Sr. No	Name of the Company	Return on Equity				
		2012-13	**2013-14**	2014-15	2015-16	2016-17
1	Bharat Forge Ltd	13.22	14.84	20.56	19.25	13.82
2	Maruti Suzuki India Ltd.	12.87	13.26	15.65	16.92	20.28
3	Exide Industries Ltd.	15.38	13.13	13.53	14.11	13.97
4	Bharat Heavy Electricals Ltd.	21.72	10.47	4.16	-2.76	1.53
5	Larsen & Toubro Ltd.	16.86	16.32	13.63	13.04	11.85
6	Titan Company Ltd	36.9	29.36	26.61	20.08	17.66
7	Bajaj Electricals Ltd.	7.11	-0.75	-2.05	12.85	12.35
8	Alkem Laboratories Ltd.	20.27	16.21	14.15	17.95	20.1
9	Cadila Healthcare Ltd.	17.12	24.89	28.08	32.21	10
10	Glenmark Pharmaceuticals Ltd	15.3	14.92	20.34	20.15	22.68
11	Hindustan Zinc Ltd.	21.37	18.45	18.86	21.84	26.99
12	Tata Steel Ltd.	9.17	10.48	9.65	6.95	6.93
13	HPCL	6.59	11.54	17.05	21.04	30.51
14	BPCL	15.88	20.86	22.63	27.36	27.09
15	Petronet LNG Ltd.	25.82	14.27	15.51	14.33	21.07
16	NTPC Ltd.	15.69	12.78	12.6	11.53	9.75
17	Reliance Power Ltd.	3.05	0.33	0.14	2.46	0.38
18	Tata Power Company Ltd.	8.35	7.26	6.42	4.88	1.88
19	Balrampur Chini Mills Ltd.	12.24	0.29	-5.11	8.07	38.42

Table G:

Year	2012-13	2013-14	2014-15	2015-16	2016-17
ROE ratio greater than 20	5	3	5	5	8
ROE ratio is between 20 to 10	9	12	8	9	6
ROE ratio is less than 10	5	4	6	5	5

Finding of Return on Equity ratio over a period of study

	ROE declined over years	ROE increased over years	ROC unchanged over years
No. Of Companies	7	6	6

From the table F and Table G, it has been noticed that manufacturing companies in India have fluctuating return on equity ratio during the concerned period under which study has been done. Out of 19 manufacturing companies, on 7 companies have shown decline in their return on equity ratio constitute around 35% of sample. At the same time, equal number of companies 6 each (constitute 32% of the companies) have shown increase in return on equity ratio or are either unchanged or negligible changes in their return on capital equity ratio.

Table H:

Sr. No	Name of the Company	Efficiency ratio regarding debtor & creditors				
		2012-13	**2013-14**	2014-15	2015-16	2016-17
1	Bharat Forge Ltd	3.6	4.3	5.6	0.9	-0.2
2	Maruti Suzuki India Ltd.	28.4	23.9	33.9	43.2	48.9
3	Exide Industries Ltd.	6.1	5.6	5.8	6.1	6.3
4	Bharat Heavy Electricals Ltd.	-1.2	-1.3	-0.9	-0.8	-0.7
5	Larsen & Toubro Ltd.	-1.0	0.5	-0.8	-2.2	-4.5
6	Titan Company Ltd	58.3	67.1	66.7	54.2	74.0
7	Bajaj Electricals Ltd.	0.1	1.6	0.0	-1.2	-4.2
8	Alkem Laboratories Ltd.	4.9	7.1	6.2	4.6	1.1
9	Cadila Healthcare Ltd.	2.3	3.7	2.5	0.4	-4.9
10	Glenmark Pharmaceuticals Ltd	1.1	0.8	-0.6	-2.4	-5.0
11	Hindustan Zinc Ltd.	31.0	31.9	24.5	35.7	147.4
12	Tata Steel Ltd.	41.4	51.2	62.8	63.3	29.1
13	HPCL	45.1	40.9	42.2	41.4	38.0
14	BPCL	42.6	62.1	67.8	74.7	51.1
15	Petronet LNG Ltd.	13.8	15.7	20.1	21.2	18.9
16	NTPC Ltd.	8.2	11.6	8.0	4.5	2.5
17	Reliance Power Ltd.	-2.4	25.5	1.2	-2.4	-5.1
18	Tata Power Company Ltd.	4.8	4.5	2.6	1.7	-1.0
19	Balrampur Chini Mills Ltd.	16.4	19.7	23.4	10.7	11.8

Year	2012-13	2013-14	2014-15	2015-16	2016-17
Less than 1	4	3	4	7	8
Greater than 1	1	1	1	1	1
Greater than 2	1	0	2	0	1
Greater than 3	1	1	0	0	0
Greater than 4	2	2	0	0	0
Greater than 5	0	1	2	2	0
Greater than 6	10	11	10	9	9

Table I: Reserve to Equity ratio

Sr. No	Name of the Company	Reserves to Equity Ratio				
		2012-13	**2013-14**	2014-15	2015-16	2016-17

1	Bharat Forge Ltd	49	57	74	77	90
2	Maruti Suzuki India Ltd.	122	138	156	178	239
3	Exide Industries Ltd.	39	43	46	51	57
4	Bharat Heavy Electricals Ltd.	61	67	69	67	65
5	Larsen & Toubro Ltd.	236	180	198	217	246
6	Titan Company Ltd	21	27	34	39	48
7	Bajaj Electricals Ltd.	36	34	33	36	42
8	Alkem Laboratories Ltd.	192	226	129	148	183
9	Cadila Healthcare Ltd.	27	34	43	59	64
10	Glenmark Pharmaceuticals Ltd	92	106	182	257	333
11	Hindustan Zinc Ltd.	37	43	50	43	35
12	Tata Steel Ltd.	56	62	68	72	50
13	HPCL	39	43	46	53	19
14	BPCL	22	26	30	37	22
15	Petronet LNG Ltd.	5	6	7	8	10
16	NTPC Ltd.	9	9	9	10	11
17	Reliance Power Ltd.	5	5	5	5	5
18	Tata Power Company Ltd.	51	54	57	57	55
19	Balrampur Chini Mills Ltd.	53	49	45	49	65

Year	2012-13	2013-14	2014-15	2015-16	2016-17
Less than 10 times	3	3	3	2	1
Between 10 times to 20 times	0	0	0	1	2
Greater than 20 times	16	16	16	16	16

It has been seen that majority of the companies have huge reserves and surplus maintained as against the equity. Around 84% companies (16 out of 19) of the selected companies have reported reserves more than 20 times of the equity. This indicates less dependence on external finance for working capital as well as long term finances for expansion or modernisations.

General findings & interpretation:

1. Majority of the companies selected for the study are using less external sources of financing and having more reliance on internal sources. Average 12 out of 19 companies selected are having either 0 Debt to equity ratio or having D/E ratio less than 0.50.
2. Earnings per share of many companies are increasing or fluctuating but increasing for the selected period of study. This indicates that despite reducing or no debt components among these companies, their EPS is better off. This shows that companies are able to generate the required return on their equity for using the more internal sources for business.
3. Very few companies have return on capital employed less than 10 per cent. majority of companies have ROCE either between 10 to 20 per cent or more than 20 per cent. This also indicates that these companies are financial quite stable.
4. With respect Return on Equity, same logic works for these companies, as discussed these companies EPS is increasing for majority of the time, represents the ability of these companies to meet the expectations of share holders by consistently increasing the ROE.

5. Efficiency ratio of receivables and payables represents the net of average collection period to average payments period. It has been remarkably noticed that these companies are belonging the segment with high bargaining power with supplier as well as customer.
6. It has been observed that these are quite matured companies having huge base of retained earnings. Almost 80% of the selected companies are having reserves 20 times of equity capital.

Conclusions:

Financial leverage is very significant aspect of financial management. Especially when a business is newly emerged, the role of financial leverage is very vital. Advantage of trading on equity is significantly available for these companies. But when companies are getting matured, they often try to reduce financial leverage and saving fixed interest burden arises on account of debt funds. They incorporate more of internal funds accumulated over a period of time.