Capital Goods

October 28, 2011

BHEL

Bloomberg: BHEL IN EQUITY
Reuters: BHEL.BO

SELL

Accounting: GREEN
Predictability: GREEN
Earnings Momentum: AMBER

The humbling of an Indian legend

Dismal order intake, slow execution of the existing order backlog and deteriorating operating cash flows driven by declining customer advances has meant that BHEL's share price has underperformed the Sensex by 20% in the past year. With no catalyst for new orders until FY14, given the likely pressure on EBITDA margins (driven by the excess supply of boilers & turbines in India) and given BHEL's inability to scale-up other businesses, we initiate with a SELL.

Competitive position: MODERATE. Changes to this position: NEGATIVE

Over the past year the excess supply of boilers, turbines & generators (BTG) in India has grown. Whilst domestic production capacity of BTG has increased to 35GW (against annual demand of 20GW), 40GW of operating and upcoming power generation projects stand impacted due to delays in fuel procurement and approvals. Whilst BHEL bulls might argue that the stock's underperformance factors in this adverse supply-demand environment, we see downside risks to consensus estimates on the back of:

Deteriorating order book quality: Our analysis of BHEL's orders received from the private sector in FY10 and FY11 points to a slowdown in order execution (BHEL received 91% and 51% of its orders from the private sector in FY10 and FY11 respectively) as several of these orders are from utilities who either have negligible operational experience, or have financial closures pending or have uncertain access to fuel.

Likely margin pressure: Whilst bulls might argue that BHEL's EBITDA margins and return ratios haven't deteriorated to date, we expect deterioration from FY14 onwards as BHEL starts booking revenues in FY14 from orders taken from the private sector in FY10 & FY11. Our discussions with primary data sources suggest that in order to win private sector utility orders, BHEL has bid very aggressively over the past year.

Challenges in scaling up other businesses: BHEL continues to be known as a BTG company despite its presence across other verticals such as the railways, oil & gas and transmission. Our discussions with primary data sources suggest that BHEL has missed the bus in many such verticals due to risk averseness and the lack of technology tie-ups.

Valuation: Assuming WACC of 13.5% and perpetuity growth of 3% from FY22, we value BHEL's business at ₹290/share, implying 10.1x FY13 P/E and 8% downside. Whilst BHEL is trading at a ~40% discount to its 5-year average P/E and in-line to its peers (v/s its 5-year average premium of 17%), we expect BHEL to derate further given slowing revenue growth (10% CAGR in FY11-FY22 v/s 26% in FY06-FY11) coupled with shrinking EBITDA margins (fading to 14% by FY22 compared to ~19% over FY07-FY11).

Exhibit 1: Key financials

Year to March	FY09	FY10	FY11	FY12E	FY13E
Operating income (₹ mn)	270,120	336,526	425,383	472,314	513,200
EBITDA (₹ mn)	42,272	59,459	86,356	95,359	103,363
EBITDA (%)	15.6	17.7	20.3	20.2	20.1
EPS (₹)	12.7	17.7	24.7	26.8	28.8
RoE (%)	26.3	30.0	33.6	29.2	25.8
RoCE (%)	32.4	37.7	44.4	38.9	34.5
P/E (x)	24.7	17.8	12.7	11.7	10.9

Source: Company, Ambit Capital research

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Recommendation

CMP:	₹317
Target Price:	**₹290**
Downside (%)	***8***
EPS (FY12E):	₹26.8
Variance from consensus (%)	*(3)*

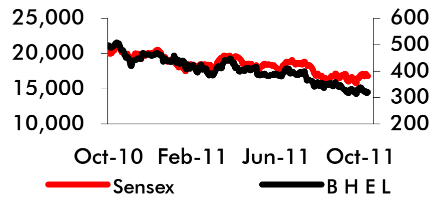
Stock Information

Mkt cap:	₹776bn/US$15,563mn
52-wk H/L:	₹511/309
3M ADV:	₹1,390mn/US$27.9mn
Beta:	0.8x
BSE Sensex:	17,289
Nifty:	5,202

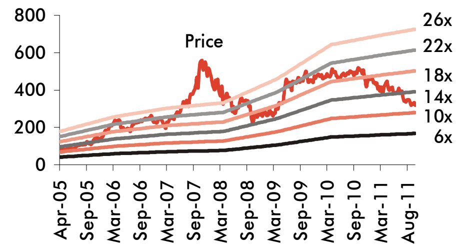
Stock Performance (%)

	1M	3M	12M	YTD
Absolute	-3.4	-14.3	-35.3	-31.8
Rel. to Sensex	-8.1	-8.1	-21.7	-16.1

Performance (%)



1-year forward P/E



Source: Bloomberg, Ambit Capital research

Company Financial Snapshot

Profit and Loss (consolidated)

(₹ mn)	FY11	FY12E	FY13E
Net sales	425,383	472,314	513,200
Optg. Exp	339,027	376,956	409,837
EBIDTA	86,356	95,359	103,363
Depreciation	5,464	6,752	8,173
Interest Expense	564	472	513
PBT	90,657	98,069	105,162
Tax	30123	32363	34703
PAT	60,534	65,706	70,459
Profit and Loss Ratios			
EBIDTA Margin %	20.3	20.2	20.1
Net Margin %	14.2	13.9	13.7
P/E (X)	12.7	11.7	10.9
EV/EBITDA (X)	7.8	7.1	6.5

Company Background

Bharat Heavy Electricals Ltd (BHEL), one of the largest engineering and manufacturing enterprises in India, dominates the power generation equipment market of the country with ~61% share of the total installed capacity. The company is in the midst of a rapid capacity expansion plan, having recently ramped up its capacity to 15GW and now is scaling it up to 20GW by FY2012. Besides, the company also derives ~20% of its revenues from the industrial segment under which, it manufactures and supplies capital equipment and systems to a host of sectors including Transmission, Transportation, Renewable Energy, Oil & Gas, etc.

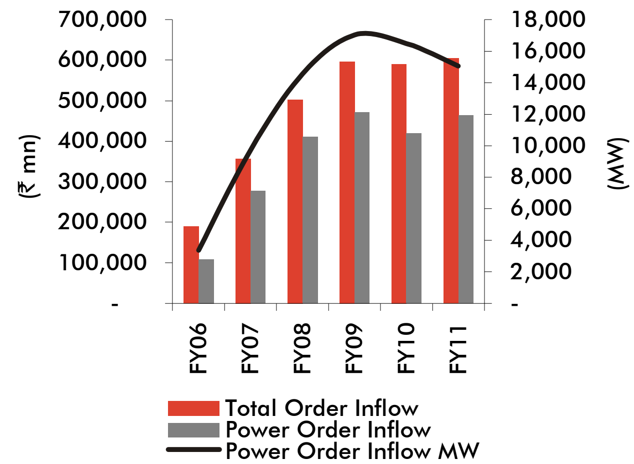
Balance Sheet (consolidated)

(₹ mn)	FY11	FY12E	FY13E
Total Assets	**596,136**	**669,647**	**733,558**
Net Fixed Assets	58,125	63,373	61,768
Current Assets	516,209	584,471	649,988
Other Assets	21,802	21,802	21,802
Total Liabilities	**596,137**	**669,647**	**733,559**
Networth	201,551	248,139	298,096
Debt	2,702	2,702	2,702
Current Liabilities	391,884	418,807	432,761
Others	0	0	0
Balance Sheet Ratios			
ROE %	33.6	29.2	25.8
ROCE %	44.4	38.9	34.5
Net Debt/Equity	-0.5	-0.4	-0.4
Total Debt /Equity	0.0	0.0	0.0
P/BV (X)	3.8	3.1	2.6

Cash Flow (consolidated)

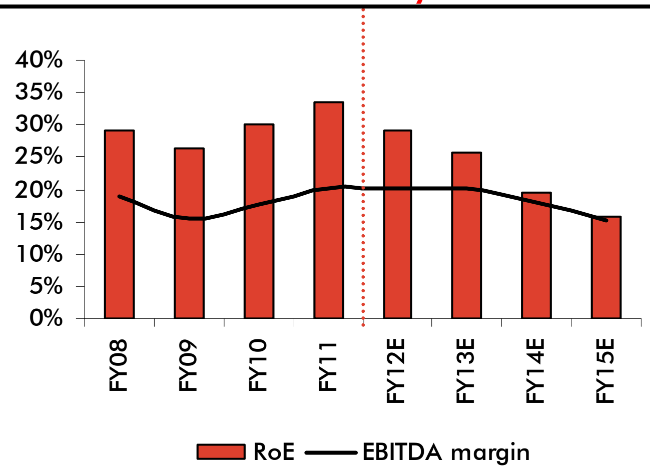
(₹ mn)	FY11	FY12E	FY13E
PAT	90,657	98,069	105,162
Depreciation	5,467	6,752	8,173
Change in Wkg Cap	(31,293)	(37,968)	(20,916)
Others	(37,840)	(31,890)	(34,190)
CF from Operations	**26,991**	**34,963**	**58,229**
Capex	(21,796)	(12,000)	(6,568)
Investments	(54)	-	-
CF from Investing	**(14,392)**	**(12,000)**	**(6,568)**
Change in Equity	-	-	-
Debt	1,292	-	-
Others	(15,391)	(19,591)	(21,015)
CF from Financing	**(14,099)**	**(19,591)**	**(21,015)**
Change in Cash	(1,500)	3,372	30,646

BHEL's languishing order inflow, rising competition and resultant margin pressure for new orders...



Source: GWEC, Ambit Capital research

...will lead to ROE deterioration in years to come



Source: Company, Ambit Capital research

An outstanding BTG franchise...

When we compare Capital Goods companies across various parameters such as:

- Financial strength (measured through debt/equity);
- Cash conversion (measured through CFO/EBITDA);
- Operating efficiency (measured through PAT margins and working capital turnover); and
- Return on capital (measured through RoCE and RoE),

BHEL emerges as one of the strongest Capital Goods companies alongside Thermax and Siemens. Moreover, in the Indian Capital Goods peer set, BHEL is the only company with a double-digit PAT margin.

Exhibit 2: BHEL is amongst the strongest companies in the India Capital Goods industry (quantitative scores in the left table and qualitative rankings in the right table)

	Debt/ Equity	PAT %	CFO/ EBITDA	RoCE	RoE	Wor. Cap. turnover
ABB	0.0	5.8	51%	37.1	23.2	9.6
Areva T&D	0.5	7.0	26%	46.1	34.4	6.0
BHEL	0.0	12.6	52%	44.7	29.4	10.4
BGR Energy	1.6	6.0	-11%	27.1	33.1	3.7
Crompton	0.5	6.8	67%	37.8	34.9	16.2
L&T	1.2	8.2	10%	19.6	22.9	3.4
Siemens	0.0	6.4	61%	45.6	30.1	104.2
Suzlon	1.7	2.4	70%	10.0	9.1	3.8
Thermax	0.0	8.0	75%	52.0	33.7	-56.6

Source: Capitaline, Ambit Capital research

	Debt/ Equity	PAT %	CFO/ EBITDA	RoCE	RoE	Wor. Cap. turnover	Overall score
ABB	Strong	Relatively strong	Relatively strong	Relatively strong	Relatively strong	Relatively strong	Relatively strong
Areva T&D	Relatively strong	Relatively strong	Average	Strong	Strong	Average	Relatively strong
BHEL	Strong	Strong	Relatively strong	Strong	Strong	Relatively strong	Strong
BGR Energy	Relatively weak	Relatively strong	Relatively weak	Relatively strong	Strong	Relatively weak	Average
Crompton	Relatively strong	Relatively strong	Strong	Relatively strong	Strong	Relatively strong	Relatively strong
L&T	Average	Relatively strong	Average	Average	Relatively strong	Relatively weak	Average
Siemens	Strong	Relatively strong	Strong	Strong	Strong	Strong	Strong
Suzlon	Relatively weak	Relatively weak	Strong	Relatively weak	Relatively weak	Relatively weak	Relatively weak
Thermax	Strong	Relatively strong	Strong	Strong	Strong	Strong	Strong

LEGEND: Strong Relatively strong Average Relatively weak

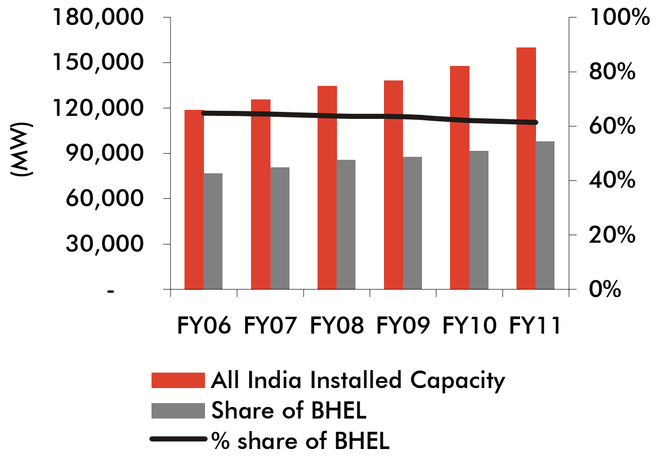
So why has BHEL been so successful? As we show in this section, the answer lies in its quasi-monopoly hold on the Indian BTG market which in turn is underpinned by its superior technology and preferential access (historically) to NTPC contracts.

A quasi–monopoly position in India

With an installed equipment base of 117GW, BHEL is a market leader in Indian boiler, turbine & generator manufacturing with market share in excess of 60%. Also, for orders already placed in the XIIth Five Year Plan (97GW were placed until May 23, 2011 out of the total planned capacity of 100GW in the XIIth Plan), BHEL holds ~50% market share.

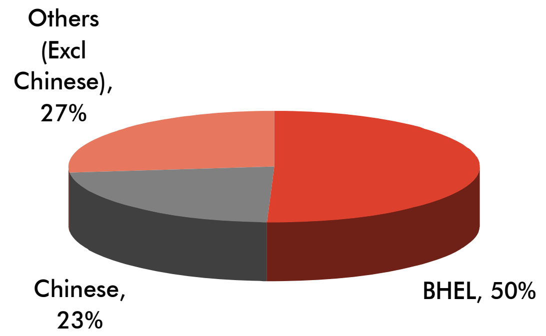
To some extent, BHEL's market share is driven by Government regulations as seen in the recent NTPC bulk tender (India's largest power generator accounting for ~35% of India's installed capacity) wherein NTPC was compelled to give 50% of its BTG orders to BHEL.

Exhibit 3: BHEL accounts for 61% of the country's cumulative installed capacity ...



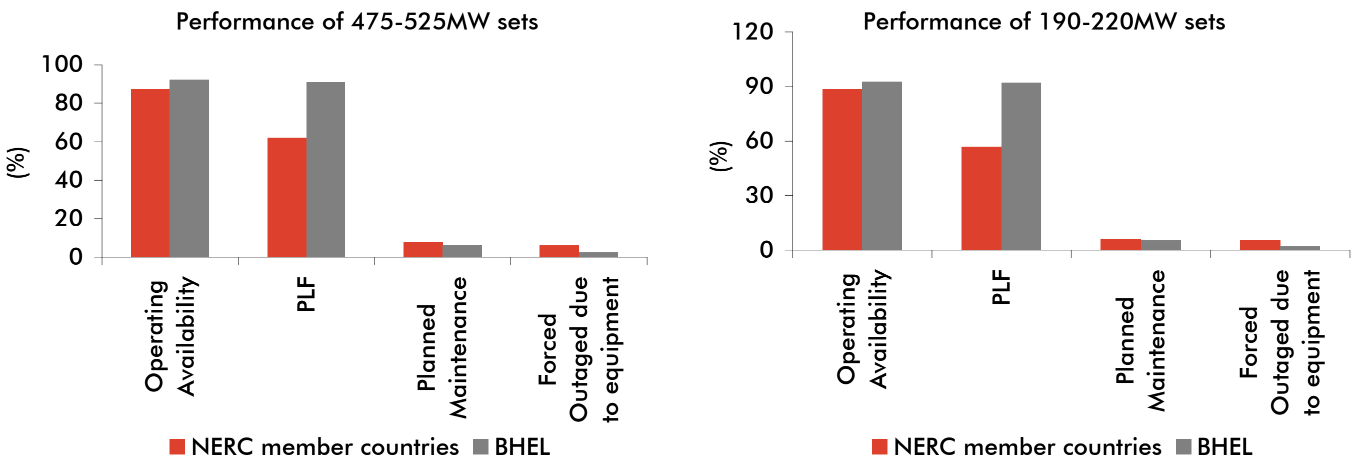
Source: Company, Ambit Capital research

Exhibit 4: ... and 50% in the capacity under construction for the XII[th] plan



Source: Company, Ambit Capital research

Exhibit 5: BHEL's equipment has consistently surpassed international benchmarks



Source: North American Electric Reliability Council (NERC); 2010, Company, Ambit Capital research. Note: NERC member countries (North America, Canada, Europe part)

On KPIs, BHEL's equipment has performed better than global peers based in North America, Canada and Europe. BHEL's average operating availability, PLFs, planned maintenance and forced outages (in 475-525 MW sets) at 92%, 91%, 8% and 6% respectively compares favourably to the industry average of 87%, 62%, 6% and 2% respectively.

With regards to profitability, BHEL enjoys the highest operating margins amongst listed Capital Goods firms in India thanks to its backward integration and large network of sub-contractors which builds upon its cost advantages and superior operational performance (see exhibit 5). This superior operational performance helps BHEL price its products at a premium which industry sources say is around 10-15% vis a vis its Indian and Chinese competitors.

Exhibit 6: BHEL enjoys the highest operating margins amongst listed Capital Goods firms in India

	BHEL	Thermax	ABB	Areva	Crompton	Siemens	Suzlon	L&T
Raw material/sales	45.8	69.0	35.6	68.5	58.8	31.9	69.7	41.1
Employee expenses/sales	12.9	8.8	7.8	8.6	11.7	7.3	9.4	7.3
Other expenses/sales	21.0	12.8	55.0	11.1	16.6	48.2	17.9	35.8
EBITDA margin	**20.3**	**9.4**	**1.6**	**11.8**	**12.9**	**12.5**	**3.0**	**15.7**

Source: Capitaline, Ambit Capital research, Note: FY11/CY10 data taken based on the classification in Capitaline

Superior technology underpinned by R&D and technology tie-ups

A key driver of BHEL's market leadership since its creation in 1964 has been the lower heat rate of its boilers, which results in superior fuel efficiency. The lower heat rate arises from BHEL's ability to customize its boiler as per the ash and moisture content of the coal.

Our discussions with senior engineers in the power industry suggests that BHEL has been a pioneer in customizing the design of the combustor - the main component that drives the efficiency of the boiler and which is measured by a fraction of fuel energy converted into steam energy. In other words, the higher the fuel energy that is converted into steam energy, the lower is the heat rate and the greater the fuel efficiency.

BHEL's expertise in designing combustors has come through R&D spend. BHEL expended 2.3% of its FY11 revenues as R&D, a higher spend figure than incurred by domestic engineering companies like Thermax, Crompton Greaves, LMW and L&T – see table below. Arguably, BHEL is able to extract more value from this R&D spend than its peers because of: (a) its ability to attract high quality engineers from the Indian Institutes of Technology (the IITs); and (b) its technology tie-ups with global leaders.

Exhibit 7: BHEL's R&D spend is by far the highest in the industry (figures represent FY11/CY10 numbers)

	BHEL	Thermax	L&T	Crompton	BEML	Lakshmi Machine Works
Sales	421,915	47,406	438,417	60,143	26,280	17,733
R&D expense	9,819	162	1,254	870	943.3	137.7
(as % of sales)	**2.3%**	**0.3%**	**0.3%**	**1.4%**	**3.6%**	**0.8%**

Source: Capitaline, Ambit Capital research

Exhibit 8: BHEL's technological tie-ups with global leaders

Partner	Technology
Alstom	Supercritical boilers
Siemens	Supercritical turbine generators
GE	Gas turbine
Sheffield Forgemasters	Large size forgings for turbines and generators up to 1,000mW rating
Toshiba	MoU signed to form a JV for high end Transmission and Distribution

Source: Company, Ambit Capital research

Exhibit 9: SWOT analysis for BHEL

Strengths	Weaknesses
• Strong franchise with market leadership in India's BTG segment (60%+ market share in cumulative installed capacity). • Superior technology due to technological alliances with reputed global partners (Alstom, Siemens, GE, etc). • BHEL has a cost advantage due to large degree of in-house manufacturing and dedicated vendor base (25,000+). • BHEL has a strong balance sheet with net cash (-0.5x net debt to equity v/s 0.3x for peers).	• BHEL has long delivery cycles in comparison with international players (particularly the Chinese). • BHEL is unable to provide supplier's credit and soft loans for financing power projects. • High revenue dependence on BTG as BHEL missed the opportunity in metros and offshore oil rigs (due to lack of technology). Also, BHEL has been a late entrant on Extra High Voltage, 765kV and GIS • 28% of BHEL's order book is slow in execution given that these orders are from domestic private sector power utilities with negligible operating experience and shaky finances.
Opportunities	**Threats**
• Huge opportunity across segments such as the railways (metro opportunity in India of US$24bn), Transmission (~US$12bn opportunity in PGCIL's 9 high capacity transmission corridors) and oil & gas (deep water investment opportunity of US$137bn over the next five years). • Life expansion program for old power plants (average age of NTPC's plants is 18 years) which are due for repairs and refurbishment. • Huge export opportunity across countries like Middle East and Africa (demand for electricity is likely to increase at a CAGR of 18.5% over FY11-15 to 1,508TWh).	• Persistent policy paralysis in New Delhi has delayed environment, land and fuel clearances for the power generation companies. Combined with losses for SEBs (as tariff hikes were not approved) has meant that power generation utilities in India are not inclined to order new BTG equipment. • There is no catalyst for new BTG ordering in India until FY14 (when orders for the XIII Five Year Plan will be tendered). • Rising competition in the Indian BTG market given the entry of L&T, BGR, Thermax, Bharat Forge Alstom and JSW Toshiba (planned capacity of 35GW+ in a 20GW p.a. market) • Poor financial health of SEBs (40% share in BHEL's FY11 order inflow) could postpone revenue recognition for BHEL.

Source: Ambit Capital research, Industry, Company

…under serious competitive pressure

Consistent fall in BHEL's market share

BHEL has consistently lost market share (see exhibit 10) to new players like L&T (technology tie-up with Mitsubishi), BGR (technology tie-up with Hitachi), Bharat Forge (technology tie-up with Alstom), and entrants from China (Shanghai Electric) and Korea (Doosan).

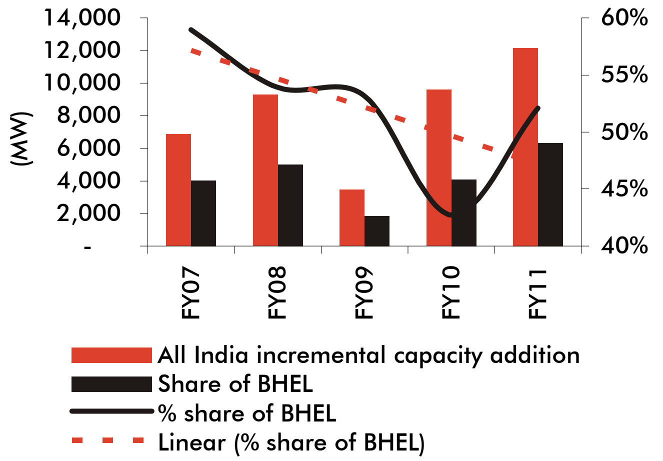
BHEL's loss in market share (and the ease with which its competitors have found a foothold in India) is due to: (a) the rising share of BTG orders coming from cost-sensitive new independent power producers; (b) the relative ease with which BTG technology can now be accessed by a range of manufacturers; and (c) the Indian Government's willingness to encourage a much larger BTG manufacturer base beyond BHEL (and hence the Government's unwillingness to impose restrictions on cheaper imports from East Asia).

With the share of IPPs in India's installed capacity increasing from 8% in FY2007 to 14% in FY2011, BHEL's market share decreased from 59% (FY2007) to 52% (FY2011). It is to be noted that whilst this period saw a record annual ordering run rate in excess of 30GW, BHEL's order booking remained flat in GW terms (~16GW). Given that industry experts now expect 50% reduction in the annual ordering run rate (to 16.5GW over FY12-FY14), BHEL will be under even more competitive pressure.

In fact, there are a range of compelling reasons to believe that BHEL will continue losing market share. Firstly, BHEL has now lost its preferential status with respect to NTPC (~75% of NTPC's thermal equipment commissioned so far are from BHEL). Note that the recent NTPC bulk tender was the last chance for BHEL to enjoy its preferential status as henceforth NTPC will be under no compulsion to give orders to BHEL. In fact from now, BHEL has to compulsorily bid under the competitive bidding process for all Indian BTG orders versus earlier preferential basis.

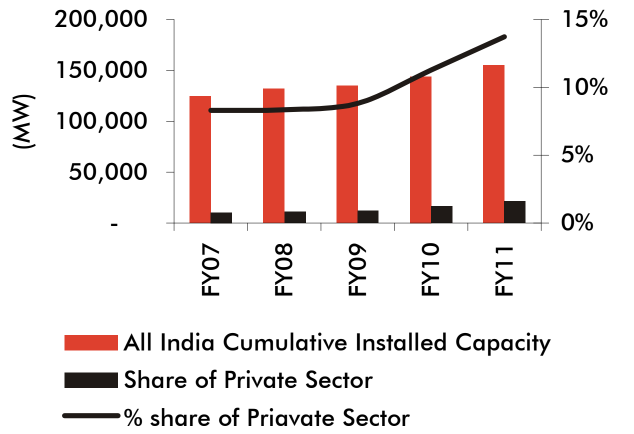
Secondly, our discussion with primary data sources suggests that BHEL's long delivery schedule (36-48 months vs 28-36 months for other domestic suppliers, Chinese and the Korean suppliers) coupled with the inability to match the prices offered by the Chinese and Koreans (who are least 15% cheaper than BHEL) are critical factors in deterring the IPPs from placing orders with BHEL.

Exhibit 10: BHEL's share in the incremental capacity addition has fallen from 59% in FY07 to 52% in FY11 …



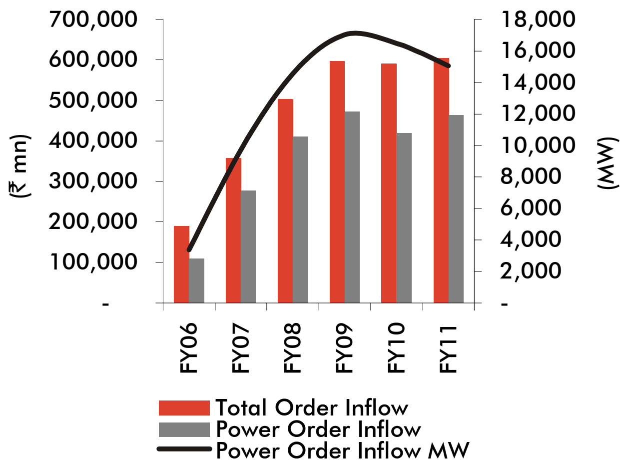
Source: CEA, Company, Ambit Capital research

Exhibit 11: …as the share of private sector in India's installed capacity increased from 8% to 14%



Source: CEA, Ambit Capital research

Exhibit 12: BHEL's languishing order inflow…



Source: Company, Ambit Capital research

Exhibit 13: …coupled with its deemed L2 status in recent tenders shows how much its franchise is under pressure

Player	Bid (₹ mn/MW)
Boilers	
Doosan	16.4
L&T	17.2
BGR Energy	17.9
BHEL	18.0
Thermax	NA
Turbine generators	
BGR Energy	9.7
JSW Toshiba	10.4
L&T	10.4
BHEL	12.4
Bharat Forge Alstom	NA

Source: Industry, Ambit Capital research, NA-Not Available, Note: These quotes represent those made in NTPC bulk tender and are only approximates based on our discussion with various industry participants and media reports

BHEL's order quality is deteriorating

Our analysis of BHEL's orders received from the private sector in FY2010 and FY2011 implies a slowdown in execution (BHEL received 91% and 51% of its orders from the private sector in FY10 and FY11 respectively) as several of these orders are from private sector utilities who either have negligible operational experience, or have financial closure pending or have issues with fuel tie-ups. Here are some numbers vis a vis the low quality of BHEL's current customer base:

- 75% and 48% of the orders received in FY10 and FY11 respectively are from customers who have negligible operating history (we do not rate captive power plant operators as experienced players as running an IPP is an altogether more difficult experience). As on March 2011, the share of such inexperienced plant operators in BHEL's order backlog is 28%.
- 16% and 22% of the orders received in FY2010 and FY2011 respectively are from projects that are awaiting financial closure. As on March 2011, the share of such projects in BHEL's order backlog stands at 8%.
- 18% and 13% of the orders received in FY2010 and FY2011 respectively are from customers who are awaiting fuel tie-ups. As on March 2011 their share in BHEL's order backlog stands at 7%.

Exhibit 14: BHEL's order inflow analysis for FY10 and FY11

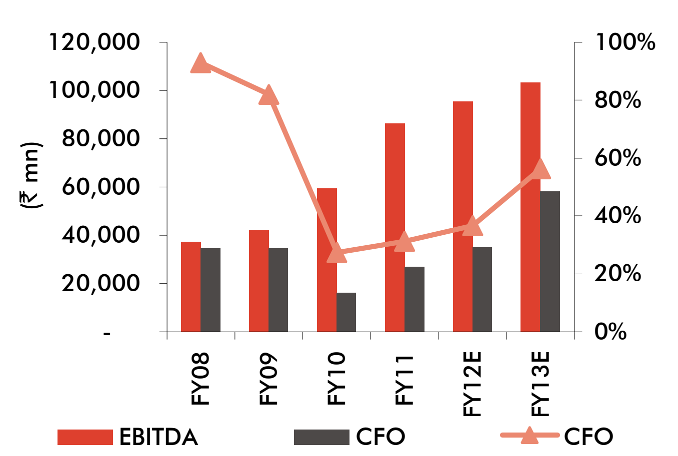
% of orders with negligible operation history			% of orders pending equity tie-up			% of orders pending fuel tie up		
Project	**Group**	**mW**	**Project**	**Group**	**mW**	**Project**	**Group**	**mW**
FY10								
Angul	Monnet Power	1,050	Abhijit Power	Abhijeet	1,080	Pipavav Energy	Videocon	1,200
Angul	Jindal India Thermal Power	1,200	Jhabua Power	Avantha	600	Surana Power	Sura	420
Pipavav Energy	Videocon	1,200	Korba West Power	Avantha	600	Hinduja National Power	Hinduja	1,040
Abhijit Power	Abhijeet	1,080						
Jhabua Power	Avantha	600						
Surana Power	Surana Industries	420						
Hinduja National Power	Hinduja	1,040						
Korba West Power	Avantha	600						
Ideal Energy	IRB Infra	540						
Adhunik Power	Adhunik Metalliks	540						
Indiabulls Power	Indiabulls	2,700						
Total (A)		**10,970**			**2,280**			**2,660**
FY11								
Indiabulls Power (Nasik and Amravati Phase II)	Indiabulls	2,700	Visa Power Ltd/ Chhattisgarh	Visa	1,200	Bajaj Hindusthan/ Lalitpur	Bajaj (Shishir Bajaj)	1,980
Dainik Bhaskar Power/ Chhattisgarh	Dainik Bhaskar	1,200	Bajaj Hindusthan/ Lalitpur	Bajaj (Shishir Bajaj)	1,980			
Visa Power Ltd/ Chhattisgarh	Visa	1,200						
Bajaj Hindusthan/ Lalitpur	Bajaj (Shishir Bajaj)	1,980						
Total (B)		**7,080**			**3,180**			**1,980**
Total		**18,050**			**5,460**			**4,640**
as % of total order backlog*		**28%**	as % of total order backlog		**8%**	as % of total order backlog		**7%**

*Source: Industry, Ambit Capital research, Note: *It is assumed that none of these orders have been executed till date*

Falling cash conversion as working capital cycle deteriorates

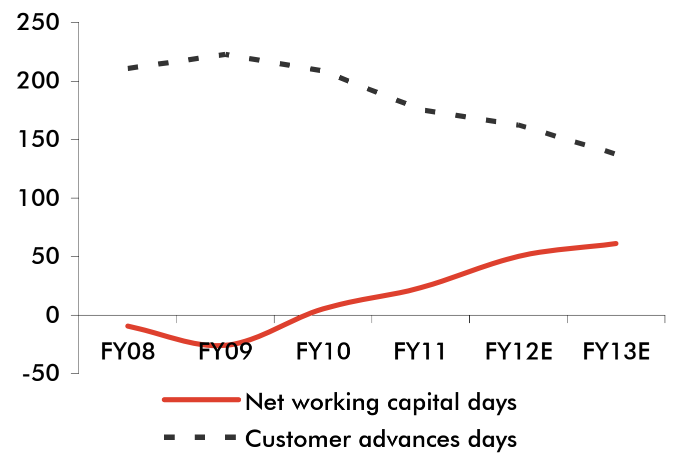
Since FY09, BHEL's cash conversion (i.e. CFO/EBITDA) has significantly deteriorated. Debtor days increased from 217 to 236 and customer advances (as a percentage of the order backlog) decreased to 12.5% in FY2011 from 14.1% over FY2009. Whilst BHEL's management has not given any reason for the jump in debtor days, the increased share of the private sector in BHEL's order intake in FY10 (BHEL received 91% of order from private sector in FY2010) could be one of the reasons for the falling advances. This in turn could be due to rising competition (as multiple BTG vendors vie to provide better payment terms to the utilities).

Exhibit 15: BHEL's CFO/EBITDA conversion has deteriorated…



Source: Company, Ambit Capital research

Exhibit 16: …as working capital increases on the back of a fall in customer advances

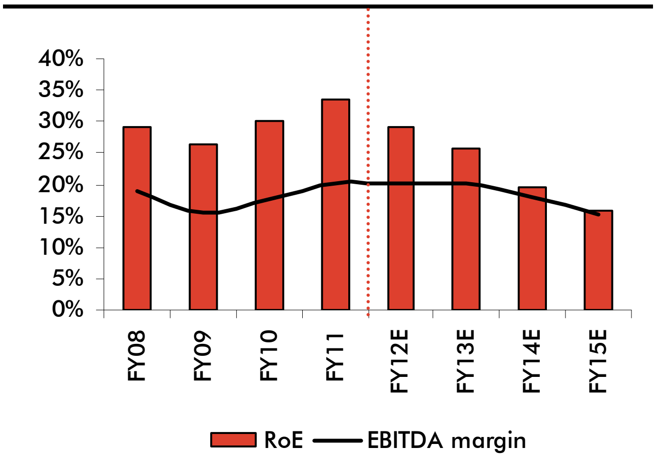


Source: Company, Ambit Capital research

Although EBITDA margins and return ratios for BHEL haven't deteriorated so far, we expect these ratios to deteriorate sharply from FY14 onwards as BHEL starts booking revenues from the new orders bagged over the last 2 years amidst stiff competition and at lower margins (than were the norm until FY11).

This coupled with the fact that out of 40GW of operating and upcoming power capacity in India has been impacted by the policy paralysis which has beset the country (see exhibit 19,20) does not augur well for BHEL's revenues over the next three years.

Exhibit 17: We expect RoEs to deteriorate from FY14 onwards …



Source: Company, Ambit Capital research

Exhibit 18: …on the back of excess supply of BTGs in India

Company/Group	Boiler (mW)	Turbine generator (mW)
BHEL	20,000	20,000
L&T – Mitsubishi	4,000	4,000
BGR Energy – Hitachi	4,000	4,000
GB Engineering – Ansaldo	2,000	-
Thermax – Babcock & Wilcox	3,000	-
JSW – Toshiba	-	3,000
Bharat Forge – Alstom	-	5,000
Total supply (annual)	**33,000**	**36,000**
Potential demand (annual)	**20,000**	**20,000**

Source: Industry, Ambit Capital research

40GW of projects delayed as the fuel crisis deepens and clearances remain elusive

According to Mr. Ashok Khurana, Director General of the Association of Power Producers, across India, 40GW of operating and upcoming power capacity has been impacted due to issues relating to fuel procurement and delays in securing governmental approvals. The situation is now so grave that it is likely that some of these projects might run the risk of defaulting on their debt commitments unless the contracts are renegotiated.

Mr Khurana further highlights that ~20GW of the above 40GW are entirely impacted due to fuel supply issues. Whilst 13GW are affected (likely to incur losses or single digit RoEs) due to the regulatory change in Indonesia (which mandates that from 23rd September onwards Indonesian coal will be benchmarked to a set of international and domestic indices), ~7GW of projects are affected (operating at lower PLF) as they are getting only 50%-65% of the fuel committed to originally by Coal India.

Exhibit 19: Projects in limbo due to their dependence on imported coal

Developer	Project	MW
Adani Power	Tiroda	1,980
Adani Power	Mundra	2,640
Lanco	Udupi	508
Tata Power	Mundra	4,000
JSW Energy	Ratnagiri	300
Reliance Power	Krishnapatnam	4,000
Total		**13,428**

Source: Industry, Ambit Capital research

Exhibit 20: Projects operating at lower PLFs due to inadequate supply of coal

Developer	Project	MW
Lanco	Amarkantak I and II	600
Reliance Power	Rosa	1,200
NTPC	Farakka	2,100
NTPC	Khalgaon	2,340
KSK	Wardha Warora	540
Total		**6,780**

Source: Industry, Ambit Capital research

Challenges in scaling up other businesses

BHEL continues to be known as a boiler turbine and generator (BTG) company despite its longstanding presence across other verticals such as the railways, oil & gas and transmission & distribution. Contribution from the BTG segment (i.e. the power generation segment) continues to dominate revenues with a share of 80% in FY11 versus 71% in FY07 (revenue CAGR in power generation stood at 29% over FY05-FY11 compared with 19% for the industry division). The reason for the continued dominance of the power segment in BHEL's revenues is that its other divisions have simply not been able to scale up.

Railways: BHEL missed the bus on metros

Whilst BHEL is a market leader in the Indian electrical locomotives segment up to 5,000 HP (where it has a 50%+ market share), it has clearly missed out on the metro opportunity in India. None of the key Indian metro contracts so far have gone to BHEL.

Our discussion with primary data sources highlight BHEL's inability to enter into tie-ups with either GE, Toshiba or Alstom (technology partners for building metro rail coaches). Consequently, BHEL over the last five years has lost orders up to ~₹83bn, which includes orders for the:

- Delhi Metro (to Bombardier which bagged orders for 614 coaches for ₹46bn),
- Bangalore Metro (BEML bagged orders for 150 coaches for ₹16.7bn),
- Chennai Metro (Alstom bagged orders for 168 coaches ₹14.7bn),
- Mumbai Metro (China's Nanjing bagged orders for 64 coaches for ₹6bn).

Going forward metro projects have been proposed in Kanpur, Kochi, Gurgaon, Jaipur, Bhopal and Lucknow. BHEL's chances of landing these contracts seems low.

Exhibit 21: BHEL has completely missed the metro opportunity completely

Project	Winner	No. of coaches	₹ bn
Delhi Metro	Bombardier	614	46.0
Bangalore Metro	BEML	150	16.7
Chennai Metro	Alstom	168	14.7
Mumbai Metro	Nanjing	64	6.0

Source: Industry, Ambit Capital research

T&D: BHEL missed the bus on Extra High Voltage, 765kV and GIS

Market share in PGCIL transformer orders in XIth Plan

Project	Market Share
Chinese/Korean	45.3%
Crompton Greaves	29.6%
European majors	12.2%
Others	12.9%

Source: Industry, Ambit Capital research

BHEL entered into a tie-up with Toshiba as late as February 2010 to gain exposure to extra high voltage alternating current (EHVAC) and the ultra high voltage alternating current (UHVAC) range (including 765kV transformers, reactor and gas insulated switchgears (GIS)).

Unfortunately for BHEL, by 2010 the Chinese, Koreans and Crompton Greaves (CRG) had already established its dominance with PGCIL (India's largest transmission utility company). In PGCIL's transformer orders placed so far in the XIth Five Year Plan, the market share of Chinese and Koreans is 45% and the market share of CRG stands at 30%.

Oil & Gas: BHEL missed the bus on technology for offshore oil rigs

Since inception BHEL has been present only in the onshore oil rig segment. As a result it has completely missed the opportunity to make a mark in the offshore segment, which is the main driver of the oil rig business in India. This is on the back of BHEL's failure to find a suitable partner for manufacturing deep sea offshore oil rigs. Our discussions with primary data sources highlight BHEL's non willingness to take risk of damages in the event of rig malfunctioning (eg BP was told to pay a fine in the range of $5.4-$21.4bn in the gulf of Mexico oil spill case) as the main reason for this miss.

The miss is likely to cost BHEL given that over the past couple of decades, the importance of offshore production (particularly deepwater) in global oil supply has increased. The International Energy Association says that more than 50% of all new oil & gas reserves found in the past decade are offshore. At present ~30% (25mbpd) of the 85mbpd of oil consumed globally comes from offshore oil wells. Of this, 5mbpd comes from deepwater, with its share expected to increase to 50% by CY15.

Exhibit 22: Porter's analysis of the Indian BTG industry

Bargaining power of suppliers
Medium

Steel constitutes the bulk of the raw material requirements. Given that the BTG industry is a major consumer of steel reduces the bargaining power of steel suppliers.

Continued shortage of skilled man power, sub-contractors and foundries (for example, for heavy castings and forgings) increases the power of ancillary suppliers.

Intensity of competition
High

Given excess supply in the system (planned capacity of 35GW+ in a 20GW p.a. market) coupled with slowing demand from power producers (40GW projects delayed due to fuel and clearances etc), the competitive intensity in the Indian BTG industry is rising rapidly. This is now clearly leading to significant price cuts by BTG manufacturers as they vie to win new business.

Bargaining power of buyers
High

Given the excess supply in the BTG industry, buyers have several options to choose from and they are using this to push prices down. This is evident from BGR's ~20% lower bid in NTPC's 9x800 MW turbine tender compared to Bharat Forge Alstom's bid in NTPC's 11x600 MW tender.

Barriers to entry
Medium

Whilst technology is the biggest entry barrier, many new domestic players have overcome the same by entering into JVs/technical alliance with global technology leaders (L&T-Mitsubishi, BGR-Hitachi, Thermax-Babcock, Bharat Forge-Alstom, JSW-Toshiba etc).

Improving
Unchanged
Deteriorating

Threat of substitution
Low

Renewable energy is the only replacement to thermal power. However, given the better economics of thermal power, it will take time for renewables to catch up.

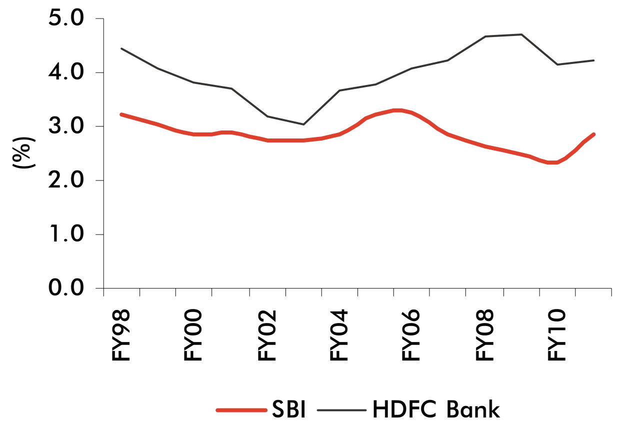
Source: Ambit Capital research

Is BHEL another SBI in the making?

State-owned banks, like the State Bank of India (SBI), enjoyed a quasi-monopoly until the early nineties. Then in between 1993-95, the RBI awarded banking licenses to 10 new private sector banks. Since then, two other new private sector banks (Kotak Mahindra Bank and Yes Bank) have also been awarded banking licenses.

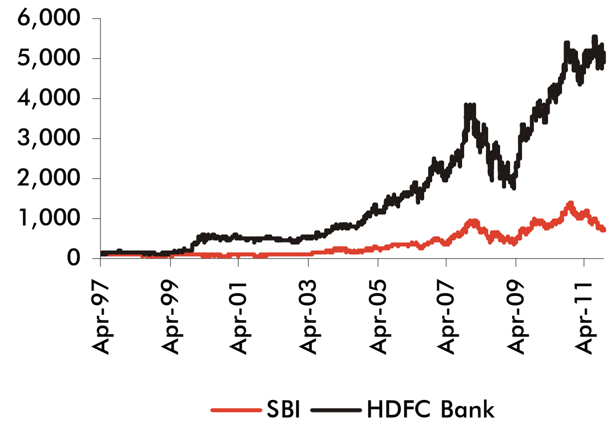
The entry of these new generation private sector banks (capitalizing on their strengths of better incentivized employees, better technology and less meddling from politicians) has meant increasing competition for the state-owned banks, including SBI (which is still by far the biggest bank in India accounting for ~50% of outstanding advances). As a result, in the last 15 years the spread between SBI and HDFC Bank has consistently increased (see exhibit 24) and this is reflected in the relative share price performance of SBI vs HDFC Bank (the leading private sector bank).

Exhibit 23: Spreads between HDFC Bank and SBI have consistently increased since SBI lost its monopoly status



Source: Industry, Ambit Capital research

Exhibit 24: ... resulting in HDFC Bank's share price outperforming



Source: Industry, Ambit Capital research

BHEL's position today seems similar to that of SBI in the mid-90s: the dominant player for the first time facing serious competition from the private sector.

Like SBI, BHEL seems destined to lose market share (and hence underperform its private sector peers' share prices) as:

- Its preferential status vis a vis NTPC orders is taken away;
- A gamut of new players with technology from global giants like Mitsubishi, Alstom, Hitachi, Siemens, B&W enter the fray;
- Price sensitive and working capital constrained private sector utilities become more important in Indian BTG.

Whilst the early signs of BHEL losing market share are already visible (see exhibit 10) we fear a more serious dent in BHEL's market share going forward given that BHEL has just lost preferential status with respect to NTPC (more than 80% of NTPC's coal based thermal equipments are manufactured by BHEL).

Furthermore, given that BHEL is looking at relaxing exclusivity status with its foreign technology partners and allow them to sell in India directly does not augur well for BHEL (as it is likely to intensify competition further). The rationale for doing this is to expect the foreign technology partner to reciprocate and give BHEL introduction to markets where they are strong (given that BHEL wants to diversify its exposure by increasing focus on exports as India is now a very competitive market).

For instance BHEL is now considering allowing Alstom to sell super critical equipment in India despite signing an exclusive technological agreement with Alstom for selling super critical equipment in India only through BHEL. In return, BHEL, presumably, expects client introductions from Alstom in geographies wherein Alstom is strong.

Key assumptions and estimates

We expect BHEL to report revenue CAGR of 9.8% and PAT CAGR of 7.9% over FY11-FY13 driven by the assumptions shown in the table below.

Exhibit 25: Key assumptions and estimates for BHEL (all figures in ₹ mn unless otherwise mentioned)

	FY10	FY11	FY12E	FY13E	Comments
Key assumptions					
Order inflows	**590,370**	**605,070**	**523,096**	**392,598**	
Power	419,820	463,930	359,446	194,261	Given the slowing pace of orders in the power sector over the next couple of years (due to the fuel crisis coupled with the fact that over 90% of the XII[th] plan ordering is already over), we expect FY12 and FY13 order inflow of 12GW and 5.8GW respectively (FY09-FY11 yearly average has been ~16GW).
Industry	134,840	103,750	124,500	149,400	We model 20% order inflow growth for this business over FY12 and FY13 respectively (in-line with the historical average of 19% over the last six years). The main driver of this is likely to be PGCIL's tender for high capacity transmission corridors coupled with a railway tender for next generation EMUs at Kachapura West Bengal
Exports	35,710	37,390	39,149	48,936	Given the global slowdown, we model only 5% order inflow growth for this business during FY12.
Order backlog	**1,443,000**	**1,641,450**	**1,679,761**	**1,545,540**	We have assumed the order backlog to decline at a CAGR of 3.0% over FY11-FY13 given 14% and 25% decline in order intake in FY12 and FY13 respectively.
Bill to book (x)	0.29	0.30	0.30	0.31	
Key estimates					
Sales	**336,526**	**425,383**	**472,314**	**513,200**	Based on the assumptions highlighted above, we expect revenues to grow at CAGR of 9.8% over FY11-FY13 (FY09-FY11 CAGR has been 25.5%).
Sales (YoY growth) (%)	24.6	26.4	11.0	8.7	
EBITDA	**59,459**	**86,356**	**95,359**	**103,363**	We expect BHEL to maintain margins until FY13 given that most of the orders due for execution over the next couple of years represent those which were bagged before FY10 (when BHEL enjoyed a pseudo monopoly). Consequently, we expect EBITDA CAGR of 9.4% over FY11-FY13 (FY09-FY11 CAGR has been 42.9%).
EBITDA margin (%)	17.7	20.3	20.2	20.1	
EBITDA (YoY growth) (%)	40.7	45.2	10.4	8.4	
Interest expense	367	564	472	513	BHEL is virtually a debt free company with a consolidated net debt to equity of -0.5x.
PBT	66,209	90,657	98,069	105,162	
Tax rate (%)	34.6	33.2	33.0	33.0	We assume a stable taxation rate of 33% for the company.
Adj. PAT	**43,198**	**60,474**	**65,706**	**70,459**	Consequently, we expect net profit CAGR of 7.9% over FY11-FY13 (FY09-FY11 CAGR has been 39.6%).
PAT (YoY growth) (%)	39.2	40.0	8.7	7.2	
Cash flow from operations (CFO)	16,301	26,991	34,963	58,229	Whilst we expect BHEL to continue to be CFO positive, we expect deterioration in cash conversion (assumed working capital days of ~61 in FY13 days as against 23 days in FY11) primarily on the back of lower customer advances (assumed customer advances of ~137 days in FY13 v/s 175 days in FY11) as order inflow momentum slows down.
Cash flow from investments	(9,418)	(14,392)	(12,000)	(6,568)	We model capex of ₹12bn in FY12 in order to ramp up its production capacity from 15GW to 20GW.
Free cash flow	6,883	12,599	22,963	51,661	
Cash flow from financing	(11,614)	(14,099)	(19,591)	(21,015)	We assume a dividend payout of 25% over both FY12 and FY13 respectively which is in line with the historical average of the last five years
Overall change in cash	(4,731)	(1,500)	3,372	30,646	

Source: Company, Ambit Capital research

For FY12 and FY13, our estimates are below consensus on topline as well as bottomline. We believe our lower bill-to-book ratio assumption to be the reason for lower topline and bottomline growth (note that we have maintained our margin assumptions for FY12 and FY13) vis a vis consensus. We assume slower execution of BHEL's order backlog given that more than 40GW of operating and upcoming power capacity in India has been stalled due to pending financial closures or issues relating to fuel tie-ups.

Exhibit 26: Ambit v/s consensus estimates for BHEL

	Consensus	Ambit	% change
Sales (₹ mn)			
FY12E	485,342	472,314	-2.7
FY13E	551,536	513,200	-7.0
EPS (₹)			
FY12E	27.5	26.8	-2.5
FY13E	31.1	28.8	-7.6

Source: Bloomberg, Ambit Capital research

Absolute valuation

We have valued BHEL using a free cash flow (FCFF) model. Our FCFF metric is '*cash profit – increase in working capital – capex*'. Our FCFF model has two distinct phases:

- **FY12-FY22**: We model each year in detail and assume that: (i) revenues will grow at a CAGR of 9.6% (FY01-11 revenue CAGR has been 21%); and (ii) operating margins would gradually fall and stabilize at ~14.0% by FY22 (from 20.3% in FY11) given the rising competitive intensity;
- **From FY23:** FCFF is assumed to grow at a CAGR of 3%.

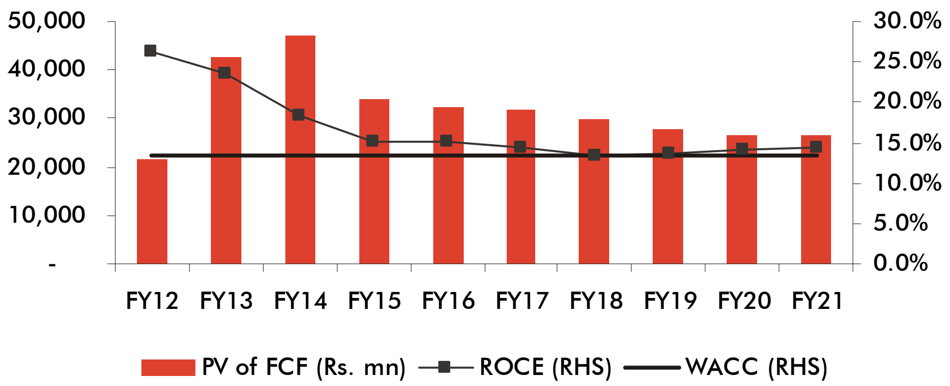
Given the deteriorating margin profile coupled with rising working capital requirement, we expect BHEL's RoCE to gradually reduce from 26% in FY11 to 14% in FY22. Based on these assumptions and assuming a weighted average cost of capital (WACC) of 13.5%, our FCFF model values BHEL at ₹290 per share (implying FY12 P/E of 10.8x and FY13 P/E of 10.1x) and 8% downside.

Exhibit 27: Our free cashflow (FCF) valuation for BHEL is ₹290/share

Period	₹ mn
Net PV of free cash flows for BHEL	346,524
Terminal value	264,839
Total	**611,363**
Less net debt	(97,734)
Value of BHEL	709,097
Total no. of shares (in mn)	2,448
Value per share (₹/share)	**290**

Source: Ambit Capital research

Exhibit 28: FCFF profile of BHEL

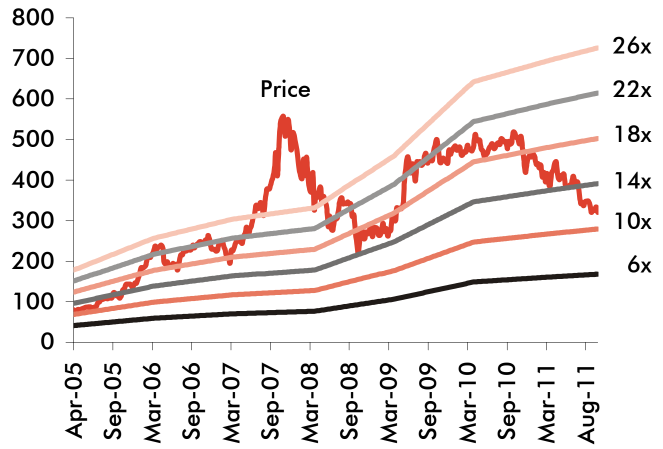


Source: Company, Ambit Capital research

BHEL is currently trading ~40% below its 5-year mean P/E having witnessed a 17% correction post the 1QFY12 results, a quarter in which BHEL did not bag even a single power sector order.

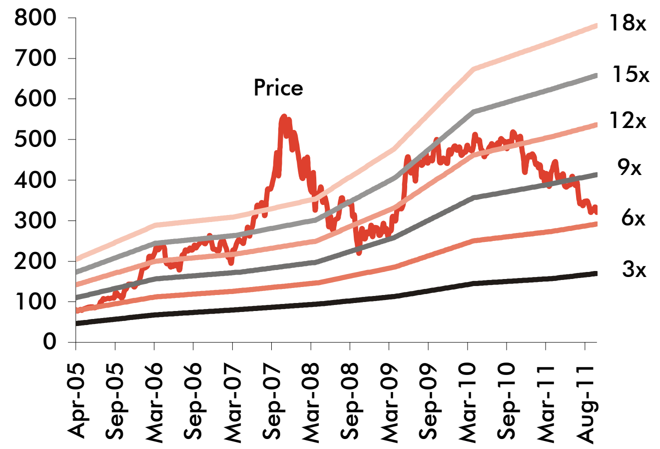
Given the rising competition, slowing revenue growth (10% CAGR over FY11-FY22 v/s 26% over FY06-FY11) and shrinking operating margins (fading towards 14% vs average ~19% over the last five years), we believe that BHEL's discount to its historical averages is likely to widen with likely downgrades to consensus' FY13 earnings and management's optimistic FY12 order intake guidance of 10% growth. Note that we have assumed FY12 order intake to decline by 23%.

Exhibit 29: One year forward P/E band



Source: Bloomberg, Ambit Capital research

Exhibit 30: One year forward EV/EBITDA band



Source: Bloomberg, Ambit Capital research

Relative valuation

On FY13 P/E, BHEL is currently trading in-line to its Capital Goods peers compared to the historical 5-year average premium of 17%. Whilst we believe that BHEL is relatively better placed versus other BTG peers given its huge order backlog we advise clients to avoid the sector given the macro headwinds facing power generating companies coupled with an absence of near term catalysts.

However, if an investor wants to invest in India's power story, we recommend investments in the best IPPs (such as Torrent Power), as we believe they would be the biggest beneficiaries of any policy announcements made in New Delhi. Given that analysts have ascribed lower/no valuations to the upcoming pipelines getting commissioned from FY13 onwards across IPPs, favourable policy announcements will lead to improvement in visibility towards these projects and resultant valuation upgrades.

BTG manufacturers would be amongst the next leg of beneficiaries once the IPPs sort out their near term pipeline and subsequently start announcing new projects.

Amongst IPPs we like Torrent Power given its strong balance sheet (FY11 net debt:equity was 0.6x v/s net debt:equity of ~1.5x for peers), superior cash flow generation (FY12 FCFF yield of 14%), higher RoEs (FY12 RoE of 24% v/s 13% for peers) and attractive dividend yield of 2%.

Exhibit 31: Peer valuations

Company	Share Price	Mcap	P/E (x)		P/B (x)		EV/EBITDA (x)		RoE (%)		EPS CAGR (%)
	(₹)	(US $mn)	FY12E	FY13E	FY12E	FY13E	FY12E	FY13E	FY12E	FY13E	(FY11-13E)
BGR Energy	321	467	7.1	6.9	1.9	1.5	4.4	4.2	30.3	24.9	2.0
Thermax	437	1,051	12.5	11.7	3.2	2.7	7.2	6.7	27.5	24.3	7.9
BHEL	315	15,561	11.7	10.9	3.1	2.6	7.1	6.5	29.2	25.8	7.9
Larsen & Toubro	1,337	16,493	16.8	14.5	2.8	2.5	11.8	10.3	18.5	18.4	12.0
Average (excl. BHEL)			**12.1**	**11.0**	**2.6**	**2.2**	**7.8**	**7.1**	**25.4**	**22.5**	**7.3**
Divergence			**-3%**	**-1%**	**17%**	**16%**	**-9%**	**-7%**	**15%**	**15%**	**8%**

Source: Bloomberg, Ambit Capital research

Exhibit 32: Sensitivity analysis

	High case	Base case	Low case
Revenue growth	We have modelled consolidated revenue CAGR of 12.4% over FY11-FY22E and subsequently a terminal growth rate of 4%.	We have modeled consolidated revenue CAGR of 9.6% over FY11-FY22E and subsequently a terminal growth rate of 3%.	We have modelled consolidated revenue CAGR of 7.1% over FY11-FY22E and subsequently a terminal growth rate of 2%.
Operating margins	We model EBITDA margins to continue to hover ~20% over FY12-FY13. However, over a longer term, we expect EBITDA margin to reduce and gradually stabilize at ~16.0%.	We model EBITDA margins to continue to hover at ~20% over FY12-FY13. However, over a longer term, we expect EBITDA margins to reduce and gradually stabilize at ~14.0%.	We model EBITDA margin to continue to hover at ~20% over FY12-FY13. However, over a longer term, we expect EBITDA margin to reduce and gradually stabilize at ~12.0%.
Working capital cycle	We model working capital cycle to increase from 23 days in FY11 to 40 days in FY12 and subsequently stabilize at ~50 days over the long term.	We model working capital cycle to increase from 23 days in FY11 to 50 days in FY12 and subsequently stabilize at ~63 days over the long term.	We model working capital cycle to increase from 23 days in FY11 to 60 days in FY12 and subsequently stabilize at ~72 days over the long term.
Fair value (₹ per share)	**411**	**290**	**217**
Upside / (Downside)	**30%**	**-8%**	**-31%**

Source: Ambit Capital research

What will change our stance on BHEL?

The Government swinging back into action: Policy paralysis in New Delhi (which has resulted in delays in environment, land and fuel clearances for the power generation companies and losses for SEBs as tariff hike remains elusive) is the main driver of the ongoing challenges in the sector. As a result, whilst developers are increasingly finding it difficult to procure fuel at prices that the SEBs can absorb, SEBs (given their shaky finances) prefer "load shedding" rather than meeting full demand. All this has discouraged developers from announcing new projects.

If the Government gets back into action, that will galvanise stock prices in this sector as it will improve visibility on BHEL's order backlog - especially execution for orders taken from companies with low operating experience (see exhibit 14).

Government's announcements relating to measures such as:

- Expediting domestic coal production (opening up the sector to foreign players like Rio Tinto and BHPs; expediting environment clearances and capex programs for Coal India),
- Building infrastructure (ports, railway lines, more production of wagons) to facilitate consumption of imported coal,
- Allowing tariff hikes to SEBs in proportion to the rise in fuel costs, and
- Expediting the process of land acquisition,

will go a long way towards improving the sector's profitability and visibility.

However, in our recent New Delhi trips (wherein our economist and strategy team meets senior civil servants, intelligence officials and newspaper editors) we do not find any signs of Government doing anything constructive given that: **(a)** the relationship between top industrialists and politicians has soured; **(b)** the political class is pre-occupied with corruption-related allegations and is aware that its might is ebbing; and **(c)** the power of the political class being weakened as the power of institutions such as the Media, the Supreme Court (which has made some remarkable verdicts over the past couple of months eg. Noida land extension, Bellary), the Comptroller & Auditor General of India and the Competition Commission (that slapped a ₹6.3bn fine on DLF) have risen.

BHEL's focus on other businesses: Given the rising competition in the BTG market (see exhibit 18 above), BHEL will have to improve its focus on other businesses especially railways and transmission given the size of the opportunity. Whilst metros are likely to see capex of US$24bn (including EPC) over the next ten years, PGCIL is likely to incur capex of US$12bn to implement nine high capacity corridors.

Exhibit 33: Explanation for our flags on the cover page

Accounting	**GREEN**	In our forensic accounting screen, BHEL scores (206) better than the average accounting scores of both BSE-500 (196) as well as the Capital Goods sector (188). For an explanation of how our accounting screen works, please refer to our November 2010 accounting thematic.
Predictability	**GREEN**	BHEL has so far been a fairly predictable and relatively transparent company. It has usually delivered on its turnover target as per the yearly MoUs signed with the Government.
Earnings Momentum	**AMBER**	Bloomberg earnings momentum suggests a minor 1% downgrade in FY12 earnings post the 1QFY12 results. Going ahead, we expect the company to report PAT CAGR of 7.9% over FY11-13 v/s 39.6% for FY09-11.

Source: Ambit Capital research

Exhibit 34: Balance sheet (consolidated)

Year to March (₹ mn)	FY09	FY10	FY11	FY12E	FY13E
Cash	103,295	98,564	97,064	100,436	131,082
Debtors	160,715	207,926	275,105	310,563	337,447
Inventory	78,920	92,838	110,175	135,871	140,603
Loans & advances	26,922	30,695	33,865	37,601	40,856
Investments	59	59	113	113	113
Fixed assets	28,218	41,612	58,125	63,373	61,768
Miscellaneous	18,410	15,310	21,689	21,689	21,689
Total assets	**416,539**	**487,004**	**596,136**	**669,647**	**733,558**
Current liabilities & provisions	285,687	326,561	391,884	418,807	432,761
Debt	1,666	1,483	2,702	2,702	2,702
Total liabilities	**287,353**	**328,044**	**394,586**	**421,508**	**435,463**
Shareholders' equity	4,895	4,895	4,895	4,895	4,895
Reserves & surplus	124,291	154,065	196,656	243,243	293,201
Total networth	**129,186**	**158,960**	**201,551**	**248,139**	**298,096**
Net working capital	(19,130)	4,898	27,261	65,229	86,144
Net debt (cash)	(101,629)	(97,081)	(94,362)	(97,734)	(128,380)

Source: Company, Ambit Capital research

Exhibit 35: Income statement (consolidated)

Year to March (₹ mn)	FY09	FY10	FY11	FY12E	FY13E
Operating income	270,120	336,526	425,383	472,314	513,200
% growth	36.9	24.6	26.4	11.0	8.7
Operating expenditure	227,848	277,068	339,027	376,956	409,837
EBITDA	**42,272**	**59,459**	**86,356**	**95,359**	**103,363**
% growth	13.0	40.7	45.2	10.4	8.4
Depreciation	3,431	4,603	5,464	6,752	8,173
EBIT	38,841	54,856	80,892	88,607	95,190
Interest expenditure	352	367	564	472	513
Non-operational income	9,890	11,720	10,329	9,934	10,485
PBT	**48,380**	**66,209**	**90,657**	**98,069**	**105,162**
Tax	17,228	22,940	30,123	32,363	34,703
Reported PAT	**31,152**	**43,269**	**60,534**	**65,706**	**70,459**
Adjustments	112	72	60	-	-
Adjusted PAT	**31,039**	**43,198**	**60,474**	**65,706**	**70,459**
% growth	8.5	39.2	40.0	8.7	7.2

Source: Company, Ambit Capital research

Exhibit 36: Cash flow statement (consolidated)

Year to March (₹ mn)	FY09	FY10	FY11	FY12E	FY13E
PBT	48,380	66,209	90,657	98,069	105,162
Depreciation	3,431	4,605	5,467	6,752	8,173
Interest	357	368	564	472	513
Tax	(23,191)	(19,130)	(38,432)	(32,363)	(34,703)
(Incr) / decr in net working capital	13,765	(27,151)	(31,293)	(37,968)	(20,916)
Others	(8,111)	(8,599)	28	-	-
Cash flow from operating activities	**34,632**	**16,301**	**26,991**	**34,963**	**58,229**
(Incr) / decr in capital expenditure	(13,244)	(17,193)	(21,796)	(12,000)	(6,568)
(Incr) / decr in investments	-	-	(54)	-	-
Others	8,569	7,775	7,457	-	-
Cash flow from investing activities	**(4,675)**	**(9,418)**	**(14,392)**	**(12,000)**	**(6,568)**
Issuance of equity	-	-	-	-	-
Incr / (decr) in borrowings	(1,332)	(207)	1,292	-	-
Others	(9,289)	(11,406)	(15,391)	(19,591)	(21,015)
Cash flow from financing activities	**(10,621)**	**(11,614)**	**(14,099)**	**(19,591)**	**(21,015)**
Net change in cash	19,336	(4,731)	(1,500)	3,372	30,646

Source: Company, Ambit Capital research

Exhibit 37: Ratio analysis

Year to March (%)	FY09	FY10	FY11	FY12E	FY13E
EBITDA margin	15.6	17.7	20.3	20.2	20.1
EBIT margin	14.4	16.3	19.0	18.8	18.5
Net profit margin	11.5	12.9	14.2	13.9	13.7
Return on capital employed	32.4	37.7	44.4	38.9	34.5
Return on equity	26.3	30.0	33.6	29.2	25.8
Current ratio (x)	1.3	1.3	1.3	1.4	1.5

Source: Company, Ambit Capital research

Exhibit 38: Valuation parameters

Year to March	FY09	FY10	FY11	FY12E	FY13E
EPS (₹)	12.7	17.7	24.7	26.8	28.8
Book value per share (₹)	52.8	64.9	82.3	101.4	121.8
P/E (x)	24.7	17.8	12.7	11.7	10.9
P/BV (x)	6.0	4.9	3.8	3.1	2.6
EV/EBITDA (x)	16.0	11.4	7.8	7.1	6.5
EV/Sales (x)	2.5	2.0	1.6	1.4	1.3

Source: Company, Ambit Capital research

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Explanation of Investment Rating

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