

Initiating Coverage

BHARAT HEAVY ELECTRICALS Ltd.

21-October-2020





Industry	LTP	Fair Value	Time Horizon
Heavy Electrical Equipment	Rs.28.7	Rs.29.5	2 quarters

HDFC Scrip Code	BHELTDEQNR
BSE Code	500103
NSE Code	BHEL
Bloomberg	BHEL IN
CMP 20 th Oct, 2020	28.7
Equity Capital (Rs cr)	696.4
Face Value (Rs)	2
Equity Share O/S (cr)	348.2
Market Cap (Rs cr)	9976.1
Book Value (Rs)	83.8
Avg. 52 Wk Volumes	43821198.8
52 Week High	61.3
52 Week Low	19.2

Share holding Pattern % (30 th June, 20)	
Promoters	63.2
Institutions	19.8
Non Institutions	17.0
Total	100.0

Fundamental Research Analyst

Debanjana Chatterjee

Debanjana.chatterjee@hdfcsec.com

Our Take:

Bharat Heavy Electricals Ltd (BHEL) is an integrated power plant equipment manufacturer with a strong market share of 53% in installed capacity of conventional power (BTG: Boilers, Turbines and Generators) segment within India and presence in 84 countries around the globe. Till date, BHEL has installed around 11 GW power generating capacity in overseas markets. BHEL is one of the few companies in the world manufacturing the entire range of power plant equipment. It caters to all fuel types viz. Thermal, Hydro, Oil & Gas, Solar, and Transmission. Its business diversity in industries such as transportation, defence and emission control helps the company to mitigate segment associated risk.

Although, working capital needs are putting pressure over the net cash availability, BHEL's focus on controlling material cost, focus on cash collection, and efforts on exploring new opportunities to diversify revenue streams should improve the situation. Order book remained unchanged (due to a tendency to postpone investment on COVID 19 related demand contraction) at Rs 1,09,000cr during FY20, same as FY19 with 81% being executable.

BHEL started to suffer from 2015 due to competition from China, overcapacity in power industry, slowdown in addition of power capacities and shift in focus to renewable source of energy. Even now most of these negatives continue to impact BHELs' operations though threat of China competition has significantly reduced.

Policy support from government for Aatmnirbhar Bharat is encouraging as it has led to increased interest among various local manufacturers to indigenise critical components, which will in turn be beneficial for the company. Company's prudence in taking strategic financial decisions, various initiatives taken in recent times, including "Make In India", Collaborative Manufacturing, improvement in operational and execution efficiencies through implementation of IT based solutions for project monitoring, together will help in offsetting the adversities to come. However, given the ongoing challenges in the operating environment, timely execution of orders and realisation of receivables will be key monitorables.



Valuations & Recommendation:

High receivables had been a persistent problem for BHEL. In current environment, cash-flow of its major clients are weak and that will not help in solving the perennial problem. BHEL continues to trade at lower multiples than other engineering majors on account of this issue as well as lack of sufficient order acquisition visibility post execution of current order-book. The demand scenario in the BTG/EPC market is unlikely to materially improve in the next 1-2 years.

Reduced competitive intensity due to exit/reduced operations of a few players over the past few years may lead to better margin profile of new orders. With more retirements out of existing employee base over the next few years we expect EBITDA margin can improve but not dramatically.

BHEL earns low single-digit ROE for many years and has limited scope to meaningfully reduce its Net Working Capital in the near term. Its new initiatives in terms of contract manufacturing with global OEM will take time to show up in its financials.

We expect BHEL to stage a turnaround in FY22. We assign a P/E multiple of 14x FY22E EPS for calculating its fair value resulting in price of Rs.29.5 over the next two quarters.

Financial Summary (Standalone):

Particulars (Rs cr)	Q1FY21	Q1FY20	YoY-%	Q4FY20	QoQ-%	FY19	FY20	FY21E	FY22E
Total Operating Income	1990.9	4531.7	-56.1%	5049.3	-60.6%	30349.0	21486.1	20709.2	25013.0
EBITDA	-1058.9	-266.7	297.0%	-561.7	88.5%	2142.0	-232.9	16.6	1425.7
Depreciation	118.5	114.8	3.2%	154.3	-23.2%	474.8	502.9	530.2	567.3
Other Income	95.5	145.5	-34.4%	148.2	-35.5%	677.6	580.6	505.3	525.3
Interest Cost	114.6	108.0	6.1%	141.2	-18.8%	286.9	507.0	518.3	417.4
Tax	-299.3	-127.7	134.3%	825.2	-136.3%	842.5	810.9	-213.0	231.9
APAT	-897.2	-216.3	314.9%	-1534.1	-41.5%	1215.4	-1473.0	-313.7	734.4
Diluted EPS (Rs)	-24.4	-5.9	314.9%	-41.8	-41.5%	3.5	-4.2	-0.9	2.1

Source: Company, HDFC sec Research



Recent Developments

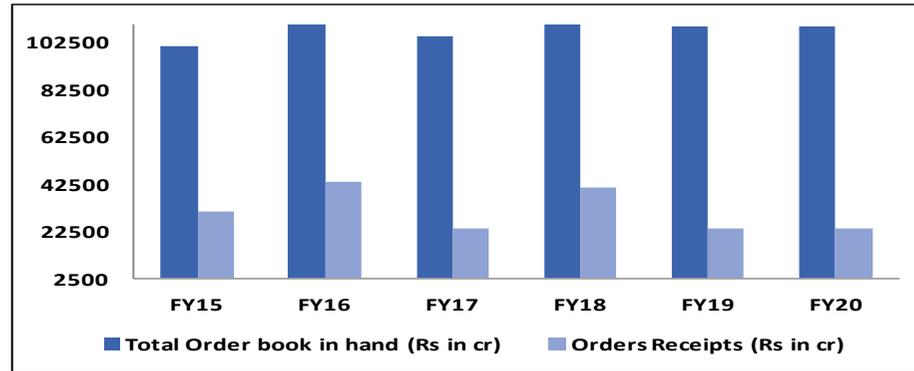
Unchanged order book along with projects bagged in power and other sectors provides medium term visibility:

The current situation has not impacted much on the order book of BHEL, despite a sharp decline of nearly 64% in the IIP (Index for Industrial Production) of capital goods. The total order book as on 30th June 2020 stood at Rs 1,08,126cr, out of which power sector is Rs 86,603cr, industry sector Rs 13,447cr and, Rs 8,076cr is for International Operations. Up to Q1FY21, BHEL booked orders worth Rs 1,485cr, out of which power segment is Rs 982cr, industry segment Rs 444cr and remaining forming up the exports.

BHEL is well placed with orders received in the power segment. The company had received 2x660 MW NTPC Talcher main plant package Fleet Mode Procurement of 12 nos. Steam Generators and reactor headers for 700 MWe PHWR Reactors by NPCIL, and many orders for FGD and boiler modifications. Tendering is in progress for 2x800 MW NTPC Singrauli; 2x800 MW NTPC Lara and 1x800 MW SCCL Adilabad extension and 2x660 MW Pench, MP. Tenders for FGD for around 34 GW, mostly from government utilities are also in advanced stage. Recently, the company has also tendered for the operation and maintenance (O&M) of NTPC's 50 MW solar power plant at Ananthapur, Andhra Pradesh for a period of 11 months with an estimated cost of Rs 64.4lakh, the last date for submission of which is October 26, 2020.

In addition to domestic orders the company has also received orders from Bangladesh and Nepal. BHEL has received an export order of 2 x 660 MW Maitree Super Thermal Power Project, Bangladesh, and a (4x225) MW Arun-3 Hydroelectric project, and a 40MW of Rahughat Hydro project in Nepal.

Apart from power the company has bagged projects in other sectors as well. Amidst stiff competitive bidding, BHEL has won its first commercial order for state-of-the-art Battery Energy Storage Systems from The Energy and Resource Institute (TERI) where it is required to set up cumulative 410 kWh Battery Energy Storage Systems (BESS) in the National Capital Territory (NCT) of Delhi. BHEL's scope of work in the contract includes design, supply, testing, installation & commissioning along with a comprehensive five-year AMC of the systems at three different locations.



Cash focused operations leading to better cash collection, and cost reduction efforts will be a breather to the margins during the coming quarters:

The company during FY20 worked with financial prudence, where it achieved its highest cash collection to billing ratio at 114% in the last 10 years. It further increased to 133% during Q1FY21. It also brought down its total debtors at Rs 35,332cr from Rs 37,850cr Y-o-Y as on 30th June 2020, with consolidated receivables coming down from Rs 12,011.9cr to Rs 7,108.6cr during the same time period. In an industry where receivable management is a concern, BHEL has managed to bring them down. The net provision creation during the year has been only Rs 255cr against Rs 1,836cr in the last year.

BHEL is committed to generate better returns through institutionalized cost reduction efforts in a competitive environment. Mapping of operations to cash flows especially for top line has enabled the company to sustain its operations and end the year with positive cash balance of Rs 6,418cr during FY20. BHEL had been able to trim down its cash deficit at Rs 2,875cr during FY20 from Rs 3,855cr in FY19, and to Rs 523cr in Q1FY21 as against Rs 2175cr Y-o-Y. Loss generating from standalone operating cash flow has fallen by 25.5% during FY20 from a loss of Rs 3881.5cr to a loss of Rs 2891cr Y-o-Y.

Cash focused operations ultimately has helped the company retain its debt free status (0.2 D/E in FY20 standalone) in the times of overall liquidity crunch especially when the company is also channelizing timely liquidity for MSME and other vendors. At the end of Q1FY21, from total receivables, 48% are from state Govts, 33% from central Govt, 12% are from private players and 7% are from exports customers.



BHEL has taken various initiatives under the Atmanirbhar Bharat Abhiyan which will raise its competitive spree in the future and help in creating comparative advantage over its peers:

Under the make in India plan the company has taken a three-pronged approach for maximum utilization of the current opportunities and ensuring significant contribution to the national objective. These are a) In-house development and manufacture of items currently being bought out/imported by the company b) In-house development and manufacture of major items in the country's engineering imports basket c) Working with global OEMs for manufacturing items for India as well as for exports, i.e., 'Make in India, Make for the World'.

For e.g the company has taken up various initiatives for in-house development and manufacture of FGD and ACC items which was previously being bought from China (~Rs 1000cr of raw material were sourced from China during FY19). The company has also turned towards the domestic solar manufacturers for domestic procurement of panels for solar power plants. This will help the company combat foreign dependency keeping FOREX related issues under check as well.

BHEL has formed a new business group – the "Make in India Business Development Group". BHEL has also organized a workshop under the aegis of Department of Heavy Industry, for promoting collaborations between PSUs- private industry as well as R&D institutions & academia for development and manufacture of critical items for helping manufacturers to disentangle their supply chains from imports. In a follow up to this workshop, BHEL is already engaged with interested parties/industry associations for taking this forward. All these activities will boost the capacity utilisation of the company.

Long term Triggers

Strong market presence and diversification in other sectors bodes well for the company:

BHEL is the leading player in India's power and industrial/electrical equipment market and accounts for 53% of the country's installed capacity of conventional power projects. It also contributes around 57% to the country's thermal power generation. Cost competitiveness and superior execution capability, support its dominant market presence and it is well poised to benefit from structural recovery in the power sector.

Apart from power (~73% revenue contribution as of FY20, standalone), BHEL has over the years diversified into a range of engineering and manufacturing activities for the core sectors of the economy which include transportation, defence, aerospace, water, oil & gas, etc., and has been a leader in indigenous manufacturing in the country. To minimize power segment dominance the company is constantly looking



for opportunities in other industries as well. BHEL & ICF jointly offered the first air-conditioned local train of Central Railway in passenger service from Thane to Panvel, Mumbai, in January 2020. It has so far successfully commissioned nine Air-Conditioned ACEMU local trains for Western Railway & Central Railway to provide metro like comfort for local commuters of Mumbai.

More than half of the traction equipment in locomotives & EMUs of Indian Railways has been supplied by BHEL. BHEL has commissioned 200+ electric substations and 5 major HVDC projects in the country. BHEL's solar portfolio of more than 1.2 GW, spread across the country includes ground mounted, rooftop, canal top and floating PV plants. BHEL is also one of the largest manufacturers and suppliers of power transformers and electrical AC machines in the country. BHEL has been a major reliable supplier of critical equipment and services in defence & aerospace sector for over three decades. Most of the satellites launched by ISRO are powered by BHEL manufactured solar panels and lithium ion batteries.

BHEL has signed major international projects which once rolled out will help the company in diversifying its business in the long-run:

During FY20, BHEL floated Expression of Interest (EOI) in inviting Global OEMs to leverage on BHEL facilities & capabilities for setting up manufacturing base in India where talks are majorly over technology, and few forming up JVs as well. Under this EOI, BHEL has signed three MoUs with international majors in the fields of Maglev Train projects, Marine gas turbines for defence applications and Armoured Trucks equipped with smart technologies.

Additionally to augment BHEL's range and competitiveness, it has floated second stage of EOIs as well. It has floated EOIs on areas like Metro Propulsion System, Railways Signaling, Track Machines for Railways as well as Air Defence Guns for collaborating for specific technologies.

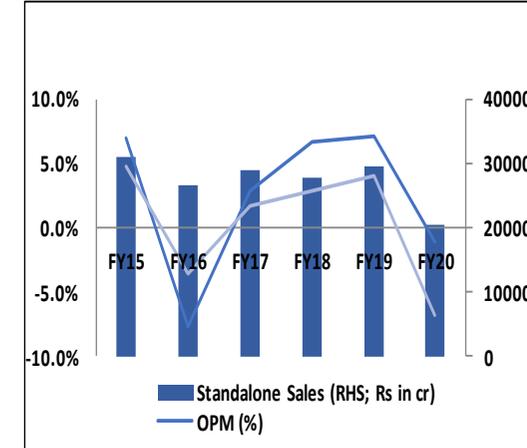
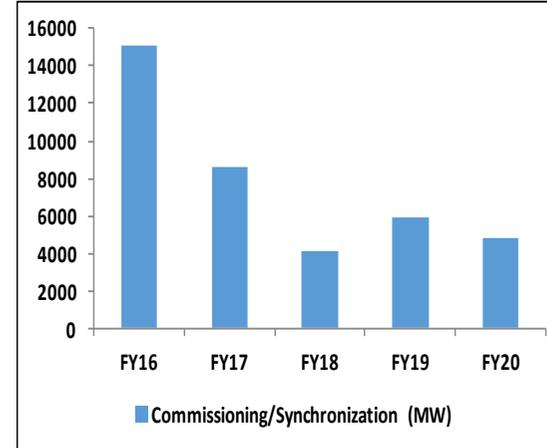
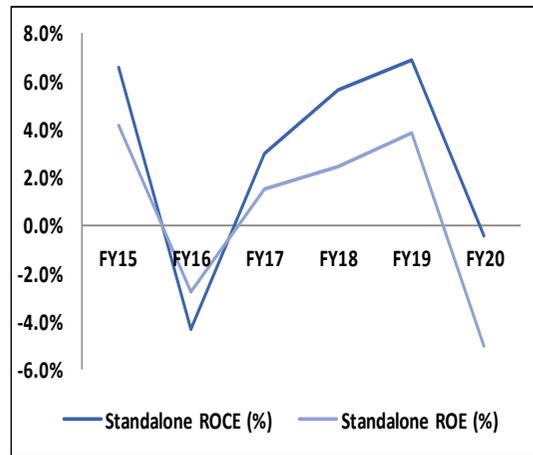
These projects are related to defense and transportation segment. Although, these MOUs are at their preliminary stages but, once these fructify it will have great influence over its top-line and help in diversifying the company's business.

What could go wrong :

- Top-line & margins during FY21 are expected to remain subdued owing to the current COVID situation, and various projects still remaining stalled, and execution being pushed afar creating a trickle-down effect on the company's revenues. Margins in the power

sector remain challenging, as the sector is characterised with defaults from SEBs especially Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) and Telangana State Power Generation Corporation Limited (TSGENCO).

- Availability of labour is still an ongoing concern even though the company's sites have started their operations from the month of May.
- Intense competition especially in the bidding process could lead to project loss.
- Falling GDP, slow pick-up in demand, slower IIP figures have a direct impact on the power sector which is already impacting the company as well.
- Huge working capital requirement/intensity might deplete the company's cash levels in the coming quarters. BHEL's consolidated net cash level has already dwindled down in recent years.
- Dismal top-line (both consolidated & standalone) performance over the past five quarters with sales and margins dropping and low project execution performance over the years are a few other concerns.
- BHEL reported operational loss for second straight quarter in Q1FY21. Revenue growth stood red (expected on account of lockdowns) for a 5th straight quarter. Order inflows recorded close to or more than 50% fall in inflows.



Source: Company, HDFC sec Research



About the company

Bharat Heavy Electricals Limited (BHEL) is an engineering and manufacturing company, with 190+ GW installed capacity globally. The company is an integrated power plant equipment manufacturer, which is engaged in the designing, engineering, manufacturing, constructing, testing, commissioning and servicing a range of products and services for various sectors, such as power, transmission, industry, transportation, renewable energy, oil and gas, and defense. It operates in two segments: Power and Industry. In its Industry segment, BHEL provides a portfolio of products, systems and services for power plants, power utilities, Oil and gas, metallurgical and mining, and process industries, such as cement, fertilizers, sugar and paper.

In its Power segment, BHEL supplies steam turbines, generators, boilers and its auxiliaries approximately 1,000 Megawatt (MW); Gas turbines and generators upto 299 MW unit size; Supplies hydro turbines and generators of approximately 400MW, and Manufactures 220/235/500/540/700MW nuclear turbine generator sets. It has 16 manufacturing units + 2 repair units + 8 service centres with infrastructure to deal with 150+ project sites (across India and abroad).

Segmental Performance:

Particulars (Rs cr)	Q1FY21	Q1FY20	YoY (%)	Q4FY20	QoQ (%)	FY20	FY19	YoY (%)
Segment Revenue								
Power	1,119.4	3,491.5	-67.9%	3,174.7	-64.7%	14,960.4	23,405.0	-36.1%
Industrial	777.2	918.8	-15.4%	1,418.9	-45.2%	5,530.2	5,944.3	-7.0%
EBT								
Power	(568.0)	(54.1)	-949.2%	(7.9)	-7099.5%	804.3	2,812.2	-71.4%
Industrial	(253.0)	34.9	-825.0%	(371.2)	31.9%	(205.8)	437.2	-147.1%
EBTM								
Power	-50.7%	-1.6%	-3172.6%	-0.2%	-20318.3%	5.4%	12.0%	-55.3%
Industrial	-32.5%	3.8%	-957.1%	-26.2%	-24.4%	-3.7%	7.4%	-150.6%

Source: Company, HDFC sec Research



Single Source with multiple solutions for Infrastructure & Industrial Segments:

<p>POWER: Execution of power projects from concept to commissioning Products-</p>	<ul style="list-style-type: none"> •Thermal: up to 1000 MW BTG ratings •Emissioncontrol equipment-FGD, ESP, SCR •Gas: gas turbines &MW & generators upto 297 MW •Hydro: EM Package up to 400 MW •Nuclear: SG & TG sets upto 700 MWe 	<p>WATER: Turnkey solutions for power plants, industries and municipal segments Products-</p>	<ul style="list-style-type: none"> •Pre Treatment Plant •Sea Water Reverse Osmosis and Demineralization Plant •Effluent Treatment Plant •Sewage Treatment Plant and Tertiary Treatment Plant •Zero Liquid Discharge System
<p>TRANSMISSION: Wide range of transmission systems & products including EHV & UHV Products-</p>	<ul style="list-style-type: none"> •Power transformers •Instrument transformers •Shunt reactors •Switchgear •Capacitors •Control & Protection equipment •HVDC terminals •Flexible AC transmission 	<p>DEFENCE & AEROSPACE: Strategic equipment for Indian defence forces for over 20 years Products-</p>	<ul style="list-style-type: none"> •Super Rapid Gun Mount •IPMS for Naval ships •Turret Casting For T72 Tanks •Integrated Platform Management System For Naval Ships •Compact Heat Exchanger For LCA •Space Grade Solar Panel •Space Grade Li-ion Battery
<p>TRANSPORTATION: Locos and wide range of traction propulsion equipment Products-</p>	<ul style="list-style-type: none"> •Electric locomotives up to 6000 HP, Diesel- Electric locomotives up to 1400 HP •Electrics and Propulsion equipment for EMUs/ Locos 	<p>INDUSTRIAL PRODUCTS & SYSTEMS: Wide Range Of Industrial Products Products-</p>	<ul style="list-style-type: none"> •Oil Rigs •Well Head & X-mas Tree Valves •Fabricated Equipment •Boiler Feed Pumps •Compressors •AC Alternators & Motors •Valves
<p>RENEWABLE ENERGY: EPC solutions for Solar PV Power Plants, with and without Battery Energy Storage System Ground mounted, Roof top, canal top and floating solar power plants. Products-</p>	<ul style="list-style-type: none"> •Solar cells and modules •Power Control Unit (PCU) for solar PV plants 	<p>ENERGY STORAGE SOLUTIONS: Focus on electric mobility, battery storage & railway track electrification Products-</p>	<ul style="list-style-type: none"> •Energy Storage, Power Conditioning & Energy Management Systems •Complete Containerized Solutions •Electric Vehicle Chargers

Source: Company, HDFC sec Research

Financials (Standalone):

Income Statement

(Rs Cr)	FY18	FY19	FY20	FY21E	FY22E
Net Revenues	28925.7	30349.0	21486.1	20709.2	25013.0
Growth (%)		4.9%	-29.2%	-3.6%	20.8%
Operating Expenses	26992.8	28207.0	21718.9	20692.6	23587.3
EBITDA	1932.9	2142.0	-232.9	16.6	1425.7
Growth (%)		10.8%	-110.9%	-107.1%	8505.7%
EBITDA Margin (%)	0.1	7.1%	-1.1%	0.1%	5.7%
Depreciation	786.4	474.8	502.9	530.2	567.3
EBIT	1146.5	1667.2	-735.7	-513.6	858.4
Other Income	693.1	677.6	580.6	505.3	525.3
Interest expenses	254.6	286.9	507.0	518.3	417.4
PBT	1585.0	2057.9	-662.1	-526.7	966.3
Tax	778.4	842.5	810.9	-213.0	231.9
RPAT	806.6	1215.4	-1473.0	-313.7	734.4
Growth (%)		50.7%	-221.2%	-78.7%	-334.1%
EPS	2.2	3.5	-4.2	-0.9	2.1

Balance Sheet

(Rs Cr)	FY18	FY19	FY20	FY21E	FY22E
SOURCE OF FUNDS					
Share Capital - Equity	734.3	696.4	696.4	696.4	696.4
Reserves	31866.8	30703.5	28484.8	27836.8	28069.8
Total Share-holders Funds	32601.1	31399.9	29181.2	28533.2	28766.2
Long Term Debt	57.2	95.5	75.4	64.1	54.5
Short Term Debt	0.0	2457.3	4933.4	5426.7	4070.0
Total Debt	57.2	2552.7	5008.8	5490.8	4124.5
Non-Current Liabilities	8880.7	9864.9	9367.4	5772.7	6349.9
TOTAL SOURCES OF FUNDS	41538.9	43817.5	43557.4	39796.7	39240.7
APPLICATION OF FUNDS					
Fixed Assets	3271.6	3202.4	3128.1	3534.7	3782.2
LT Loans & Advances	84.3	82.8	83.2	158.1	192.2
Other Non-Current Assets	17244.9	22790.9	25356.6	21687.0	17105.7
Total Non-current Assets	20600.8	26076.1	28567.9	25379.9	21080.0
Inventories	6258.8	8113.5	8905.5	12704.6	13267.5
Debtors	22771.5	12009.6	7107.6	7687.1	8201.7
Other Current Assets	2867.0	10713.5	10271.9	11299.1	12429.0
Cash & Equivalents	11291.2	7503.3	6418.6	4464.3	5122.6
Total Current Assets	43188.4	38339.9	32703.5	36155.1	39020.7
Creditors	10586.9	11375.1	8892.0	13267.5	11659.3
Current Liabilities	11663.4	9223.4	8822.0	8470.8	9200.8
Total Current Liabilities	22250.2	20598.5	17714.0	21738.2	20860.1
Net Current Assets	20938.2	17741.4	14989.5	14416.8	18160.6
TOTAL APPLICATION OF FUNDS	41538.9	43817.5	43557.4	39796.7	39240.7

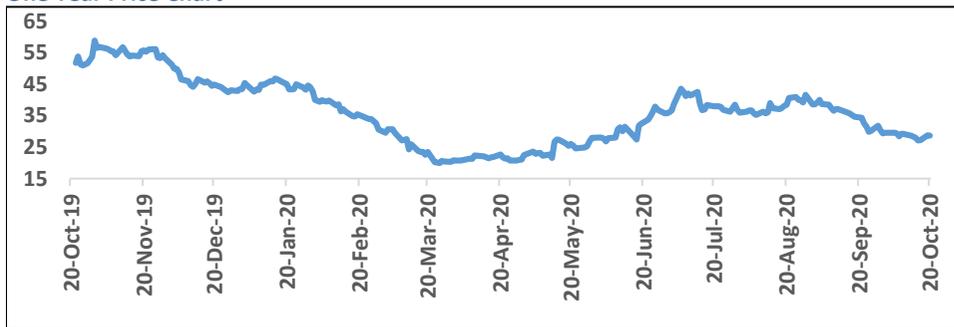
Source: Company, HDFC sec Research

BHARAT HEAVY ELECTRICALS Ltd.

Cash Flow Statement

(Rs Cr)	FY18	FY19	FY20	FY21E	FY22E
EBT	1585.0	2057.9	-662.1	-526.7	966.3
Depreciation	786.4	474.8	502.9	0.0	0.0
Interest & Others	1849.8	1306.7	209.8	505.3	525.3
Change in working capital	-3270.3	-7300.1	-2619.5	-1381.6	-3085.5
Tax expenses	43.1	-420.7	-321.9	213.0	-231.9
CF from Operating activities	994.1	-3881.5	-2891.0	-1190.0	-1825.9
Net Capex	-281.3	-425.0	-434.5	-936.9	-814.8
Purchase/sale of inv	573.4	1735.3	1716.0	-0.1	5124.6
Div & interest received	668.6	604.6	555.0	582.8	611.9
CF from Investing activities	960.7	1914.9	1836.5	-354.2	4921.7
Borrowings/repayments	-50.4	875.1	2476.7	482.0	-1366.3
Interest Exp	-583.3	-787.0	-504.6	-334.3	-501.4
Dividends paid	-37.3	-94.6	-310.4	-518.3	-417.4
CF from Financing activities	-671.0	-6.5	1661.7	-370.6	-2285.1
Net Cash Flow	1283.8	-1973.1	607.3	-1914.7	810.8

One Year Price Chart



Key Ratios

	FY18	FY19	FY20	FY21E	FY22E
EBITDA Margin	6.7%	7.1%	-1.1%	0.1%	5.7%
EBIT Margin	4.0%	5.5%	-3.4%	-2.5%	3.4%
APAT Margin	2.8%	4.0%	-6.9%	-1.5%	2.9%
RoE	2.5%	3.9%	-5.0%	-1.1%	2.6%
RoCE	5.6%	6.9%	-0.5%	0.0%	4.2%
Solvency Ratio					
Net Debt/EBITDA (x)	2.6	2.6	-17.8	3.9	0.0
Net D/E (x)	0.0	0.1	0.2	0.2	0.1
PER SHARE DATA					
EPS	2.2	3.5	-4.2	-0.9	2.1
CEPS	4.3	4.9	-2.8	0.6	3.7
BVPS	88.8	90.2	83.8	81.9	82.6
DPS	1.8	2.0	0.0	0.8	1.2
Turnover Ratios (days)					
Debtors (days)	298.4	149.4	126.6	95.6	102.0
Inventory (days)	82.0	100.9	158.6	158.0	165.0
Payables (days)	138.7	141.5	158.4	165.0	145.0
VALUATION					
P/E (x)	13.0	8.2	-6.8	-31.8	13.6
P/BV (x)	0.3	0.3	0.3	0.3	0.3
EV/EBITDA (x)	-0.4	2.3	-36.8	664.1	6.3
EV/Revenues (x)	-0.0	0.2	0.4	0.6	0.4
Dividend Yield	6.4%	7.0%	0.0%	2.8%	4.2%

Source: Company, HDFC sec Research



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HDFC securities Limited, I Think Techno Campus, Building - B, "Alpha", Office Floor 8, Near Kanjurmarg Station, Opp. Crompton Greaves, Kanjurmarg (East), Mumbai 400 042 Phone: (022) 3075 3400 Fax: (022) 2496 5066

Compliance Officer: Binkle R. Oza Email: complianceofficer@hdfcsec.com Phone: (022) 3045 3600

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