

Shareholder Value Creation Of Selected Manufacturing Companies Listed In Bse 100 Index

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ABSTRACT

Shareholder Value Creation is turning into the new corporate methodology in India. Investor esteem is estimated by the profits they have gotten. The investors need basically least pace of profit from their speculation relying upon the danger in the venture. The organization might acquire preferred benefit over the contender yet it probably won't measure up to the investor's base assumptions. The explanation is that the financial exhibition of a business association is estimated according to the investor's perspective. Esteem added addresses the worth made by an undertaking during a particular period. The organizations can't run and develop, on the off chance that it neglects to make worth to its investors. In general the worth creation turns into the broadly acknowledged objective for each association. There are various worth based measures. Investor Value Added is one of the worth based presentation measures and assists with discovering the worth of the investors. It centers mostly around the working presentation of the organization and it consolidates pay articulation and asset report information to decide the abundance returns accessible to all investors. Investor Value Added is one of the worth based exhibition measures and assists with discovering the worth of the investors. It centers principally around the working exhibition of the organization and it joins pay explanation and monetary record information to decide the abundance returns accessible to all investors. Financial Value Added and Market Value Added additionally has arisen as generally well

known and proficient device to gauge the exhibition of the organization. EVA edifies whether the monetary benefit is to the point of taking care of the expense of capital or not. It is the most effective apparatus to defeat the limits of conventional monetary measures. Harsh Stewart and Co fostered this device to gauge by and large monetary measure that urge the organization to focus on the conveyance of investor esteem. Market Value Added is a proportion of investor's abundance. MVA is the distinction between the current absolute market worth of an organization and its contributed capital. It's anything but a presentation metric like EVA yet it is an abundance metric, estimating the degree of worth of an organization has amassed over the long run. With this foundation the analyst has taken this subject to dissect the worth creation among the chose organizations from BSE 100.

Keywords: Value creation, EVA, MVA, SVA

Introduction

Creating Wealth is the main objective of any business. Shareholder's wealth is measured by the returns they receive on their investment. Value creation helps profitable and sustainable growth of the company. Shareholders' wealth is calculated in conditions of the profits they obtain on their venture. The income can either be in the form of dividends or in the form of capital appreciation or both. Capital appreciation in turn depends on the subsequent changes in the market value of the shares. This market value of shares is influenced by a number of factors, which can be company specific, industry specific or macroeconomic in nature.¹

The value based management systems have been developed for value creation. In order to help corporate to generate value for shareholders, value-based management systems have been developed. Shareholders look forward to management to create worth to their shareholders greater than and above the costs of resources stimulated, together with the cost of using capital. If the shareholders are not receiving the fair return from the company, they may withdraw their capital and invest in some other stocks. Without value creation process, the company will always fight to get additional capital, since it will be restricted by a share price that stands at a discount to the underlying value of its assets and by higher interest rates on debt or bank loans demanded by creditors. The changes in the wealth on annual basis are called wealth creation. The firm has to make investment activities for positive Net Present Value. The value creation is measured on accounts based information and the wealth creation is measured on stock market information. Some Indian companies swallow capital, and most of it goes down the tubes. Not surprisingly, managements have been pleased to treat equity as free money on which no returns are due unless there is adequate profit. In fact, in such a situation, shareholder value is often the result of accidental circumstances rather than the outcome of genuine effort by professional management of corporate.²

¹ Mangala, Deepa and Joura Simpy, "*Linkage between Economic Value Added and Market Value: An analysis in Indian context*", Indian Management Studies Journal, June 2002, pp. 55-56.

² Gandhok, Tejaparan, "*Implementing EVA*", Indian Management, July 2002, p. 31.

For successful shareholder value creation, the company must have high quality proficient management or good corporate governance. All and sundry converse on the subject within and outside the organization, but not many are aware of as what to do and what not to do with reference to this concept. Nevertheless, the concept of good corporate governance is here to stay in this country as shareholders and financial institutions turn more down to business, feels Tejpavan Gadhok, Country Manager, India, for Stern Stewart and Company. According to him, "Indian companies on the whole have a poor average in wealth creation." Over 400 companies globally implement the Economic Value Added program, but it is still relatively a new modern technique for corporate performance measurement in India.³

OBJECTIVES OF THE STUDY

1. To analyse the Shareholder Value Added, Economic Value Added and Market Value Added of select manufacturing companies listed in BSE 100 Index.
2. To examine the impact of economic variables (Wholesale Price Index, Gross Domestic Product and Money Supply) on value based measures of select manufacturing companies listed in BSE 100 Index.

METHODOLOGY

DATA USED

Secondary data were used for this study. The data were collected from the Annual Reports of the select companies of BSE 100 which were taken from Books, Journals, Magazines, Periodicals and Official websites. The researcher has selected sample companies from the companies listed in BSE 100 Index. The researcher has purposively selected all the 42 manufacturing companies for the study.

TOOLS FOR ANALYSIS

The researcher has used Mean, Standard Deviation, Co efficient of variation to know the central tendency and the homogeneity of the data were analysed for the study and LGR was used to know the growth rate of SVA, EVA and MVA. The SVA, EVA and MVA was calculated to know the value creation of the select manufacturing companies listed in BSE 100 Index. The Multivariate techniques is used for this study to know the impact of select economic variables on value based measures.

Shareholder Value Added: $SVA = NOPAT - \text{Cost of Capital}$; **Economic Value Added:** $EVA = NOPAT - (WACC * \text{Invested Capital})$; **Market Value Added** = Market Value of the firm - Capital Invested.

Regression Models Used: $Y_i (SVA) = \alpha + \beta_1 GDP + \beta_2 WPI + \beta_3 MONEYSUPPLY + \epsilon$; $Y_i (EVA) = \alpha + \beta_1 GDP + \beta_2 WPI + \beta_3 MONEYSUPPLY + \epsilon$; $Y_i (MVA) = \alpha + \beta_1 GDP + \beta_2 WPI + \beta_3 MONEYSUPPLY + \epsilon$

³ Venkatesh, S., *EVA scorecard - What's Hot What's Not*, Indian management, July 2002, p.33

Variables Used for the Study: Economic Variables: Wholesale Price Index, Gross Domestic Product, Money Supply.

SUMMARY RESULTS OF SVA, EVA AND MVA OF SELECT COMPANIES

Table 1

S. No	Company Name	Ind	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
1	United Phosphorous Ltd	Agri							
	SVA		-47.54	-30.9	-217.98	18.4	13.38	98.39	82.95
	EVA		-24.78	-26.78	-16.27	-45.88	14.53	21.87	95.55
	MVA		-133.625	11.56	1321.44	-475.12	3353.06	3435.18	-959.7
2	ABB Limited	CG							
	SVA		54.49	134.77	-50.45	140.39	165.82	330.32	466.5
	EVA		53.24	202.09	-484.3	95.06	-59.73	266.55	259.3
	MVA		602.77	2330.94	3497.21	7449.12	14823.21	5212.26	7982.8
3	Bharat Heavy Electricals Ltd	CG							
	SVA		-71.31	-103.82	110.41	387.39	1555.72	1892.77	2695.2
	EVA		460.7	436.954	650.042	951.926	1676.62	2004.15	2829.1
	MVA		34404.97	42237.29	188432.4	339289.6	562484.9	1265013	666869
4	Larsen & Toubro Ltd	CG							
	SVA		-2753.96	-381.2	-884.4	-499.18	-731.44	-1420.37	-3082.5
	EVA		116.069	877.603	803.273	628.236	316.466	1411.97	1498.3
	MVA		52142.78	12154.59	24351.99	48759.1	78638.68	237005.8	82449.
5	Siemens Ltd	CG							
	SVA		-284.28	-247.28	-624.86	-577.78	-1101.72	-492.51	-1477.1
	EVA		86.6893	140	-41.682	235.744	333.509	581.411	561.85
	MVA		10250.13	35579.05	43423.82	119184.2	190722	318722	96334.7
6		Div							
	SVA		114.25	183.34	213.85	335.84	346.75	436.15	943.18
	EVA		57.14	141.63	177.09	324.94	329.49	410.21	934.39
	MVA		-14.28	4551.31	-1378.15	-2051.82	1283.29	21278.63	1145.3
7	Dabur India Ltd	FMCG							
	SVA		57.55	109.45	-120.15	132.17	130.02	224.55	260.88

		EVA		61.66	83.76	70.2	145.22	170.13	246.71	301.04
		MVA		638.78	2003.49	2352.21	5642.65	7953.47	9431.65	6712.7
8	Hindustan Unilever Ltd	FMCG								
		SVA		1606.21	1942.59	1671.81	1186.94	1360	1824.49	1902.8
		EVA		1617.85	2001.81	1371.46	1129.72	1062.89	1812.87	1910.0
		MVA		37642.07	42483.63	29357.66	41269.95	45266.03	45135.92	54219.3
9	ITC Ltd	FMCG								
		SVA		2697.63	2265.61	2059.59	1570.06	1308.1	3102.75	322
		EVA		2346.02	1563.48	877.057	1495.65	854.738	3039.53	312
		MVA		161848	240706.9	321083.6	529712.4	658533.4	789021.4	643
10	Nestle India Ltd	FMCG								
		SVA		259.78	270.5	209.71	403.04	366.94	516.68	63
		EVA		262.046	241.606	294.616	405.572	390.017	524.729	64
		MVA		50381.17	66352.66	56189.84	90176.87	109269.9	144307.5	139
11	Tata Tea Ltd	FMCG								
		SVA		63.79	129.6	-93.48	163.96	241.34	297.41	13
		EVA		67.3632	178.888	-320.34	151.193	50.5321	262.99	46
		MVA		10490.95	10672.78	7201.71	9982.565	10128.52	11033.81	134
12	United Spirtis	FMCG								
		SVA		10.73	72.7	-334.26	-3.8	369.43	293.25	24
		EVA		13.0599	34.3661	-199.23	14.6844	385.925	299.601	199
		MVA		2163.96	3478.7	6151.92	24989.65	80969.93	196645.6	867
13	Cipla Ltd	HC								
		SVA		201.02	284.24	105.7	393.35	551.02	652.97	68
		EVA		200.88	306.09	41.96	392.33	556.38	637.11	62
		MVA		4469.58	6734.98	428.01	11551.43	5065.56	13165.37	102
14	Dr Reddy's Laboratories Ltd	HC								
		SVA		43.48	177.8	306.37	377.15	222.12	57.79	18
		EVA		59.3426	212.862	317.059	366.295	148.159	34.2191	81
		MVA		70502.01	68110.75	108910.1	65300.49	73926.37	134062.6	121
15	Ranbaxy Laboratories	HC								
		SVA		836.48	338.39	201.31	338.15	607.64	-1062.87	54
		EVA		912.905	552.109	-24.493	332.168	423.629	-1085.6	48
		MVA		109682	203084.9	231860.9	132274.5	142799.8	155291.5	102
16	Sun Pharmaceuticals Inds Ltd	HC								
		SVA		219.75	373.1	310.06	1484.41	1720.14	1390.9	120
		EVA		216.936	398.561	6.05268	1478.51	1628.16	1368.01	115

		MVA		28066.15	54663.16	101871.5	125769.9	185008.4	244334.3	21
17	ACC ltd		HR							
		SVA		121.66	148.02	-53.69	355.58	476.24	1213.24	138
		EVA		130.18	97.2	-4.96	346.71	453.42	1155.13	114
		MVA		289.81	1624.45	3205.91	6431.22	16822.11	15273.03	450
18	Ambuja Cements Ltd		HR							
		SVA		10373.97	8622.71	12778.23	14409.82	15585.09	16675.3	161
		EVA		10521.4	8763.63	12473.2	14392.7	15458.7	16692.1	160
		MVA		24252.48	47092.15	70988.42	106549.5	213038.9	223304.6	105
S. No	Company Name		Ind	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-0
19	Coal India Ltd		M and PM							
		SVA		428.94	502.19	-137.88	293.83	213.53	544.37	1053.9
		EVA		428.99	512.26	-219.74	312.34	291.72	627.93	1053.2
		MVA		5379.95	17291.08	25661.28	54722.94	115520	46326.5	26628.7
20	National Aluminium Co Ltd		M and PM							
		SVA		518.94	159.5	1077.65	1551.57	2335.88	1622.79	1258.4
		EVA		566.92	759.616	1100.84	1548.8	2291.38	1602.76	976.61
		MVA		137392.4	679353.8	632512.4	1188037	929507.1	2687850	498057
21	Hindalco Industries Ltd		M and PM							
		SVA		605.84	700.38	559.12	568.01	789.82	1316.14	1634.7
		EVA		597.637	873.45	-234.11	494.805	70.2573	1012.49	885.39
		MVA		1673.42	9646.08	9492.22	12652.61	11507.55	12256.9	-10366
22	Jindal Steel and Power Ltd		M and PM							
		SVA		135.49	325.89	387.62	559.27	652.73	1221.7	1514.7
		EVA		144.945	307.247	509.88	566.998	661.188	1219.96	1501.3
		MVA		5062.909	9490.64	13793.51	23900.93	34214.3	235496.3	12873.6
23	SAIL		M and PM							
		SVA		7524.56	6805.73	6745.1	6191.66	6164.73	4893.85	4005.6
		EVA		7535.33	6814.71	6752.03	6200.3	6169.14	4897.41	4005.1
		MVA		3690.49	20563.18	25249.6	22012.16	36329.38	116909.7	31337.2

24	Tata Steel Ltd	M and PM								
		SVA	1003.47	1760.07	3368.45	3490.92	4173.52	4673.08	5179.8	
		EVA	1007.07	1815.84	2948.77	3401.31	3709.03	4608.97	3987.7	
		MVA	54552.91	161740.3	210979.5	206490.7	273951	679030	11610	
25	Bharat Petroleum Corpn Ltd	O&G								
		SVA	825.21	881.67	1052	1676.11	885.79	276.41	1777.5	
		EVA	781.6	709.44	1211.48	1029.54	856.97	28.15	1411.0	
		MVA	-1340.58	5476.91	5228.61	2758.58	-7343.49	-2159.7	-1310	
26	Gail (India) Ltd	O&G								
		SVA	1178.63	1634.99	1864.3	1549.72	2304.4	2374.79	2595.1	
		EVA	1184.77	1638.66	1868.79	1553.55	2096.18	2106.52	1749.2	
		MVA	57349.41	218116.6	193334.6	220746.1	214052.3	451547.5	247110	
27	Hindustan Petroleum Corp Ltd	O&G								
		SVA	775.95	1560.73	1800.49	1264.54	355.36	1557.34	1509.6	
		EVA	770.953	1667.67	1484.51	1200.09	-76.459	1485.25	1284.1	
		MVA	116282.3	207968.3	302623.3	531591.2	761679.4	5199181	294882	
28	Indian Oil Corp Ltd	O&G								
		SVA	2878.01	6137.32	6901.7	4877.59	4864.33	7436.52	6937.7	
		EVA	2881.06	6153.15	6862.69	4865.69	4798.84	7424.52	6915.2	
		MVA	184869.1	532950.2	598580.4	648963	524199.1	945549	506510	
29	ONGC Ltd	O&G								
		SVA	10391.53	8673.59	12858.14	14399.55	15578.86	16663.17	16071.1	
		EVA	10492.3	8933.75	11984.9	14302.8	14999.1	16546	15898.3	
		MVA	494807.7	1135609	1164584	1670508	1855239	2638838	142294	
30	Reliance Industries Ltd	O&G								
		SVA	3236.98	4128.26	5059.21	7558.78	9021.1	11929.25	19434.9	
		EVA	3134.72	5080.66	3941.9	7199.79	7092.09	11474	18580.3	
		MVA	85928.38	803521.7	251553.2	296498	167611	78293.29	797344	
31	NTPC Ltd	Pow								
		SVA	3600.91	5296.01	5583.26	5796.88	6794.61	7398.38	8171.6	
		EVA	3596.42	7084.9	-3745.6	5162.41	4813.65	7066.64	7504.4	
		MVA	678754.5	858443.3	1103889	2042498	1476341	1928197	164006	

32	Reliance Infrastructure Ltd	Pow								
		SVA	295.19	169.93	154.57	500.33	582.64	793.37	1004.6	
		EVA	301.578	431.686	88.7103	481.27	350.962	625.337	439.14	
		MVA	29602.38	86665.29	96637.66	127178.9	116287.4	495290.1	118883	
33	Tata Power Co Ltd	Pow								
		SVA	500.97	565.12	288.26	530.04	542.98	683.35	840.8	
		EVA	501.201	824.592	-943.11	436.916	181.597	587.345	602.54	
		MVA	19653.36	59391.31	73786.09	82821.82	107223	316360.7	16023	
34	Asian Paints Ltd	PC								
		SVA	1083.37	1114.56	1010.03	1199.3	1980.54	4020.02	6222.4	
		EVA	-8.74	304.26	-585.64	1022.07	1583.47	3924.33	6080.6	
		MVA	2608.05	14549.09	35132.49	58619.67	109571.4	176418.3	118965	
35	Grasim Industries Ltd	Tex								
		SVA	24.49	86.26	-186.22	17.47	-15.21	37.63	24.81	
		EVA	26.8423	284.677	-1290.5	-86.902	-509.83	-49.59	-213.8	
		MVA	27102.92	89491.45	118237.8	124054.2	251402.1	330661.4	107040	
36	Ashok Leyland Ltd	TE								
		SVA	83.06	112.24	186.13	269.24	323.46	360.37	462.44	
		EVA	44.89	97.06	163.18	262.19	308.18	343.22	421.33	
		MVA	10601.62	33737.51	1712.35	2598.31	-6663.76	-6354.82	-11305	
37	Bharat Forge Ltd	TE								
		SVA	71.82	167.4	-60.64	186.62	172.53	256.98	72.93	
		EVA	79.0796	304.053	-836.81	112.624	-162.01	199.097	-62.32	
		MVA	5933.35	27373.1	39469.55	83145.41	76447.88	74771.51	14049.1	
38	Cummins India Ltd	TE								
		SVA	546.99	638.67	222.93	411.06	211.42	225.76	147.6	
		EVA	590.087	622.371	338.419	426.014	247.21	230.828	156.88	
		MVA	12134.86	39431.43	52148.86	54844.61	110165.8	144171.2	47831.5	
39	Hero Honda Motors Ltd	TE								
		SVA	826.14	1209.32	1816.84	1790.92	2043.45	3327.75	2577.4	
		EVA	836.211	1373.02	877.99	1719.69	1756.33	3262.74	2355.96	

		MVA		53002.19	88064.63	112014.9	169609.5	150257.9	136745.2	157399.7	3
40	Mahindra and Mahindra Ltd	TE									
		SVA		35.23	164.51	112.6	486.32	784.24	1010.24	957.21	
		EVA		94.9578	263.875	-168.43	449.443	560.919	978.201	846.589	
		MVA		12212.06	44022.54	61977.66	117843.4	213382	201576.4	69143.2	2
41	Maruti Suzuki India Ltd	TE									
		SVA		99.16	192.03	322.7	834.87	1123.03	1549.08	1702.94	
		EVA		103.624	378.956	-380.22	752.626	585.636	1402.25	1497.36	
		MVA		12971.13	43456.39	61650.85	117461.3	212210.3	200610.8	71756.31	2
42	Tata Motors Ltd	TE									
		SVA		-103.33	299.62	539.78	875.55	1414.06	1866.02	1931.22	
		EVA		-57.131	641.74	-369.26	1168.74	1226.91	1821.31	1533.83	
		MVA		50408.59	156605.1	179846.2	247999	344488.4	281199	68791.52	4

Larsen and Toubro Ltd, Siemens Ltd, Ranbaxy Laboratories Ltd, ACC Ltd, National Aluminium Ltd, Asian Paints Ltd and Tata Motors Ltd have decreasing trend of SVA during the period of study. ABB Ltd, Tata Chemicals Ltd, Tata Tea Ltd, Cipla Ltd SAIL have inconsistent growth in SVA. All other companies have created Shareholder value in positive manner.

ABB Ltd, Larsen and Toubro Ltd, Ranbaxy laboratories Ltd, ACC Ltd, National Aluminium Ltd, Gail India Ltd and Asian Paints Ltd has decreasing trend of EVA during the study period. Tata Chemicals Ltd, Tata Tea Ltd, Hindustan Industries Ltd and SAIL have inconsistent growth of EVA. All other companies have positive EVA during the study period.

National Aluminium Ltd, Bharat Petroleum Corpn Ltd, Grasim Industries Ltd have negative growth of MVA during the study period. Cipla Ltd, SAIL, GAIL India Ltd, Hindustan Petroleum Corpn Ltd, Reliance Industries Ltd, Reliance Infrastructure Ltd, Tata Power Ltd, Asian Paints Ltd, Hero Honda Motors Ltd and Mahindra and Mahindra Ltd has positive growth of MVA except the last year of the study period. All other companies has positive growth of MVA.

All the companies have created positive value creation during the study period except Siemens Ltd and Ranbaxy Laboratories Ltd. During the study period, ABB Ltd, Larsen and Toubro Ltd, Ranbaxy laboratories Ltd, Gail India Ltd, Grasim Industries Ltd and Bharat Forge

Ltd have not created Economic Profit. All the sample companies have created wealth to their shareholders except Bharat Petroleum Corporation Ltd.

IMPACT OF SELECT ECONOMIC VARIABLES ON VALUE BASED MEASURES

Ho: The economic variables does not influence the value creation of select manufacturing companies listed in BSE 100 Index.

Ha: The economic variable influence the value creation of select manufacturing companies listed in BSE 100 Index.

Table 2 - An Analysis of Impact of Wholesale Price Index, Gross Domestic Product and Money Supply on SVA of sample companies - Multiple Regression Results

S. No.	Company Name	Industry Name	R	R Square	Adjusted R Square	Durb in Wats on	F	Sig.	Hypothesis Accepted/ Rejected
1.	United Phosphorous Ltd	Agri.	.721 ^a	.520	.280	2.286	2.168	.193 ^b	Accepted
2.	ABB Limited	CG	.965 ^a	.931	.896	2.370	26.922	.001 ^b	Rejected
3.	Bharat Heavy Electricals Ltd	CG	.992 ^a	.984	.975	1.946	119.390	.000 ^b	Rejected
4.	Larsen & Toubro Ltd	CG	.827 ^a	.684	.526	2.191	4.330	.060 ^b	Accepted
5.	Siemens Ltd	CG	.733 ^a	.538	.307	3.076	2.327	.174 ^b	Accepted
6.	Tata Chemicals Ltd	Div.	.934 ^a	.872	.808	2.332	13.659	.004 ^b	Rejected
7.	Dabur India Ltd	FMCG	.940 ^a	.884	.826	2.467	15.238	.003 ^b	Rejected
8.	Hindustan Unilever Ltd	FMCG	.930 ^a	.864	.796	2.601	12.732	.005 ^b	Rejected
9.	ITC Ltd	FMCG	.988 ^a	.976	.964	2.987	80.739	.000 ^b	Rejected
10.	Nestle India Ltd	FMCG	.385 ^a	.148	-.278	2.842	.348	.792 ^b	Accepted

11.	Tata Tea Ltd	FMCG	.939 ^a	.882	.823	1.940	14.963	.003 ^b	Rejected
12.	United Spirtis	FMCG	.691 ^a	.478	.217	2.570	1.831	.242 ^b	Accepted
13.	Cipla Ltd	HC	.886 ^a	.785	.677	3.150	7.296	.020 ^b	Rejected
14.	Dr Reddy's Laboratories Ltd	HC	.878 ^a	.770	.655	2.938	143.21245	2.010	Accepted
15.	Ranbaxy Laboratories	HC	.993 ^a	.987	.980	2.010	149.972	.000 ^b	Rejected
16.	Sun Pharmaceuticals Inds Ltd	HC	.890 ^a	.793	.689	2.699	7.644	.018 ^b	Rejected
17.	ACC ltd	Hou.R el	.905 ^a	.820	.729	2.187	9.086	.012 ^b	Rejected
18.	Ambuja Cements Ltd	Hou.R el	.936 ^a	.876	.814	2.905	14.137	.004 ^b	Rejected
19.	Coal India Ltd	Mand PM	.857 ^a	.735	.602	1.975	5.547	.036 ^b	Rejected
20.	National Aluminium Co Ltd	Mand PM	.954 ^a	.910	.864	1.770	20.131	.002 ^b	Rejected
21.	Hindalco Industries ltd	Mand PM	.983 ^a	.966	.949	3.006	57.070	.000 ^b	Rejected
22.	Jindal Steel and Power Ltd	Mand PM	.602 ^a	.363	.044	2.504	1.138	.406 ^b	Accepted
23.	SAIL	Mand PM	.734 ^a	.538	.307	1.818	2.331	.174 ^b	Accepted
24.	Tata Steel Ltd	Mand PM	.961 ^a	.923	.884	2.120	23.887	.001 ^b	Rejected
25.	Bharat Petroleum Corpn Ltd	O & G	.925 ^a	.856	.784	1.715	11.900	.006 ^b	Rejected
26.	Gail (India) Ltd	O & G	.524 ^a	.275	-.088	3.038	465.12458	1.773	Accepted

27.	Hindustan Petroleum Corp Ltd	O & G	.70 7 ^a	.499	.249	1.773	1.994	.21 6 ^b	Accepted
28.	Indian Oil Corp Ltd	O & G	.92 2 ^a	.849	.774	2.466	11.279	.00 7 ^b	Rejected
29.	ONGC Ltd	O & G	.97 0 ^a	.941	.912	2.263	32.016	.00 0 ^b	Rejected
30.	Reliance Industries Ltd	O & G	.83 3 ^a	.694	.540	2.559	4.529	.05 5 ^b	Rejected
31.	NTPC Ltd	Pow	.66 2 ^a	.438	.157	1.571	1.560	.29 4 ^b	Accepted
32.	Reliance Infrastructure Ltd	Pow	.98 6 ^a	.972	.959	2.117	70.578	.00 0 ^b	Rejected
33.	Tata Power Co Ltd	Pow	.98 7 ^a	.975	.963	2.795	78.355	.00 0 ^b	Rejected
34.	Asian Paints Ltd	Petrochem	.98 6 ^a	.973	.959	2.326	71.443	.00 0 ^b	Rejected
35.	Grasim Industries Ltd	Text	.97 4 ^a	.948	.923	2.482	36.749	.00 0 ^b	Rejected
36.	Ashok Leyland Ltd	TE	.49 1 ^a	.241	-.139	2.308	.634	.62 0 ^b	Accepted
37.	Bharat Forge Ltd	TE	.97 9 ^a	.959	.938	2.832	46.468	.00 0 ^b	Rejected
38.	Cummins India Ltd	TE	.39 4 ^a	.155	-.267	2.279	.368	.77 9 ^b	Accepted
39.	Hero Honda Motors Ltd	TE	.43 4 ^a	.189	-.217	2.803	.465	.71 7 ^b	Accepted
40.	Mahindra and Mahindra Ltd	TE	.97 1 ^a	.942	.914	2.285	32.693	.00 0 ^b	Rejected
41.	Maruti Suzuki India Ltd	TE	.98 0 ^a	.961	.942	1.988	49.374	.00 0 ^b	Rejected
42.	Tata Motors Ltd	TE	.98 2 ^a	.964	.946	2.430	53.142	.00 0 ^b	Rejected

a. Dependent Variable: SVA; b. Predictors (Constant) GDP, WPI, Money Supply; Level of Sig. 5%

The Table 2 has shown the correlation coefficient of ABB ltd, Bhraat Heavy Electricals Ltd, Dabur India Ltd, Hindustan Unilever Ltd, ITC Ltd, Cipla Ltd, Dr. Reddy's Laboratories Ltd, ACC Ltd, Hindal co Industries Ltd, Jindal Steel and Power Ltd, SAIL, Tata Steel Ltd, Gail India ltd, ONGC Ltd, Reliance Industries Ltd, NTPC Ltd, Reliance Infrastructure Ltd, Tata Power Co Ltd, Ashok Leyland ltd and Tata Motors Ltd shown strong positive relationship. Grasim Industries, Hindustan Petroleum corporations, Bharat Petroleum, National Aluminium have moderate correlation between the variables. Bharat Heavy Electricals Ltd, Hindustan Unilever Ltd, Nestle India Ltd, Ambuja Cements Ltd, Hindalco Industries ltd, Jindal Steel and Power Ltd, SAIL, Tata Steel Ltd, Gail India Ltd, ONGC, Reliance Industries Ltd, NTPC, Asian Paints Ltd have positive auto correlation between the variables. Out of 42 Companies, 28 company's statistical significance value is less than 0.05 at 5% sig level. So Null hypothesis is Rejected and 14 companies have accepted the Null hypothesis.

Table 3. An Analysis of Impact of Wholesale Price Index, Gross Domestic Product and Money Supply on EVA of sample companies - Multiple Regression Results

S. No.	Company Name	Industry Name	R	R Square	Adjusted R Square	Durb in Watson	F	Sig.	Hypothesis Accepted/ Rejected
	United Phosphorous Ltd	Agri.	.921 ^a	.848	.772	2.317	11.158	.007 ^b	Rejected
2.	ABB Limited	CG	.442 ^a	.195	-.207	2.671	.486	.704 ^b	Accepted
3.	Bharat Heavy Electricals Ltd	CG	.992 ^a	.983	.975	2.080	116.758	.000 ^b	Rejected
4.	Larsen & Toubro Ltd	CG	.958 ^a	.917	.876	2.546	22.188	.001 ^b	Rejected
5.	Siemens Ltd	CG	.975 ^a	.950	.926	2.514	38.307	.000 ^b	Rejected
6.	Tata Chemicals Ltd	Div.	.934 ^a	.873	.810	2.362	13.770	.004 ^b	Rejected
7.	Dabur India Ltd	FMCG	.996 ^a	.992	.988	2.807	247.390	.000 ^b	Rejected
8.	Hindustan Unilever Ltd	FMCG	.883 ^a	.780	.671	1.810	7.111	.021 ^b	Rejected

9.	ITC Ltd	FMCG	.937 ^a	.879	.818	2.098	14.471	.004 ^b	Rejected
10.	Nestle India Ltd	FMCG	.995 ^a	.991	.986	2.424	212.445	.000 ^b	Rejected
11.	Tata Tea Ltd	FMCG	.348 ^a	.121	-.318	2.854	.276	.841 ^b	Accepted
12.	United Spirtis	FMCG	.696 ^a	.484	.226	1.761	1.874	.235 ^b	Accepted
13.	Cipla Ltd	HC	.873 ^a	.762	.643	2.237	6.409	.027 ^b	Rejected
14.	Dr Reddy's Laboratories Ltd	HC	.932 ^a	.868	.803	2.133	13.193	.005 ^b	Rejected
15.	Ranbaxy Laboratories	HC	.536 ^a	.287	-.069	3.000	.807	.534 ^b	Accepted
16.	Sun Pharmaceuticals Inds Ltd	HC	.630 ^a	.397	.095	1.890	1.315	.354 ^b	Accepted
17.	ACC ltd	Hou.R el	.562 ^a	.316	-.026	2.418	.923	.485 ^b	Accepted
18.	Ambuja Cements Ltd	Hou.R el	.970 ^a	.940	.910	2.180	31.320	.000 ^b	Rejected
19.	Coal India Ltd	Mand PM	.802 ^a	.643	.465	2.505	3.603	.085 ^b	Accepted
20.	National Aluminium Co Ltd	Mand PM	.637 ^a	.406	.109	1.580	1.368	.339 ^b	Accepted
21.	Hindalco Industries ltd	Mand PM	.078 ^a	.006	-.491	2.706	.012	.998 ^b	Accepted
22.	Jindal Steel and Power Ltd	Mand PM	.987 ^a	.974	.962	2.688	76.131	.000 ^b	Rejected
23.	SAIL	Mand PM	.986 ^a	.973	.959	2.324	71.756	.000 ^b	Rejected
24.	Tata Steel Ltd	Mand PM	.904 ^a	.817	.726	2.499	8.934	.012 ^b	Rejected
25.	Bharat Petroleum Corpn Ltd	O & G	.440 ^a	.194	-.210	2.209	.480	.708 ^b	Accepted

26.	Gail (India) Ltd	O & G	.956 ^a	.914	.872	1.653	21.360	.001 ^b	Rejected
27.	Hindustan Petroleum Corp Ltd	O & G	.351 ^a	.123	-.315	2.377	.281	.838 ^b	Accepted
28.	Indian Oil Corp Ltd	O & G	.432 ^a	.187	-.220	2.798	.460	.721 ^b	Accepted
29.	ONGC Ltd	O & G	.967 ^a	.936	.903	2.178	29.087	.001 ^b	Rejected
30.	Reliance Industries Ltd	O & G	.921 ^a	.848	.772	2.198	11.151	.007 ^b	Rejected
31.	NTPC Ltd	Pow	.686 ^a	.470	.205	2.920	1.774	.252 ^b	Accepted
32.	Reliance Infrastructure Ltd	Pow	.374 ^a	.140	-.290	2.743	.325	.808 ^b	Accepted
33.	Tata Power Co Ltd	Pow	.260 ^a	.068	-.398	2.673	.146	.929 ^b	Accepted
34.	Asian Paints Ltd	Petrochem	.997 ^a	.995	.992	3.413	373.164	.000 ^b	Rejected
35.	Grasim Industries Ltd	Text	.325 ^a	.105	-.342	2.627	.236	.869 ^b	Accepted
36.	Ashok Leyland Ltd	TE	.938 ^a	.880	.820	1.935	14.621	.004 ^b	Rejected
37.	Bharat Forge Ltd	TE	.180 ^a	.032	-.451	2.663	.067	.976 ^b	Accepted
38.	Cummins India Ltd	TE	.933 ^a	.870	.805	2.778	13.413	.005 ^b	Rejected
39.	Hero Honda Motors Ltd	TE	.800 ^a	.640	.461	2.814	3.563	.087 ^b	Accepted
40.	Mahindra and Mahindra Ltd	TE	.850 ^a	.723	.584	2.960	5.208	.042 ^b	Rejected
41.	Maruti Suzuki India Ltd	TE	.726 ^a	.527	.290	2.458	2.228	.186 ^b	Accepted
42.	Tata Motors Ltd	TE	.482 ^a	.233	-.151	2.625	.607	.634 ^b	Accepted

a. Dependent Variable: EVA; b. Predictors (Constant) GDP, WPI, Money Supply; Level of Sig. 5%

The table 3 has shown that the United phosphorus Ltd, ABB Ltd, Larsen and Toubro Ltd, Siemens Ltd, Tata Chemicals Ltd, Hindustan Unilever Ltd, ITC Ltd, Nestle India Ltd, Dr Reddy's laboratories Ltd, Ambuja Cements Ltd, Jindal Steel and Power Ltd, SAIL, Tata Steel Ltd, Gain India Ltd, ONGC Ltd, Reliance Industries Ltd, Asian Paints Ltd, Ashok Leyland Ltd and Cummins India Ltd have Strong positive correlation between the variables. Hindustan Petroleum, Indian Oil Corporation, Hindalco Industries Ltd, Grasim Textile Ltd and Bharat Forge Ltd have moderate but positive correlation between the variables. Durbin Watson Test shows the positive auto correlation between the variables of United Spirits, Sun Pharmaceuticals Ltd, National Aluminium corporation, Gail India Ltd and Ashok Leyland. Out of 42 Companies, 23 companies have rejected the Null Hypothesis and 19 companies have accepted the Null Hypothesis.

Table 4. An Analysis of Impact of Wholesale Price Index, Gross Domestic Product and Money Supply on MVA of sample companies - Multiple Regression Results

S. No.	Company Name	Industry Name	R	R Square	Adjusted R Square	Durbin Watson	F	Sig.	Hypothesis Accepted/ Rejected
1.	United Phosphorous Ltd	Agri.	.463 ^a	.215	-.178	2.370	.547	.668 ^b	Accepted
2.	ABB Limited	CG	.751 ^a	.563	.345	2.048	2.580	.149 ^b	Accepted
3.	Bharat Heavy Electricals Ltd	CG	.804 ^a	.647	.470	2.160	3.665	.082 ^b	Rejected
4.	Larsen & Toubro Ltd	CG	.759 ^a	.575	.363	2.167	2.711	.138 ^b	Accepted
5.	Siemens Ltd	CG	.705 ^a	.497	.246	1.880	1.979	.219 ^b	Accepted
6.	Tata Chemicals Ltd	Div.	.324 ^a	.105	-.342	2.190	.235	.869 ^b	Accepted
7.	Dabur India Ltd	FMCG	.877 ^a	.769	.654	2.968	6.662	.024 ^b	Rejected
8.	Hindustan Unilever Ltd	FMCG	.952 ^a	.905	.858	2.745	19.142	.002 ^b	Rejected
9.	ITC Ltd	FMCG	.988 ^a	.977	.965	1.824	83.229	.000 ^b	Rejected

10.	Nestle India Ltd	FMCG	.99 3 ^a	.987	.980	2.414	147.2 14	.00 0 ^b	Rejected
11.	Tata Tea Ltd	FMCG	.94 3 ^a	.889	.834	2.483	16.03 1	.00 3 ^b	Rejected
12.	United Spirtis	FMCG	.75 6 ^a	.571	.357	2.089	2.667	.14 2 ^b	Accepte d
13.	Cipla Ltd	HC	.92 4 ^a	.854	.781	2.869	11.66 8	.00 6 ^b	Rejected
14.	Dr Reddy's Laboratories Ltd	HC	.93 9 ^a	.881	.822	2.046	14.81 2	.00 4 ^b	Rejected
15.	Ranbaxy Laboratories	HC	.38 5 ^a	.149	-.277	1.905	.349	.79 2 ^b	Accepte d
16.	Sun Pharmaceuti cals Inds Ltd	HC	.98 6 ^a	.972	.959	2.531	70.44 8	.00 0 ^b	Rejected
17.	ACC ltd	Hou.R el	.85 8 ^a	.736	.605	2.488	5.589	.03 6 ^b	Rejected
18.	Ambuja Cements Ltd	Hou.R el	.81 4 ^a	.663	.494	1.676	3.928	.07 3 ^b	Accepte d
19.	Coal India Ltd	Mand PM	.46 5 ^a	.216	-.175	1.869	.553	.66 5 ^b	Accepted
20.	National Aluminium Co Ltd	Mand PM	.52 8 ^a	.279	-.081	2.443	.774	.54 9 ^b	Accepted
21.	Hindalco Industries ltd	Mand PM	.42 2 ^a	.178	-.233	2.117	.433	.73 7 ^b	Accepted
22.	Jindal Steel and Power Ltd	Mand PM	.28 3 ^a	.080	-.380	2.193	.173	.91 1 ^b	Accepted
23.	SAIL	Mand PM	.63 2 ^a	.400	.100	2.380	1.333	.34 9 ^b	Accepted
24.	Tata Steel Ltd	Mand PM	.57 9 ^a	.335	.003	2.269	1.009	.45 1 ^b	Accepted
25.	Bharat Petroleum Corpn Ltd	O & G	.90 3 ^a	.816	.723	2.365	8.846	.01 3 ^b	Rejected
26.	Gail (India) Ltd	O & G	.88 2 ^a	.777	.666	2.350	6.986	.02 2 ^b	Rejected
27.	Hindustan Petroleum Corp Ltd	O & G	.06 1 ^a	.004	-.494	2.101	.007	.99 9 ^b	Accepte d

28.	Indian Oil Corp Ltd	O & G	.51 9 ^a	.269	-.097	2.520	.736	.56 8 ^b	Accepted
29.	ONGC Ltd	O & G	.57 6 ^a	.331	-.003	2.543	.992	.45 8 ^b	Accepted
30.	Reliance Industries Ltd	O & G	.59 2 ^a	.351	.026	2.453	1.080	.42 6 ^b	Accepted
31.	NTPC Ltd	Pow	.62 8 ^a	.394	.091	2.618	1.301	.35 7 ^b	Accepted
32.	Reliance Infrastructure Ltd	Pow	.41 7 ^a	.174	-.239	2.381	.422	.74 4 ^b	Accepted
33.	Tata Power Co Ltd	Pow	.83 9 ^a	.704	.556	2.403	4.764	.05 0 ^b	Rejected
34.	Asian Paints Ltd	Petro chem	.64 2 ^a	.413	.119	1.777	1.405	.33 0 ^b	Accepted
35.	Grasim Industries Ltd	Text	.56 6 ^a	.320	-.019	2.050	.943	.47 7 ^b	Accepted
36.	Ashok Leyland Ltd	TE	.78 0 ^a	.609	.413	2.653	3.110	.11 0 ^b	Accepted
37.	Bharat Forge Ltd	TE	.44 2 ^a	.196	-.207	1.925	.486	.70 4 ^b	Accepted
38.	Cummins India Ltd	TE	.71 4 ^a	.510	.264	2.135	2.079	.20 5 ^b	Accepted
39.	Hero Honda Motors Ltd	TE	.94 0 ^a	.884	.827	1.526	15.30 4	.00 3 ^b	Rejected
40.	Mahindra and Mahindra Ltd	TE	.71 0 ^a	.504	.256	2.136	2.031	.21 1 ^b	Accepted
41.	Maruti Suzuki India Ltd	TE	.72 4 ^a	.524	.285	2.124	2.198	.18 9 ^b	Accepted
42.	Tata Motors Ltd	TE	.48 6 ^a	.236	-.146	2.189	.619	.62 8 ^b	Accepted

a. Dependent Variable: MVA; b. Predictors (Constant) GDP, WPI, Money Supply; Level of Sig. 5%

The Table 4 has presented the results of Multiple Regression analysis of influence of economic variables on value based measures of the select companies. Hindustan Unilever Ltd, ITC Ltd, Nestle India Ltd, Tata Tea Ltd, Cipla Ltd, Dr Reddy's laboratories Ltd, Sun Pharmaceuticals Ltd, Bharat Petroleum Corporation Ltd, Hero Honda Motors Ltd has strong

positive correlation between the variables. Durbin Watson test shows the positive auto correlation between the variables of Asian Paints Ltd, Bharat Forge Ltd, Ambuja Cements Ltd, Coal India Ltd, Siemens Ltd and ITC Ltd. Out of 42 companies only 15 companies have Rejected the Null Hypothesis and 27 Companies have Accepted the Null Hypothesis.

SUGGESTIONS AND CONCLUSION

The sample companies which is having inconsistent growth of EVA, that companies must reduce the cost of capital, invest more capital in opportunities that will earn more than the related capital charge. And also the particular companies must increase profits without using additional capital through productivity improvement. Make capital from existing operations by increasing efficiency of capital by fast up the working capital and speed up the cycling time is also one of the ways to improve the Value creation. Adopting Value based measures into a company is very costly and time consuming process one. It needs continuous commitment of the board of directors and senior management to use these measures. It will also require some training and extensive communication effort directed to everyone in the company. Each one in the company must be educated on the basic theory underlying the notion of creating economic value. The entire business world seems to be moving towards greater clearness, supporting financial disclosure instrument and superior corporate supremacy. In such a fast changing business environment, the investor friendly financial performance measures may, possibly, compose this walkway full perfect new air. Shareholder value is based on the principle of the survival of the fittest. In India, business decisions are based on the commercial basis. So complete implementation is not possible, in an economy wherein business decisions are influenced by socio economic factors. Our economy is now moving towards hundred percent liberalisation and corporates are bound to take decisions purely on commercial to safe guard the interests of their shareholders. The concept of Shareholder value creation and EVA are well known concept to the Indian context. Applicability of the value based measure is very difficult. Hence the methodology adjustment required for accounting profit to NOPAT, Beta calculation and risk free rate of return. The value based measures made a good position for itself not only in the Western countries but also in the Indian context. However the recognition of this concept in India is gradually beginning and is expected that in future days, all the Indian companies will start relying upon this new measure of performance measurement.

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