A Financial Analysis of Selected Automobiles Companies

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ABSTRACT

The Indian automobile industry presents a galaxy of varieties and models meeting all possible expectations and globally established industry standards. Some of the leading names echoing in the Indian automobile industry include Maruti Suzuki, Tata Motors, Mahindra and Mahindra, Hyundai Motors, Hero Honda and Hindustan Motors in addition to a number of others. The main objective of this research paper is to make a comparative study of the financial position of the selected automobile companies and it is concluded that the automobile industry growing in all respects and fields. New innovations and new products launch frequently which is a major factor of growth in this sector. There are also various service station networks for the repair and maintenance of your vehicle. Automobile Industry, expected to witness a tremendous growth in the global market.

Keywords: Automobile Industry, Financial Position, Technology, Commercial Vehicles, Passenger Vehicles

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During the early stages of its development, Indian automobile industry heavily depended on foreign technologies. However, over the years, the manufacturers in India have started using their own technology evolved in the native soil. The thriving market place in the country has attracted a number of automobile manufacturers including some of the reputed global leaders to set their foot in the soil looking forward to enhance their profile and prospects to new heights. Following a temporary setback on account of the global economic recession, the Indian automobile market has once again picked up a remarkable momentum witnessing a buoyant sale for the first time in its history in the month of September 2009.

The automobile sector of India is the seventh largest in the world. In a year, the country manufactures about 2.6 million cars making

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up an identifiable chunk in the world's annual production of about 73 million cars in a year. The country is the largest manufacturer of motorcycles and the fifth largest producer of commercial vehicles. Industry experts have visualized an unbelievably huge increase in these figures over the immediate future. The figures published by the Asia Economic Institute indicate that the Indian automobile sector is set to emerge as the global leader by 2012. In the year 2009, India rose to be the fourth largest exporter of automobiles following Japan, South Korea and Thailand. Experts state that in the year 2050, India will top the car volumes of all the nations of the world with about 611 million cars running on its roads.

At present, about 75 percent of India's automobile industry is made up by small cars, with the figure ranking the nation on top of any other country on the globe. Over the next two or three years, the country is expecting the arrival of more than a dozen new brands making compact car models.

Overview of Performance of the Indian Automobile Industry

Domestic Sales

The cumulative growth of the Passenger

Vehicles segment during April 2007 – March 2008 was 12.17 percent. Passenger Cars grew by 11.79 percent, Utility Vehicles by 10.57 percent and Multi Purpose Vehicles by 21.39 percent in this period.

The Commercial Vehicles segment grew marginally at 4.07 percent. While Medium & Heavy Commercial Vehicles declined by 1.66 percent, Light Commercial Vehicles recorded a growth of 12.29 percent.

Three Wheelers sales fell by 9.71 percent with sales of Goods Carriers declining drastically by 20.49 percent and Passenger Carriers declined by 2.13 percent during April- March 2008 compared to the last year.

Two Wheelers registered a negative growth rate of 7.92 percent during this period, with motorcycles and electric two wheelers segments declining by 11.90 percent and 44.93 percent respectively. However, Scooters and Mopeds segment grew by 11.64 percent and 16.63 percent respectively.

Exports

Automobile Exports registered a growth of 22.30 percent during the current financial year.

The growth was led by two wheelers segment which grew at 32.31 percent. Commercial vehicles and Passenger Vehicles exports grew by 19.10 percent and 9.37 percent respectively. Exports of Three Wheelers segment declined by 1.85 percent.

Objectives of the study

- To make comparative study of selected companies on the basis of financial positions.
- To make comparative study of solvency position (short term as well as long term).
- To suggest measures to improve financial position in AutomobileCompanies.

Scope of the study

The scope of the study includes the following things:-

(i) Selected Companies

The companies which we have selected for doing this analysis are following:-

- Ford Motor Company
- Honda Motor Company
- Hyundai Motor Company
- Maruti Suzuki Motor Company
- Tata Motors Company

(ii) Time period

The time period for which the data have been collected is from January 2001 to January 2011.

(iii) Selected Parameters

The data collected for this time period of all the companies is about its -

- Current Ratio
- Quick Ratio
- Reserves/Funds
- Net Income
- Cash balance
- Current Assets
- Current liabilities &provisions
- Capital employed
- Debt-equity ratio
- Net worth

Sources of data collection

According to the needed research of the project; the researcher pursued secondary data collection method. Researcher has used web sites to collect data regarding automobiles companies & information broacher for secondary data collection and have also used PROWESS software data collection for doing analysis.

Hypothesis of the study

- 1. Ho1: There is no significant difference between selected companies regarding their financial position.
- 2. Ho2: There is no significant difference between selected companies regarding their profitability position.
- 3. Ho3: There is no significant difference between selected companies regarding their solvency position. (Long term as well as short

term).

Technique of analysis

Various statistical tools have been applied to analyses the collected data. Such as-

- T-test
- F-test
- Standard deviation
- Mean values

- Variance
- · Compound annual growth rate
- Graphs and charts with the help of leading statistical package SPSS.

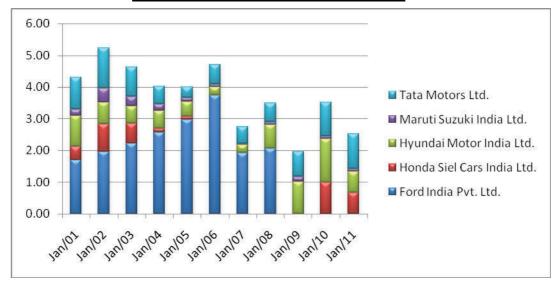
The analysis and interpretation of the study is carried out by following the chronological order of the parameters mentioned above:

Table 1. DebtEquity Ratio (in Times)

Year	Ford	Honda	Hyundai	Maruti Suzuki	Tata Motors
2001	1.70	0.43	0.96	0.20	1.01
2002	1.97	0.86	0.69	0.44	1.27
2003	2.23	0.63	0.54	0.29	0.94
2004	2.57	0.12	0.56	0.21	0.57
2005	2.98	0.09	0.47	0.12	0.35
2006	3.73	0.00	0.27	0.09	0.61
2007	1.93	0.00	0.25	0.03	0.53
2008	2.06	0.00	0.75	0.09	0.59
2009	-	0.00	1.02	0.15	0.80
2010	-	0.99	1.38	0.08	1.06
2011	-	0.66	0.68	0.08	1.11
F-test	0.73	-	2.71	10.90	5.55
T-test	24.48	-	15.25	12.01	19.96
Mean	2.40	0.34	0.69	0.16	0.80
S.D	0.67	0.38	0.33	0.12	0.29
Variance	0.45	0.15	0.11	0.01	0.09
CAGR	39	-100	42.7	-55.2	-50

SOURCE: CMIE, PROWESS SOFTWARE 2011

Graph 1. Debt Equity Ratio (in Times)



The table 1 shows the Debt equity ratio of selected firms. In case of the CAGR in Debt equity ratio in Hyundai is maximum which is 42.5% then

followed by Ford at the rate 39 %. The minimum CAGR in Debt equity ratio in Honda, Maruti Suzuki and Tata Motors which is -100%, -55.2%,

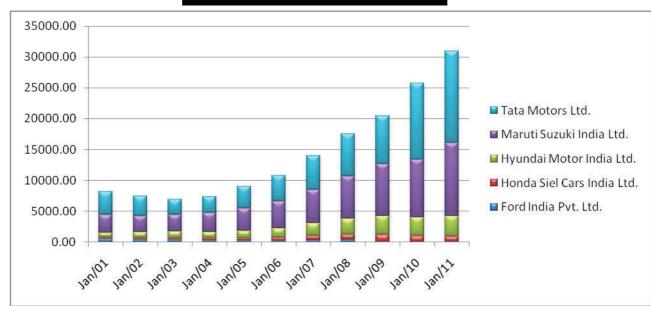
-50% respectively. The maximum value of mean F-test is also applied on the data to know the is 2.40 of Ford & minimum mean value is 0.16 of Maruti Suzuki. The maximum S.D is 0.67 of Ford & minimum value is 0.16 ofMaruti Suzuki.

significant difference. The computed value of MarutiSuzuki is 10.90. Which is more than the table value at (1, 6) degree of freedom which is

Table 2. NetWorth (in Crore)

Year	Ford	Honda	Hyundai	Maruti Suzuki	Tata Motors
2001	433.40	237.38	816.45	2912.10	3754.12
2002	382.39	208.82	988.41	2642.50	3253.78
2003	321.87	235.30	1142.14	2707.30	2465.06
2004	267.63	308.16	1020.93	3098.00	2597.16
2005	221.10	385.04	1261.97	3591.20	3593.60
2006	209.15	517.72	1529.92	4378.80	4111.39
2007	308.59	671.10	2055.02	5452.60	5537.07
2008	329.20	915.30	2521.76	6853.90	6869.75
2009	-	1149.99	3032.39	8415.40	7839.50
2010	-	953.43	3051.67	9344.90	12394.27
2011	-	918.11	3285.08	11835.10	14965.47
F-test	2.21	79.16	64.34	40.19	6.79
T-test	27.83	41.87	53.29	47.53	25.02
Mean	309.17	590.94	1882.34	5566.53	6125.56
S.D	76.39	344.65	939.71	3139.03	4140.84
Variance	5834.71	118783.18	883051.78	9853482.93	17146588.05
CAGR	-40.5	162.3	160.2	154.2	107.2

Graph 2. Networth (in Crore)



5.99 hence, we reject the hypothesis.. It means that the Debt equity ratio differs significantly in different years. The computed value of Ford, Hyundai, and Tata Motors[0.73, 2.71, 5.55]. Which is less than the table value. It means that theDebt equity ratio do not differs significantly in different years. T-test is also applied on it. The computed value of all the firms is more than the table value at 5% level of significance for two tailed test which is 2.262 therefore we reject the hypothesis as there is a significant difference. In an overall conclusion, it can be said that Hyundai is the most efficient Company in terms of generating Debt equity ratio and Honda is the most inefficient company in terms of generating Debt equity ratio.

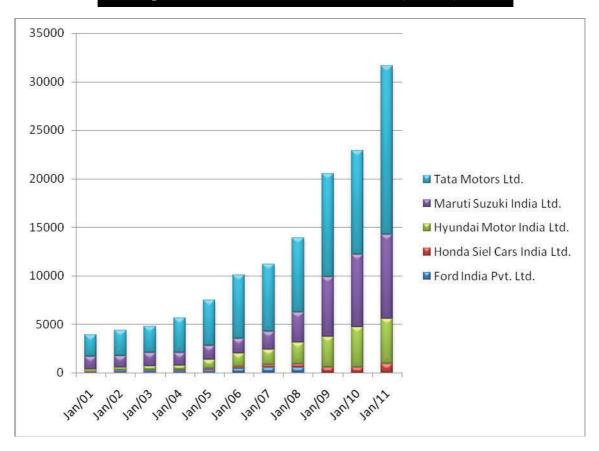
The table 2 shows the Net worth of selected firms. In case of the CAGR in Net worth in Honda

is maximum which is 162.3% then followed by Hyundai, Maruti Suzuki, Tata Motors at the rate 160.2%, 154.2%, 107.2 % respectively. The minimum CAGR in Net worth inFord which is -40.5%. The maximum value of mean is of 6125.56 Tata Motors & minimum mean value is 309.7 of Ford. The maximum S.D is 4140.84 of Tata Motors & minimum value is 76.39 of Ford. F-test is also applied on the data to know the significant difference. The computed value of Honda, Hyundai, Maruti Suzuki, Tata Motors is 79.16, 64.34, 40.19, 6.79. Which is more than the table value at (1, 6) degree of freedom which is 5.99 hence, we reject the hypothesis.. It means that the differs Net worth significantly in different The computed value of Ford is 2.21. Which is less than the table value. It means that the Debt equity ratio do not differs significantly in different years. T-test is also applied on it. The computed value of all the firms is more than

Table 3. Current Liabilities & Provisions (inCrore)

Year	Ford	Honda	Hyundai	MarutiSuzuki	Tata Motors
2001		95.47	213.34	1384.10	2239.30
2002	205.12	48.04	249.52	1231.60	2639.60
2003	181.56	59.35	437.62	1363.60	2742.82
2004	215.54	80.64	454.24	1292.90	3585.36
2005	260.57	113.62	983.55	1416.50	4689.99
2006	423.80	170.39	1394.42	1509.50	6574.41
2007	513.03	280.87	1586.62	1882.50	6944.90
2008	534.79	340.06	2248.72	3072.40	7732.67
2009		558.23	3124.62	6178.80	10633.10
2010		555.90	4136.67	7504.90	10676.92
2011		914.93	4681.70	8644.20	17372.59
F-test	42.11	405.39	132.35	13.86	116.73
T-test	32.28	57.95	31.29	29.43	53.18
Mean	155.64	146.86	887.34	1648.10	3549.08
S.D	199.08	243.12	1421.98	2524.05	4670.87
Variance	39632.45	59109.17	2022038.31	6370853.42	21817024.25
CAGR	157.4	170.2	166.9	135.7	166.2

Graph 3. Current Liabilities & Provisions (inCrore)



the table value at 5% level of significance for two tailed test which is 2.262 therefore we reject the hypothesis as there is a significant difference. In an overall conclusion, it can be said that

Honda is the most efficient Company in terms of generating Net worth and Ford is the most inefficient company in terms of generating Net worth. The table 3 shows the Current liabilities &

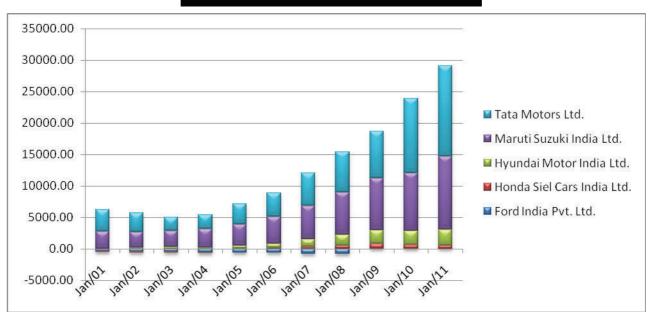
Table 4. Reserves /Funds (in Crore)

Year	Ford	Honda	Hyundai	Maruti Suzuki	Tata Motors
2001	-366.60	-122.62	3.91	2779.80	3498.22
2002	-467.61	-151.18	175.87	2510.20	2997.88
2003	-528.13	-124.70	329.60	2575.00	2145.24
2004	-582.37	-51.84	208.39	2953.50	2277.33
2005	-628.90	25.04	449.43	3446.70	3236.77
2006	-640.85	157.72	717.38	4234.30	3749.60
2007	-788.41	311.10	1242.48	5308.10	5154.20
2008	-767.80	555.30	1709.22	6709.40	6484.34
2009		789.99	2219.85	8270.90	7453.96
2010		593.43	2239.13	9200.40	11880.22
2011		558.11	2472.54	11690.60	14394.87
F-test			15.96	39.90	5.86
T-test			6.05	45.90	22.45
Mean	-596.33	230.94	1069.80	5425.35	5752.06
S.D	143.19	344.65	939.71	3135.75	4051.26
Variance	20504.34	118783.18	883051.78	9832927.46	16412737.50
CAGR	-100	-100	134.6	154	101.9

provisions of selected firms. In case of the CAGR inCurrent liabilities & provisions inHonda is maximum which is 170.2% then followed by Ford, Hyundai, Tata MotorsCurrent liabilities & provisions at the rate 157.4%, 166.9%, 166.2% respectively. The minimum CAGR inCurrent liabilities & provisions inMaruti Suzuki is 135.7%

. The maximum value of mean is 3549.08 of Tata Motors& minimum mean value is 146.86 of Honda. The maximum S.D is 4670.87of Tata Motors & minimum value is 199.08 of Ford. F-test is also applied on the data to know the significant difference. The computed value of Ford, Honda,





Hyundai, Maruti Suzuki, Tata Motors is 42.11, 405.39, 132.35, 13.86, 116.73 respectively. Which is more than the table value at (1, 5) degree of freedom which is 6.61 hence, hence, we reject the hypothesis... It means that the Current liabilities & provisionsdiffers significantly in different years. T-test is also applied on it. The computed value of all the firms is more than the table value at 5% level of significance for two tailed test which is 2.262 therefore we reject the hypothesis as there is a significant difference.In an overall conclusion, it can be said that Maruti Suzuki is the most efficient Company in terms of generatingCurrent liabilities & provisions andHonda is the most inefficient company in terms of generatingCurrent liabilities & provisions The table4 shows the Reserves / funds of selected firms. In case of the CAGR inReserves /funds in MarutiSzuki is maximum which is 42.5% then followed by Hyundai, Tata motors at the rate 134.6%, 101.9. The minimum CAGR in Reserves / fundsin Honda, Ford which is -100%. The maximum value of mean is 5752.06 of Tata Motors & minimum mean value is -596.33 of Ford. The maximum S.D is 4051.26 of Tata Motors & minimum value is 143.19 ofFord. F-test is also applied on the data to know the

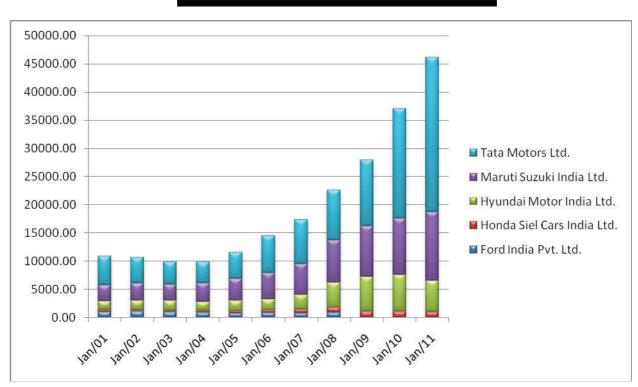
significant difference. The computed value of Hyundai, Motors Suzuki is 15.96,39.90. Which is more than the table value at (1, 6) degree of freedom which is 5.99 hence, hence, we reject the hypothesis.It means that theReserves / fundsdiffers significantly in different years. The computed value of Tata Motors 5.86Which is less than the table value. So we accept the hypothesis. It means that the Reserves / funds do not differs significantly in different years. T-test is also applied on it. The computed value of all the firms is more than the table value at 5% level of significance for two tailed test which is 2.262 therefore we reject the hypothesis as there is a significant difference. In an overall conclusion, it can be said that MarutiSzuki is the most efficient Company in terms of generating Reserves / funds and Honda is the most inefficient company in terms of generatingReserves / funds.

The table 5 shows the Capital Employed of selected firms. In case of the CAGR inCapital Employed in MarutiSzuki is maximum which is 158% then followed by Honda, Hyundai and Tata Motors at the rate 145.7%,127.5%,113.5% respectively. The minimum CAGR inCapital Employed in Ford i.e.51.3%.The maximum

 Table 5. Capital Employed (in Crore)

Year	Ford	Honda	Hyundai	Maruti Suzuki	Tata Motors
2001	1028.59	321.30	1579.71	2859.80	5138.25
2002	1068.69	288.45	1669.53	3023.70	4657.17
2003	962.13	264.35	1759.95	2888.10	4012.36
2004	856.11	308.56	1592.47	3309.30	3753.93
2005	744.94	385.04	1858.31	3874.90	4723.22
2006	834.56	517.72	1948.01	4678.80	6536.66
2007	771.26	671.10	2576.97	5522.60	7791.07
2008	890.77	915.30	4411.43	7461.40	8975.54
2009		1149.99	6137.11	8915.70	11745.37
2010		1051.54	6524.59	9977.80	19510.87
2011		1013.36	5505.26	12255.00	27419.07
F-test	6.41	25.31	12.51	52.89	8.12
T-test	66.39	30.65	30.26	53.92	29.29
Mean	894.63	626.06	3233.03	5887.92	9478.50
S.D	116.82	346.35	1995.76	3279.93	7528.29
Variance	13647.54	119955.33	3983065.09	10757926.47	56675107.98
CAGR	51.3	145.7	127.5	158	113.5

Graph 5. Capital Employed (inCrore)



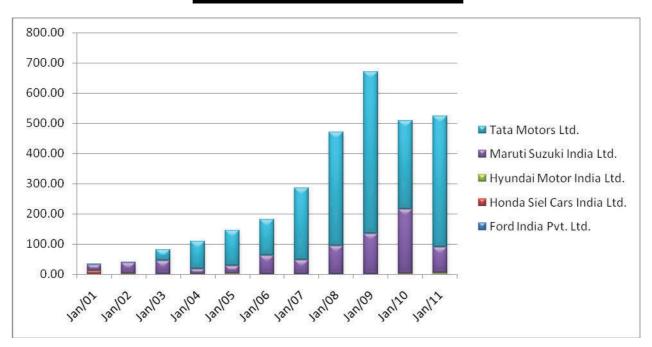
value of mean is 9478.50 of Tata Motors & minimum mean value is 626.06 of Maruti Honda. The maximum S.D is 7528.29 of Tata Motors & minimum value is 346.35 ofHonda. F-test is also applied on the data to know the significant difference. The computed value of Ford, Honda Hyundai, MarutiSzuki and Tata Motors is 6.41,

25.31, 12.51, 52.8 and 8.12 respectively. Which is more than the table value at (1, 6) degree of freedom which is 5.99 hence, hence, we reject the hypothesis.. It means that the Capital Employed differs significantly in different years. T-test is also applied on it. The computed value of all the firms is more than the table value at 5% level

Table 6. Cash Balance(in Crore)

Year	Ford	Honda	Hyundai	Maruti Suzuki	Tata Motors
2001	0.02	10.42	0.03	20.70	2.28
2002	0.02	2.66	0.10	36.50	0.96
2003	0.01	0.10	0.08	43.80	37.34
2004	0.02	0.02	0.15	17.40	90.28
2005	0.02	0.02	1.55	25.50	118.85
2006	0.01	0.06	0.23	61.90	119.56
2007	0.03	0.01	0.19	46.20	239.27
2008	0.02	0.01	0.24	94.60	376.50
2009		0.03	0.71	133.90	536.06
2010		0.04	2.73	212.40	293.18
2011		0.02	4.53	84.30	433.90
F-test	0.15	18.03	3.36	5.11	24.46
T-test	16.03	4.57	6.62	14.35	6.19
Mean	0.02	1.22	0.96	70.65	204.38
S.D	0.01	3.15	1.45	58.98	184.14
Variance	0.00	9.94	2.10	3478.41	33907.42
CAGR	16.9	-57.9	82.1	97	145

Graph 6. Cash Balance(in Crore)



of significance for two tailed test which is 2.262 therefore we reject the hypothesis as there is a significant difference. In an overall conclusion, it can be said that MarutiSzuki is the most efficient Companyinterms of generating Capital Employed and Fordis the most inefficient company in terms of generating Capital Employed.

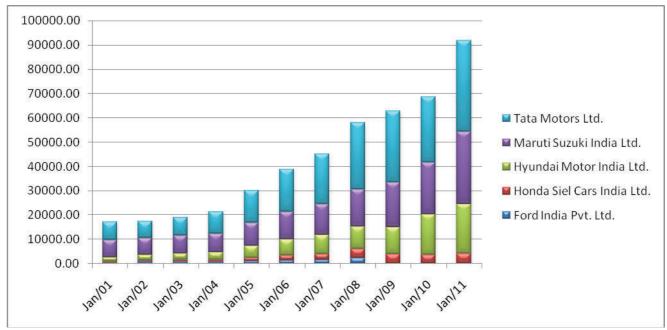
The table 6 shows the Cash Balance of selected firms. In case of the CAGR inCash Balance in Tata Motors is maximum which is 145% then followed by MarutiSzuki, Hyundai and Ford at the rate 97 %, 82.1%, 16.9 respectively. The minimum CAGR in Cash Balancein Honda which is57.9%. The maximum value of mean is

204.38 of Tata Motors & minimum mean value is .02 of Ford. The maximum S.D is 184.14 of Tata Motors & minimum value is 0.1 of Ford. F-test is also applied on the data to know the significant difference. The computed value of Honda and Tata Motors is 18.03,24.46. Which is more than the table value at (1, 6) degree of freedom which is 5.99 hence, we reject the hypothesis.. It means that the Cash Balance differs significantly in different years. The computed value of Ford, Hyundai, and Maruti Szuki is 0.15, 3.36, 5.11 respectively. Which is less than the table value. It means that the Cash Balance do not differs significantly in different years. T-test is also applied on it. The computed value of all the

Table 7. Net Income(in Crore)

Year	Ford	Honda	Hyundai	Maruti Suzuki	Tata Motors
2001	341.11	469.95	1702.58	7266.10	7442.79
2002	787.48	521.08	2263.38	6930.40	6770.93
2003	885.58	658.95	2633.49	7305.20	7366.53
2004	872.22	755.55	3161.11	7531.70	8989.65
2005	1136.21	1316.00	4978.31	9336.10	13197.30
2006	1344.79	2155.01	6607.87	11228.10	17514.41
2007	1493.69	2521.87	7816.54	12576.60	20825.82
2008	2220.14	3902.63	9253.61	15250.50	27522.88
2009		3957.55	10999.28	18490.70	29312.99
2010		3541.41	16818.85	21287.70	27016.56
2011		4105.33	20494.98	29818.90	37358.83
F-test	44.38	164.58	379.91	51.91	77.21
T-test	31.39	40.19	77.01	62.56	41.57
Mean	1135.15	2173.21	7884.55	13365.64	18483.52
S.D	564.74	1502.33	6166.04	7308.19	10654.81
Variance	318927.94	2256989.71	38020011.95	53409708.15	113525073.20
CAGR	155.6	167	169.7	157.7	162

Graph 7. Net Incomes (in Crore)



firms is more than the table value at 5% level of significance for two tailed test which is 2.262 therefore we reject the hypothesis as there is a significant difference. In an overall conclusion, it can be said that Tata Motors is the most efficient Company in terms of generating Debt equity ratio and Honda is the most inefficient company in terms of generating Debt equity ratio.In an overall conclusion, it can be said that Tata

Motors is the most efficient Company in terms of generating Debt equity ratio and Honda is the most inefficient company in terms of generating Debt equity ratio.

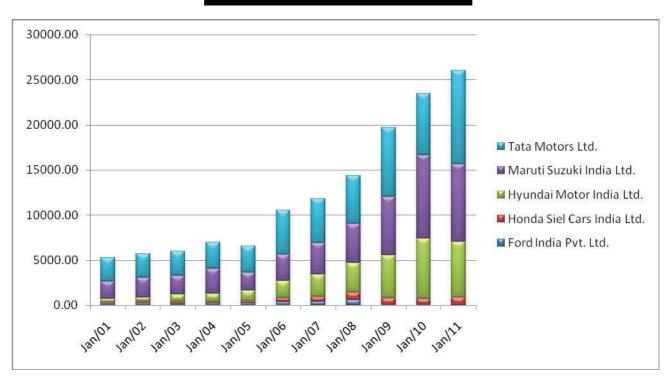
The table 7 shows the Net Income of selected firms. In case of the CAGR inNet Income inHyundai is maximum which is 169.7% then followed by Honda, Tata Motors, MarutiSzuki at

Table 8. Current Assets(in Times)

Year	Ford	Honda	Hyundai	Maruti Suzuki	Tata Motors
2001	188.17	124.14	389.47	1977.40	2632.18
2002	231.66	157.29	462.94	2209.40	2653.99
2003	194.99	212.57	801.41	2074.40	2670.29
2004	217.61	190.54	922.30	2716.70	2923.51
2005	214.46	195.85	1263.49	1941.80	2962.41
2006	364.39	460.78	1875.61	2907.60	4910.17
2007	399.88	570.02	2446.85	3513.30	4874.66
2008	588.41	865.24	3240.30	4317.60	5357.61
2009		781.35	4760.42	6513.90	7619.36
2010		717.01	6672.87	9250.90	6840.33
2011		893.96	6126.18	8636.50	10398.68
F-test	21.28	45.73	683.27	14.73	29.45
T-test	30.82	25.39	84.38	38.10	46.26
Mean	299.95	469.89	2632.89	4187.23	4894.84
S.D	141.22	306.75	2278.71	2709.66	2538.21
Variance	19944.43	94093.14	5192523.79	7342240.67	6442508.30
CAGR	141.9	156.1	170.6	132.3	148.8

Source: cmie, prowess software 2011

Graph 8. Current Assets(in Times)



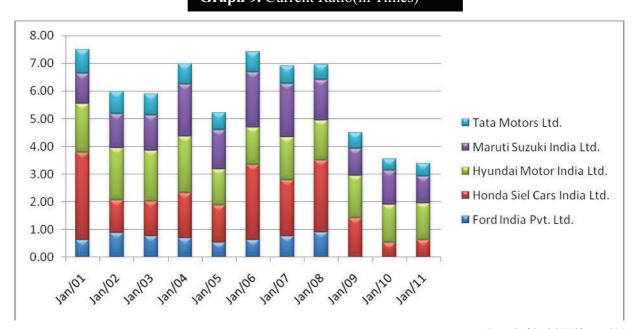
the rate 167%, 162% and 157.7 respectively. The minimum CAGR in Net Incomein Ford i.e155.6%. The maximum value of mean is 18483.52 of Tata Motors & minimum mean value is 1135.15 of Ford. The maximum S.D is 10654.81of Tata Motors& minimum value is 564.74 of Ford. F-test is also applied on the data to know the significant difference. The computed value of Ford, Honda, Hyundai, MarutiSzuki and Tata Motors is 44.38, 164.58, 379.91, 51.91 and 77.21 respectively. Which is more than the table value at (1, 6) degree of freedom which is 5.99 hence, hence, we reject the hypothesis.. It means that the Net Incomediffers significantly in different years. T-test is also applied on it. The computed value of all the firms is more than the table value at 5% level of significance for two tailed test which is 2.262 therefore we reject the hypothesis as there is a significant difference. In an overall conclusion, it can be said that Hyundai is the most efficient Company in terms of generating Debt equity ratio and Ford is the most inefficient company in terms of generating Debt equity ratio.

The table 8 shows the Current assets of selected firms. In case of the CAGR inCurrent assets inHyundai is maximum which is 170.6% then followed by Honda, Tata Motors and Ford at the rate 156.1%, 148.8%, 141.9% respectively. The minimum CAGR in Current assetsin Maruti Suzuki which is 132.3% .The maximum value of mean is 4894.84 of Tata Motors & minimum mean value is 299.95 of Ford. The maximum S.D is 2538.21 of Tata motors & minimum value is

Table 9. Current Ratio(in Times)

Year	Ford	Honda	Hyundai	Maruti Suzuki	Tata Motors
2001	0.63	3.16	1.76	1.09	0.86
2002	0.88	1.17	1.88	1.25	0.80
2003	0.77	1.24	1.84	1.27	0.76
2004	0.70	1.62	2.05	1.86	0.76
2005	0.54	1.34	1.29	1.42	0.62
2006	0.63	2.71	1.35	1.99	0.74
2007	0.75	2.04	1.55	1.93	0.64
2008	0.91	2.58	1.44	1.48	0.56
2009		1.42	1.53	0.96	0.59
2010		0.52	1.37	1.24	0.41
2011		0.63	1.31	0.97	0.48
F-test	0.14	0.46	4.31	5.68	21.60
T-test	34.21	16.11	46.35	37.13	88.67
Mean	0.73	1.68	1.58	1.41	0.66
S.D	0.13	0.85	0.26	0.37	0.14
Variance	0.02	0.73	0.07	0.14	0.02
CAGR	16.2	30.4	-47.6	100.8	-58.7

Graph 9. Current Ratio(in Times)



141.22 ofFord. F-test is also applied on the data to know the significant difference. The computed value of Ford, Honda, Hyundai, Maruti Suzuki and Tata Motors are 21.28, 45.73, 683.27,14.73 and 29.45 recspectively. Which is more than the table value at (1, 6) degree of freedom which is 5.99 hence,hence, we reject the hypothesis.. It means that the Current assets differs significantly in different years. T-test is also applied on it. The

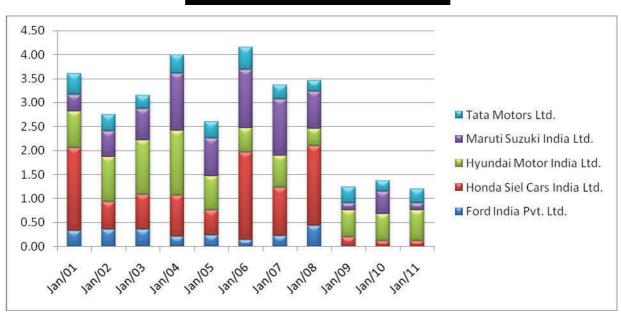
computed value of all the firms is more than the table value at 5% level of significance for two tailed test which is 2.262 therefore we reject the hypothesis as there is a significant difference. In an overall conclusion, it can be said that Hyundai is the most efficient Company in terms of generating Debt equity ratio and MarutiSzuki is the most inefficient company in terms of generating Debt equity ratio.

Table 10. Quick Ratio(in Times)

YEAR	Ford	Honda	Hyundai	Maruti Suzuki	Tata Motors
2001	0.33	1.73	0.76	0.35	0.43
2002	0.36	0.57	0.94	0.53	0.35
2003	0.35	0.73	1.14	0.65	0.28
2004	0.21	0.85	1.36	1.19	0.39
2005	0.23	0.52	0.72	0.78	0.35
2006	0.14	1.82	0.51	1.22	0.47
2007	0.22	1.01	0.67	1.17	0.30
2008	0.44	1.66	0.35	0.78	0.23
2009	-	0.20	0.55	0.16	0.33
2010	-	0.12	0.56	0.47	0.22
2011	-	0.12	0.63	0.16	0.29
F-test	0.37	0.50	5.21	6.78	1.61
T-test	16.43	12.37	18.86	19.82	28.76
Mean	0.29	0.85	0.74	0.68	0.33
SD	0.10	0.64	0.30	0.39	0.08
Variance	0.01	0.41	0.09	0.15	0.01
CAGR	21.4	32.1	-49.4	107.2	-36.9

Source: cmie, prowess software 2011

Graph 10. Quick Ratios(in Times)



The table 9 shows the Current ratio of selected firms. In case of the CAGR in Current ratio inMaruti Suzuki is maximum which is 100.8% then followed by Honda, Ford and Hyundai at the rate 30.4%, 16.2% and -47.6% respectively. The minimum CAGR inCurrent ratio in Tata Motors which is -58.7%. The maximum value of mean is 1.68 of Honda & minimum mean value is 0.66 of Tata Motors. The maximum S.D is 0.85 of Honda & minimum value is 0.14 of Tata Motors. F-test is also applied on the data to know the significant difference. The computed value of Tata Motors is 21.60. Which is more than the table value at (1, 6) degree of freedom which is 5.99 hence, hence, we reject the hypothesis.. It means that the Current ratio differs significantly in different years. The computed value of Ford, Honda, Hyundai, and MarutiSzuki is 0.14, 0.46, 4.31, 5.68 respectively. Which is less than the table value. It means that theCurrent ratio do not differs significantly in different years. T-test is also applied on it. The computed value of all the firms is more than the table value at 5% level of significance for two tailed test which is 2.262 therefore we reject the hypothesis as there is a significant difference. In an overall conclusion, it can be said that Hyundai is the most efficient Company in terms of generating Debt equity ratio and Honda is the most inefficient company in terms of generating Debt equity ratio.

The table 10 shows the Quick ratio of selected firms. In case of the CAGR in Quick ratio inMarutiSzuki is maximum which is 107.2% then followed by Honda, Ford at the rate 32.1%, 21.4% respectively. The minimum CAGR in Quick ratio in Hyundai which is -49.4%, -The maximum value of mean is 0.85 of Honda & minimum mean value is 0.29 of Ford. The maximum S.D is 0.64 of Honda & minimum value is 0.10 ofFord. F-test is also applied on the data to know the significant difference. The computed value of Maruti Suzuki is 6.78. Which is more than the

table value at (1, 6) degree of freedom which is 5.99 hence,hence, we reject the hypothesis.. It means that theQuick ratio differs significantly in different years. The computed value of Ford, Honda, Hyundai, and Tata Motors are 0.37, 0.50, 5.21 and 1.61 respectively. Which is less than the table value. It means that theQuick ratio do not differs significantly in different years. T-test is also applied on it. The computed value of all the firms is more than the table value at 5% level of significance for two tailed test which is 2.262 therefore we reject the hypothesis as there is a significant difference.

In an overall conclusion, it can be said that Maruti Suzuki is the most efficient Company in terms of generating Debt equity ratio and Hyundai is the most inefficient company in terms of generating Debt equity ratio.

CONCLUSION

Automobile industry includes designs, manufacture, and development and selling of motor vehicles such as two wheeler, three wheelers, cars, truck, busses tractors and other vehicles. However, it does not include industries that are dealing as repair shops, or other motor fuel filling stations. Automobile industry in world keeps on growing and it is one of the most important sectors of the world in terms of revenue collection. It reached to the peak in the year 2007 when the total motor vehicle production touched the 73.3 million milestones. It is in 2009 that the sales dropped a bit and restricted to 61 million. In spite of this considerable downfall in the motor vehicle production, china being able to generate it sales by 45% in 2009 to 13.6 million units.

In conclusion, the automobile industry growing in all respects and fields. New innovations and new products launch frequently which is a major factor of growth in this sector.

There are also various service station networks for the repair and maintenance of your vehicle. Automobile Industry, expected to witness a tremendous growth in the global market.

REFERNCES

- 1. Ann E Carlson. Federalism, Preemption, and Greenhouse Gas Emissions, University of California, Los Angeles (UCLA). School of Law U.C. *Davis Law Review* 2003; 37(1): 281.
- 2. Balwant Rawat. *Patenting Landscape in India*. Intellectual Property 2009.
- 3. Nitin Gupta, Vaibhav Shekhar. *The Indian Mid-Segment Passenger Car Industry*. Institute of Chartered Financial Analysts of India (ICFAI), The Icfai Institute for Management Teachers 2010.
- 4. Peter L Strauss. Geier v. American Honda Motor Co. *A Story of Statutes, Regulation and the Common Law,* Columbia Law School 2009.
- Peter Weill, Richard Woodham. Manheim Interactive: Selling Cars Online, Massachusett Institute of Technology (MIT) - Sloan School of Management 2001.

- 6. Priyanka Singh, Brajesh Kumar. *Trade Off Theory or Pecking Order Theory: What Explains the Behavior of the Indian Firms?* IIM Ahmedabad, Jindal Global Business School, IIM Ahmedaba 2008.
- 7. Ryan Edmonds. Taking the Risk Out of Termination: An Enterprise Risk Management Analysis of the Normative System of Employment Standards Challenged by Honda V. Keays, York University, Osgoode Hall Law School 2011.
- 8. Sofronis Clerides. *Gains from Trade in Used Goods: Evidence from Automobiles*, University of Cyprus,
 Department of Economics, Centre for Economic Policy
 Research (CEPR), University of Bologna, Rimini
 Center for Economic Analysis (RCEA) 2008.
- Steven Bellman , Gerald Lohse, Eric J Johnson.
 Predictors of Online Buying Behavior, Murdoch University, Accenture Corporation, Columbia University, Columbia Business School 2009.
- 10. Valerie A Ramey, Daniel J Vine. Tracking the Source of the Decline in GDP Volatility: An Analysis of the Automobile Industry. University of California at San Diego, National Bureau of Economic Research (NBER), Board of Governors of the Federal Reserve 2005.