

# Bharat Electronics

<b>BSE SENSEX</b>	<b>S&amp;P CNX</b>
26,654	8,157
<b>Bloomberg</b>	<b>BHE IN</b>
Equity Shares (m)	240.0
M.Cap.(INR b)/(USD b)	283.9 / 4.2
52-Week Range (INR)	1,417 / 984
1, 6, 12 Rel. Per (%)	-3/-9/11
12M Avg Val (INR m)	475
Free float (%)	25.0

## Financials & Valuation (INR b)

Y/E Mar	2016	2017E	2018E
Net Sales	73.0	81.9	94.1
EBITDA	14.6	14.9	17.2
PAT	13.6	14.8	16.6
EPS (INR)	56.9	61.8	69.0
Gr. (%)	17.0	8.6	11.6
BV/Sh (INR)	364.2	426.7	479.5
RoE (%)	15.6	14.5	14.4
RoCE (%)	16.5	15.6	15.2
P/E (x)	20.8	19.1	17.1
P/BV (x)	3.2	2.8	2.5

Estimate change 

TP change 

Rating change 

**CMP: INR1,183 TP: INR1,450 (+23%)**

**Buy**

## Operational performance in line; Working capital cycle improvement impressive

- 4QFY16 operational performance broadly in line with estimates:** BHE reported revenue of INR32.1b (up 9.8% YoY) v/s estimate of INR34.3b and operating profit of INR9.9b (up 26% YoY) v/s estimated profit of INR9.1b. Gross margin expansion of 481bp YoY improved margins 167bp YoY to 31%.
- 4QFY16 revenue at INR32.1b (up 5.8% YoY) was below our estimate of INR34.1b.** Execution deferrals on account of delay from vendors in supply of input equipment like Tatra truck from BEML in 3QFY16 has led to miss in the topline for the company. For FY16, BHE's revenue was supported by contribution from segments like Akash missile system, 3D tactical control system, Fire control systems, Low level light weight radar, integrated Sonar suit, L Band surveillance radar for export and passive night vision devices.
- Gross margin expansion drives operating profit growth of 26%:** Despite revenue growth of mere 9.8% YoY, 4QFY16 operating profit increased 26% YoY to INR9.9b—led by strong gross margin expansion of 481bp YoY to 53.4%. Gross margin expansion was primarily on account better product mix and forex variation reimbursement of INR1.5b. Raw material cost declined 481bp YoY to 47%, and other expense increased 38.5% YoY to INR3.6b led by increase in provision done by the company. Reported net profit at INR8.0b was in line with our estimate (INR7.9b), Tax rate was higher during the quarter (26.1% vs 18.5% in 4QFY15) primarily on account of low in-house R&D as company has resorted to collaborative R&D.
- Maintain Buy:** We maintain **Buy** with a price target of INR1,450/share—21x FY18E (near its peak historical valuation of 22x), to factor the improved pace of decision making in defense.

## Quarterly Performance

Y/E March	FY15				FY16				FY15	FY16	(INR Million)	
	1Q	2Q	3Q	4Q	1Q	2QE	3Q	4Q			MOSL 4QE	Var
Sales	10122	12940	16082	29282	10953	14677	15172	32148	68427	72952	34,132	-5.8
Change (%)	12.7	23.9	33.9	-6.5	8.2	13.4	-5.7	9.8	9.0	6.6	16.6	
EBITDA	-455	1189	2781	7926	-54	1754	2926	9988	11441	14614	9,093	9.8
Change (%)	-19	6812	56	3	-88	48	5	26	28	28	14.7	
As of % Sales	-4.5	9.2	17.3	27.1	-0.5	12.0	19.3	31.1	16.7	20.0	26.6	
Depreciation	364	375	374	426	404	403	414	468	1540	1689	584	
Interest	0	3	0	11	0	3	1	41	14	45	-4	
Other Income	1152	1106	1135	1386	1255	1375	1355	1336	4780	5322	1,165	
Exceptional items (reported)	0	0	0	0	0	0	0	72	0	0	0	
PBT	333	1917	3542	8874	798	2724	3865	10888	14667	18202	9,677	12.5
Tax	77	448	824	1645	191	656	908	2799	2994	4553	1,744	
Effective Tax Rate (%)	23.2	23.3	23.3	18.5	23.9	24.1	23.5	25.7	20.4	25.0	18.0	
Reported PAT	256	1470	2718	7229	607	2068	2957	8089	11672	13649	7,933	2.0
Change (%)	49.0	147.2	41.8	9.0	137.1	40.7	8.8	11.9	25.3	17.5	9.7	
Adj PAT	256	1470	2718	7229	607	2068	2957	8017	11672	13649	7,933	1.1
Change (%)	49.0	147.2	41.8	9.0	137.1	40.7	8.8	10.9	25.3	17.3	9.7	

E: MOSL Estimates

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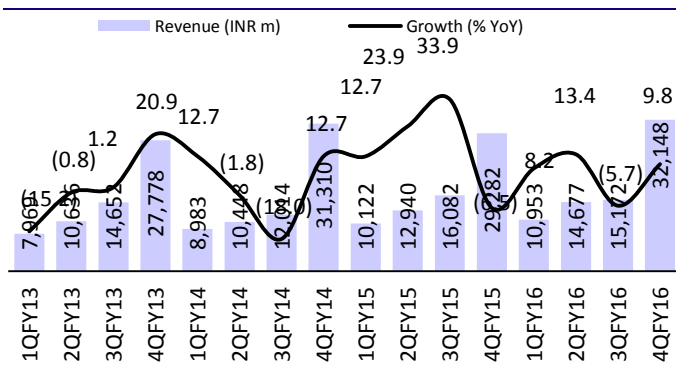
**Investors are advised to refer through important disclosures made at the last page of the Research Report.**

Motilal Oswal research is available on [www.motilaloswal.com/Institutional-Equities](http://www.motilaloswal.com/Institutional-Equities), Bloomberg, Thomson Reuters, Factset and S&P Capital.

**4QFY16 operational performance broadly in line with estimate**

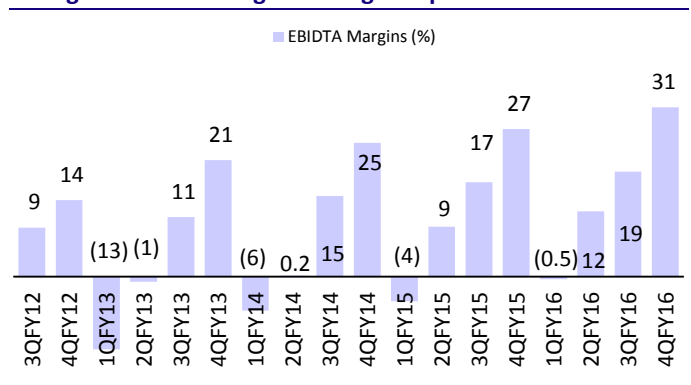
- BHE reported revenue of INR32.1b (up 9.8% YoY) v/s estimate of INR34.3b and operating profit of INR9.9b (up 26% YoY) v/s estimated profit of INR9.1b. Gross margin expansion of 481bp YoY improved margins 167bp YoY to 31%.
- 4QFY16 revenue at INR32.1b (up 5.8% YoY) was below our estimate of INR34.1b. Execution deferments on account of delay from vendors in supply of input equipment like Tatra truck from BEML in 3QFY16 has led to miss in the topline for the company. For FY16, BHE’s revenue was supported by contribution from segments like Akash missile system, 3D tactical control system, Fire control systems, Low level light weight radar, integrated Sonar suit, L Band surveillance radar for export and passive night vision devices.
- Exports has remained a focus area for BHE and it has set up dedicated business unit and marketing group to become key supply chain partners of global players like Boeing, Pilatus, GE, Siemens, Philips etc. Exports for FY16 stood at \$85m (~8.0% of the total revenue), highest in the history of the company. Export order book stands at \$120m (down 40% YoY).
- Despite revenue growth of mere 9.8% YoY, 4QFY16 operating profit increased 26% YoY to INR9.9b—led by strong gross margin expansion of 481bp YoY to 53.4%. Gross margin expansion was primarily on account better product mix and forex variation reimbursement of INR1.5b. Raw material cost declined 481bp YoY to 47%, and other expense increased 38.5% YoY to INR3.6b led by increase in provision done by the company. Reported net profit at INR8.0b was in line with our estimate (INR7.9b), Tax rate was higher during the quarter (26.1% vs 18.5% in 4QFY15) primarily on account of low in-house R&D as company has resorted to collaborative R&D.
- Reported net profit at INR8.0b was in line our estimate (INR7.9b), led by higher-than-estimated tax rate (28.4% vs estimate of 18%). Higher tax rate was primarily on account of low in-house R&D as company has resorted to collaborative R&D.

**Exhibit 1: Revenue de-growth on account of weak execution of orders**



Source: MOSL, Company

**Exhibit 2: Margin improvement driven by product mix change driven robust gross margin improvement**



Source: MOSL, Company

**Exhibit 3: Key orders executed during over last three years**

FY14	FY15	FY16
Akash Missile system (Army and Air Force)	Missile Systems	Akash Missile systems (Air force and Army)
Passive night vision devices	Night Vision Devices	3D tactical control radar
Central Acquisition Radar	Tactical Control radar	Fire Control System
National Population Register	Missile warning system	Low Level Light weight radar (Aslesha)
Electronic support measure system for small ships	Gun Tank upgrade	Integrated Sonar suite
Missile warning system	Laser range finder	L Band Surveillance radar for export
Low level light weight Radar (Bharani)	Hull mounted Sonar	Passive night vision devices
Low intensity conflict EW system	Ship borne EW System	
NC3I Network		
Fire Control System		
Hull Mounted Sonar		
Electronic Voting Machine		
Shipborne Electronic Warfare System		
Low Level Transportable Radar		
Coastal surveillance systems		
Electronic Voting Machines		

Source: Company, MOSL

**Order book stands healthy at INR320b, potential pipe line looks healthy**

- BHE's order book as on 4QFY16 end stands healthy at INR320b, BTB at 4.5x. order finalization of integrated air command and control system (INR79b), weapon locating radar (INR18b) has led to strong order inflow of INR171b in FY16. BHE's addressable defence electronic market seems to be picking up.
- Key orders like Akash missile system weapon locating radar, tactical communication system, mobile cellular communication system, electronic warfare systems, advanced composite communication system and commander TI sights are likely to be finalized during FY17.

**Exhibit 4: Key orders acquired during last 3 years**

FY14	FY15	FY16
National Population Register	Gun upgrades	Integrated Air command control system
Radar and Sonar for Myanmar (USD70m order)	Ship borne EW System	Weapon locating radar(Rs18b)
Mobile Cellular Communication System	Mobile Communication terminal	Handheld thermal imager with laser range
HUMSA New Generation	Hull mounted Sonar	Ground based ELINT
Electronic support measure system for small ships	Advanced Composite terminal	Integrated communication system
Akash Missile system (6 Sqdn)	Combat Management System	USHUS Sonar
AMC for Surveillance Radar Element	Communication system	Electronics Fuzes

Source: Company, MOSL

**Working Capital Cycle improves significantly**

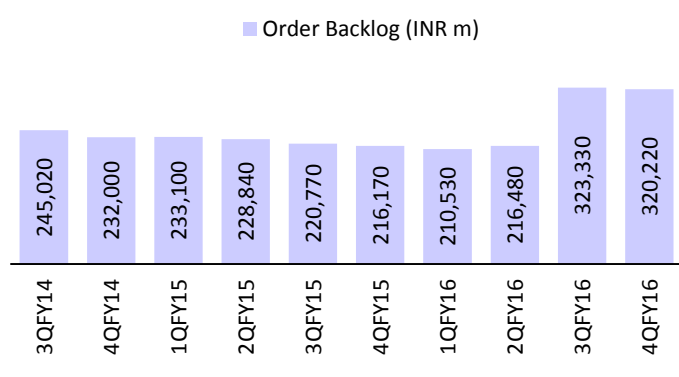
BHE has been able to significantly improve the working capital cycle during FY16. Net working cycle for BHE stands at 34 days as on March 2016 as compared to 81days in FY15. BHE has been able to reduce the working capital cycle led by reduction in inventory levels (169 days as compared to 183 days in FY15)and also on account of increase in other current liabilities led by increase in advance received from customers for the orders finalized in FY16 (INR171b as compared to INR51b in FY15).

**Exhibit 5: BHE’s order expectation to be finalized during FY16**

FY15	FY16	FY17
Missile warning system	Weapon Locating Radar	Akash Missile system
Electronic Warfare system	Hand held thermal imager	Tactical communication system
Weapon locating radar	Mobile Electronic intelligence system	Mobile cellular communication system
Passive night vision devices	Integrated air command control system	Electronic warfare systems
Hand held thermal Imager with Laser range		Advanced composite communication
Electronic voting machines		Commander TI sights
Mobile cellular communication system		
Electronic warning system		
Weapon locating radar		
Passive night vision devices		
Mobile cellular communication system		
Weapon locating radar		
Hand held thermal Imager		
Shipborne electronic warfare system		
Gun upgrade program		

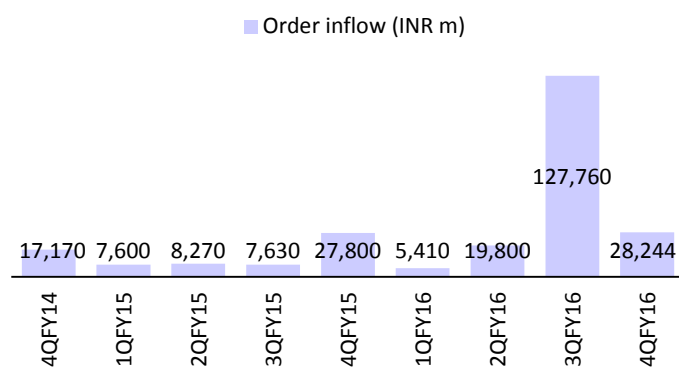
Source: Company, MOSL

**Exhibit 6: Order book stands stable at INR320b providing a revenue visibility of 4.5x its FY16 revenue**



Source: MOSL, Company

**Exhibit 7: Strong order inflow for FY16 led by finalization of key orders**



Source: MOSL, Company

**BHE enters into strategic alliances for emerging business through co-development, co-production and production ToT**

BHE has entered into strategic alliance with defence laboratories, ordinance factory board and other global OEMs to develop products like Surface to air systems, air defence radars, Battlefield management system, sonar systems, next generation night vision devices, gun upgrades/ new gun programmes, inertial navigation systems, medium altitude long endurance unmanned aerial vehicles (UAVs) and maintenance of aerostat surveillance and communication systems.

BHE has identified new emerging business areas like next generation electronic warfare suites, air defence systems, tactical communication systems and battlefield management systems

**Plans to significantly ramp up the non defence revenue share**

BHE plans to significantly ramp up the non defence revenue by entering into new business areas like critical infrastructure protection, air traffic management radars, intelligent traffic management systems, Solar power plants and smart city elements. Currently non defence areas contribute 17% to the overall revenue of the company.

**Capex plans of INR5b to set up Greenfield weapon systems facility**

BHE plans to set up INR5b Greenfield weapon systems facility in Andhra Pradesh which will focus on the design, development and production of weapon systems like fire control, missile systems and other weapon upgrade systems. BHE expects the facility to be ready over the next two years.

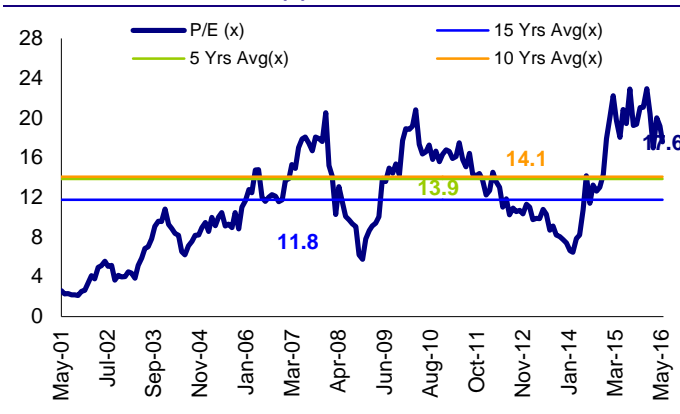
**R&D expenditure: target to increase to 10% of revenues**

To improve indigenization, adapt upcoming technologies, and maintain its leadership position in the fast evolving Defense Electronics market, BHE has laid down R&D plans for FY15-18 (FY15 spend at 8.20% of net sales) and has filed for nine patent applications during FY15.

**Valuation and rating**

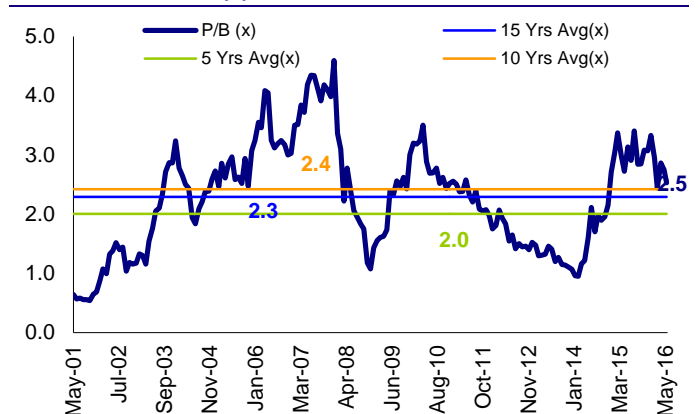
- BHE is well positioned to benefit from the rising defense expenditure supported by a) strong manufacturing base (Capacity utilization of ~60%) and execution track record, b) relationship with defense and government agencies, c) strategic collaboration with foreign technology partners for new products development d) in-house R&D capabilities (R&D spend at 8.2% of revenues) and e) Increased focus on exports to friendly countries.
- We expect BEL to report EPS of INR62/sh in FY17 (+8.6% YoY), INR69/sh in FY87 (+11.6% YoY). Maintain Buy, with a Price Target of INR1,450/share (21x FY18E) which is near to its peak historical valuation of 22x to factor the improved pace of decision-making in defense and higher FII limit.
- BHE’s export revenue has increased meaningfully from INR824m in FY09 to INR5.7b in FY16. The management had set target to increase its export sales to total sales ratio from the 5.4% in FY15 to 7% by FY19, which the company has achieved in FY16 itself.

**Exhibit 8: BHE PER Band (x)**



Source: MOSL, Company

**Exhibit 9: BHE P/B (x)**



Source: MOSL, Company

**Exhibit 10: BEL: New Products Developed / Introduced**

FY11	Akash Weapon System
	New Generation Humsa Sonar
	Mobile Communication Terminal
	Combat Management Systems for Ships
FY12	Coastal Surveillance System
	Tablet PC
	Integrated anti submarine warfare complex
	Advanced torpedo defence system
	Digital radio trunking system
	Upgraded indigenous forward observer simulator
	Electro optic fire control systems
	Integrated radio line modem
	Remotely operated vehicle
Thermal imaging camera for fly catcher radar	
FY13	National Command Control Communication and Intelligence Network (NC3I)
	Mobile Cellular Communication System
	Passive Night Vision Devices with XD4 technology
	ESM system for small ship
	Point to Multi Point Radio and mast for LORROS
FY14	3D Tactical Control Radar
	Low Level Light Weight Surveillance Radar (Bharani)
	Missile Approach Warning System
	Printing attachment to EVM to facilitate comparison of votes in event of disputes
	EVM with new specifications incl digital certification and tamper proof mechanism
	Hull Mounted Sonar
FY15	Schilka air defence weapon system for army
	Software defined radio for Navy
	Communication Network (Link II MOD III for Navy
	Export version of unit level switch board (ULSB) MK III
	Tactical satellite terminal for Akash Army
	Advanced composite communication system (Bharati) for Navy
	Ship data network (SDN) for P16A ship
	Simulator for Akash Misslie System for Army (Vehicle/Classroom Versions)
	Secured Phone (CDMA)

Source: MOSL, Company

## Operating metrics

### Exhibit 11: Key operating metrics

INR M	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17E	FY18E
Order book	113,500	236,000	257,480	249,490	234,520	216,170	273,416	325,680	369,419
Y-o-Y growth	9.3%	107.9%	9.1%	-3.1%	-6.0%	-7.8%	26.5%	19.1%	13.4%
Order inflow	61,444	177,217	77,897	52,425	42,300	51,300	130,000	136,500	143,325
Y-o-Y growth	14.1%	188.4%	-56.0%	-32.7%	-19.3%	21.3%	153.4%	5.0%	5.0%
Execution	51,804	54,717	56,500	59,905	61,223	66,755	72,753	84,236	99,586
Y-o-Y growth	13.0%	5.6%	3.3%	6.0%	2.2%	9.0%	9.0%	15.8%	18.2%
Book to bill ratio (x)	2.2	4.3	4.6	4.2	3.8	3.2	3.8	3.9	3.7
<b>Revenues</b>	<b>51,804</b>	<b>54,717</b>	<b>56,500</b>	<b>59,905</b>	<b>61,223</b>	<b>66,755</b>	<b>72,753</b>	<b>84,236</b>	<b>99,586</b>
Defence	44,330	44,696	42,104	51,882	52,087	56,075	60,385	69,074	80,665
Non Defence	8,798	11,174	15,573	9,156	10,668	10,681	12,368	15,162	18,921
<b>Revenues</b>									
Indigenously developed	57.0%	57.0%	54.0%	NA	41.0%	38.0%			
In association with DRDO, etc	18.0%	21.0%	27.0%	NA	44.0%	42.0%			
<b>Total Indigenous</b>	<b>75.0%</b>	<b>78.0%</b>	<b>81.0%</b>	<b>78.0%</b>	<b>85.0%</b>	<b>80.0%</b>			
ToT from Foreign OEM's	25.0%	22.0%	19.0%	22.0%	15.0%	20.0%			
<b>Revenues</b>									
Domestic	51,131	53,680	55,157	58,340	59,232	63,111	68,016	78,077	91,579
Exports	1,067	1,617	1,879	1,782	2,510	3,645	4,738	6,159	8,007
Exports, % of Total	2.1%	3.0%	3.3%	3.0%	4.1%	5.5%	6.5%	7.3%	8.0%
<b>Cost structure (% of Revenues)</b>									
Raw material cost	56.4	56.3	62.1	62.4	57.9	55.2	55.5	55.5	56.0
Employee Cost	19.0	18.6	18.7	18.2	16.4	18.5	17.7	16.7	16.4
Other Expenses	4.8	5.0	5.7	6.0	6.3	6.0	7.0	7.2	7.2
Provisions/write off	2.0	2.4	2.9	2.9	5.4	3.6	1.6	1.8	1.7
R&D Expenses (INR M)	3159	3882	4682	5099	4670				
R&D Expenses % to Sales	5.9	6.9	8.1	8.4	7.4				
Net cash/( Debt) (INR M)	35,777	65,192	67,725	53,025	45,644	58,815	51,686	58,160	66,314
Core NWC (Days)	283	311	365	396	418	346	388	382	379
Customer Advances	241	421	454	353	307	265	225	210	210
<b>Reported NWC (Days)</b>	<b>43</b>	<b>-110</b>	<b>-89</b>	<b>43</b>	<b>111</b>	<b>81</b>	<b>163</b>	<b>172</b>	<b>169</b>

## Financials and Valuation

Income Statement							(INR Million)	
Y/E Mar	2011	2012	2013	2014	2015	2016	2017E	2018E
<b>Net Sales</b>	<b>55,870</b>	<b>57,676</b>	<b>61,038</b>	<b>62,755</b>	<b>68,427</b>	<b>72,952</b>	<b>81,891</b>	<b>94,054</b>
Change (%)	5.2	3.2	5.8	2.8	9.0	6.6	12.3	14.9
<b>EBITDA</b>	<b>9,895</b>	<b>6,146</b>	<b>6,425</b>	<b>8,911</b>	<b>11,433</b>	<b>14,614</b>	<b>14,874</b>	<b>17,200</b>
EBITDA Margin (%)	17.7	10.7	10.5	14.2	16.7	20.0	18.2	18.3
Depreciation	1,220	1,208	1,307	1,421	1,540	1,689	2,111	2,416
<b>EBIT</b>	<b>8,675</b>	<b>4,938</b>	<b>5,118</b>	<b>7,490</b>	<b>9,894</b>	<b>12,925</b>	<b>12,764</b>	<b>14,784</b>
Interest	4	6	8	34	14	45	0	0
Other Income	2,740	5,855	6,100	4,285	4,780	5,322	6,750	7,000
Extraordinary items	201	-39	-64	6	8	0	0	0
<b>PBT</b>	<b>11,611</b>	<b>10,748</b>	<b>11,146</b>	<b>11,747</b>	<b>14,667</b>	<b>18,202</b>	<b>19,514</b>	<b>21,784</b>
Tax	2,997	2,450	2,248	2,431	2,994	4,553	4,686	5,231
Tax Rate (%)	25.8	22.8	20.2	20.7	20.4	25.0	24.0	24.0
Min. Int. & Assoc. Share	0	0	0	0	0	0	0	0
<b>Reported PAT</b>	<b>8,615</b>	<b>8,299</b>	<b>8,898</b>	<b>9,316</b>	<b>11,672</b>	<b>13,649</b>	<b>14,828</b>	<b>16,553</b>
<b>Adjusted PAT</b>	<b>8,414</b>	<b>8,337</b>	<b>8,962</b>	<b>9,310</b>	<b>11,665</b>	<b>13,649</b>	<b>14,828</b>	<b>16,553</b>
Change (%)	11.8	-0.9	7.5	3.9	25.3	17.0	8.6	11.6

Balance Sheet							(INR Million)	
Y/E Mar	2011	2012	2013	2014	2015	2016	2017E	2018E
Share Capital	800	800	800	800	800	2,400	2,400	2,400
Reserves	49,226	55,570	62,429	69,498	78,140	85,001	100,001	112,687
<b>Net Worth</b>	<b>50,026</b>	<b>56,370</b>	<b>63,229</b>	<b>70,298</b>	<b>78,940</b>	<b>87,401</b>	<b>102,401</b>	<b>115,087</b>
Debt	1	0	0	0	0	0	0	0
Deferred Tax	-1,806	-2,282	-2,716	-2,995	-3,378	-3,000	-3,000	-3,000
<b>Total Capital Employed</b>	<b>48,220</b>	<b>54,088</b>	<b>60,513</b>	<b>67,304</b>	<b>75,562</b>	<b>84,401</b>	<b>99,401</b>	<b>112,087</b>
Gross Fixed Assets	17,890	19,016	20,732	22,267	24,405	26,467	29,467	32,467
Less: Acc Depreciation	13,053	13,914	14,978	15,757	17,297	18,986	21,097	23,513
<b>Net Fixed Assets</b>	<b>4,837</b>	<b>5,102</b>	<b>5,755</b>	<b>6,509</b>	<b>7,108</b>	<b>7,481</b>	<b>8,370</b>	<b>8,954</b>
Capital WIP	577	1,136	1,614	1,969	1,398	4,297	2,000	2,000
Investments	120	120	120	120	191	120	120	120
<b>Current Assets</b>	<b>124,277</b>	<b>139,941</b>	<b>134,257</b>	<b>133,680</b>	<b>139,319</b>	<b>165,325</b>	<b>164,520</b>	<b>188,625</b>
Inventory	24,603	27,918	32,711	33,701	34,269	33,701	39,263	45,094
Debtors	28,973	26,869	33,347	41,508	38,180	41,508	44,872	51,536
Cash & Bank	65,194	67,725	53,025	45,644	58,815	77,289	59,296	67,772
Loans & Adv, Others	5,507	17,429	15,174	12,826	8,055	12,826	21,090	24,222
<b>Curr Liabs &amp; Provns</b>	<b>81,589</b>	<b>92,210</b>	<b>81,233</b>	<b>74,974</b>	<b>73,056</b>	<b>92,822</b>	<b>75,609</b>	<b>87,612</b>
Curr. Liabilities	75,853	86,323	74,071	68,979	65,289	81,204	66,634	77,305
Provisions	5,736	5,887	7,162	5,995	7,767	11,618	8,974	10,307
<b>Net Current Assets</b>	<b>42,687</b>	<b>47,731</b>	<b>53,024</b>	<b>58,705</b>	<b>66,263</b>	<b>72,503</b>	<b>88,911</b>	<b>101,013</b>
<b>Total Assets</b>	<b>48,221</b>	<b>54,088</b>	<b>60,513</b>	<b>67,303</b>	<b>74,960</b>	<b>84,401</b>	<b>99,401</b>	<b>112,087</b>

E: MOSL Estimates



## Financials and valuation

### Ratios

Y/E Mar	2011	2012	2013	2014	2015	2016	2017E	2018E
<b>Basic (INR)</b>								
EPS	35.1	34.7	37.3	38.8	48.6	56.9	61.8	69.0
Cash EPS	41.0	39.6	42.5	44.7	55.0	63.9	70.6	79.0
Book Value	208.4	234.9	263.5	292.9	328.9	364.2	426.7	479.5
DPS	7.2	6.9	7.4	7.8	9.7	11.4	12.4	13.8
Payout (incl. Div. Tax.)	20.1	20.1	20.0	20.0	20.0	20.0	20.0	20.0
<b>Valuation(x)</b>								
P/E					15.8	20.8	19.1	17.1
Cash P/E					41.9	18.5	16.7	14.9
Price / Book Value					2.3	3.2	2.8	2.5
EV/Sales					1.9	2.9	2.8	2.3
EV/EBITDA					11.0	14.1	15.1	12.5
Dividend Yield (%)					0.4	1.0	1.0	1.2
<b>Profitability Ratios (%)</b>								
RoE	16.8	14.8	14.2	13.2	14.8	15.6	14.5	14.4
RoCE	18.1	15.7	15.0	14.0	15.6	16.5	15.6	15.2
RoIC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Turnover Ratios (%)</b>								
Fixed Asset Turnover (x)	3.1	3.0	2.9	2.7	2.8	2.7	2.7	2.8
Debtors (No. of Days)	189	170	199	241	204	208	200	200
Inventory (No. of Days)	161	177	196	196	183	169	175	175
Net Debt/Equity (x)	-1.3	-1.2	-0.8	-0.6	-0.7	-0.9	-0.6	-0.6

### Cash Flow Statement

(INR Million)

Y/E Mar	2011	2012	2013	2014	2015	2016	2017E	2018E
Adjusted EBITDA	9,895	6,146	6,425	8,911	11,433	14,614	14,874	17,200
Non cash opr. exp (inc)	2,740	5,854	6,099	4,284	4,779	5,322	6,750	7,000
(Inc)/Dec in Wkg. Cap.	23,285	-2,534	-19,994	-13,062	5,614	12,234	-34,401	-3,626
Tax Paid	-2,997	-2,450	-2,248	-2,431	-2,994	-4,553	-4,686	-5,231
Other operating activities	201	-39	-64	6	8	0	0	0
<b>CF from Op. Activity</b>	<b>33,124</b>	<b>6,978</b>	<b>-9,781</b>	<b>-2,292</b>	<b>18,839</b>	<b>27,617</b>	<b>-17,462</b>	<b>15,343</b>
(Inc)/Dec in FA & CWIP	-1,441	-2,010	-2,439	-2,530	-1,567	-4,961	-703	-3,000
<b>Free cash flows</b>	<b>31,682</b>	<b>4,968</b>	<b>-12,220</b>	<b>-4,822</b>	<b>17,272</b>	<b>22,655</b>	<b>-18,165</b>	<b>12,343</b>
(Pur)/Sale of Invt	0	0	0	0	-71	71	0	0
Others	0	0	0	0	0	0	0	0
<b>CF from Inv. Activity</b>	<b>-1,441</b>	<b>-2,010</b>	<b>-2,439</b>	<b>-2,530</b>	<b>-1,638</b>	<b>-4,891</b>	<b>-703</b>	<b>-3,000</b>
Inc/(Dec) in Net Worth	-273	-496	-389	-344	-684	-1,622	3,636	0
Inc / (Dec) in Debt	-6	-1	0	0	0	0	0	0
Interest Paid	-4	-6	-8	-34	-14	-45	0	0
Divd Paid (incl Tax) & Others	-2,010	-1,934	-2,083	-2,181	-2,728	-3,188	-3,464	-3,867
<b>CF from Fin. Activity</b>	<b>-2,294</b>	<b>-2,437</b>	<b>-2,481</b>	<b>-2,559</b>	<b>-3,427</b>	<b>-4,855</b>	<b>172</b>	<b>-3,867</b>
<b>Inc/(Dec) in Cash</b>	<b>29,389</b>	<b>2,531</b>	<b>-14,700</b>	<b>-7,381</b>	<b>13,774</b>	<b>17,871</b>	<b>-17,993</b>	<b>8,476</b>
Add: Opening Balance	35,784	65,194	67,725	53,025	45,644	58,815	77,289	59,296
<b>Closing Balance</b>	<b>65,173</b>	<b>67,725</b>	<b>53,025</b>	<b>45,644</b>	<b>59,418</b>	<b>76,686</b>	<b>59,296</b>	<b>67,772</b>

E: MOSL Estimates

## Corporate profile

### Company description

Bharat Electronics Limited (BHE) was established at Bangalore, India, by the Government of India under the Ministry of Defence in 1954 to meet the specialized electronic needs of the Indian defence services. Over the years, it has grown into a multi-product, multi-technology, multi-unit company servicing the needs of customers in diverse fields in India and abroad.

Exhibit 1: Sensex rebased

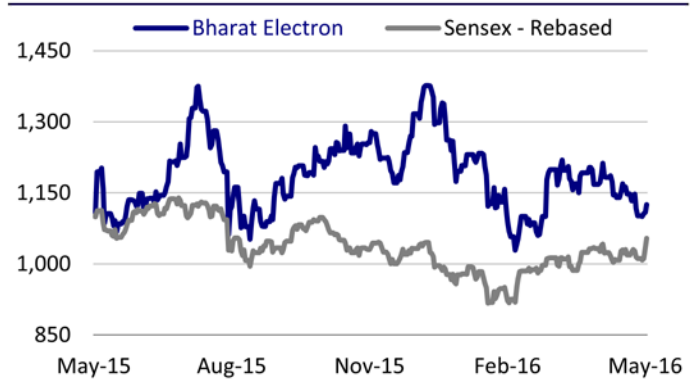


Exhibit 2: Shareholding pattern (%)

	Mar-16	Dec-15	Mar-15
Promoter	75.0	75.0	75.0
DII	14.7	14.7	15.4
FII	4.0	4.1	3.4
Others	6.3	6.2	6.2

Note: FII Includes depository receipts

Source: Capitaline

Exhibit 3: Top holders

Holder Name	% Holding
Life Insurance Corporation Of India	5.3
Reliance Capital Trustee Co. Ltd A/C	
Relianceequity Opportunities Fund	1.0

Source: Capitaline

Exhibit 4: Top management

Name	Designation
Sunil Kumar Sharma	Chairman & Managing Director
P R Acharya	Director (Finance)
M L Shanmukh	Director (Human Resources)
P C Jain	Director (Marketing)
S Sreenivas	Company Secretary

Source: Capitaline

Exhibit 5: Directors

Name	Name
Sunil Kumar Sharma	Ajit T Kalghatgi
Amol Newaskar	S M Acharya*
Manmohan Handa	Vinod Kumar Mehta*
P R Acharya	Vikram Srivastava*
M L Shanmukh	C A Krishnan
P C Jain	Kusum Singh

\*Independent

Exhibit 6: Auditors

Name	Type
Badari Madhusudhan& Srinivasan	Statutory
Thirupal Gorige	Secretarial Audit
P S V & Associates	Cost Auditor
Ved & Co	Branch
Rao & Narayan	Branch
Malani Somani Chandak & Associates	Branch

Source: Capitaline

Exhibit 7: MOSL forecast v/s consensus

EPS (INR)	MOSL forecast	Consensus forecast	Variation (%)
FY17	61.8	60.4	2.3
FY18	69.0	65.7	5.0

Source: Bloomberg

## NOTES

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