



## Hindustan Aeronautics Limited

Years	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23
# Income Statement										
Sales	₹ 15,134.79	₹ 15,730.03	₹ 16,758.50	₹ 17,950.20	₹ 18,519.25	₹ 20,008.47	₹ 21,445.37	₹ 22,882.36	₹ 24,620.21	₹ 26,927.85
Sales Growth	-	3.93%	6.54%	7.11%	3.17%	8.04%	7.18%	6.70%	7.59%	9.37%
COGS	₹ 11,719.89	₹ 12,172.94	₹ 13,293.97	₹ 13,839.79	₹ 14,214.70	₹ 14,072.16	₹ 14,931.49	₹ 16,296.36	₹ 15,481.96	₹ 16,164.11
COGS% Sales	77.44%	77.39%	79.33%	77.10%	76.76%	70.33%	69.63%	71.22%	62.88%	60.03%
Gross Profit	₹ 3,414.90	₹ 3,557.09	₹ 3,464.53	₹ 4,110.41	₹ 4,304.55	₹ 5,936.31	₹ 6,513.88	₹ 6,586.00	₹ 9,138.25	₹ 10,763.74
Gross Margins	22.56%	22.61%	20.67%	22.90%	23.24%	29.67%	30.37%	28.78%	37.12%	39.97%
Selling & General Expenses	₹ 1,844.89	₹ 1,206.27	₹ 987.03	₹ 874.66	₹ 844.32	₹ 1,367.52	₹ 1,633.73	₹ 1,244.62	₹ 3,718.43	₹ 4,094.27
S&G Exp% Sales	12.19%	7.67%	5.89%	4.87%	4.56%	6.83%	7.62%	5.44%	15.10%	15.20%
EBITDA	₹ 1,570.01	₹ 2,350.82	₹ 2,477.50	₹ 3,235.75	₹ 3,460.23	₹ 4,568.79	₹ 4,880.15	₹ 5,341.38	₹ 5,419.82	₹ 6,669.47
EBITDA Margins	10.37%	14.94%	14.78%	18.03%	18.68%	22.83%	22.76%	23.34%	22.01%	24.77%
Interest	₹ 8.28	₹ 14.66	₹ 5.90	₹ 16.45	₹ 34.62	₹ 177.49	₹ 359.43	₹ 266.72	₹ 65.14	₹ 64.35
Interest % Sales	0.05%	0.09%	0.04%	0.09%	0.19%	0.89%	1.68%	1.17%	0.26%	0.24%
Depreciation	₹ 602.51	₹ 806.06	₹ 862.80	₹ 680.61	₹ 946.97	₹ 1,024.47	₹ 997.63	₹ 1,157.19	₹ 1,109.87	₹ 1,783.91
Depreciation % Sales	3.98%	5.12%	5.15%	3.79%	5.11%	5.12%	4.65%	5.06%	4.51%	6.62%
Earnings Before Tax	₹ 959.22	₹ 1,530.10	₹ 1,608.80	₹ 2,538.69	₹ 2,478.64	₹ 3,366.83	₹ 3,523.09	₹ 3,917.47	₹ 4,244.81	₹ 4,821.21
EBT % Sales	6.34%	9.73%	9.60%	14.14%	13.38%	16.83%	16.43%	17.12%	17.24%	17.90%
Tax	₹ 885.17	₹ 784.47	₹ 1,209.00	₹ 966.95	₹ 1,252.43	₹ 1,396.28	₹ 1,095.99	₹ 1,037.93	₹ 144.65	₹ 681.77
Effective Tax Rate	92.28%	51.27%	75.15%	38.09%	50.53%	41.47%	31.11%	26.49%	3.41%	14.14%
Net Profit	₹ 74.05	₹ 745.63	₹ 399.80	₹ 1,571.74	₹ 1,226.21	₹ 1,970.55	₹ 2,427.10	₹ 2,879.54	₹ 4,100.16	₹ 4,139.44
Net Margins	0.49%	4.74%	2.39%	8.76%	6.62%	9.85%	11.32%	12.58%	16.65%	15.37%
No of Equity Shares	48.20	48.20	36.15	36.15	33.44	33.44	33.44	33.44	33.44	33.44
Earnings Per Share	₹ 1.54	₹ 15.47	₹ 11.06	₹ 43.48	₹ 36.67	₹ 58.93	₹ 72.58	₹ 86.11	₹ 122.62	₹ 123.79
EPS Growth %	-	906.9%	-28.5%	293.1%	-15.7%	60.7%	23.2%	18.6%	42.4%	1.0%
Dividend per Share	₹ 18.50	₹ 9.96	₹ 17.40	₹ 22.13	₹ 32.17	₹ 19.80	₹ 33.25	₹ 30.00	₹ 40.00	₹ 55.00
Dividend Payout Ratio	1204.19%	64.38%	157.33%	50.90%	87.73%	33.60%	45.81%	34.84%	32.62%	44.43%
Retained Earnings	0.00%	35.62%	0.00%	49.10%	12.27%	66.40%	54.19%	65.16%	67.38%	55.57%
# Balance Sheet										
Equity Share Capital	₹ 482.00	₹ 482.00	₹ 361.50	₹ 361.50	₹ 334.39	₹ 334.39	₹ 334.39	₹ 334.39	₹ 334.39	₹ 334.39
Reserves	₹ 14,532.64	₹ 16,304.07	₹ 10,657.60	₹ 12,175.13	₹ 9,151.26	₹ 11,740.54	₹ 12,865.19	₹ 15,033.79	₹ 18,929.61	₹ 23,171.78
Borrowings	₹ 684.16	₹ 4.53	₹ 79.80	₹ 1,022.03	₹ 904.52	₹ 4,156.66	₹ 5,926.97	₹ 52.71	₹ 48.64	₹ 51.00
Other Liabilities	₹ 48,179.62	₹ 47,251.84	₹ 45,419.70	₹ 38,148.85	₹ 38,043.70	₹ 35,238.05	₹ 35,008.40	₹ 37,601.27	₹ 40,870.71	₹ 45,632.41
Total	₹ 63,878.42	₹ 64,042.44	₹ 56,518.60	₹ 51,707.51	₹ 48,433.87	₹ 51,469.64	₹ 54,134.95	₹ 53,022.16	₹ 60,183.35	₹ 69,189.58
Fixed Assets Net Block	₹ 2,088.18	₹ 7,191.14	₹ 6,925.20	₹ 7,349.56	₹ 7,566.07	₹ 7,454.30	₹ 7,351.48	₹ 7,157.95	₹ 6,758.14	₹ 6,827.33
Capital Work in Progress	₹ 184.74	₹ 216.38	₹ 1,025.40	₹ 1,389.40	₹ 1,457.82	₹ 1,499.01	₹ 2,040.11	₹ 1,948.42	₹ 2,471.85	₹ 1,883.91
Investments	₹ 707.43	₹ 745.31	₹ 886.40	₹ 980.74	₹ 989.37	₹ 901.79	₹ 940.15	₹ 1,054.95	₹ 1,294.14	₹ 1,385.39
Other Assets	₹ 14,729.52	₹ 6,828.70	₹ 5,543.50	₹ 5,112.05	₹ 4,997.30	₹ 8,592.82	₹ 11,891.37	₹ 12,003.99	₹ 14,448.12	₹ 19,834.86
Total Non Current Assets	₹ 17,709.87	₹ 14,981.53	₹ 14,380.50	₹ 14,831.75	₹ 15,010.56	₹ 18,447.92	₹ 22,223.11	₹ 22,165.31	₹ 24,972.25	₹ 29,931.49
Receivables	₹ 6,884.06	₹ 6,242.60	₹ 4,836.90	₹ 4,220.16	₹ 6,750.79	₹ 12,459.03	₹ 11,234.73	₹ 5,669.55	₹ 4,641.55	₹ 4,719.07
Inventory	₹ 22,349.51	₹ 25,146.93	₹ 23,997.80	₹ 21,538.76	₹ 20,148.32	₹ 20,467.31	₹ 20,379.20	₹ 18,020.97	₹ 16,225.94	₹ 14,232.87
Cash & Bank	₹ 16,934.98	₹ 17,671.38	₹ 13,303.40	₹ 11,116.84	₹ 6,524.20	₹ 95.38	₹ 297.91	₹ 7,166.33	₹ 14,343.61	₹ 20,306.15
Total Current Assets	₹ 46,168.55	₹ 49,060.91	₹ 42,138.10	₹ 36,875.76	₹ 33,423.31	₹ 33,021.72	₹ 31,911.84	₹ 30,856.85	₹ 35,211.10	₹ 39,258.09
Total Assets	₹ 63,878.42	₹ 64,042.44	₹ 56,518.60	₹ 51,707.51	₹ 48,433.87	₹ 51,469.64	₹ 54,134.95	₹ 53,022.16	₹ 60,183.35	₹ 69,189.58
Check	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
# Cash Flow Statement										
Operating Activities										
Profit from operations				₹ 5,131.00	₹ 5,340.00	₹ 6,223.00	₹ 6,538.00	₹ 6,754.00	₹ 9,625.00	₹ 11,136.00
Receivables				₹ 571.00	₹ (3,563.00)	₹ (9,335.00)	₹ (1,883.00)	₹ 4,995.00	₹ 611.00	₹ (1,749.00)
Inventory				₹ 2,663.00	₹ 1,837.00	₹ 198.00	₹ 49.00	₹ 2,458.00	₹ 1,765.00	₹ 1,922.00
Payables				₹ (347.00)	₹ (98.00)	₹ 963.00	₹ 1,456.00	₹ (1,837.00)	₹ 299.00	₹ 578.00
Other WC items				₹ (7,404.00)	₹ (2,740.00)	₹ (4,651.00)	₹ (2,804.00)	₹ 3,629.00	₹ (1,092.00)	₹ (294.00)
Working capital changes				₹ (4,517.00)	₹ (4,564.00)	₹ (12,825.00)	₹ (3,182.00)	₹ 9,245.00	₹ 1,583.00	₹ 456.00
Direct taxes				₹ (1,037.00)	₹ (1,510.00)	₹ (1,092.00)	₹ (1,820.00)	₹ (875.00)	₹ (1,027.00)	₹ (2,756.00)
Cash From Operating Activities				₹ (4,940.00)	₹ (5,298.00)	₹ (20,519.00)	₹ (1,646.00)	₹ 24,369.00	₹ 11,764.00	₹ 9,293.00
Investing Activities										
Fixed assets purchased				₹ (1,514.00)	₹ (1,250.00)	₹ (1,390.00)	₹ (1,380.00)	₹ (1,208.00)	₹ (1,500.00)	₹ (1,781.00)
Fixed assets sold				₹ 12.00	₹ 1.00	₹ 2.00	₹ 2.00	₹ 1.00	₹ 3.00	₹ 5.00
Investments purchased				₹ (64.00)	₹ (64.00)	-	₹ (74.00)	₹ (66.00)	₹ (235.00)	₹ (91.00)
Investments sold				-	-	₹ 105.00	-	-	-	-
Interest received				-	-	₹ 260.00	₹ 64.00	₹ 76.00	₹ 200.00	₹ 738.00
Dividends received				₹ 3.00	₹ 1.00	₹ 2.00	₹ 1.00	₹ 1.00	₹ 2.00	₹ 2.00
Invest in subsidiaries				-	-	₹ (20.00)	-	-	-	-
Investment in group cos				₹ (2.00)	₹ (2.00)	-	₹ (1.00)	-	₹ (10.00)	-
Acquisition of companies				₹ (30.00)	₹ (5.00)	-	-	-	-	₹ (15.00)
Other investing items				₹ 4,616.00	₹ 1,913.00	₹ 6,334.00	₹ 54.00	₹ 5.00	₹ (11,250.00)	₹ (4,593.00)
Cash from Investing Activities				₹ 3,021.00	₹ 594.00	₹ 5,293.00	₹ (1,334.00)	₹ (1,191.00)	₹ (12,790.00)	₹ (5,735.00)
Financing Activities										
Proceeds from borrowings				₹ 950.00	-	₹ 3,289.00	₹ 1,753.00	-	-	-
Repayment of borrowings				-	-	-	-	₹ (5,860.00)	-	-
Interest paid fin				₹ (10.00)	₹ (29.00)	₹ (170.00)	₹ (348.00)	₹ (204.00)	₹ (117.00)	₹ (56.00)
Dividends paid				₹ (1,104.00)	₹ (1,295.00)	₹ (798.00)	₹ (1,340.00)	₹ (1,003.00)	₹ (1,338.00)	₹ (1,672.00)
Financial liabilities				-	₹ (3.00)	-	-	₹ (3.00)	-	₹ (4.00)
Other financing items				-	₹ (1,214.00)	-	-	-	-	-
Cash From Financing Activities				₹ (164.00)	₹ (2,541.00)	₹ 2,321.00	₹ 65.00	₹ (7,070.00)	₹ (1,464.00)	₹ (1,732.00)
Net Cash Flow				₹ 2,433.00	₹ (2,680.00)	₹ (80.00)	₹ 266.00	₹ 6,864.00	₹ (4,072.00)	₹ 1,370.00



## Hindustan Aeronautics Limited

### Ratio Analysis

Years	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Trend	Mean	Median
Sales Growth	7.11%	3.17%	8.04%	7.18%	6.70%	7.59%	9.37%		7.02%	7.18%
EBITDA Growth	30.61%	6.94%	32.04%	6.81%	9.45%	1.47%	23.06%		15.77%	9.45%
EBIT Growth	57.80%	-2.37%	35.83%	4.64%	11.19%	8.36%	13.58%		18.43%	11.19%
Net Profit Growth	293.13%	-21.98%	60.70%	23.17%	18.64%	42.39%	0.96%		59.57%	23.17%
Dividend Growth	27.18%	45.37%	-38.45%	67.93%	-9.77%	33.33%	37.50%		23.30%	33.33%
Gross Margin	22.9%	23.2%	29.7%	30.4%	28.8%	37.1%	40.0%		30.29%	29.67%
EBITDA Margin	18.03%	18.68%	22.83%	22.76%	23.34%	22.01%	24.77%		21.78%	22.76%
EBIT Margin	14.23%	13.57%	17.71%	18.10%	18.29%	17.51%	18.14%		16.79%	17.71%
EBT Margin	14.14%	13.38%	16.83%	16.43%	17.12%	17.24%	17.90%		16.15%	16.83%
Net Profit Margin	8.76%	6.62%	9.85%	11.32%	12.58%	16.65%	15.37%		11.59%	11.32%
SalesExpenses%Sales	4.87%	4.56%	6.83%	7.62%	5.44%	15.10%	15.20%		8.52%	6.83%
Depreciation%Sales	3.79%	5.11%	5.12%	4.65%	5.06%	4.51%	6.62%		4.98%	5.06%
OperatingIncome%Sales	14.23%	13.57%	17.71%	18.10%	18.29%	17.51%	18.14%		16.79%	17.71%
Return on capital Employ	18.85%	24.19%	21.84%	20.30%	27.13%	22.32%	20.74%		22.19%	21.84%
Retained Earnings%	49.10%	12.27%	66.40%	54.19%	65.16%	67.38%	55.57%		52.87%	55.57%
Return on Equity%	12.54%	12.93%	16.32%	18.39%	18.74%	21.28%	17.61%		16.83%	17.61%
Self sustained Growth Rate	6.16%	1.59%	10.84%	9.96%	12.21%	14.34%	9.79%		9.27%	9.96%
Interest coverage Ratio	155.33x	72.60x	19.97x	10.80x	15.69x	66.16x	75.92x		59.50x	66.16x
Debtor Turnover Ratio	4.25x	2.74x	1.61x	1.91x	4.04x	5.30x	5.71x		3.65x	4.04x
Credit Turnover Ratio	0.47x	0.49x	0.57x	0.61x	0.61x	0.60x	0.59x		0.56x	0.59x
Inventory Turnover	0.83x	0.92x	0.98x	1.05x	1.27x	1.52x	1.89x		1.21x	1.05x
Fixed Asset Turnover	2.44x	2.45x	2.68x	2.92x	3.20x	3.64x	3.94x		3.04x	2.92x
Capital Turnover Ratio	1.43x	1.95x	1.66x	1.62x	1.49x	1.28x	1.15x		1.51x	1.49x
Debtor Days	86	133	227	191	90	69	64		123	90
Payable Days	776	750	643	596	600	606	619		655	619
Inventory Days	438	397	373	347	287	241	193		325	347
Cash Conversion cycle	-252	-220	-42	-58	-222	-297	-362		-207	-222
CFO/Sales	28.58%	28.83%	31.10%	30.49%	29.52%	39.09%	41.35%		32.71%	30.49%
CFO/Total Assets	9.92%	11.03%	12.09%	12.08%	12.74%	15.99%	16.09%		12.85%	12.09%
CFO/Total Debt	502.04%	590.37%	149.71%	110.31%	12813.51%	19788.24%	21835.29%		7969.92%	590.37%



## Hindustan Aeronautics Limited

### Forecasting

Sales Forecasting			
Year Weight	Year	Sales	Sales Growth
1	2014A	15134.79	
2	2015A	15730.03	3.93%
3	2016A	16758.50	6.54%
4	2017A	17950.20	7.11%
5	2018A	18519.25	3.17%
6	2019A	20008.47	8.04%
7	2020A	21445.37	7.18%
8	2021A	22882.36	6.70%
9	2022A	24620.21	7.59%
10	2023A	26927.85	9.37%
11	2024E	27029.80	0.38%
12	2025E	28308.36	4.73%
13	2026E	29586.92	4.52%
14	2027E	30865.49	4.32%
15	2028E	32144.05	4.14%

EBITDA Forecasting			
Year Weight	Year	EBITDA	EBITDA Growth
1	2014A	1570.01	
2	2015A	2350.82	49.73%
3	2016A	2477.50	5.39%
4	2017A	3235.75	30.61%
5	2018A	3460.23	6.94%
6	2019A	4568.79	32.04%
7	2020A	4880.15	6.81%
8	2021A	5341.38	9.45%
9	2022A	5419.82	1.47%
10	2023A	6669.47	23.06%
11	2024E	6922.04	3.79%
12	2025E	7453.79	7.68%
13	2026E	7985.54	7.13%
14	2027E	8517.30	6.66%
15	2028E	9049.05	6.24%

EPS Forecasting			
Year Weight	Year	EPS	EPSGrowth
1	2014A	1.54	
2	2015A	15.47	906.93%
3	2016A	11.06	-28.51%
4	2017A	43.48	293.13%
5	2018A	36.67	-15.66%
6	2019A	58.93	60.70%
7	2020A	72.58	23.17%
8	2021A	86.11	18.64%
9	2022A	122.62	42.39%
10	2023A	123.79	0.96%
11	2024E	135.06	9.11%
12	2025E	149.22	10.48%
13	2026E	163.37	9.48%
14	2027E	177.52	8.66%
15	2028E	191.67	7.97%



# Hindustan Aeronautics Limited

## Common Size Statement

Particulars	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23
<b>Sales</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Raw Material Cost	60.45%	56.47%	54.73%	48.42%	43.45%	36.49%	39.57%	37.02%	37.17%	39.15%
Change in Inventory	4.92%	4.27%	3.35%	-2.85%	-3.94%	-5.86%	-2.96%	-10.74%	-2.41%	2.57%
Power and Fuel	1.43%	1.40%	1.40%	1.27%	1.24%	1.16%	0.94%	0.80%	0.81%	0.75%
Other Mfr. Exp	2.73%	2.31%	7.02%	4.68%	4.92%	5.35%	3.94%	3.91%	3.86%	4.51%
Employee Cost	17.74%	21.48%	19.54%	19.88%	23.21%	21.47%	22.21%	18.75%	18.64%	18.18%
Selling and admin	2.66%	1.44%	1.06%	1.21%	1.10%	1.76%	0.72%	0.60%	0.73%	0.79%
Other Expenses	9.53%	6.23%	4.83%	3.66%	3.46%	5.08%	6.90%	4.84%	14.37%	14.42%
Other Income	17.30%	10.44%	9.54%	5.82%	4.11%	1.88%	1.93%	1.57%	4.01%	6.21%
Depreciation	3.98%	5.12%	5.15%	3.79%	5.11%	5.12%	4.65%	5.06%	4.51%	6.62%
Interest	0.05%	0.09%	0.04%	0.09%	0.19%	0.89%	1.68%	1.17%	0.26%	0.24%
Profit before tax	23.64%	20.17%	19.14%	19.96%	17.49%	18.70%	18.36%	18.69%	21.25%	24.11%
Tax	5.85%	4.99%	7.21%	5.39%	6.76%	6.98%	5.11%	4.54%	0.59%	2.53%
Net profit	17.79%	15.18%	11.92%	14.57%	10.73%	11.73%	13.25%	14.16%	20.66%	21.58%
Dividend Amount	5.89%	3.05%	3.75%	4.46%	5.81%	3.31%	5.18%	4.38%	5.43%	6.83%

## Common Size Balance Sheet

Particulars	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23
<b>Total Liabilities</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Equity Share Capital	0.75%	0.75%	0.64%	0.70%	0.69%	0.65%	0.62%	0.63%	0.56%	0.48%
Reserves	22.75%	25.46%	18.86%	23.55%	18.89%	22.81%	23.77%	28.35%	31.45%	33.49%
Borrowings	1.07%	0.01%	0.14%	1.98%	1.87%	8.08%	10.95%	0.10%	0.08%	0.07%
Other Liabilities	75.42%	73.78%	80.36%	73.78%	78.55%	68.46%	64.67%	70.92%	67.91%	65.95%
<b>Total Assets</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Net Block	3.3%	11.2%	12.3%	14.2%	15.6%	14.5%	13.6%	13.5%	11.2%	9.9%
Capital Work in Progress	0.3%	0.3%	1.8%	2.7%	3.0%	2.9%	3.8%	3.7%	4.1%	2.7%
Investments	1.1%	1.2%	1.6%	1.9%	2.0%	1.8%	1.7%	2.0%	2.2%	2.0%
Receivables	10.78%	9.75%	8.56%	8.16%	13.94%	24.21%	20.75%	10.69%	7.71%	6.82%
Inventory	34.99%	39.27%	42.46%	41.65%	41.60%	39.77%	37.65%	33.99%	26.96%	20.57%
Cash & Bank	26.51%	27.59%	23.54%	21.50%	13.47%	0.19%	0.55%	13.52%	23.83%	29.35%
Other Assets	23.06%	10.66%	9.81%	9.89%	10.32%	16.69%	21.97%	22.64%	24.01%	28.67%



## Hindustan Aeronautics Limited

### Beta Regression

Hindustan Aeronautics Limited Returns			Nifty Returns		Beta Drifts	
Date	Closing Price	Weekly Returns	Closing Price	Weekly Returns	Levered Raw Beta	0.76
25-03-2019	344.70		11,623.90		Raw Beta Weight	75.00%
01-04-2019	344.43	-0.08%	11,665.95	0.36%	Market Beta	1.00
08-04-2019	346.06	0.47%	11,643.45	-0.19%	Market Beta Weight	25.00%
15-04-2019	340.33	-1.65%	11,752.80	0.94%		
22-04-2019	330.03	-3.03%	11,754.65	0.02%		
29-04-2019	320.32	-2.94%	11,712.25	-0.36%	Adjusted Beta	0.82
06-05-2019	310.75	-2.99%	11,278.90	-3.70%		
13-05-2019	311.97	0.39%	11,407.15	1.14%		
20-05-2019	329.42	5.60%	11,844.10	3.83%		
27-05-2019	343.39	4.24%	11,922.80	0.66%		
03-06-2019	344.84	0.42%	11,870.65	-0.44%		
10-06-2019	312.90	-3.46%	11,823.30	-0.40%		
17-06-2019	339.96	2.12%	11,724.10	-0.84%		
24-06-2019	346.59	1.95%	11,788.85	0.55%		
01-07-2019	338.97	-2.20%	11,811.15	0.19%		
08-07-2019	327.70	-3.32%	11,552.50	-2.19%		
15-07-2019	328.06	0.11%	11,419.25	-1.15%		
22-07-2019	328.79	0.22%	11,284.30	-1.18%		
29-07-2019	312.09	-5.08%	10,997.35	-2.54%		
05-08-2019	312.89	0.26%	11,109.65	1.02%		
12-08-2019	317.45	1.46%	11,047.80	-0.56%		
19-08-2019	312.57	-1.54%	10,929.35	-1.98%		
26-08-2019	315.44	0.92%	11,023.25	1.79%		
02-09-2019	327.07	3.69%	10,846.20	-0.70%		
09-09-2019	342.41	4.69%	11,075.90	1.18%		
16-09-2019	367.06	7.20%	11,274.20	1.79%		
23-09-2019	353.75	-3.63%	11,512.40	2.11%		
30-09-2019	337.02	-4.73%	11,174.75	-2.93%		
07-10-2019	348.95	3.54%	11,305.05	1.17%		
14-10-2019	342.32	-1.90%	11,661.85	3.16%		
21-10-2019	363.22	6.11%	11,583.90	-0.67%		
28-10-2019	382.53	5.31%	11,890.60	2.65%		
04-11-2019	368.32	-3.71%	11,908.15	0.15%		
11-11-2019	390.81	6.10%	11,895.45	-0.11%		
18-11-2019	385.15	-1.45%	11,514.40	0.10%		
25-11-2019	376.04	-2.36%	12,056.05	1.19%		
02-12-2019	371.43	-1.23%	11,921.50	-1.12%		
09-12-2019	368.47	-0.80%	12,086.70	1.39%		
16-12-2019	352.98	-4.20%	12,271.80	1.53%		
23-12-2019	348.02	-1.40%	12,245.80	-0.21%		
30-12-2019	357.57	2.74%	12,226.65	-0.16%		
06-01-2020	357.40	-0.05%	12,256.80	0.25%		
13-01-2020	400.03	11.93%	12,352.35	0.78%		
20-01-2020	414.46	3.61%	12,248.25	-0.84%		
27-01-2020	374.32	-9.68%	11,962.10	-2.34%		
03-02-2020	378.28	1.06%	12,098.35	1.14%		
10-02-2020	364.07	-3.76%	12,113.45	0.12%		
17-02-2020	358.27	-1.59%	12,080.85	-0.27%		
24-02-2020	312.44	-7.21%	11,201.75	-7.38%		
02-03-2020	301.38	-9.34%	10,889.45	-1.90%		
09-03-2020	259.66	-13.84%	9,955.20	-9.41%		
16-03-2020	278.02	7.07%	11,745.45	-12.15%		
23-03-2020	254.95	-8.30%	8,660.25	-9.97%		
30-03-2020	256.80	0.72%	8,083.80	-6.66%		
06-04-2020	266.06	3.60%	9,111.30	12.72%		
13-04-2020	271.76	2.14%	9,266.75	1.70%		
20-04-2020	258.35	-4.93%	9,154.40	-1.21%		
27-04-2020	253.83	-0.98%	9,859.90	7.71%		
04-05-2020	243.47	-4.81%	9,251.50	-6.17%		
11-05-2020	254.23	4.42%	9,136.85	-1.24%		
18-05-2020	259.91	2.23%	9,039.25	-1.07%		
25-05-2020	269.77	3.79%	9,580.30	5.99%		
01-06-2020	306.14	13.48%	10,142.15	5.86%		
08-06-2020	317.99	3.87%	9,972.90	-1.67%		
15-06-2020	343.26	7.95%	10,244.40	2.72%		
22-06-2020	370.39	7.90%	10,383.00	1.35%		
29-06-2020	413.58	11.66%	10,607.35	2.16%		
06-07-2020	457.51	10.62%	10,768.05	1.51%		
13-07-2020	455.27	-0.49%	10,901.70	1.24%		
20-07-2020	441.77	-2.97%	11,194.15	2.68%		
27-07-2020	423.51	-4.13%	11,073.45	-1.08%		
03-08-2020	460.23	8.69%	11,214.05	1.27%		
10-08-2020	628.98	36.64%	11,178.40	-0.32%		
17-08-2020	588.17	-6.49%	11,371.60	1.73%		
24-08-2020	490.90	-16.54%	11,647.60	2.43%		
31-08-2020	442.28	-9.90%	11,333.85	-2.69%		
07-09-2020	413.95	-6.41%	11,464.45	1.15%		
14-09-2020	408.82	-1.24%	11,504.95	0.35%		
21-09-2020	372.84	-8.80%	11,050.25	-3.95%		
28-09-2020	387.99	4.06%	11,416.95	3.32%		
05-10-2020	381.29	-1.73%	11,914.20	4.36%		
12-10-2020	361.74	-5.13%	11,762.45	-1.27%		
19-10-2020	348.58	-3.64%	11,930.35	1.43%		
26-10-2020	333.97	-4.19%	11,642.40	-2.41%		
02-11-2020	340.96	2.09%	12,263.55	5.34%		
09-11-2020	376.99	10.57%	12,719.95	3.72%		
16-11-2020	374.90	-0.55%	12,859.05	1.09%		
23-11-2020	397.65	6.07%	12,968.95	0.85%		
30-11-2020	409.19	2.90%	13,258.55	2.23%		
07-12-2020	416.25	1.73%	13,513.85	1.93%		
14-12-2020	413.63	0.81%	13,760.55	1.83%		
21-12-2020	399.48	-4.80%	13,749.25	-0.08%		
28-12-2020	415.99	4.13%	14,018.50	1.96%		
04-01-2021	444.04	6.50%	14,347.25	2.35%		
11-01-2021	468.97	5.85%	14,433.70	0.60%		
18-01-2021	460.28	-1.85%	14,371.90	-0.43%		
25-01-2021	450.37	-2.15%	13,634.60	-5.13%		
01-02-2021	491.94	9.23%	14,924.25	9.46%		
08-02-2021	498.18	1.27%	15,163.30	1.60%		
15-02-2021	515.15	3.41%	14,981.75	-1.20%		
22-02-2021	528.07	2.51%	14,529.15	-3.02%		
01-03-2021	512.12	-3.02%	14,938.10	2.81%		
08-03-2021	515.06	0.57%	15,030.95	0.62%		
15-03-2021	501.02	-2.72%	14,744.00	-1.91%		
22-03-2021	479.31	-4.33%	14,507.30	-1.61%		
29-03-2021	502.26	4.79%	14,867.35	2.48%		
05-04-2021	486.21	-3.20%	14,834.85	-0.22%		
12-04-2021	469.21	-3.50%	14,617.85	-1.46%		
19-04-2021	464.55	-0.99%	14,341.35	-1.89%		
26-04-2021	464.40	-0.03%	14,631.10	2.02%		
03-05-2021	466.18	0.38%	14,823.15	1.31%		
10-05-2021	477.47	2.42%	14,677.80	-0.98%		
17-05-2021	498.13	4.33%	15,175.30	3.39%		
24-05-2021	499.71	0.32%	15,435.65	1.72%		
31-05-2021	516.34	3.33%	15,670.25	1.52%		
07-06-2021	507.79	-1.66%	15,798.35	0.82%		
14-06-2021	492.40	-3.03%	15,683.35	-0.73%		
21-06-2021	503.40	2.23%	15,860.35	1.13%		
28-06-2021	518.21	2.94%	15,722.20	-0.87%		
05-07-2021	542.71	4.73%	15,689.80	-0.21%		
12-07-2021	522.44	-3.74%	15,923.40	1.49%		
19-07-2021	535.91	2.58%	16,856.05	6.42%		
26-07-2021	542.23	1.18%	15,763.05	-0.59%		
02-08-2021	524.50	-3.27%	16,238.20	3.01%		
09-08-2021	528.97	0.83%	16,529.10	1.79%		
16-08-2021	546.86	3.40%	16,450.50	-0.48%		
23-08-2021	670.70	22.64%	16,705.20	1.55%		
30-08-2021	677.16	0.96%	17,323.60	3.70%		
06-09-2021	607.18	-14.7%	17,369.25	0.26%		
13-09-2021	694.79	4.14%	17,585.15	1.24%		
20-09-2021	650.84	-6.33%	17,853.20	1.52%		
27-09-2021	648.82	-0.31%	17,532.05	-1.80%		
04-10-2021	656.30	1.15%	17,895.20	2.07%		
11-10-2021	701.17	6.84%	18,338.55	2.48%		
18-10-2021	644.46	-8.09%	18,114.90	-1.22%		
25-10-2021	634.83	-1.49%	17,671.65	-2.45%		
01-11-2021	650.30	2.44%	17,916.80	1.39%		
08-11-2021	688.08	5.81%	18,102.75	1.04%		
15-11-2021	668.10	-2.90%	17,764.80	-1.87%		
22-11-2021	624.32	-6.55%	17,026.45	-4.16%		
29-11-2021	629.52	0.83%	17,196.70	1.00%		
06-12-2021	633.43	0.62%	17,511.30	1.83%		
13-12-2021	604.90	-4.50%	16,985.20	-3.00%		
20-12-2021	597.47	-1.23%	17,003.75	0.11%		
27-12-2021	588.53	-1.50%	17,354.05	2.06%		

03-01-2022	611.06	3.83%	17,812.70	2.64%
10-01-2022	663.29	8.55%	18,255.75	2.49%
17-01-2022	686.85	3.55%	17,617.15	-3.50%
24-01-2022	688.08	0.18%	17,101.95	-2.92%
31-01-2022	680.05	-1.17%	17,516.30	2.42%
07-02-2022	669.65	-1.51%	17,374.75	-0.81%
14-02-2022	652.92	-2.50%	17,276.30	-0.57%
21-02-2022	638.77	-2.17%	16,658.40	-3.58%
28-02-2022	666.67	4.34%	16,245.35	-2.48%
07-03-2022	672.59	0.92%	16,630.45	2.37%
14-03-2022	701.80	4.34%	17,287.05	3.95%
21-03-2022	677.21	-3.50%	17,153.00	-0.78%
28-03-2022	740.70	9.38%	17,670.45	3.02%
04-04-2022	786.84	6.23%	17,784.35	0.64%
11-04-2022	814.13	3.47%	17,475.65	-1.74%
18-04-2022	815.00	0.11%	17,171.95	-1.74%
25-04-2022	774.48	-4.97%	17,102.55	-0.40%
02-05-2022	767.29	-0.93%	16,411.25	-4.04%
09-05-2022	733.95	-4.24%	15,782.15	-3.83%
16-05-2022	853.61	16.30%	16,266.15	3.07%
23-05-2022	872.18	2.18%	16,352.45	0.53%
30-05-2022	921.60	5.67%	16,584.30	1.42%
06-06-2022	918.63	-0.32%	16,201.80	-2.31%
13-06-2022	930.39	1.28%	15,293.50	-6.61%
20-06-2022	872.52	-6.22%	15,699.25	2.65%
27-06-2022	842.97	-3.39%	15,752.05	0.34%
04-07-2022	845.50	0.30%	16,220.60	2.97%
11-07-2022	838.46	-0.83%	16,049.20	-1.06%
18-07-2022	907.15	8.19%	16,719.45	4.18%
25-07-2022	983.27	8.39%	17,158.25	2.62%
01-08-2022	970.06	-1.34%	17,397.50	1.39%
08-08-2022	1,099.36	13.33%	17,698.15	1.73%
15-08-2022	1,088.48	-0.99%	17,758.45	0.34%
22-08-2022	1,104.27	1.45%	17,558.90	-1.12%
29-08-2022	1,150.89	4.22%	17,539.45	-0.11%
05-09-2022	1,181.12	2.61%	17,833.35	1.68%
12-09-2022	1,205.18	2.04%	17,530.85	-1.70%
19-09-2022	1,183.86	-1.77%	17,327.35	-1.16%
26-09-2022	1,141.05	-3.62%	17,094.35	-1.34%
03-10-2022	1,193.28	4.58%	17,314.65	1.29%
10-10-2022	1,134.84	-4.90%	17,185.70	-0.74%
17-10-2022	1,146.43	2.78%	17,576.30	2.27%
24-10-2022	1,224.50	5.01%	17,786.80	1.20%
31-10-2022	1,243.42	1.51%	18,117.15	1.86%
07-11-2022	1,203.87	-3.18%	18,349.70	1.28%
14-11-2022	1,273.46	5.78%	18,307.65	-0.23%
21-11-2022	1,326.20	4.14%	18,512.75	1.12%
28-11-2022	1,347.22	1.59%	18,696.10	0.99%
05-12-2022	1,319.37	-2.07%	18,456.60	-1.07%
12-12-2022	1,256.12	-4.79%	18,269.00	-1.23%
19-12-2022	1,184.61	-5.69%	17,806.80	-2.53%
26-12-2022	1,229.34	3.78%	18,105.30	1.68%
02-01-2023	1,213.85	-1.26%	17,859.45	-1.36%
09-01-2023	1,196.19	-1.45%	17,856.60	0.54%
16-01-2023	1,219.70	1.96%	18,027.65	0.40%
23-01-2023	1,194.20	-2.08%	17,604.15	-2.35%
30-01-2023	1,136.80	-4.81%	17,854.05	1.42%
06-02-2023	1,166.35	2.60%	17,856.50	0.01%
13-02-2023	1,281.81	9.90%	17,844.20	0.49%
20-02-2023	1,230.33	-4.02%	17,465.80	-2.67%
27-02-2023	1,307.77	6.29%	17,594.35	0.74%
06-03-2023	1,383.96	5.83%	17,412.90	-1.03%
13-03-2023	1,359.56	-1.76%	17,100.05	-1.80%
20-03-2023	1,247.82	-8.22%	16,845.05	-0.91%
27-03-2023	1,345.10	7.80%	17,359.75	2.45%
03-04-2023	1,363.28	1.33%	17,599.15	1.38%
10-04-2023	1,382.54	1.41%	17,828.00	1.30%
17-04-2023	1,370.62	-0.86%	17,624.05	-1.14%
24-04-2023	1,429.27	5.01%	18,065.00	2.50%
01-05-2023	1,450.41	0.77%	18,069.00	0.02%
08-05-2023	1,465.43	1.04%	18,314.80	1.36%
15-05-2023	1,513.84	3.30%	18,203.40	-0.61%
22-05-2023	1,488.39	-1.68%	18,499.35	1.63%
29-05-2023	1,560.39	4.84%	18,534.10	0.19%
05-06-2023	1,840.06	17.92%	18,563.40	0.16%
12-06-2023	1,893.21	2.89%	18,836.00	1.41%
19-06-2023	1,793.40	-5.27%	18,665.50	-0.85%
26-06-2023	1,867.67	4.14%	19,189.05	2.80%
03-07-2023	1,851.90	-0.84%	19,331.80	0.74%
10-07-2023	1,890.21	2.07%	19,564.50	1.20%
17-07-2023	1,899.08	0.47%	19,745.00	0.92%
24-07-2023	1,935.02	1.89%	19,646.05	-0.50%
31-07-2023	1,847.45	-4.52%	19,517.00	-0.66%
07-08-2023	1,874.30	1.45%	19,428.30	-0.45%
14-08-2023	1,865.82	-0.45%	19,310.15	-0.61%
21-08-2023	1,926.74	3.26%	19,265.80	-0.23%
28-08-2023	1,957.42	1.59%	19,435.30	0.88%
04-09-2023	2,037.88	4.11%	19,819.95	1.98%
11-09-2023	1,969.33	-3.85%	20,192.35	1.88%
18-09-2023	1,921.11	-1.95%	19,674.25	-2.57%
25-09-2023	1,915.06	-0.32%	19,638.30	-0.18%
02-10-2023	1,941.26	1.37%	19,653.50	0.08%
09-10-2023	1,957.94	0.86%	19,751.05	0.50%
16-10-2023	1,897.83	-3.07%	19,542.65	-1.06%
23-10-2023	1,840.60	-3.02%	19,047.25	-2.53%
30-10-2023	1,867.66	2.56%	19,230.60	0.96%
06-11-2023	2,057.86	9.02%	19,425.35	1.01%
13-11-2023	2,109.68	2.52%	19,731.80	1.58%
20-11-2023	2,225.63	5.50%	19,794.70	0.32%
27-11-2023	2,444.23	9.82%	20,267.90	2.39%
04-12-2023	2,713.25	11.01%	20,969.40	3.46%
11-12-2023	2,741.30	1.03%	21,456.65	2.32%
18-12-2023	2,683.72	-2.10%	21,349.40	-0.50%
25-12-2023	2,783.09	3.70%	21,731.40	1.79%
01-01-2024	2,977.22	6.98%	21,710.80	-0.09%
08-01-2024	2,979.90	0.09%	21,894.55	0.85%
15-01-2024	2,984.61	0.16%	21,622.40	-1.24%
22-01-2024	2,882.51	-3.42%	21,352.60	-1.25%
29-01-2024	2,949.51	2.32%	21,853.80	2.35%
05-02-2024	2,944.06	-0.19%	21,782.50	-0.33%
12-02-2024	3,055.84	3.80%	22,040.70	1.19%
19-02-2024	3,022.68	-1.09%	22,212.70	0.78%
26-02-2024	3,157.45	4.46%	22,538.75	0.57%
04-03-2024	3,316.15	5.03%	22,493.55	0.69%
11-03-2024	3,098.85	-6.55%	22,023.35	-2.09%
18-03-2024	3,170.50	2.31%	22,096.75	0.33%
25-03-2024	null			

null



# Hindustan Aeronautics Limited

## Weighted Average Cost of Capital

### Peer Comps

Name	Country	Total Debt	Total Equity	Tax Rate <sup>1</sup>	Debt/Equity	Debt/Capital	Levered Beta 2	Unlevered Beta 3
Hindustan Aeronautics Ltd	India	0.37	212,140.46	30.00%	0.00%	0.00%	1.54	1.54
Bharat Dynamics	India	4.49	30,901.31	30.00%	0.00%	0.00%	1.30	1.30
BEML Ltd	India	390.54	12,883.37	30.00%	0.03%	0.03%	0.88	0.88
MTAR Technologie	India	249.34	5,242.04	30.00%	0.05%	0.05%	0.83	0.83
Ideaforge Tech	India	13.54	3,047.63	30.00%	0.00%	0.00%	0.92	0.92
Paras Defence	India	25.36	2,529.54	30.00%	0.01%	0.01%	1.40	1.40
Average				30.00%	0.02%	0.02%	1.07	1.07
Median				30.00%	0.01%	0.01%	0.92	0.92

### Cost of Debt

Pre-tax cost of debt	151.19%
Tax Rate	30.00%
After Tax cost of debt	105.83%

### Capital Structure

		Current	Target
Total Debt	0.37	0.00%	0.02%
Market Capitalization	212,140.46	100.00%	99.98%
Total Capitalization	212,140.83	100.00%	100.00%
Debt / Equity		0.00%	0.02%

1. Tax Rate considered as Marginal Tax Rate for the country
2. Levered Beta is based on 5 year monthly data
3. Unlevered Beta = Levered Beta / (1 + (1 - Tax Rate) x Debt/Equity)
3. Levered Beta = Unlevered Beta / (1 + (1 - Tax Rate) x Debt/Equity)

### Cost of Equity

Risk free rate	7.05%
Equity Risk Premium	8.22%
Levered Beta 4	1.20
Cost of Equity	16.88%

### Levered Beta

Comps Median Unlevered Beta	0.92
Target Debt/ Equity	0.02%
Tax Rate	30.00%
Levered Beta	1.20

### Weighted Average Cost of Capital

Cost of Equity	16.88%
Equity Weight	99.98%
Cost of Debt	105.83%
Debt Weight	0.02%
WACC	16.90%



# Hindustan Aeronautics Limited

*Intrinsic Growth*

Calculation of ROIC	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23
<b>Current Assets</b>						
Inventories	₹ 20,148.00	₹ 20,467.00	₹ 20,379.00	₹ 18,021.00	₹ 16,226.00	₹ 14,233.00
Trade receivables	₹ 6,751.00	₹ 12,459.00	₹ 11,235.00	₹ 5,670.00	₹ 4,642.00	₹ 4,719.00
Cash Equivalents	₹ 6,524.00	₹ 95.00	₹ 298.00	₹ 7,166.00	₹ 14,344.00	₹ 20,306.00
Short term loans	₹ 38.00	₹ 17.00	₹ 12.00	₹ 10.00	₹ 64.00	₹ 14.00
Other asset items	₹ 4,959.00	₹ 8,576.00	₹ 11,879.00	₹ 11,994.00	₹ 14,384.00	₹ 19,821.00
<b>Total Current Assets</b>	<b>₹ 38,420.00</b>	<b>₹ 41,614.00</b>	<b>₹ 43,803.00</b>	<b>₹ 42,861.00</b>	<b>₹ 49,660.00</b>	<b>₹ 59,093.00</b>
<b>Current Liabilities</b>						
Trade Payables	₹ 1,666.00	₹ 2,633.00	₹ 4,089.00	₹ 2,261.00	₹ 2,560.00	₹ 3,137.00
Advance from Customers	₹ 4,575.00	₹ 13,753.00	₹ 12,601.00	₹ 5,110.00	₹ 4,352.00	₹ 5,540.00
Other liability items	₹ 31,803.00	₹ 18,852.00	₹ 18,318.00	₹ 30,231.00	₹ 33,959.00	₹ 36,955.00
<b>Total Current Liabilities</b>	<b>₹ 38,044.00</b>	<b>₹ 35,238.00</b>	<b>₹ 35,008.00</b>	<b>₹ 37,602.00</b>	<b>₹ 40,871.00</b>	<b>₹ 45,632.00</b>
<b>Net Working Capital</b>	<b>₹ 376.00</b>	<b>₹ 6,376.00</b>	<b>₹ 8,795.00</b>	<b>₹ 5,259.00</b>	<b>₹ 8,789.00</b>	<b>₹ 13,461.00</b>
<b>Non Current Assets</b>						
Land	₹ 30.00	₹ 29.00	₹ 32.00	₹ 32.00	₹ 28.00	₹ 28.00
Building	₹ 1,099.00	₹ 1,205.00	₹ 1,371.00	₹ 1,428.00	₹ 1,452.00	₹ 1,861.00
Plant Machinery	₹ 1,765.00	₹ 2,037.00	₹ 2,288.00	₹ 2,272.00	₹ 2,361.00	₹ 2,493.00
Equipments	₹ 4,690.00	₹ 5,064.00	₹ 5,435.00	₹ 5,913.00	₹ 6,210.00	₹ 6,750.00
Furniture n fittings	₹ 72.00	₹ 82.00	₹ 86.00	₹ 85.00	₹ 89.00	₹ 102.00
Railway slidings	-	-	-	-	-	-
Vehicles	₹ 254.00	₹ 375.00	₹ 391.00	₹ 412.00	₹ 414.00	₹ 482.00
Intangible Assets	₹ 1,712.00	₹ 1,955.00	₹ 2,061.00	₹ 2,507.00	₹ 2,919.00	₹ 3,287.00
Other fixed assets	₹ 486.00	₹ 453.00	₹ 507.00	₹ 513.00	₹ 519.00	₹ 842.00
<b>Gross Block</b>	<b>₹ 10,108.00</b>	<b>₹ 11,200.00</b>	<b>₹ 12,172.00</b>	<b>₹ 13,162.00</b>	<b>₹ 13,992.00</b>	<b>₹ 15,846.00</b>
Accumulated Depreciation	₹ 2,478.00	₹ 3,451.00	₹ 4,486.00	₹ 5,605.00	₹ 6,704.00	₹ 7,889.00
<b>Net Non Current Assets</b>	<b>₹ 12,586.00</b>	<b>₹ 14,651.00</b>	<b>₹ 16,658.00</b>	<b>₹ 18,767.00</b>	<b>₹ 20,696.00</b>	<b>₹ 23,735.00</b>
<b># Invested Capital</b>	<b>₹ 12,962.00</b>	<b>₹ 21,027.00</b>	<b>₹ 25,453.00</b>	<b>₹ 24,026.00</b>	<b>₹ 29,485.00</b>	<b>₹ 37,196.00</b>
<b>EBIT</b>	<b>₹ 2,513.26</b>	<b>₹ 3,544.32</b>	<b>₹ 3,882.52</b>	<b>₹ 4,184.19</b>	<b>₹ 4,309.95</b>	<b>₹ 4,885.56</b>
<b>ROIC</b>	<b>19.39%</b>	<b>16.86%</b>	<b>15.25%</b>	<b>17.42%</b>	<b>14.62%</b>	<b>13.13%</b>

Calculation of Reinvestment Rate	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23
Net Capex	₹ (1,249.00)	₹ (1,388.00)	₹ (1,378.00)	₹ (1,207.00)	₹ (1,497.00)	₹ (1,776.00)
Change in Working Capital	₹ 6,000.00	₹ 6,000.00	₹ 2,419.00	₹ (3,536.00)	₹ 3,530.00	₹ 4,672.00
EBIT	₹ 2,513.26	₹ 3,544.32	₹ 3,882.52	₹ 4,184.19	₹ 4,309.95	₹ 4,885.56
Marginal Tax Rate	25%	25%	25%	25%	25%	25%
EBIT(1-T)	₹ 1,884.95	₹ 2,658.24	₹ 2,911.89	₹ 3,138.14	₹ 3,232.46	₹ 3,664.17
<b>Reinvestment</b>		<b>₹ 4,612.00</b>	<b>₹ 1,041.00</b>	<b>₹ (4,743.00)</b>	<b>₹ 2,033.00</b>	<b>₹ 2,896.00</b>
<b>Reinvestment Rate</b>		<b>173.50%</b>	<b>35.75%</b>	<b>-151.14%</b>	<b>62.89%</b>	<b>79.04%</b>
				<b>4 Year Average</b>		<b>6.63%</b>
				<b>4 Year Median</b>		<b>49.32%</b>

Calculation of Growth Rate	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23
Reinvestment Rate		173.50%	35.75%	-151.14%	62.89%	79.04%
ROIC		16.86%	15.25%	17.42%	14.62%	13.13%
<b>Intrinsic Growth</b>		<b>29.24%</b>	<b>5.45%</b>	<b>-26.32%</b>	<b>9.19%</b>	<b>10.38%</b>
				<b>4 Year Average</b>		<b>-0.32%</b>
				<b>4 Year Median</b>		<b>7.32%</b>





# Hindustan Aeronautics Limited

## DCF Valuation

Calculation of PV of FCFF	Mar/23A	Mar/24F	Mar/25F	Mar/26F	Mar/27F	Mar/28F
EBIT	4885.56	5129.84	5386.33	5655.65	5938.43	6235.35
Tax Rate	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
EBIT(1-T)	3664.17	3847.38	4039.75	4241.73	4453.82	4676.51
Less: Reinvestment Rate	79.04%	79.04%	79.04%	79.04%	79.04%	79.04%
Free Cash Flow to Firm (FCFF)	768.17	806.58	846.91	889.25	933.72	980.40
Mid Year Convention		0.5	1.5	2.5	3.5	4.5
Discounting Factor		0.92	0.79	0.68	0.58	0.50
<b>PV of FCFF</b>		<b>746.01</b>	<b>670.09</b>	<b>601.89</b>	<b>540.64</b>	<b>485.61</b>
Expected Growth	5.00%					
Terminal Growth	6.25%					
WACC	16.90%					
<b>Calculation of Terminal Value</b>						
FCFF (n+1)	1,029.42					
WACC	16.90%					
Terminal Growth Rate	6.25%					
<b>Terminal Value</b>	<b>9,668.79</b>					
<b>Calculation of Equity Value per Share</b>						
PV of FCFF	3,044.24					
PV of Terminal Value	4,789.16					
<b>Value of Operating Assets</b>	<b>7,833.40</b>					
Add: Cash	20306.15					
Less: Debt	0					
<b>Value of Equity</b>	<b>28,139.55</b>					
No of Shares	66.88					
<b>Equity Value per Share</b>	<b>420.76</b>					
<b>Share price</b>	<b>3169</b>					
<b>Discount/Premium</b>	<b>7.53x</b>					



## Hindustan Aeronautics Limited

Amount in crores

### Comparable Company Valuation

Company	Ticker	Share Price	Shares Outstanding	Market Data			Financials			Valuation		
				Equity Value	Net Debt	Enterprise Value	Revenue	EBITDA	Net Income	EV/Revenue	EV/EBITDA	P/E
Hind.Aeronautics		3170.8	66.88	212055.18	0.37	190673.49	28106.64	8902.98	6144.3	6.78x	21.42x	34.51x
Bharat Dynamics		1686.05	18.33	30902.14	4.49	27093.23	2313.41	468.29	476.7	11.71x	57.86x	64.83x
BEML Ltd		3091.05	4.16	12871.13	390.54	13252.17	3928.61	414.46	182.67	3.37x	31.97x	70.46x
MTAR Technologie		1704.8	3.08	5243.9	249.34	5478.59	633.43	164.02	81.94	8.65x	33.40x	64.00x
Ideaforge Tech		710.35	4.29	3046.36	13.54	2821.08	250.36	60.08	29.13	11.27x	46.96x	104.58x
Paras Defence		649.65	3.9	2533.64	25.36	2546.28	225.36	65.58	32.76	11.30x	38.83x	77.34x
NIBE		1303.4	1.31	1711.65	48.23	1728.03	192.29	24.98	7.62	8.99x	69.18x	224.63x
High										11.71X	57.86X	104.58X
75th Percentile										11.29X	44.92X	75.62X
Average										8.85X	38.41X	69.29X
Median										9.96X	36.11X	67.64X
25th Percentile										7.25X	32.33X	64.20X
Low										3.37X	21.42X	34.51X

HAL Comparable Valuation										EV/Revenue	EV/EBITDA	P/E
Implied Enterprise Value										279902.49	321526.87	415619.98
Net Debt										0.37	0.37	0.37
Implied Market Value										279902.12	321526.50	415619.61
Shares Outstanding										66.88	66.88	66.88
Implied Value per Share										4185.14	4807.51	6214.41
										Undervalued	Undervalued	Undervalued