24 June 2010 | 17 pages

Bharat Heavy (BHEL.BO)

Upgrade to Buy – Time to Play Catch-Up

Equity ☑
Rating change ☑
Target price change ☑
Estimate change ☑

- **Upgrade to Buy (1L)** — From Hold (2L), given: (1) stock underperformance v/s BSE Sensex (-12.5%) and L&T (-7.4%) over the last year, (2) Strong inflow guidance of ~ Rs600bn for FY11E (~9% higher than our expectation of Rs550bn) (3) L&T's disqualification from the NTPC-DVC tender implies easing of near-term competition and (4) Expectations of ~ 24% earnings growth in FY11E. Increase target price to Rs2,770 to factor in our EPS revision (-1% to -2%) and roll forward of target P/E multiple of 23x to Sep 11 from Jun 11.

- **Switch from L&T to BHEL** — In the near term given the valuation difference (BHEL at 22.2x FY11E P/E and L&T Cons at 25.8x FY11E P/E) and the recent relative stock performance. Despite our upgrade, we believe longer-term competitive dynamics do not look good for BHEL and as a consequence over the longer term we would prefer L&T over BHEL.

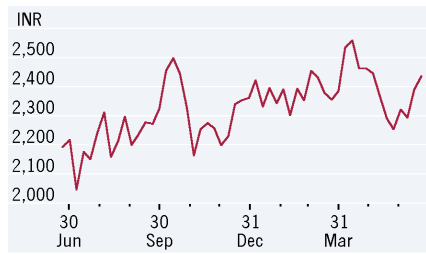
- **Order inflows of Rs100bn so far in FY11E** — Our data suggests that BHEL has already won a Rs63bn 1600MW supercritical order from KPCL, Rs19bn HVDC order from PGCIL and a Rs13bn 600MW Singareni Collieries order so far in FY11E vis-à-vis FY11E guidance of Rs600bn, which could be comfortably achieved.

- **Maintaining ~ 53% market share** — In FY10 the private sector placed 14,689MW of orders out of 16,489MW which is 89% of power orders received. This has helped BHEL maintain market shares at similar levels in XIIth plan as in XIth plan. Thought market share could structurally come down; the pace of the fall could be arrested by accreditation issues faced by competitors (eg. L&T's disqualification).

- **High FY11E capacity utilizations will support margins** — In FY10 the company operated at capacity utilizations of greater than 100% with production of 12,000-13,000 MW. Similarly the management expects to operate at capacity utilizations of greater than 100% in FY11E, with production of 16,000-17,000W.

Buy/Low Risk	**1L**
from Hold/Low Risk	
Price (24 Jun 10)	Rs2,428.00
Target price	Rs2,770.00
from Rs2,673.00	
Expected share price return	14.1%
Expected dividend yield	1.1%
Expected total return	**15.2%**
Market Cap	Rs1,188,555M
	US$25,740M

Price Performance (RIC: BHEL.BO, BB: BHEL IN)



Statistical Abstract

Year to 31 Mar	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2009A	31,263	63.87	16.3	38.0	9.2	26.4	0.7
2010A	43,107	88.06	37.9	27.6	7.5	29.9	1.0
2011E	53,472	109.23	24.0	22.2	6.0	30.0	1.1
2012E	64,452	131.66	20.5	18.4	4.8	29.1	1.2
2013E	73,598	150.35	14.2	16.1	4.0	27.0	1.3

Source: Powered by dataCentral

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See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

Fiscal year end 31-Mar	2009	2010	2011E	2012E	2013E
Valuation Ratios					
P/E adjusted (x)	38.0	27.6	22.2	18.4	16.1
EV/EBITDA adjusted (x)	29.6	20.0	15.5	12.5	10.8
P/BV (x)	9.2	7.5	6.0	4.8	4.0
Dividend yield (%)	0.7	1.0	1.1	1.2	1.3
Per Share Data (Rs)					
EPS adjusted	63.87	88.06	109.23	131.66	150.35
EPS reported	64.11	88.06	109.23	131.66	150.35
BVPS	264.32	325.16	403.63	501.01	613.57
DPS	17.00	23.30	26.30	29.30	32.30
Profit & Loss (RsM)					
Net sales	260,964	328,119	407,013	498,591	585,845
Operating expenses	-227,261	-278,310	-342,799	-418,895	-493,251
EBIT	**33,703**	**49,809**	**64,214**	**79,696**	**92,594**
Net interest expense	-307	-335	-335	-335	-335
Non-operating/exceptionals	14,974	16,433	17,758	19,039	20,104
Pre-tax profit	**48,370**	**65,907**	**81,637**	**98,401**	**112,364**
Tax	-17,106	-22,800	-28,165	-33,948	-38,766
Extraord./Min.Int./Pref.div.	119	0	0	0	0
Reported net income	**31,382**	**43,107**	**53,472**	**64,452**	**73,598**
Adjusted earnings	31,263	43,107	53,472	64,452	73,598
Adjusted EBITDA	37,046	54,389	69,894	86,548	100,552
Growth Rates (%)					
Sales	36.4	25.7	24.0	22.5	17.5
EBIT adjusted	11.5	47.8	28.9	24.1	16.2
EBITDA adjusted	11.6	46.8	28.5	23.8	16.2
EPS adjusted	16.3	37.9	24.0	20.5	14.2
Cash Flow (RsM)					
Operating cash flow	**42,145**	**26,323**	**38,785**	**29,122**	**28,618**
Depreciation/amortization	3,343	4,580	5,680	6,852	7,958
Net working capital	12,444	-24,495	-22,368	-43,683	-53,938
Investing cash flow	**-13,068**	**-18,541**	**-14,760**	**-15,000**	**-7,000**
Capital expenditure	-12,627	-18,266	-14,760	-15,000	-7,000
Acquisitions/disposals	-441	-275	0	0	0
Financing cash flow	**-9,194**	**-13,538**	**-15,063**	**-16,781**	**-18,499**
Borrowings	542	-216	0	0	0
Dividends paid	-9,736	-13,345	-15,063	-16,781	-18,499
Change in cash	**19,883**	**-5,755**	**8,962**	**-2,660**	**3,118**
Balance Sheet (RsM)					
Total assets	**414,211**	**484,868**	**572,434**	**659,155**	**739,487**
Cash & cash equivalent	103,743	97,988	106,949	104,290	107,409
Accounts receivable	159,755	206,887	256,540	314,261	369,257
Net fixed assets	25,678	39,364	48,443	56,591	55,633
Total liabilities	**284,823**	**325,695**	**374,851**	**413,901**	**439,133**
Accounts payable	58,529	71,915	90,285	111,469	132,202
Total Debt	1,494	1,278	1,278	1,278	1,278
Shareholders' funds	**129,388**	**159,173**	**197,583**	**245,254**	**300,354**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	14.2	16.6	17.2	17.4	17.2
ROE adjusted	26.4	29.9	30.0	29.1	27.0
ROIC adjusted	64.6	61.2	47.2	39.3	32.1
Net debt to equity	-79.0	-60.8	-53.5	-42.0	-35.3
Total debt to capital	1.1	0.8	0.6	0.5	0.4

For further data queries on Citi's full coverage universe please contact CIR Data Services Asia Pacific at CIRDataServicesAsiaPacific@citi.com or +852-2501-2791

Powered by: dataCentral

Upgrade to Buy (1L) from Hold (2L)

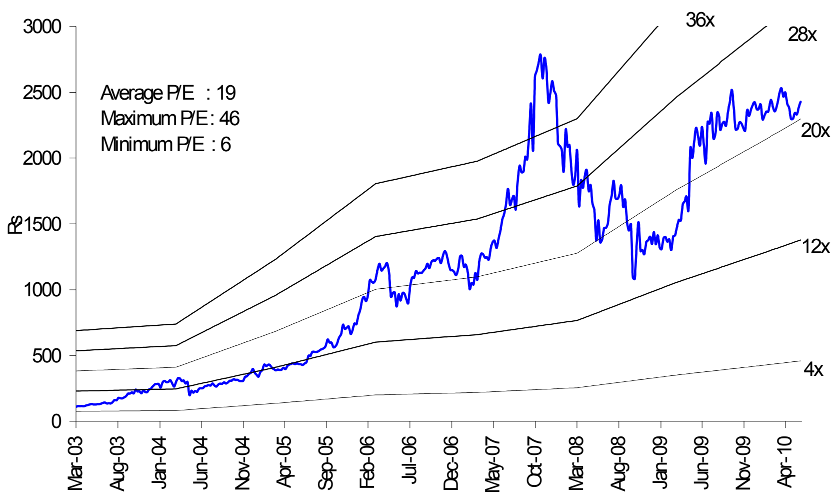
- We upgrade BHEL to Buy (1L) from Hold (2L) given – (1) stock underperformance v/s BSE Sensex (-12.5%) and L&T (-7.4%) over the last year, (2) managements' strong order inflow guidance of ~ Rs600bn for FY11E which is 9% higher than our expectation of Rs550bn, (3) L&T's disqualification from the NTPC-DVC tender implies near-term competition should ease and (4) Expectations of ~ 24% earnings growth in FY11E.
- We recommend investors switch from L&T to BHEL in the near term given valuation difference (BHEL at 22.2x FY11E P/E and L&T Cons at 25.8x FY11E P/E) and recent relative stock performance. Despite our upgrade we believe longer-term competitive dynamics do not look good for BHEL and over the longer term we would prefer L&T over BHEL.
- We increase our target price to Rs2,770 from Rs2,673 to factor in our earnings revision and roll forward of target P/E multiple to Sep 11 from Jun 11.

Figure 1. BHEL v/s L&T v/s BSE Sensex

	1 Month	3 Month	6 Month	1 Year	2 Year	3 Year
Absolute Performance						
BHEL	5.5%	3.1%	2.5%	10.7%	74.6%	68.6%
Sensex	7.9%	1.9%	2.4%	23.2%	26.0%	22.9%
L&T	9.4%	10.6%	5.9%	18.1%	54.2%	69.1%
Relative Performance						
v/s Sensex	**-2.4%**	**1.2%**	**0.1%**	**-12.5%**	48.5%	45.7%
v/s L&T	**-3.9%**	**-7.5%**	**-3.4%**	**-7.4%**	20.3%	-0.5%

Source: DataCentral and Citi Investment Research and Analysis

Figure 2. BHEL – 1 Year Forward Rolling P/E Bands



Source: DataCentral and Citi Investment Research and Analysis estimates

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Data as of: 18-Jun-10

Radar Screen Quadrant Definitions

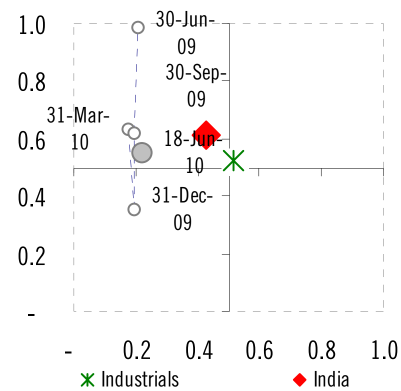
Glamor *Poor relative value but superior relative momentum*	**Attractive** *Superior relative value and superior relative momentum*
Unattractive *Poor relative value and poor relative momentum*	**Contrarian** *Superior relative value but poor relative momentum*

Quants View – Glamour

Bharat Heavy Electricals currently lies in the Glamour quadrant of our Value-Momentum map with strong momentum but relatively weak value scores. It has been a resident there since the past 3 months. Compared to its peers in the Industrials sector, Bharat Heavy Electricals fares worse on the valuation metric but better on the momentum metric. On the other hand, compared to its peers in its home market of India, Bharat Heavy Electricals fares worse on the valuation metric and on the momentum metric.

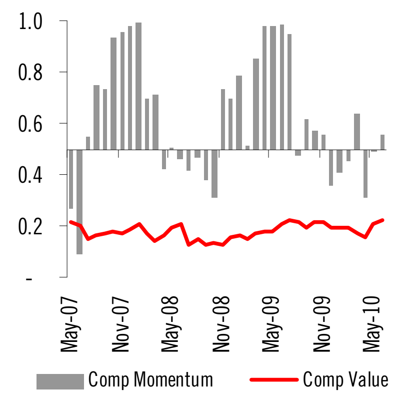
From a macro perspective, Bharat Heavy Electricals has a high Beta to the region so is likely to rise (or fall) faster than the region. It is also likely to benefit from falling EM yields, and a weaker US Dollar.

Figure 3. Radar Quadrant Chart History



Source: CIRA

Figure 4. Radar Valuation Momentum Ranks



Source: CIRA

Figure 5. Radar Model Inputs

IBES EPS (Actual and Estimates)

FY(-2)	58.41	Implied Trend Growth (%)	22.71
FY(-1)	63.64	Trailing PE (x)	27.34
FY0	88.39	Implied Cost of Debt (%)	10.50
FY1	113.44	Standardised MCap	0.93
FY2	138.52		

Note: Standardised MCap calculated as a Z score – (mkt cap - mean)/std dev – capped at 3

Source: Citi Investment Research and Analysis, Worldscope, I/B/E/S

Figure 6. Stock Performance Sensitivity to Key Macro Factors

Region	1.34	Commodity ex Oil	(0.24)
Local Market	1.03	Rising Oil Prices	0.12
Sector	1.06	Rising Asian IR's	(0.15)
Growth Outperforms Value	(0.03)	Rising EM Yields	(0.50)
Small Caps Outperform Large Caps	0.15	Weaker US$ (vs Asia)	1.63
Widening US Credit Spreads	0.06	Weaker ¥ (vs US$)	0.24

Source: Citi Investment Research and Analysis

Figure 7. BHEL Earnings Revision Table

End Mar31 Rsmn	FY11E	FY12E	FY13E
Inflow (Rsbn)			
Old	550	550	-
New	600	600	585
Chg	9.1%	9.1%	-
Gross Sales			
Old	405,125	506,406	-
New	422,220	517,220	607,733
Chg	4.2%	2.1%	-
Net Sales			
Old	388,043	485,054	-
New	407,013	498,591	585,845
Chg	4.9%	2.8%	-
EBITDA Margins %			
Old	18.1%	18.1%	-
New	17.2%	17.4%	17.2%
Chg	(95)	(76)	-
PAT			
Old	53,883	65,914	-
New	53,472	64,452	73,598
Chg	-0.8%	-2.2%	-
EPS			
Old	110.07	134.65	-
New	109.23	131.66	150.35
Chg	-0.8%	-2.2%	-

Source: Citi Investment Research and Analysis

Earnings revision

Marginally adjust down our EPS estimates by ~ 1-2% over FY11E-12E to factor:

- 9% higher inflows on BHEL's strong guidance
- 2-4% higher gross sales
- 76-95bps lower EBITDA margins

We now expect BHEL to grow EPS at a CAGR of 20% over FY10-13E with average RoEs of ~ 29%. Our FY10-13E estimates are ~2% below consensus

Figure 8. BHEL – CIRA v/s Consensus

Year End Mar31	FY11E	FY12E	FY13E
Consensus	111.39	134.57	153.85
CIRA	109.23	131.66	150.35
Difference	-1.9%	-2.2%	-2.3%

Source: Bloomberg and Citi Investment Research and Analysis estimates

Strong FY10 with PAT up 37% YoY

- BHEL's FY10 PAT at Rs43.1bn up 37% YoY was driven by gross sales of Rs341bn up 22% YoY and EBITDA margins of 16.9% up 244bps YoY.
- The company booked orders worth Rs590bn in FY10P ending the year with an order backlog of Rs1,438bn up 23% YoY and 4.2x FY10 sales.

Figure 9. BHEL FY10 Results Review

Year End Mar31 (Rsmn)	1Q09	1Q10	2Q09	2Q10	3Q09	3Q10	4Q09	4Q10	FY09	FY10
Gross Sales	**47,036**	**57,996**	**57,983**	**69,166**	**64,533**	**73,860**	**111,344**	**140,963**	**280,896**	**341,985**
% growth y-o-y	*31.8%*	*23.3%*	*30.6%*	*19.3%*	*16.7%*	*14.5%*	*39.9%*	*26.6%*	*30.7%*	*21.7%*
Excise Duty	3,743	2,039	4,557	2,913	4,310	2,857	5,943	5,372	18,553	13,181
Net Sales	**43,293**	**55,957**	**53,426**	**66,253**	**60,223**	**71,003**	**105,401**	**135,591**	**262,343**	**328,804**
% growth y-o-y	*33.9%*	*29.3%*	*34.7%*	*24.0%*	*21.3%*	*17.9%*	*46.3%*	*28.6%*	*35.5%*	*25.3%*
Value of Production	**43,055**	**56,192**	**57,630**	**68,064**	**65,609**	**76,391**	**107,220**	**135,332**	**273,514**	**335,979**
(Inc)/ Dec in stock-in-trade	143	(301)	(4,400)	(1,787)	(5,537)	(5,532)	(1,722)	(248)	(11516)	(7867)
Raw material	25,179	35,753	36,212	39,719	40,587	44,948	69,227	80,520	171,205	200,940
% of net sales	58.5%	63.4%	59.5%	57.3%	58.2%	55.5%	64.0%	59.2%	60.9%	58.7%
Staff cost	8,953	11,137	8,898	10,690	9,202	12,269	14,075	17,434	41,128	51,530
% of net sales	20.7%	19.9%	16.7%	16.1%	15.3%	17.3%	13.4%	12.9%	15.7%	15.7%
Others	5,280	4,206	5,609	6,335	5,764	4,990	6,858	13,012	23,511	28,542
% of net sales	12.2%	7.5%	10.5%	9.6%	9.6%	7.0%	6.5%	9.6%	9.0%	8.7%
EBITDA	**3,738**	**5,162**	**7,107**	**11,296**	**10,207**	**14,328**	**16,963**	**24,873**	**38,015**	**55,659**
EBITDA margin %	**8.6%**	**9.2%**	**13.3%**	**17.0%**	**16.9%**	**20.2%**	**16.1%**	**18.3%**	**14.5%**	**16.9%**
Depreciation	726	961	743	934	865	1,038	1,008	1,647	3,342	4,580
EBIT	**3,012**	**4,201**	**6,364**	**10,362**	**9,342**	**13,290**	**15,955**	**23,226**	**34,673**	**51,079**
Interest	26	43	22	45	179	69	81	178	308	335
Other income	2,059	2,271	2,051	1,955	1,797	1,933	1,972	2,080	7,879	8,239
Other operational income	858	758	1,021	1,023	1,266	1,289	3,100	3,855	6,245	6,925
PBT	**5,903**	**7,187**	**9,414**	**13,295**	**12,226**	**16,443**	**20,945**	**28,983**	**48,488**	**65,907**
Tax	2,059	2,481	3,256	4,715	4,320	5,717	7,471	9,887	17,106	22,800
Tax Rate	34.9%	34.5%	34.6%	35.5%	35.3%	34.8%	35.7%	34.1%	35.3%	34.6%
PAT	**3,844**	**4,706**	**6,158**	**8,580**	**7,906**	**10,726**	**13,475**	**19,096**	**31,383**	**43,108**
% growth y-o-y	*33%*	*22.4%*	*10.7%*	*39.3%*	*2.4%*	*35.7%*	*21.3%*	*41.7%*	*19.2%*	*37.4%*

Source: BHEL and Citi Investment Research and Analysis

Figure 10. BHEL – Sales Performance v/s MoU Targets

Year End Mar31 (Rsbn)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11E	FY12E
MoU Target - Base	83	95	110	165	200	250	310	380	480
Growth		13.9%	16.4%	50.0%	21.2%	25.0%	24.0%	22.6%	26.3%
MoU Target - Excellent	NA	NA	NA	NA	210	270	320	395	500
Growth						28.6%	18.5%	23.4%	26.6%
Achievements	88	107	146	188	215	280	341	422	517
Growth						30.4%	21.5%	24.0%	22.5%
Overachievement - base	6%	13%	33%	14%	7%	12%	10%	11%	8%
Overachievement - excellent					2%	4%	6%	7%	3%

Source: BHEL and Citi Investment Research and Analysis estimates

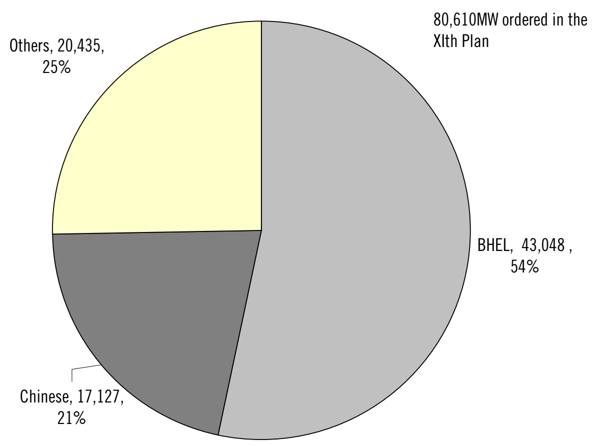
Order inflows of ~ Rs100bn in FY11E so far

- Our data suggests that BHEL has already won a Rs63bn 1600MW supercritical order from KPCL, Rs19bn HVDC order from PGCIL and a Rs13bn 600MW Singareni Collieries order so far in FY11E vis-à-vis FY11E guidance of Rs600bn.

Continuing to maintain market share in the face of competition

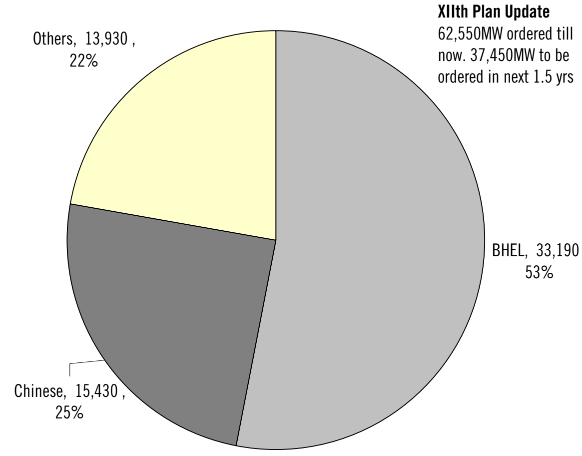
- During FY10 the private sector placed 14,689MW of orders out of the total 16,489MW, which is 89% of power orders received. This implied Rs338bn of inflows, which is ~81% of the power inflows. In FY09, out of Rs471bn of power inflows, 30% (~ Rs130bn) came from the private sector. This helped BHEL maintain market shares at similar levels in the XIIth as in the XIth Plan.

Figure 11. XIth Plan Market Share So Far



Source: CEA, BHEL and Citi Investment Research and Analysis

Figure 12. XIIth Plan Market Share So Far



Source: BHEL and Citi Investment Research and Analysis

7.7GW of assured high margin SEB orders

- BHEL is assured of 7720MW of SEB supercritical orders over the next 1.5 years, as shown in the table below. Initially, BHEL would hold a 50% equity stake in each of these projects, which would later be reduced to 26% each by offering the remaining shares to financial institutions.

Figure 13. BHEL – JVs with SEBs

SEB	Location	Units	MW
TNEB	Tuticorin	2X800	1600
KPCL	Raichur	2X800	1600
MPGCL	Khandwa	2X800	1600
Mahagenco	Latur	2X660	1320
GSECL	Sarkhadi	2X800	1600
Total			**7720**

Source: Company and Citi Investment Research and Analysis

- Among the SEB JV orders, the first of the lot from Karnataka for 1600MW BTG for Rs63bn came through in 1QFY11, and the remaining from Tamil Nadu, Maharashtra and Madhya Pradesh should come through in FY11E.

- We believe the assured SEB supercritical orders will have higher margins than other orders which have been won through or will be won through competitive bidding.

Figure 14. BHEL – Supercritical Order Wins So Far

Order	Plant	Rsmn/MW	Units	MW	Rsmn
KPCL BTG Order	Yeramarus	39.4	2X800	1600	63,000
JPVL BTG Order	Bara	28.1	3X660	1980	55,640
NTPC Turbine Order	Barh II	11.2	2X660	1320	14,740
NTPC Boiler Order	Barh II	13.6	2X660	1320	18,000
APGENCO Boiler Order	Krishnapatnam	15.6	2X800	1600	25,000
Total				**7820**	**176,380**

Source: Citi Investment Research and Analysis

- BHEL needs to work on 8-10 sets to indigenize supercritical technology. Given that the assured SEB orders themselves provide BHEL 10 supercritical sets one can always wonder if the import content on the NTPC-DVC bulk tenders could be reduced vis-à-vis earlier.

- According to the management it depends on the delivery schedules for the SEB and NTPC-DVC orders and is not always based on the technology. If the customer wants early deliveries then BHEL may have to get some parts from abroad. But at the end of the day the company needs to be competitive to get the orders.

Incumbent advantages in the face of competition

- BHEL has in the past 40-50 years been absorbing a number of technologies and set up various facilities to produce not just the main products or boilers, turbine and generator, but also auxiliaries. In addition, the company is producing its own control and instrumentation systems. So the kind of depth of products which BHEL has cannot be matched by the new players.

- BHEL's capacity expansion is largely brown-field in nature where costs have been recovered earlier. For the same MW of capacity, the newer players are having to make much higher investments.

Figure 15. Likely India Domestic Coal & Lignite Equipment Manufacturing Capacity

	Boiler	Turbine	Boiler		Turbine	
			Current	Future	Current	Future
BHEL	Alstom - Technical Collaboration	Siemens - Technical Collaboration	10,900	15,060	10,900	15,060
L&T	Mitsubishi - Investment JV	Mitsubishi - Investment JV	4,000	6,000	4,000	6,000
JSW		Toshiba - Investment JV	-	-	-	3,000
Bharat Forge		Alstom - Investment JV	-	-	-	5,000
GB Engineering	Ansaldo (Gammon)			2,000		
Thermax	Babcock & Wilcox - Investment JV		1,500	4,500		
Cethar Vessels-Riley Power	Riley Power - Technical Collaboration	Power Machines - Investment JV	NA	NA	NA	NA
BGR	Hitachi - Investment JV	Hitachi - Investment JV	NA	NA	NA	NA
Doosan			NA	NA	NA	NA
Domestic Manufacturing Capacity			**16,400**	**27,560**	**14,900**	**29,060**

Source: Companies, Citi Investment Research and Analysis, Hindu, Mint and Business Standard

Capacity expansion on schedule

- In FY10 BHEL expanded capacity to 15,000MW and is on track to further augment capacity to 20,000MW by 2012 March 2012.

Figure 16. BHEL – Capacity Break Up

MW	March-2008	March-2010	March-2012
Hydel	2500	2500	2500
Thermal (Coal + Lignite)	6740	10900	15060
Gas	992	1090	1955
Nuclear	-	700	700
Total	**10232**	**15190**	**20215**

Source: Company and Citi Investment Research and Analysis

High capacity utilizations in FY11E would support margins

- In FY10 the company operated at capacity utilizations of greater than 100% with production of 12,000-13,000 MW. Similarly the management expects to operate at capacity utilizations of greater than 100% in FY11E with production of 16,000-17,000MW. This would support margins in FY11E.

Working hard to prevent capacity constraints

- BHEL has added 1,100 new vendors in FY10 taking up the total vendor count to 26,000 vendors. Since the number of vendors for castings/ forgings (procured from outside India) have remained at the same levels of 2-3 for quite some time, BHEL has taken the initiative of setting up its own foundry and forging plant. The company has signed a technology transfer agreement for manufacturing large-size forgings for turbines/ generators up to 1000MW with Sheffield Forgemasters, the only independent forgemaster in the world. The 10-year partnership to develop power generation forgings in India will see transfer of specialist technology and engineering knowledge to BHEL. For the supercritical boilers the company will manufacture the pressure parts and not outsource, as these are critical for product quality.

Updates on the NTPC-DVC bulk tenders

- According to Hindu, Financial Express and Economic Times L&T-MHI has been disqualified from the NTPC 11X660MW bulk tender for technical reasons. Given that this leaves only BHEL in the race for the boiler tender, NTPC-DVC might re-tender the boiler orders. GB-Engineering-Ansaldo, Thermax-Babcock Wilcox and Cethar Vessels are expected to take part in the tender this time around.

- NTPC supposedly rejected L&T Power's bid on the grounds that a technological collaboration agreement was signed by the parent company L&T and not by 100% subsidiary L&T Power. NTPC has also rejected L&T Power's bid for supply of turbine-generators on the same grounds.

- However, there are still four players in the bidding race for supply of turbine-generators and NTPC has decided to go ahead with the tendering.

Figure 17. NTPC – DVC 660MW Supercritical Bulk Sets Tender 1– Project Details

Project	Client	Sets	Capacity (MW)
New Nabinagar	NTPC - BSEB JV	3	1,980
Meja	NTPC - UPRVUNL JV	2	1,320
Tanda Extension	NTPC	2	1,320
Solapur	NTPC	2	1,320
Raghunathpur Phase II	DVC	2	1,320
Total		**11**	**7,260**

Source: NTPC and Citi Investment Research and Analysis

Figure 18. Technical Bidders For Bulk Tender 1

	Boiler	Turbine - Generator
BHEL	Yes	Yes
Alstom - Bharat Forge JV	-	Yes
Toshiba - JSW JV	-	Yes
Power Machines, Russia	-	Yes
L&T - MHI JV (Likely disqualified)	Yes	Yes
Possible new entrants for boiler tender		
Thermax-Babcock Wilcox		
GB Engineering-Ansaldo-Gammon		
Cethar Vessels		

Source: Hindu and Citi Investment Research and Analysis

Figure 19. NTPC 800MW Supercritical Bulk Sets Tender 2 – Project Details

Project	Client	Sets	Capacity (MW)
Lara	NTPC	2	1,600
Darlipalli	NTPC	2	1,600
Kudgi	NTPC	3	2,400
Gajmara	NTPC	2	1,600
Total		**9**	**7,200**

Source: NTPC and Citi Investment Research and Analysis

Transmission opportunity

- In transmission, BHEL is presently the leader in the 400kV segment. For the higher voltage segment, BHEL has recently established a JV with Toshiba and has plans to manufacture sets of 765 KV and 1200 kV. For the HVDC transmission, BHEL is working with ABB. The two companies have already bagged the contract for building the first 800kV transmission line in India and the second in the world.

Nuclear opportunity

- To date BHEL has maintained a market share of 80% on the nuclear side. The nuclear opportunity, though big, will be extremely long drawn-out and is unlikely to be a very big contributor to the backlog over the medium term. BHEL's scope of work includes the conventional power island in a nuclear power plant and does not include the reactor.

- Steam generators for new rating 700MW nuclear sets are being developed and the company has signed an MoU with NPCIL for a JV for a conventional island of a nuclear plant. Technology tie-ups being explored for 700 MW and above TG sets and the company has also signed an MoU with GE-Hitachi for cooperation in nuclear-island equipment

Transportation opportunity

- BHEL makes locomotives, EMUs, traction motors and signalling equipment. Railways will be decent-size opportunity but one has to remember that BHEL's focus will continue to be power.

- BHEL has already tied up with General Electric as the technology partner for the diesel locomotives and is in the process of tying up with an international partner for manufacturing electric locomotives.

- The company is in the process of joining hands with the Railways, which is constructing two new major facilities for manufacturing high-power electric and diesel locomotives. These two facilities are coming up in Bihar and would essentially cater to the demand for locomotives from the proposed high-speed dedicated freight corridor project. BHEL also plans to manufacture 100 high-speed locomotives a year.

- BHEL and Alstom have joined hands to jointly bid for the Rs140bn Chennai Metro Rail Project. BHEL, along with Alstom, will bid to provide the necessary machinery for the project.

WTG opportunity

- BHEL had a tie up with Nordex and used to make wind turbines earlier. But in India the focus shifted from making equipment to offering turnkey solutions which involved land deals. As a Government entity, BHEL could not continue in the business as it could not get involved land dealings. The company is currently evaluating entering into this business once again but this will be limited to making components and sub components.

Bharat Heavy

Company description

BHEL is the largest engineering company in India, manufacturing equipment for the power and industrial segments. It is the largest manufacturer of power plant equipment in India. The industrial equipment division primarily caters to process industries, transportation (including leasing of locomotives to Indian Railways), transmission, defense and diesel generating sets (DG).

Investment strategy

We rate BHEL shares Buy / Low Risk (1L) with a 12-month target price of Rs2,770 given (1) stock underperformance v/s BSE Sensex (-12.5%) and L&T (-7.4%) over the last year, (2) managements' strong order inflow guidance of ~ Rs600bn for FY11E, which is 9% higher than our expectation of Rs550bn, (3) L&T's disqualification from the NTPC-DVC tender implies near-term competition will ease and (4) Expectations of ~ 24% earnings growth in FY11E.

Valuation

Our Rs2,770 target price is based on a target P/E multiple of 23x on September 11E, set at a 30-50% premium to the BSE Sensex and a ~20-25% premium to its historical average P/E multiple of 19x. We believe our target multiple is well supported by EPS CAGR of 24% over FY10-13E with average RoEs at 29% over FY10-12E.

Risks

Our quantitative risk-rating system, which tracks 260-day historical share price volatility, suggests a Medium Risk rating for BHEL shares. However, we believe BHEL deserves a Low Risk rating as its order book provides good earnings visibility over the medium term.

Key downside risks that could impede the stock from reaching our target price include: 1) Delays in power-sector reforms could affect order flows and earnings; 2) Regulatory uncertainties could hurt valuations and sentiment toward the stock; 3) Competitive pressures from global majors are a concern, particularly as technology upgrades are affected; and 4) In the short term, progress on order flows would influence market sentiment.

Larsen & Toubro

(LART.BO; Rs1,787.10; 1L)

Valuation

Our Rs1,875 target price is based on sum-of-the-parts (SOTP). We use 23x Sep11E earnings for the parent (Rs1,610), on par with BHEL. We also believe that the parent's numbers do not capture the value inherent in subsidiaries, which we value at Rs266, with L&T Infotech at Rs73 (12x Sep11E EPS, in-line with second-tier peers), L&T Finance at Rs20 (1.0x Sep11E P/BV), 51% stake in L&T-MHI JV at Rs36, and L&T IDPL at Rs64. Over the past 15 years L&T has traded at an average premium of ~ 39% to BHEL. However, during economic slowdowns BHEL trades at a premium to L&T. The trend reverses in good times. We believe that India economic growth is still 6-9 months away from a full-fledged revival so we peg L&T on par with BHEL. Our target multiple for BHEL at 23x is set a ~25% premium to the stock's historical average P/E of 18.4x. Our target multiple is well supported by an EPS CAGR of 29% over FY09-12E, with average RoE of 30%.

Risks

We rate L&T shares Low Risk, in line with our quantitative risk-rating system, and because L&T's order backlog of c.Rs911bn represents two years' sales and provides earnings visibility. Downside risks that could prevent the shares from reaching our target price include: 1) attracting and retaining talent; 2) the E&C and electrical equipment businesses are sensitive to economic variables; 3) competitive pressures; and 4) L&T needs to keep abreast with technology trends to sustain valuations and earnings. Upside risks to our target price include: 1) better-than-expected order booking; 2) a better-than-expected execution rate; and 3) higher-than-expected EBITDA margins.

Appendix A-1

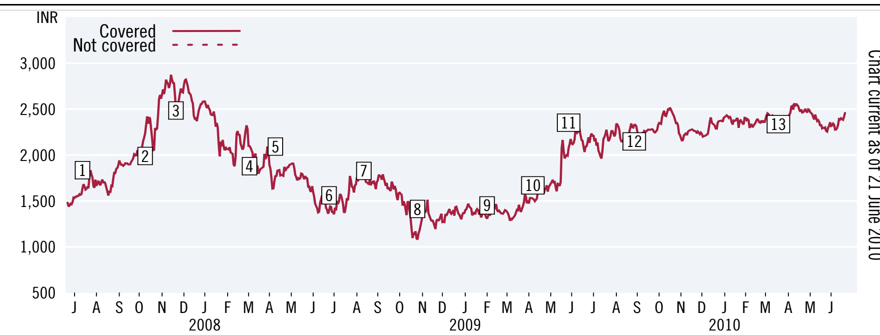
Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of all or any identified portion of this research report hereby certifies that, with respect to each issuer or security or any identified portion of the report with respect to an issuer or security that the research analyst covers in this research report, all of the views expressed in this research report accurately reflect their personal views about those issuer(s) or securities. The research analyst(s) also certify that no part of their compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this research report.

IMPORTANT DISCLOSURES

Bharat Heavy (BHEL.BO)

Ratings and Target Price History
Fundamental Research
Analyst: Venkatesh Balasubramaniam



	Date	Rating	Target Price	Closing Price
1	12-Jul-07	1L	*1,923.00	1,641.35
2	9-Oct-07	1L	*2,542.00	2,236.75
3	21-Nov-07	1L	*2,936.00	2,486.10
4	4-Mar-08	1L	*2,529.00	2,098.25
5	9-Apr-08	*2L	*1,832.00	1,776.75

	Date	Rating	Target Price	Closing Price
6	24-Jun-08	*1L	*1,642.00	1,391.00
7	12-Aug-08	*2L	*2,025.00	1,805.15
8	27-Oct-08	*1L	*1,373.00	1,080.25
9	1-Feb-09	1L	*1,504.00	1,320.45
10	7-Apr-09	*2L	*1,675.00	1,531.90

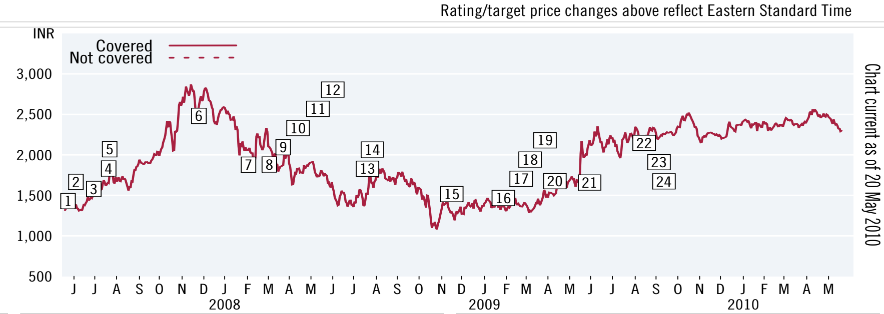
	Date	Rating	Target Price	Closing Price
11	27-May-09	2L	*2,193.00	2,078.20
12	27-Aug-09	*1L	*2,634.00	2,329.00
13	18-Mar-10	*2L	*2,673.00	2,379.05

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Bharat Heavy Electricals Ltd (BHEL.NS)

Rating History
Global Quantitative Research
Asia Radar Screen
Analyst: Paul R Chanin



	Date	Rating	Target Price	Closing Price
1	22-May-07	*5	-	1,339.50
2	5-Jun-07	*3	-	1,386.25
3	29-Jun-07	*5	-	1,537.85
4	20-Jul-07	*4	-	1,649.25
5	23-Jul-07	*3	-	1,765.65
6	26-Nov-07	*2	-	2,602.90
7	4-Feb-08	*4	-	2,058.90
8	4-Mar-08	*3	-	2,098.00

	Date	Rating	Target Price	Closing Price
9	24-Mar-08	*4	-	1,872.90
10	14-Apr-08	*5	-	1,828.00
11	12-May-08	*4	-	1,745.75
12	2-Jun-08	*5	-	1,594.15
13	21-Jul-08	*4	-	1,506.30
14	28-Jul-08	*5	-	1,649.70
15	17-Nov-08	*4	-	1,292.15
16	28-Jan-09	*3	-	1,398.45

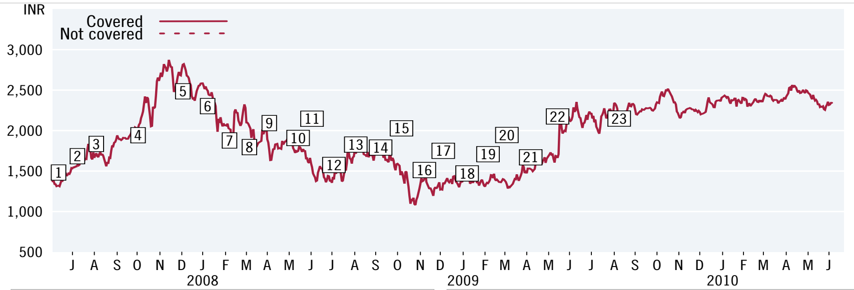
	Date	Rating	Target Price	Closing Price
17	23-Feb-09	*5	-	1,364.10
18	6-Mar-09	*2	-	1,311.15
19	27-Mar-09	*3	-	1,549.80
20	10-Apr-09	*4	-	1,498.65
21	29-May-09	*2	-	2,178.15
22	14-Aug-09	*5	-	2,200.60
23	4-Sep-09	*4	-	2,212.05
24	11-Sep-09	*3	-	2,256.45

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Bharat Heavy Electricals Ltd (BHEL.BO)

Rating History
Global Quantitative Research
World Radar Screen
Analyst: Chris Montagu
Covered since May 23 2009



	Date	Rating	Target Price	Closing Price
1	6-Jun-07	*7	-	1,339.75
2	7-Jul-07	*10	-	1,555.85
3	3-Aug-07	*9	-	1,720.30
4	2-Oct-07	*5	-	1,990.05
5	4-Dec-07	*6	-	2,815.40
6	8-Jan-08	*4	-	2,494.30
7	7-Feb-08	*8	-	2,019.90
8	6-Mar-08	*5	-	2,081.40
9	3-Apr-08	*8	-	1,754.95
10	14-May-08	*7	-	1,746.90
11	3-Jun-08	*9	-	1,548.50
12	3-Jul-08	*8	-	1,396.60
13	3-Aug-08	*9	-	1,756.50
14	8-Sep-08	*8	-	1,790.55
15	7-Oct-08	*10	-	1,496.70
16	7-Nov-08	*9	-	1,405.10
17	4-Dec-08	*8	-	1,357.75
18	7-Jan-09	*7	-	1,439.90
19	5-Feb-09	*9	-	1,348.80
20	4-Mar-09	*10	-	1,332.65
21	7-Apr-09	*6	-	1,531.90
22	14-May-09	*5	-	1,663.00
23	10-Aug-09	*7	-	2,148.80

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

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Rohini Malkani has in the past worked with the India government or its divisions in her personal capacity.

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% of companies in each rating category that are investment banking clients	22%	23%	21%
Citi Investment Research & Analysis Quantitative Decision Tree Model Coverage	48%	0%	52%
% of companies in each rating category that are investment banking clients	56%	0%	52%
Citi Investment Research & Analysis Quantitative European Value & Momentum Screen	30%	40%	30%
% of companies in each rating category that are investment banking clients	50%	54%	50%
Citi Investment Research & Analysis Asia Quantitative Radar Screen Model Coverage	20%	60%	20%
% of companies in each rating category that are investment banking clients	22%	19%	23%
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Quantitiative Research Consultant:
* Daniel Giamouridis is an academic consultant to Citi Investment Research & Analysis and is Athens, Greece based. This research maybe a result of his part input.
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CIRA Asia Quantitative Radar Screen model recommendations are based on a regionally consistent framework to measure relative value and momentum for a large number of stocks across regional developed and emerging markets. Relative value and momentum rankings are equally weighted to produce a global attractiveness score for each stock. The scores are then ranked and put into quintiles. A stock with a quintile rating of 1 denotes an attractiveness score in the top 20% of the universe (most attractive). A stock with a quintile rating of 5 denotes an attractiveness score in the bottom 20% of the universe (least attractive).
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Recommendations are based on the relative attractiveness of a stock, thus can not be directly equated to buy, hold and sell categories. Accordingly, your decision to buy or sell a security should be based on your personal investment objectives and only after evaluating the stock's expected relative performance.

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