



## INDIAN COMPANIES CORPORATE BUSSINESS VALUATION - STUDY REPORT

Dr. T. MALKAIAH

Professor, Department of M.B.A, Siddhartha Institute of Technology and Sciences, Narapally, Hyderabad, Telangana, India

### Abstract

Corporate valuation/business valuation is the process of determining the economic worth of the company based on its business model and external environment and suppurate with reasons and empirical evidence. Valuation is the process of determining the economic value of a business or a company which reflects the performance of the company both its past performance as well as expectation of its future performance. Valuation is used by financial market participants to determine the price they are willing to buy or sell to the effect of sale of business. To study the intrinsic value of the firm's equity and compare the calculation of intrinsic value with their corresponding market values. The data is analyzed by using financial models like discounted cash flow method, Dividend growth model applied for rubber tyre companies and done comparative studies. The intrinsic value of the firm's equity compared to the market value. This paper is expected to reveal that how the Indian companies tend to reward better value to the shareholders that are measures the corporate valuation and encourages regulators to initiate further timely reforms to build a strong relationship between those who run the company and the stakeholders.

**KEY WORDS:** corporate valuation, DCF, FCF, FCFE, Intrinsic value, Market value

### INTRODUCTION

Corporate valuation or business valuation is procedure of deciding the "financial worth" of organisation taking into account plan of action and outer environment and suppurate with reasons and experiential confirmation. Valuation has been esteeming organization might take administration the pieces of its capital structure, prospect of future earning and market estimation of advantage. "Corporate valuation is a process and set of procedures used to estimate the

economic values of owner's interest in a business. Valuation is used by financial market participants to determine the price they are willing to buy or sell to effect a sale of a business"

### Corporate valuation depend up on

#### 1. Purposes of valuation

Valuation basically made because to now company performance and were it stand in the externally environment valuation will help to know company

coming out with true value that is intrinsic value were the actual value of a company or an asset based on an underlying perception of its true value including all aspects of the business, in terms of tangible and intangible factors. The value may or may not be the same compare to market value.

## 2. Stage of business valuation

- Finding out what your business worth.
- Understanding areas in which your business might need to improve before officially putting it on the market.
- Measure the marketplace at a relatively under or over value rate.
- Reduce risk make sure any internal valuation have to measure they accurate in valuation.

## 3. Past financials

In valuation were a measures the company past financial statement can help to project for the future purpose of the company growth. In this valuation past financial date will use for

company management, owner, stakeholder, shareholder, investor, creditors, government were this people can easy now company performance it may help to invest to the particular company

## 4. Expected Financial result

Financial statement is records out line of financial activates of a business, an individual or any other entity. In valuation the company or individual can easily now they performance it always show whether the company is in profit or loss Expected financial result will always they expect huge profit for company.

**The methods which have been used discounted free cash flow model are frequently used in corporate valuation.**

Discounted cash flow (DCF):

In Discounted Free Cash Flow They have Two Approach. 1.Measuring DCF to Firm, 2. Measuring DCF to Equity, 3.Discounted Free Cash Flow to Firm, 4. Discounted Free Cash Flow for Equity

### RESEARCH OBJECTIVE:

The following are the Objectives of the Stud

1. To determine the value of selected Indian firms using FCFF and FCFE model.
2. To determine the Intrinsic Value of the Selected firms and compare the same with Market Prices.

### RESEARCH METHODOLOGY:

- Type of research : Descriptive study
- Time period of study: 5 years financial statement
- Type of data to be used and its source: Secondary data.
- Statistical tests/financial models to

be used: Discounted cash flow method and Dividend growth model.

## REVIEW OF LITERATURE:

- Olsson and Oswald (2000):** According to this researcher was the research as used both the model dividend growth model and discounted free cash flow model .more accurate firm most likely due to the use of different assumptions. This method of DGM and DFCF were they give different valuation consistency and logical forms.
- Gentry et al (2003):** According to this researcher were the research provides an integrated valuation system (IVS) that includes in academics or any other who want to profession any change in firm's financial strategy and the effect of changing in whole value of stock. Even they can include or introduce theoretical with condition when the dividend discounted model (DDM) will measure are equal to the discounted cash flow model (DCF) estimation.
- Juethner nauroth (2005):** According to this researcher was the research the dividend discounted model dividend are irrelevance. They will always deviation dividend will equivalence in this model based on expected earning and expected in

growth rate.

- Walid Saleh et al (2008):** According to this researcher was the research as this valuation models under different situation measuring the cost of equity and growth rate into analysis and comparing the actual marketing price with measuring the intrinsic value. Dividend discounted method and the cash flow method are different intrinsic value of the firm.

## ANALYSIS

Analysis as base on AAL with reference to other selected company.

**Table 1-Showing the discounted Free Cash Flows to Equity for the selected Indian Companies from the year 2011 to 2015**

AUTOMOTIVE AXLES LIMITED					CRORES
Year	CFO(A)	CAPEX(B)	A-B	NET BORROWINGS	FCFE
2011	720.76	390.39	330.4	-91.185	239.18
2012	939.05	696.68	242.4	-62.99	179.38
2013	538.6	249	289.6	-45.04	244.56
2014	58.06	306.33	-248.3	408.14	159.87
2015	917.08	192.59	192.6	-613.5	110.99

RANE MADRAS LIMITED					
Year	CFO(A)	CAPEX(B)	A-B	NETBORROWINGS	FCFE
2011	341.8	589.3	-247.5	11.16	-236.34
2012	201.5	419.3	-217.8	11.93	-205.87
2013	703.7	302.4	401.3	9.87	411.17
2014	451.5	427.8	23.7	2.5	26.2
2015	670.9	852.5	-181.6	25.73	-155.87

HINDUSTAN HARDY SPICER LIMITED					
Year	CFO(A)	CAPEX(B)	A-B	NETBORROWINGS	FCFF
2011	17.158	10.713	6.445	11.68	18.125
2012	39.447	9.291	30.156	51.96	82.116
2013	19.953	22.919	-2.966	82.74	79.774
2014	11.901	52.53	-40.629	-51.3	-91.929
2015	23.608	11.826	11.782	-81.78	-69.998

Particular	2011	2012	2013	2014	2015
Automotive Axles Limited	239.18	176.38	244.56	159.87	110.99
Rane Madras Limited	-236.34	-205.87	411.17	26.2	-155.87
Hindustan Hardy Spices Limited	18.125	82.116	79.774	-91.929	-69.998

### Interpretation

The above table and graph show the free cash flow to the Equity for the selected three companies from the year 2011 to 2015. It's been observed that the FCFF was Rs. 239.18crores for Automotive Axles Ltd during 2011 and for the year 2015 it was found at Rs. 110.99 crores. The FCFF to Rane Madras was at Rs. -236.34 crores in 2011 and in 2015 it was -155.87 crores. However, it was found that the higher FCFF was Rs. 411.17 crores during 2013. For Hindustan Hardy Spices Ltd the highest FCFF was found during 2012 at 82.116crores and the lower FCFF was found 2014 at -91.929 and during 2015 also -69.998 crores.

**Table 2-Showing the Discounted Free Cash Flows for the selected Indian Companies from the year 2011 to 2015 of GROWTH RATE.**

ATOMOTIVE AXLES LIMITED			
Year	RETENCE RATIO	RETURN ON EQUITY	GROWTH RATE
2011	73.74	23.6	17.40264
2012	66.43	4.52	3.002636
2013	76.19	6.17	4.700923
2104	79.21	3.48	2.756508
2015	85.66	3.48	2.980968

RANE MADRAS LIMITED			
Year	RETENCE RATIO	RETURN ON EQUITY	GROWTH RATE
201	71.06	24.92	17.708152
2012	64.78	23.81	15.424118
2013	69.64	18	12.5352
2104	65.55	11.96	7.83978
2015	61.97	8.54	5.292238

HINDUSTAN HARDY SPICER LIMITED			
Year	RETENCE RATIO	RETURN ON EQUITY	GROWTH RATE
2011	17.58	6.52	1.146216
2012	49.14	16.43	8.073702
2013	48.83	9.42	4.599786
2104	46.78	8.76	4.097928
2015	100	0	0

PARTICULAR	2011	2012	2013	2014	2015
Automotive Axles limited	17.40	11.01	3.44	4.88	2.98
Rane Madres limited	17.75	15.6	12.53	7.83	5.80
Hindustan Hardy Spicer limited	1.14	8.07	4.59	4.09	0.00

### Interpretation

The above table and graph show the growth rate of the selected three companies from the year 2011 to 2015. It's been observed that the Automotive Axles Ltd growth rate during 2011 is 17.40 more and for the year 2015, 2.90. The Rane Madras growth rate more compare to other company from 2011. It has 17.75 it has been increase but in 2015 it has 5.80 been both Company has never shown any negative growth rate. Hindustan hardly Spicer limited growth rate were less in 2011 it has 1.14 and it has been decline in growth rate in 2015 it has shown 0.00 growth rate which means is no growth for particular year.

**Table 3- Showing the Free Cash Flows for Equity for the selected Indian Companies from the year 2011 to 2015. When they is CONSTANT GROWTH**

ATOMOTIVE AXLES LIMITED				Crores
Year	FCFE (A)	r (Ke) (B)	growth	Value
2011	239.18	11.40	17.40264	(3,985.47)
2012	179.38	(18.24)	3.002636	(844.28)
2013	244.56	9.23	4.700923	5,398.26
2104	159.87	21.50	2.756508	852.83
2015	110.99	34.19	2.980968	355.60

RANE MADRAS LIMITED				crores
Year	FCFE (A)	r (Ke) (B)	Growth (c)	Value (A/(B-C))
2011	-236.34	9.22	17.70815	2783.04
2012	-205.87	(14.69)	15.42412	683.73
2013	411.17	8.70	12.5352	-10731.90
2104	26.2	22.47	7.83978	179.07
2015	-155.87	36.69	5.292238	-496.38

HINDUSTAN HARDY SPICER LIMITED				crores
Year	FCFE (A)	r (Ke) (B)	Growth (c)	Value (A/(B-C))
2011	18.125	8.43	1.146216	248.93
2012	82.116	(11.23)	8.073702	-425.45
2013	79.774	8.53	4.599786	2027.84
2104	-91.929	15.20	4.097928	-828.13
2015	-69.998	26.63	0	-262.83

Particular	2011	2012	2013	2014	2015
Automotive Axles Limited	-3985.44	-844.28	5398.26	852.83	355.61
Rane Madras limited	2769.39	683.73	-10731.90	179.07	-496.38
Hindustan Hardy Spices Limited	248.93	-425.45	2027.84	-828.13	-262.83

### Interpretation

The above table and graph show the free cash flow to the equity for the selected three companies from the year 2011 to 2015. The AAL company were from 2011 as went into negative growth rate – 3985.44 and even 2012 in the 2015 were company has positive cash flow of 355.61 crores. Rane Madras company were the cash flow from 2011 to 2015 RMD company in 2011 they 2,769.39, 2013 RMB company

as went to negative cash out flow on particular-10,731.90 and then 2015 RMD as when into negative cash flow -449.62 however the Hindustan Hardy Spicer limited FCFE from 2011 to 2015 were 2011 the company as 248.93 and in 2014 and 2015 were the company has negative cash flow of -828.13 and -262.83 compare to the three firm were 2015 AAL company has positive cash flow of 355.61 crores.

**Table 4- Showing the Free Cash Flows for firm Automotive Axles Limited for 2011 to 2015 will remain**

Year	FCFF	WACC	Ke	Growth Rate	Rf
2011	373.36	12.82	11.40	17.40	5.81
2012	305.61	(12.61)	(18.24)	11.02	8.15
2013	345.42	7.86	9.23	3.44	8.06
2014	(316.54)	16.54	21.50	4.89	8.34
2015	752.14	24.65	34.19	2.98	9.06
Average	292.00	9.85	11.62	7.95	7.88

**Table 5-Showing the Estimated FCFE, Present Values of FCFE and the Value of Automotive Axles Limited as on 2015.**

Free Cash Flow Method			
Year	Estimated FCFE	PVIF	PV
2016	315.21	0.9103	286.95
2017	340.27	0.8287	281.98
2018	367.32	0.7544	277.11
2019	396.52	0.6868	272.31
2020	428.05	0.6252	267.60
TV	1,857.66	0.6252	1,161.36
Value of the Firm			2,547.31

### Interpretation

The above table and show the free cash flow to firm were Automotive Axles Limited we have estimated to calculate present value of firm were taken average and predicted for 5 years. To know the value of firm in 2015 is 2547.31 crores.

**Table 6- Showing the Free Cash Flows for Equity Automotive Axles Limited for 2011 to 2015 will remain**

Year	FCFE	Ke	Growth Rate
2011	239.18	11.40	17.40
2012	176.38	(18.24)	11.02
2013	244.56	9.23	3.44
2014	159.87	21.50	4.89
2015	110.99	34.19	2.98
Average	186.20	11.62	7.95

**Table 7-Showing the Estimated FCFE, Present Values of FCFE and the Value of Automotive Axles Limited as on 2015.**

Free Cash Flow Method			
Year	Estimated FCFE	PVIF	PV
2016	201.00	0.8959	180.07
2017	216.98	0.8026	174.15
2018	234.23	0.7191	168.43
2019	252.85	0.6442	162.89
2020	272.95	0.5772	157.53
TV	1,184.56	0.5772	683.67
Value of the Equity			1,526.75

### Interpretation

The above table and show the free cash flow for equity were Automotive Axles Limited we have estimated to calculate present value

of firm were taken average and predicted for 5 years. To know the value of firm in 2015 is 1526.75 crores.

**Table 8- Showing the Free Cash Flows for Firm Rane Madres Limited for 2011 to 2015 will remain.**

Year	FCFF	WACC	Ke	Growth Rate	Rf	DD
2011	(204.03)	6.89	9.22	17.75	5.81	7
2012	(124.24)	6.47	(14.69)	15.60	8.15	9.5
2013	488.92	9.47	8.70	12.54	8.06	7
2014	141.44	10.32	22.47	7.84	8.34	5.5
2015	(53.51)	9.27	36.69	5.80	9.06	4.5
Average	49.72	8.48	12.48	11.91	7.88	6.70

**Table 9 - Showing the Estimated FCFF, Present Values of FCFF and the Value of Rane Madres Limited as on 2015.**

Free Cash Flow Method			
Year	Estimated FCFF	PVIF	PV
2016	55.64	0.9218	51.29
2017	62.26	0.8497	52.90
2018	69.68	0.7832	54.58
2019	77.98	0.7220	56.30
2020	87.27	0.6655	58.08
TV	344.45	0.6655	229.23
Value of the Firm			502.37

### Interpretation

The above table and show the free cash flow for firm were RANE MADRAS Limited we have estimated to calculate present value of firm were taken average and predicted for 5 years. To know the value of firm in

2015 is 502.37crores.

**Table 10- Showing the Free Cash Flows for Equity Rane Madres Limited for 2011 to 2015 will remain.**

Year	FCFE	Ke	Growth Rate
2011	-236.34	9.22	17.75
2012	-205.87	(14.69)	15.60
2013	411.17	8.70	12.54
2014	26.2	22.47	7.84
2015	-155.87	36.69	5.80
Average	(32.14)	12.48	11.91

**Table 11-Showing the Estimated FCFE, Present Values of FCFE and the Value of Rane Madres Limited as on 2015**

Free Cash Flow Method			
Year	Estimated FCFE	PVIF	PV
2016	55.64	0.9218	51.29
2017	62.26	0.8497	52.90
2018	69.68	0.7832	54.58
2019	77.98	0.7220	56.30
2020	87.27	0.6655	58.08
TV	344.45	0.6655	229.23
Value of the Firm			502.37
Less - Market Value of Debt			50.96
Equity Value			451.41

### Interpretation

The above table and show the free cash flow for equity were Rane Madras Limited we have estimated to calculate present value of firm were taken average and predicted for 5 years. To know the value of equity but we have reduced in firm value by taking debt to know equity value in 2015 is 451.41crores.

Table4 12- Showing the Free Cash Flows for Firm Hindustan Hardy Spicer Limited for 2011 to 2015 will remain.

Year	FCFE (Cr)	WACC (%)	Growth Rate (%)	Dividend	Ke	Rf
2011	10.75	12.55	1.15	3.00	8.43	5.81
2012	36.76	9.34	8.07	5.00	(11.23)	8.15
2013	4.53	11.38	4.60	3.00	8.53	8.06
2014	(33.34)	10.40	4.10	3.00	15.20	8.34
2015	20.69	12.39	-	3.00	26.63	9.06
Average	7.88	11.21	3.58	3.40	9.51	7.88

Table-Showing the Estimated FCFE, Present Values of FCFE and the Value of Rane Madres Limited as on 2015

Free Cash Flow Method			
Year	Estimated FCFE	PVIF	PV
2016	8.16	0.8992	7.34
2017	8.45	0.8086	6.84
2018	8.76	0.7271	6.37
2019	9.07	0.6538	5.93
2020	9.39	0.5879	5.52
TV	58.31	0.5879	34.28
Value of the Firm			66.27

### Interpretation

The above table and show the free cash flow for firm were Hindustan Hardy Spicer Limited we have estimated to calculate present value of firm were taken average and predicted for 5 years. To know the value of firm in 2015 is 66.27 crores.

Table 13- Showing the Free Cash Equity for Firm Hindustan Hardy Spicer Limited for 2011 to 2015 will remain.

Year	FCFE (Crores)	WACC (%)	Growth Rate (%)	Dividend	Ke	Rf
2011	18.125	12.55	1.15	3.00	8.43	5.81
2012	82.116	9.34	8.07	5.00	(11.23)	8.15
2013	79.774	11.38	4.60	3.00	8.53	8.06
2014	-91.929	10.40	4.10	3.00	15.20	8.34
2015	-69.998	12.39	-	3.00	26.63	9.06
Average	3.62	11.21	3.58	3.40	9.51	7.88

Table 13.1-Showing the Estimated FCFE, Present Values of FCFE and the Value of Rane Madres Limited as on 2015

Free Cash Flow Method			
Year	Estimated FCFE	PVIF	PV
2016	3.75	0.9132	3.42
2017	3.88	0.8339	3.24
2018	4.02	0.7614	3.06
2019	4.16	0.6953	2.90
2020	4.31	0.6349	2.74
TV	4.47	0.6349	2.84
Value of the Firm			18.19

## Interpretation

The above table and show the free cash flow for Equity were Hindustan Hardy Spicer Limited we have estimated to calculate present value of Equity were taken average and predicted for 5 years. To know the value of firm in 2015 is 18.91 crores.

**Table 14-Showing Intrinsic value and Market value per/share for selected company as on 31<sup>st</sup> march 2015 cash flow model.**

Company	Intrinsic Value	Market Value	Deviation	Overvalued/Under Valued
Automotive Axles Limited	1,010.29	827.25	183.04	Undervalued
Rane Madras limited	474.46	314.44	160.02	Undervalued
Hindustan Hardy Spicer Limited	121.39	102.00	19.39	Undervalued

## Interpretation

The above tables were company of AAL as the intrinsic value is 1010.29cr and market value which has been trading on 2015 is 827.25cr they is a deviation is 183.04cr only. The Automotive Axles Limited is undervalued. Rane Madras Company Limited Intrinsic value 474.46cr and market value 314.44cr then deviation is 160.02cr comparing Rane Madras Limited Intrinsic and Market Value is where RML is undervalued. Hindustan Hardy Spicer Limited Intrinsic value 121.39cr and market value 102cr the deviation is 19.39cr.comparing HHSL is undervalued.

## FINDINGS

- 1) The using DCF models were Automotive Axles Limited has the better cash flow in firm and equity compare to the Rani Madras and Hindustan Hardy Spicer Limited.
- 2) We have used different model when they is no growth rate compare of the selected firm RML and HHSL and equity cash flow of AAL company has 324.60 crores compare to last year it was 743.50
- 3) In constant growth rate of Automotive Axles Limited as firm were 334.5cr and for equity were 355.61 compare Rane Madras Limited and Hindustan Hardy Spicer Limited.
- 4) We have taken the growth rate were the AAL company have low growth of 2.98% compare to Rane Madras Limited.
- 5) The finding of present value FCFE and FCFE were for firm which as calculated for future to now PV factor 2547.31 crores and for equity 1526.75 crores AAL company as more compare to other company RML and HHSL
- 6) Intrinsic value of company AAL has 1010.29 crores other company and market value of the less then intrinsic value.
- 7) The three companies is undervalued but deviation is only AAL company as high rate which expectation of company is more compare to trading value.





## Reference

- 1) Adams et al. August 2009, "A Comparison of Alternative Approaches
- 2) Damodaran, A., 2004, "Investment valuation", preliminary second version
- 3) Beranek, W., & Howe, K. M. (1990). The Regulated Firm and the DCF Model: Some Lessons From Financial Theory. Journal of Regulatory Economics
- 4) R. A., Myers, S. C., & Allen, F. (2006). Principles of Corporate Finance (8th Edition ed.). McGraw-Hill.
- 5) Goodman, David A., and John W. Peavy III, 1983, "Industry relative price-earnings ratios as indicators of investment returns",
- 6) Olsson and Oswald research made in 2000 made on DGM and DCF model
- 7) Adams et al research made in 2009 research on DDG and DCF