

## Bharat Heavy Electricals (BHEL)

Collateral damage from Indian power producer problems

**Margin decline, order cancellation, no fresh orders, working capital pressures, public offer overhang – can it get any worse?** BHEL witnessed a sharp 360bps RM led OPM decline in Dec-q. OB saw qoq decline, owing to the cancellation of a large order and lack of fresh orders. Severe working capital pressures led to a shocking qoq decline of Rs26bn in net cash. The impending offer for sale by the government is not only creating a supply / pricing overhang, but also an information overhang, in our view.

- **Downgrade to Neutral, headwinds could persist:** We think the following concerns could constrain stock performance in the medium term: 1) further order cancellations possible, despite mgmt claim that there are no slow-moving orders now; 2) continued famine of new orders, as govt. initiatives to revive power sector investment climate may take 3-4 quarters to have meaningful impact; 3) Public offer plans revived: it is a bit ironical that management reticence on key issues seems to be destroying value; 4) Margin declines – this was always built in for the long-term, given the change in technology, customer profile and higher import content. Past trend of margin declines for Chinese BTG manufacturers suggests that OPM pressures in BHEL could come earlier than expected; 5) Severe cash flow pressures owing to weak customer advances and increase in debtors / inventories.
- **EPS de-growth likely in FY14.** We reduce FY13/14 OPM by ~170-190bps and cut EPS est. by 8.5% and 15.4% respectively. Sequential OB decline in Dec-q affords weak topline growth in FY14 and a slight EPS decline. BHEL is trading at ~9x FY13 (and FY14) post est. cuts- close to trough valuations, but with significantly higher concerns on growth sustainability than earlier.
- **Our revised Dec-12 DCF based PT of Rs270** stems from earning cuts, working capital changes, lower cash and significantly higher risk premium. Additional order cancellations, sustained weak inflows are downside risks, reduction in cash flow and margin pressure constitute upside to PT and est.

### ▼ Neutral

Previous: Overweight

**BHEL.BO, BHEL IN**

Price: Rs244.15

### ▼ Price Target: Rs270.00

Previous: Rs480.00

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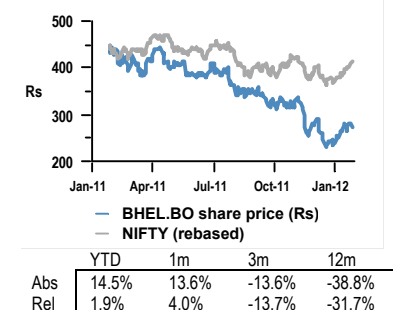
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#### Price Performance



#### Bharat Heavy Electricals Ltd. (Reuters: BHEL.BO, Bloomberg: BHEL IN)

Rs in mn, year-end Mar	FY10A	FY11A	FY12E	FY13E	FY14E
Revenue (Rs mn)	328,614	415,661	471,166	545,541	574,346
Adjusted Profit (Rs mn)	43,107	60,112	65,629	69,565	67,755
Adjusted EPS (Rs)	17.61	24.56	26.81	28.42	27.68
DPS (Rs)	4.66	6.23	6.80	7.21	7.02
Revenue growth (%)	25.4%	26.5%	13.4%	15.8%	5.3%
Adjusted EPS growth (%)	37.4%	39.5%	9.2%	6.0%	-2.6%
ROCE	26.9%	55.0%	40.0%	35.9%	29.5%
ROE	29.9%	33.3%	29.2%	25.6%	21.1%
P/E (x)	13.9	9.9	9.1	8.6	8.8
P/BV (x)	3.8	3.0	2.4	2.0	1.7
EV/EBITDA (x)	13.1	5.4	6.4	5.4	5.2
Dividend Yield	1.9%	2.6%	2.8%	2.9%	2.9%

Source: Company data, Bloomberg, J.P. Morgan estimates.

#### Company Data

Shares O/S (mn)	2,448
Market cap (Rs mn)	597,582
Market cap (\$ mn)	12,117
Price (Rs)	244.15
Date Of Price	30 Jan 12
Free float (%)	32.3%
3mth Avg daily volume	4.43
3M - Average daily Value (Rs mn)	1,203.38
Average 3m Daily Turnover (\$ mn)	24.40
NIFTY	5,205
Exchange Rate	49.32
Fiscal Year End	Mar

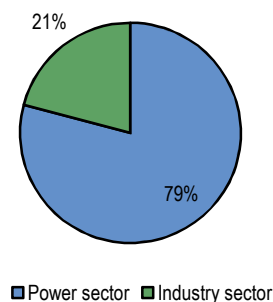
See page 8 for analyst certification and important disclosures, including non-US analyst disclosures.

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## Company Description

BHEL is a power plant equipment manufacturer with a current capacity to supply 15 GW per annum. The company targets to increase capacity to 20GW by 2012. BHEL has an order backlog of Rs1.46 trillion (US\$30 billion) providing earnings visibility through FY14

## Revenue composition (FY11)



Source: Company reports.

## EPS: J.P. Morgan vs consensus

	J. P. Morgan	Consensus
FY12E	26.8	26.9
FY13E	28.4	28.0
FY14E	27.7	26.5

Source: Bloomberg, J.P. Morgan estimates.

P&L sensitivity metrics	EBITDA impact (%)	EPS impact (%)
Improvement in RM/sales		
Impact of 50bps increase in FY13 estimates	-2.65%	-2.59%
Execution in power segment		
Impact of 5% decline in FY13 estimates	-7.21%	-7.38%
Execution in industrial segment		
Impact of 10% increase in FY13 estimates	2.73%	2.80%

Source: J.P. Morgan estimates.

## Price target and valuation analysis

We reduce our DCF based Dec-12 PT from Rs480 to Rs270 (WACC: 13.3%, terminal growth rate: 5.85%, terminal year: FY17), owing to earning cuts (8.5% in FY13/15.4% in FY14); working capital changes, lower cash and significantly higher risk premium (WACC increased ~200bps) to factor in order inflow uncertainty and potential quality issues in existing order backlog. Our PT implies 9.5.2x/9.8x FY13/14 earnings.

	Rs. Bn.	Rs./share
Sum of FCF	133	54
Terminal value	459	187
<b>Enterprise value</b>	<b>592</b>	<b>242</b>
Add: Investments	5	2
Less: Net-debt/ (Net-cash)	(65)	(26)
<b>Net present Equity value</b>	<b>661</b>	<b>270</b>

**Downgrade to Neutral.** Although valuations are close to trough post estimate cuts; we believe concerns critical to sustainable growth, are likely to persist and constrain stock performance. Additional order cancellations, sustained weak inflows are downside risks, reduction in cash flow and margin pressure constitute upside to PT and est.

## Dec-q results weak on multiple counts

**BHEL witnessed severe margin pressure in Dec-q.** The company reported EBITDA margin of 19.4% (down 360bps YoY), well below our est. of 22%. Higher RM and SG&A (including provisions for LDs) expenses contributed to margin pressure, while staff cost was down ~0.8% YoY in absolute terms. Reported EBITDA of Rs20.8bn was flat YoY, ~9% below estimate. The margin pressure more than overshadowed healthy execution in Dec-q. Reported topline of Rs105.4bn (up 19.2%) was ~4% ahead of estimate. Adjusting 3QFY11 revenue base which was inflated Rs4.44bn on account of one-off accounting change; the revenue growth was even more robust at 25.5% YoY. PAT of Rs14.3bn, up 2.1% YoY, was ~5.5% below our est.

**Table 1: BHEL: Dec-q and 9MFY12 results**

Rs. in mn, year-end March

	3Q12A	YoY 3Q11A	%chg	QoQ 2Q12A	%chg	9MFY12	9MFY11	%chg
Gross Sales	110,783	92,798	19.4	107,576	3.0	292,691	247,565	18.2
Less: Excise duty	(5,303)	(4,305)	23.2	(4,590)	15.5	(12,969)	(10,991)	18.0
<b>Net Sales</b>	<b>105,480</b>	<b>88,493</b>	<b>19.2</b>	<b>102,986</b>	<b>2.4</b>	<b>279,722</b>	<b>236,574</b>	<b>18.2</b>
Other op income	1,951	1,741	12.1	2,470	(21.0)	5,878	4,577	28.4
(Inc)/Dec in WIP	4,745	2,759	72.0	4,479	6.0	13,530	7,943	
Raw material	(64,882)	(50,857)	27.6	(65,658)	(1.2)	(176,346)	(143,775)	22.7
Staff cost	(13,377)	(13,487)	(0.8)	(13,491)	(0.8)	(39,878)	(39,505)	0.9
Other expenses	(13,113)	(7,932)	65.3	(11,192)	17.2	(31,378)	(19,122)	64.1
Total Expenditure	(86,626)	(69,516)	24.6	(85,863)	0.9	(234,072)	(194,459)	20.4
<b>EBIDTA</b>	<b>20,805</b>	<b>20,717</b>	<b>0.4</b>	<b>19,592</b>	<b>6.2</b>	<b>51,529</b>	<b>46,691</b>	<b>10.4</b>
Other income	1,960	1,529	28.2	2,199	(10.8)	6,645	4,784	38.9
EBIDT	22,765	22,247	2.3	21,791	4.5	58,174	51,475	13.0
Interest	(145)	(145)	0.2	(96)	50.4	(329)	(242)	35.9
Depreciation	(1,861)	(1,447)	28.6	(1,888)	(1.4)	(5,459)	(4,057)	34.6
<b>PBT</b>	<b>20,758</b>	<b>20,655</b>	<b>0.5</b>	<b>19,806</b>	<b>4.8</b>	<b>52,386</b>	<b>47,176</b>	<b>11.0</b>
Tax	(6,432)	(6,623)	(2.9)	(5,686)	13.1	(15,785)	(15,044)	4.9
<b>PAT</b>	<b>14,326</b>	<b>14,033</b>	<b>2.1</b>	<b>14,120</b>	<b>1.5</b>	<b>36,602</b>	<b>32,132</b>	<b>13.9</b>
EPS	5.9	5.7	2.1	5.8	1.5	15.0	13.1	13.9
<b>Key ratios (%)</b>								
Raw Material to Sales	57.0	54.4	266.06	59.4	(239.3)	58.2	57.4	79.0
Excise duty to sales	4.8	4.6	14.8	4.3	52.0	4.4	4.4	(0.9)
Staff Cost to sales	12.7	15.2	(255.85)	13.1	(41.8)	14.3	16.7	(244.3)
Other exp to sales	12.4	9.0	346.82	10.9	156.4	11.2	8.1	313.5
<b>EBIDTA margin</b>	<b>19.4</b>	<b>23.0</b>	<b>(359.43)</b>	<b>18.6</b>	<b>78.7</b>	<b>18.0</b>	<b>19.4</b>	<b>(132.0)</b>
Effective tax rate	31.0	32.1	(107.6)	28.7	227.9	30.1	31.9	(175.8)
Order Backlog (Rs.B)	1,465	1,580	(7.3)	1,610	(9.0)	1,465	1,580	(7.3)
Order Inflow (Rs.B)	(15)	133	(111.5)	143	(111)	153	388	(60.7)

Source: J.P. Morgan.

**~Rs58.47bn of orders witnessed cancellations.** These orders translate into ~1.5GW of projects. While management did not disclose specific orders cancelled they said these were private IPP works and phase-II expansion projects. They also hinted that it was a developer who wanted to shift to supercritical technology.

**No domestic BTG order reported in Dec-q.** Order backlog dipped 9% qoq to Rs1465bn. BHEL stated that inflows over 9MFY12 are ~Rs152.7bn vs. Rs384bn in corresponding period last year. Excluding cancellations calculated net-inflow in Dec-q was ~Rs43bn.

**Severe working capital pressures:** Based on data shared by management, we infer that net working capital (Ex-cash) has deteriorated from Rs29bn at the end of Mar-11 to Rs77bn post Sep-q and Rs141bn post Dec-q. Cash has reduced from Rs96bn at the end of FY11 to Rs50bn post Dec-q, registering a qoq decline of Rs26bn. YTD increase in NWC constitutes ~24% of FY12 sales est.

**Weak earnings growth to persist in 4Q:** In 4QFY12 our estimates imply an adjusted topline growth of 22.2%. However, as 4QFY11 base was inflated due to one-time accounting changes net-sales (4Qe: Rs191.4bn) is est. to grow 6.8%. We estimate 4Q PAT of Rs29bn up 3.7% YoY.

## Headwinds to persist

We think the following concerns could constrain stock performance in the medium term:

- 1) **Further order cancellations:** while management did not want to say which power producer cancelled Rs58B worth of orders, they hinted at this developer wanting to switch to supercritical technology. The management said there are no slow-moving orders otherwise, which we find difficult to believe as several projects are still struggling with land, fuel and clearances.
- 2) **Continued famine of new orders:** govt initiative to solve power sector problems is positive but we see 3-4qs before power sector investment climate sees meaningful improvement.
- 3) **Public offer:** the govt has once again revived its plan to divest 5% stake in BHEL – but it is a bit ironical that management reticence on key issues seems to be destroying value. The impending offer for sale by the government is not only creating a supply / pricing overhang, but also an information overhang as mgt remains reluctant to discuss any meaningful outlook.
- 4) **Margin declines** – this was always built in for the long-term (terminal year EBIT margin est. of 15.5% is unchanged), given the change in technology, customer profile and higher import content – but evidence of earlier than expected declines is causing concern. Going forward as BHEL witnesses a product shift from conventional 250/500MW units, we can draw a parallel from past margin trends seen by Chinese BTG manufacturers. During 2006-08, the 3 Chinese producers were undertaking more orders on the 600/660MW supercritical technologies, a brand new technology to them. During that time, their production costs increased significantly because (a) they cannot achieve economies of scale for these products, (b) they had to import some expensive key components (e.g. U-shaped tubes for turbines / boilers) from overseas. As an illustration, Dongfang had 3 consecutive years of gross margin decline on their coal-fired units from 2006-08 (from 20.1% to 17.9%). From BHEL's perspective too it appears that there is more margin downside as they are starting delivery of supercritical equipment now, and market competition is on the rise though project pie on offer is scarce.

- 5) **Severe cash flow pressures** owing to weak customer advances and increase in debtors / inventories.

**We downgrade to Neutral from OW on the back of above concerns** (see PT and risks on page 2). We continue to prefer L&T over BHEL. L&T is a diversified capex play and is better placed to recover if the general investment cycle picks up, in our view. The risk to our stock call is that L&T's superiority is well-reflected in valuation premium of ~40% vs BHEL. We think negation of the above concerns is required before BHEL closes in on the valuation gap.

## Margin cuts drive down EPS estimates

We have cut EBITDA margin by 170bps and 190bps respectively in FY13 and FY14, driving an EPS cut of 8.5% and 15.4% respectively. Sequential OB decline in Dec-q affords weak topline growth in FY14 (5.3% YoY) and a slight EPS decline (-2.6% YoY). Our revised P&L is shown in the table below-

**Table 2: BHEL: Summary P&L**

Rs. in mn, year-end March

	FY09	FY10	FY11	FY11 (adj)	FY12E	FY13E	FY14E
Gross Sales	280,895	341,985	433,799	406,071	491,823	569,458	599,526
Adjusted Gross Sales	280,895	341,985	406,071	406,071	491,823	569,458	599,526
Less: Excise duty	(18,552)	(13,182)	(18,011)	(18,011)	(20,657)	(23,917)	(25,180)
<b>Net Sales</b>	<b>262,343</b>	<b>328,803</b>	<b>415,788</b>	<b>388,060</b>	<b>471,166</b>	<b>545,541</b>	<b>574,346</b>
Other op income	6,244	6,925	9,167	9,167	11,000	11,000	11,000
(Inc)/Dec in WIP	11,515	7,867	1,274	1,274	6,000	6,000	6,000
Raw material consumption	(171,204)	(200,941)	(226,707)	(226,707)	(280,997)	(332,756)	(353,323)
Staff cost	(41,128)	(51,529)	(54,104)	(56,512)	(57,726)	(65,853)	(72,982)
Other expenses	(23,511)	(28,542)	(55,790)	(35,017)	(53,069)	(58,943)	(63,674)
Accounting adjustments			(18,366)				
Total Expenditure	(224,328)	(273,145)	(335,328)	(316,962)	(385,792)	(451,552)	(483,979)
<b>EBIDTA</b>	<b>44,260</b>	<b>62,583</b>	<b>89,627</b>	<b>80,265</b>	<b>96,374</b>	<b>104,989</b>	<b>101,367</b>
Other income	7,880	8,239	6,418	6,418	8,555	9,832	10,964
EBIDT	52,139	70,822	96,045	86,683	104,930	114,821	112,331
Interest	(307)	(335)	(547)	(547)	(750)	(750)	(750)
Depreciation	(3,343)	(4,580)	(5,441)	(5,909)	(7,382)	(8,670)	(8,922)
<b>PBT</b>	<b>48,490</b>	<b>65,907</b>	<b>90,057</b>	<b>80,226</b>	<b>96,798</b>	<b>105,402</b>	<b>102,658</b>
Tax	(17,106)	(22,800)	(29,945)	(26,701)	(31,169)	(35,837)	(34,904)
<b>PAT</b>	<b>31,383</b>	<b>43,107</b>	<b>60,112</b>	<b>53,526</b>	<b>65,629</b>	<b>69,565</b>	<b>67,755</b>
EPS	12.8	17.6	24.6	21.9	26.8	28.4	27.7
<b>Growth (%)</b>							
Net Sales	35.5	25.3	26.5	(6.7)	21.4	15.8	5.3
Reported PBT growth	9.4	35.9	36.6	(10.9)	20.7	8.9	(2.6)
Adjusted PBT growth		35.9	36.6	(10.9)	20.7	8.9	(2.6)
PAT	9.8	37.4	39.4	(11.0)	22.6	6.0	(2.6)
<b>Key ratios (%)</b>							
Raw Material to Sales	60.9	58.7	54.2	58.1	58.4	59.9	60.5
Excise duty to sales	6.6	3.9	4.2	4.4	4.2	4.2	4.2
Staff Cost to sales	15.7	15.7	13.0	14.6	12.3	12.1	12.7
Other exp to sales	9.0	8.7	13.4	9.0	11.3	10.8	11.1
<b>EBIDTA margin</b>	<b>16.5</b>	<b>18.6</b>	<b>21.1</b>	<b>20.2</b>	<b>20.0</b>	<b>18.9</b>	<b>17.3</b>
Effective tax rate	35.3	34.6	33.3	33.3	33.3	33.3	34.6

Source: J.P. Morgan estimates, Company data. Note: Revenue was booked against warranty provisions in FY11: Reported turnover was higher by Rs27.7bn. Adjusted gross sales of Rs406.07bn. Accounting adjustments in operating expenditure (Rs18.3bn) includes: (a) provision of contractual obligation on warranties: Rs20.77bn; (b) Change in accounting policy on employee benefits. Staff costs were lower by Rs2.4bn.

## BHEL: Summary of Financials

Profit and Loss statement						Cash flow statement					
Rs in millions, year-end Mar	FY10	FY11	FY12E	FY13E	FY14E	Rs in millions, year-end Mar	FY10	FY11	FY12E	FY13E	FY14E
Gross Revenues	341,538	433,370	491,823	569,458	599,526	EBIT	52,098	100,077	90,539	98,388	95,086
% change Y/Y	22%	27%	13%	16%	5%	D&A	4,580	5,441	7,382	8,670	8,922
Gross Margin (%)	13%	24%	20%	19%	17%	Tax	22,800	29,945	31,169	35,837	34,904
EBITDA	43,716	105,518	97,921	107,057	104,008	Decrease in WC	(24,495)	(22,182)	(92,223)	(2,319)	(21,241)
% change Y/Y	-11%	141%	-7%	9%	-3%	Operating CF	9,383	53,392	(25,471)	68,901	47,863
EBITDA Margin (%)	13%	24%	20%	19%	17%	Capex	(17,549)	(17,163)	(11,100)	(7,100)	(7,100)
EBIT inc OI	56,828	117,755	110,095	119,220	117,050	Change in investments	(275)	(3,593)	0	0	0
% change Y/Y	-8%	107%	-7%	8%	-2%	Investing CF	(17,824)	(20,756)	(11,100)	(7,100)	(7,100)
EBIT Margin (%)	17%	27%	22%	21%	20%	FCF	(8,440)	32,636	(36,571)	61,801	40,763
Net Interest	335	547	750	750	750	Change in equity	0	0	0	0	0
Earnings before tax	65,907	90,057	96,798	105,402	102,658	Change in debt	(216)	356	0	0	0
% change Y/Y	36%	37%	7%	9%	-3%	Net Interest paid	(335)	(547)	(750)	(750)	(750)
Tax	22,800	29,945	31,169	35,837	34,904	Other income	17,692	17,678	19,555	20,832	21,964
as % of EBT	35%	33%	32%	34%	34%	Deferred tax asset	3,131	(6,363)	1,000	1,000	1,000
Net Income (pre exceptionals)	43,107	60,112	65,629	69,565	67,755	Dividend & div tax paid	(13,321)	(17,747)	(19,478)	(20,646)	(20,109)
% change Y/Y	37%	39%	9%	6%	-3%	Misc. adjustment	(625)	(33,974)	(11,547)	(12,069)	(12,641)
Shares Outstanding	2447.6	2447.6	2447.6	2447.6	2447.6	Financial CF	3,195	(34,234)	(12,220)	(12,633)	(11,536)
EPS (pre exceptionals)	17.6	24.6	26.8	28.4	27.7	Change in cash	(5,245)	(1,599)	(48,790)	49,168	29,227
% change Y/Y	37%	39%	9%	6%	-3%	Opening cash balance	103,146	97,900	96,302	47,511	96,680
						Closing cash balance	97,900	96,302	47,511	96,680	125,906
Balance sheet						Ratio Analysis					
Rs in millions, year-end Mar	FY10	FY11	FY12E	FY13E	FY14E	%, year-end Mar	FY10	FY11	FY12E	FY13E	FY14E
Cash and cash equivalents	97,901	96,302	47,511	96,680	125,906	EBITDA margin	13%	24%	20%	19%	17%
Accounts receivable	206,888	273,546	323,390	374,438	394,209	Net profit margin	13%	14%	14%	13%	12%
Inventories	92,355	109,630	127,819	157,221	174,638	Sales per share growth	22%	27%	13%	16%	5%
Others	4,069	3,096	3,096	3,096	3,096	Sales growth	22%	27%	13%	16%	5%
Current assets	429,348	514,947	531,326	671,297	739,816	Net profit growth	37%	39%	9%	6%	-3%
Investments	798	4392	4392	4392	4392	EPS growth	37%	39%	9%	6%	-3%
Net fixed assets	39,450	51,631	55,349	53,780	51,957	Interest coverage (x)	NA	NA	NA	NA	NA
Others	0	0	0	0	0	Net debt to total capital	-21%	-17%	-8%	-13%	-16%
Total assets	469,596	570,970	591,067	729,469	796,165	Net debt to equity	-61%	-47%	-19%	-32%	-36%
Liabilities						Sales/assets	0.7	0.8	0.8	0.8	0.8
Payables	75,798	96,019	115,473	114,017	122,182	Assets/equity	3.0	2.8	2.4	2.5	2.3
Others	248,619	293,415	246,908	336,846	346,731	ROE	30%	33%	29%	26%	21%
Total current liabilities	324,417	389,434	362,380	450,863	468,914						
Total debt	1,278	1,634	1,634	1,634	1,634						
Other liabilities	83,376	105,519	132,217	182,591	222,071						
Total liabilities	409,070	496,586	496,230	635,087	692,618						
Shareholders' equity	159,174	201,538	247,689	296,608	344,253						
BVPS	65.0	82.3	101.2	121.2	140.6						

**JPM Q-Profile**

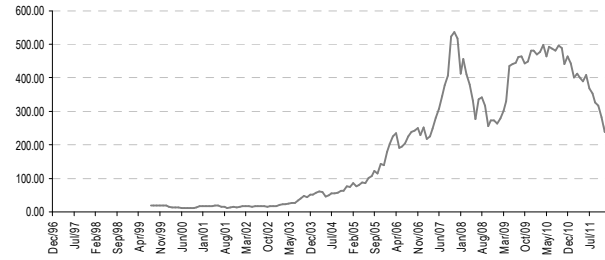
**Bharat Heavy Electricals Ltd. (INDIA / Industrials)**

As Of: 27-Jan-2012

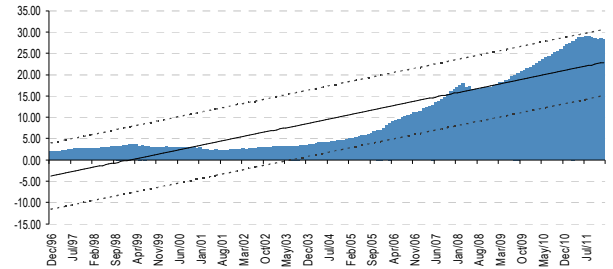
**Global Equity Quantitative Analysis**

Quant\_Strategy@jpmorgan.com

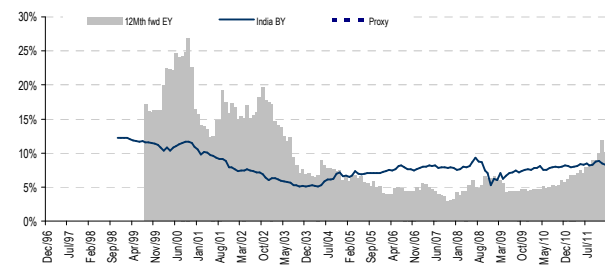
**Local Share Price** Current: **281.65**



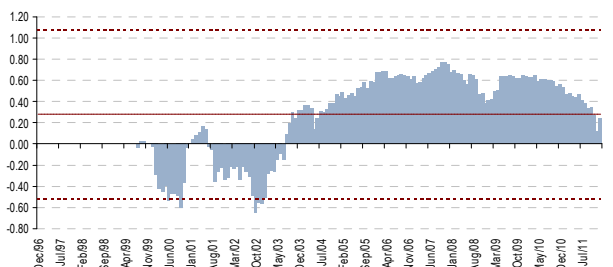
**12 Mth Forward EPS** Current: **28.43**



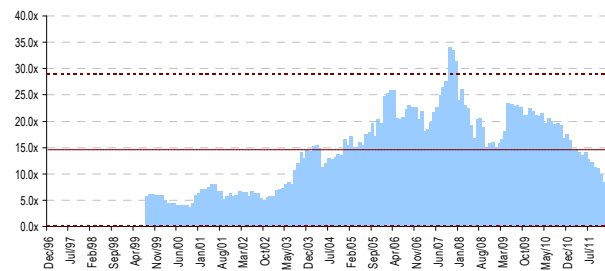
**Earnings Yield (& local bond Yield)** Current: **10%**



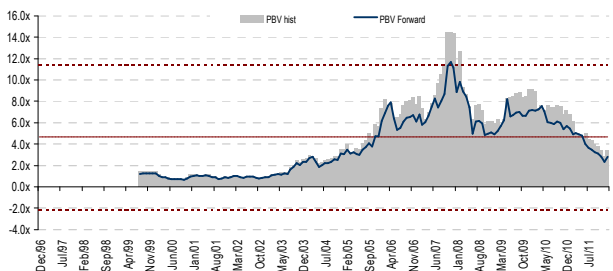
**Implied Value Of Growth\*** Current: **24.27%**



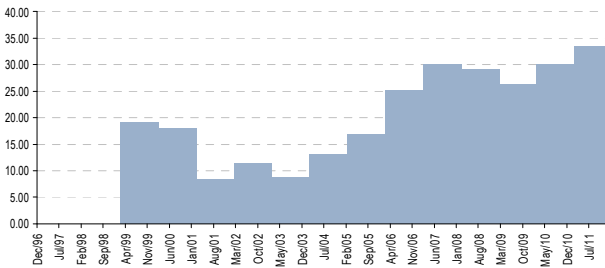
**PE (1Yr Forward)** Current: **9.9x**



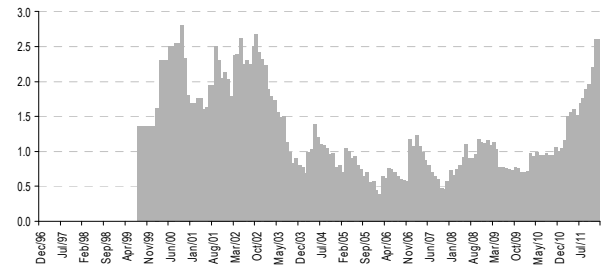
**Price/Book Value** Current: **3.4x**



**ROE (Trailing)** Current: **33.58**



**Dividend Yield (Trailing)** Current: **2.61**



**Summary**

Bharat Heavy Electricals Ltd.		SEDOL		B6SNRV2		As Of:		27-Jan-12			
INDIA						Local Price:		281.65			
Industrials						EPS:		28.43			
	Latest	Min	Max	Median	Average	2 S.D.+	2 S.D. -	% to Min	% to Max	% to Med	% to Avg
12mth Forward PE	9.91x	3.73	34.18	15.06	14.62	29.07	0.18	-62%	245%	52%	48%
P/BV (Trailing)	3.42x	0.73	14.93	3.97	4.64	11.45	-2.16	-79%	336%	16%	36%
Dividend Yield (Trailing)	2.61	0.39	2.81	1.08	1.31	2.58	0.04	-85%	8%	-59%	-50%
ROE (Trailing)	33.58	8.42	33.58	19.13	20.66	37.58	3.74	-75%	0%	-43%	-38%
Implied Value of Growth	24.3%	-0.65	0.77	0.44	0.28	1.08	-0.51	-368%	218%	81%	16%

Source: Bloomberg, Reuters Global Fundamentals, IBES CONSENSUS, J.P. Morgan Calcs

\* Implied Value Of Growth = (1 - EY/Cost of equity) where cost of equity = Bond Yield + 5.0% (ERP)

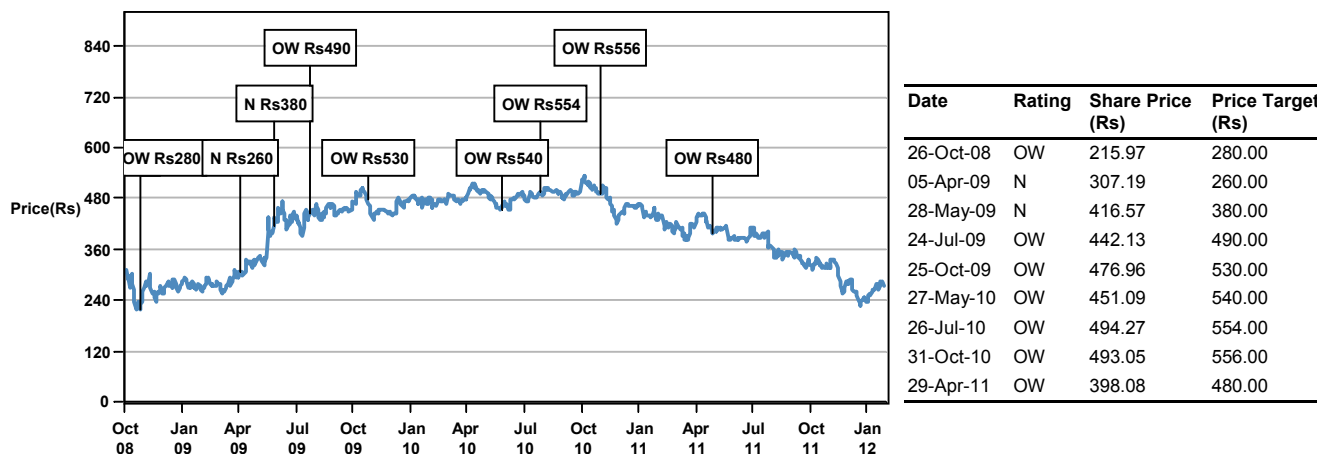
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Bharat Heavy Electricals (BHEL) (BHEL.BO, BHEL IN) Price Chart



Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends. Initiated coverage Oct 26, 2008.

The chart(s) show J.P. Morgan's continuing coverage of the stocks; the current analysts may or may not have covered it over the entire period.

J.P. Morgan ratings: OW = Overweight, N= Neutral, UW = Underweight

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IB clients*	52%	45%	36%
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IB clients*	72%	62%	58%

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