Bharat Electronics

BSE SENSEX	S&P CNX
31,688	9,935

Stock Info

Bloomberg	BHE IN
Equity Shares (m)	2,234
52-Week Range (INR)	197 / 119
1, 6, 12 Rel. Per (%)	5/11/47
M.Cap. (INR b)	419.9
M.Cap. (USD b)	6.6
Avg Val, INRm	727
Free float (%)	31.8

Financials Snapshot (INR b)

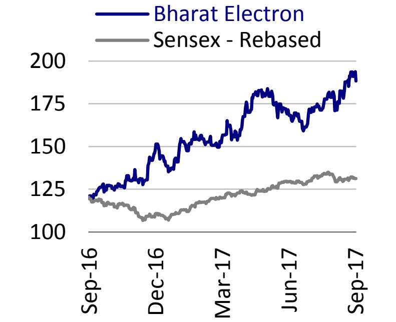
Y/E Mar	2017	2018E	2019E
Net Sales	86.1	110.1	122.8
EBITDA	17.6	19.8	21.3
NP	15.5	16.5	18.4
EPS (INR)	6.9	7.4	8.2
EPS Gr. (%)	27.2	6.7	11.5
BV/Sh (INR)	33.7	43.6	48.7
RoE (%)	20.6	17.0	16.9
RoCE (%)	18.8	19.2	17.9
P/E (x)	23.1	22.3	21.8
P/BV (x)	4.8	3.8	3.7

Shareholding pattern (%)

As On	Jun-17	Mar-17	Jun-16
Promoter	68.2	68.2	75.0
DII	16.7	17.7	15.0
FII	7.6	6.7	3.9
Others	7.5	7.4	6.1

FII Includes depository receipts

Stock Performance (1-year)



CMP: INR188 TP: INR215(+15%) Buy

Capex of INR25b to capture future growth opportunities

Plans to expand through diversification; R&D remains key focus area

Capex plans of INR25b over next 3-4 years

BHE plans to spend INR25b over the next 3-4 years (INR5b-6b annually) on modernization of its facilities and capacity expansion. Key projects include: (a) setting up a missile/defense systems integration complex (INR5b) spread over 900 acres in Andhra Pradesh, (b) electro-optical device manufacturing facility (INR2.5b) in Andhra Pradesh, and (c) electronic warfare test range. BHE is also upgrading its image intensifier technology-based tubes fabrication facility (INR2b).

Provision reversals aid margin expansion in FY17

BHE's other operating income for FY17 grew 104% to INR3.1b, led by withdrawal of provisions on (a) onerous contract, and (b) doubtful debts and liquidated damages. Provisions withdrawn in both the categories stood at INR1.7b as against INR0.02b in FY16. Provision withdrawal led to gross margin expansion of 100bp to 48.8% and operating margin improvement of 150bp to 20.5%.

NWC cycle elongates as customer advances declines

Net working capital (NWC) cycle for FY17 elongated to 91 days from 28 days in FY16. Deterioration in NWC was mainly on account of decline in customer advances from INR63.1b in FY16 to INR60.1b. Net core working capital cycle was stable in FY17 at 349 days (342 days in FY16). Inventory as well as receivables days were stable in FY17 at 208 days and 185 days, respectively.

Capex, working capital cycle elongation lead to negative FCF

BHE's cash flow from operations (CFO) declined meaningfully from INR25.9b in FY16 to INR5.5b in FY17. Decline in CFO was mainly on account of elongation in working capital cycle, which in turn was impacted by decline in customer advances. Free cash flow (FCF) for FY17 turned negative, led by capex of INR6.1b and working capital cycle elongation.

Business expansion plans through diversification

To expand revenue streams, BHE plans to enter new business areas in the defense and non-defense segments. Within defense, it plans to enter areas like indigenous SAM systems, airborne radars, image intensifier tubes and thermal imaging detectors for night vision devices, inertial navigation systems, navigational complex system, electronic ammunition fuses, and pressurized missile containers. BHE also plans to enter non-defense segments like homeland security, solar and space.

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Amit Shah – Research analyst (Amit.Shah@MotilalOswal.com); +91 22 6129 1543

Plans to double exports from 5% of sales in FY17

BHE’s exports for FY17 were USD66m (5% of the sales), down 23%, impacted by customers’ non-preparedness to take delivery. As a result, few major naval orders planned for execution did not materialize during the year. BHE has an export order book of USD85m (USD17m from offset orders) and has set a target of USD72m exports (up 9%) for FY18. Its long-term target is to reach sustained export contribution of 10% of sales, up from the current level of 5%. Key projects exported during FY17 are: CSS, CoMPASS, VHF Radio Bharti, ACCS, SANKET, EO FCS, and electro-mechanical parts, among others.

R&D remains a key focus area

R&D has been BHE’s main focus area for increasing indigenization and value addition in products / systems. R&D expenditure for FY17 was INR7.8b (8.8% of sales). The focus on R&D spending has helped BHE to achieve 87% of sales (86% in FY16) from indigenous products; 13% of sales came from products manufactured through ToT from foreign OEMs. In FY17, BHE incurred R&D spending on key business segments like radars, military communication, naval systems, missile systems, electronic warfare, avionics, electro-optics, and tank electronics.

Valuation and view

BHE is well-positioned to benefit from rising defense expenditure, supported by (a) strong manufacturing base and execution track record, (b) relationships with defense and government agencies, (c) strategic collaboration with foreign technology partners for new product development, (d) in-house R&D capabilities (R&D spend at 8.8% of revenue), and (e) increased focus on exports to friendly countries. We expect BHE to report EPS of INR7.4 in FY18 and INR8.2 in FY19. We maintain Buy with a revised TP of INR215 (25x June FY19E EPS, its peak historical valuation to factor in improved pace of decision-making in defense sector).

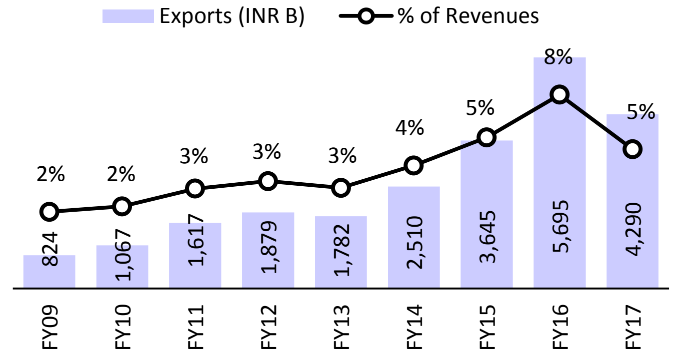
Business expansion plans through diversification

- To expand business, BHE plans to enter new areas in the defense and non-defense segments. Within defense, BHE plans to enter areas like indigenous SAM systems, airborne radars, image intensifier tubes and thermal imaging detectors for night vision devices, inertial navigation systems, navigational complex system, electronic ammunition fuses, and pressurized missile containers. BHE also plans to enter non-defense segments like homeland security, solar, space, etc.
- **Homeland security**: The homeland security market in India is spread across the central government, the state governments, and the private sector. The major segments of homeland security are critical infrastructure protection, paramilitary, police & urban area security, ground transportation, port & maritime security, cyber security, etc. Border security management is a major component of homeland security requirement; it includes border management solutions along the India-Pakistan and India-Bangladesh borders. BHE is planning to address border management solution requirements as part of the homeland security business. The total budget allocation for Union Home Ministry for 2017-18 (which includes allocation for homeland security requirements) is INR972b – a 5% hike over the previous year's INR921b.
- **Solar:** BHE has upgraded its facilities to 10 MW PV Cell and 10 MW automated solar module manufacturing and has taken up setting of megawatt size solar power plants. BHE is setting up utility scale solar power plants for captive consumption in the estates of Ordnance Factories at 17 locations spread across 8 states for a total capacity of 150 MW. The commissioning of first solar power plant of 15 MW capacity is expected to happen soon at Ordnance Factory, Medak. The Module plant will be able to manufacture solar modules up-to 320 watts with an efficiency of 16% upwards in both 60 & 72 cells configuration.

Plans to double exports from the current 5% of sales

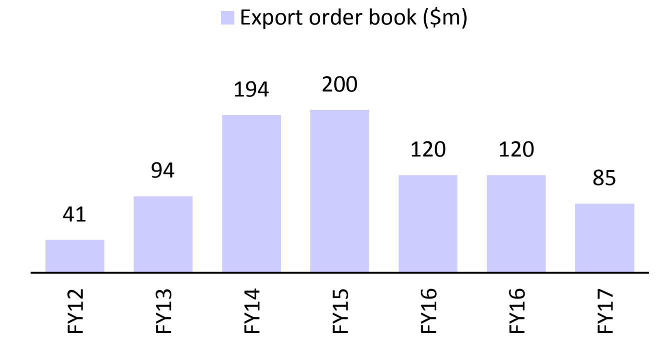
- BHE's exports for FY17 were USD66m (5% of the sales), down 23%, impacted by customers' non-preparedness to take delivery. As a result, few major naval orders planned for execution did not materialize during the year.
- BHE has an export order book of USD85m (USD17m from offset orders) and has set a target of USD72m exports (up 9%) for FY18. Its long-term target is to reach sustained export contribution of 10% of sales, up from the current level of 5%.
- Key projects exported during FY17 are: CSS, CoMPASS, VHF Radio Bharti, ACCS, SANKET, EO FCS, and electro-mechanical parts, among others.

Exhibit 1: Plans to double exports contribution from the current 5% levels



Source: MOSL, Company

Exhibit 2: Export order book currently stands at USD85m, of which it intends to execute USD72m in FY18



Source: MOSL, Company

R&D remains key focus area

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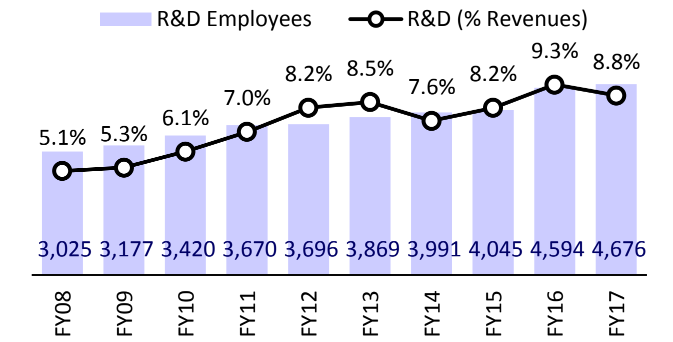
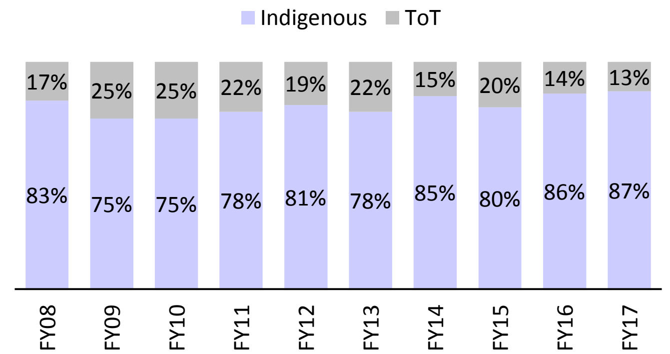
- The focus on R&D spending has helped BHE to achieve 87% of sales (86% in FY16) from indigenous products; 13% of sales came from products manufactured through ToT from foreign OEMs.
- In FY17, BHE incurred R&D spending on key business segments like radars, military communication, naval systems, missile systems, electronic warfare, avionics, electro-optics, and tank electronics.

Exhibit 3: R&D expenditure at 8.8% of revenue for FY17 as compared to 9.3% in FY16



Source: MOSL, Company

Exhibit 4: Strong R&D expenditure helps to achieve 87% sales from indigenous products



Source: MOSL, Company

Capex of INR25b planned over next 3-4 years

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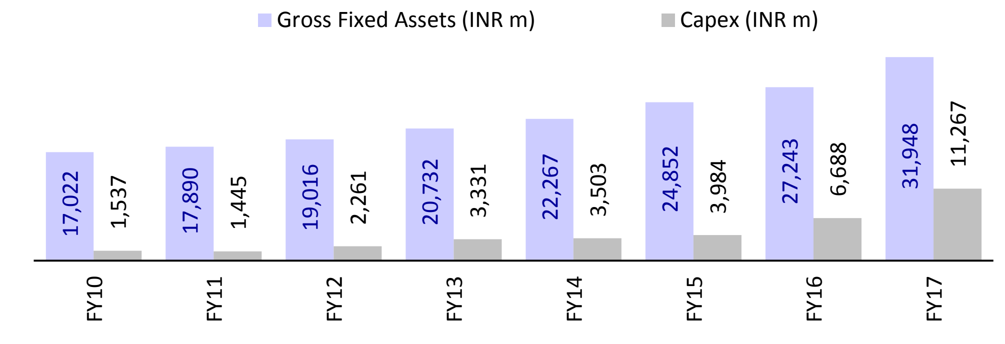
- Key projects include: (a) setting up a missile/defense systems integration complex (INR5b) spread over 900 acres in Andhra Pradesh, (b) electro-optical device manufacturing facility (INR2.5b) in Andhra Pradesh, and (c) electronic warfare test range. BHE is also upgrading its image intensifier technology-based tubes fabrication facility (INR2b).

Exhibit 5: Robust capex for upgradataion and creation of new facilities



Source: MOSL, Company

Other operational income improvement contributes to margin expansion

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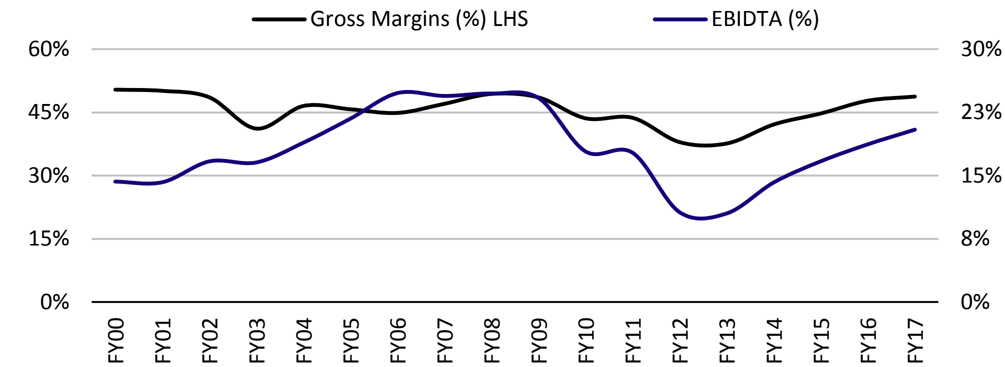
- Provision withdrawal led to gross margin expansion of 100bp to 48.8% and operating margin improvement of 150bp to 20.5%.

Exhibit 6: Other income improvement contributes to margin expansion

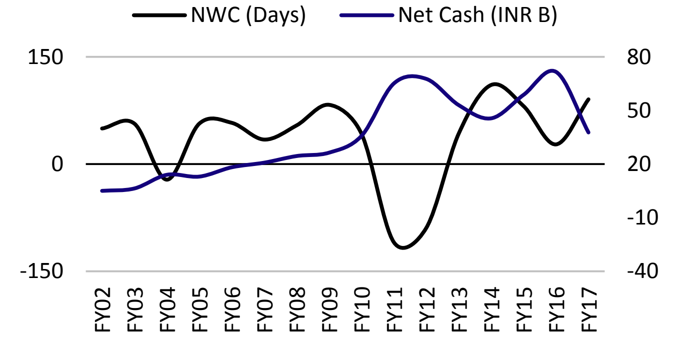


Source: MOSL, Company

Net working capital cycle elongates as customer advances decline

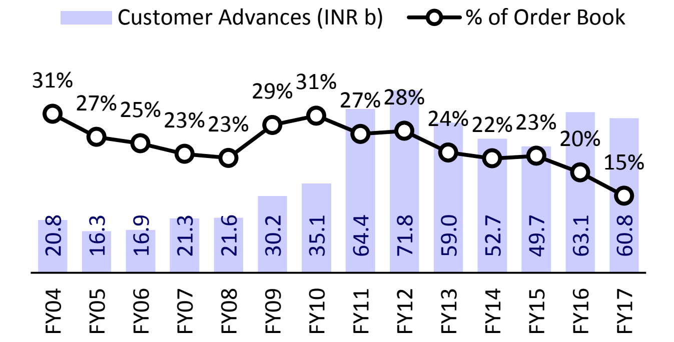
- Net working capital (NWC) cycle for FY17 elongated to 91 days from 28 days in FY16. Deterioration in NWC was mainly on account of decline in customer advances from INR63.1b in FY16 to INR60.1b.
- Net core working capital cycle was stable in FY17 at 349 days (342 days in FY16).
- Inventory as well as receivables days were stable in FY17 at 208 days and 185 days, respectively.

Exhibit 7: NWC days up from 28 days in FY16 to 91 days in FY17



Source: MOSL, Company

Exhibit 8: Customer advances down, leading to NWC cycle elongation



Source: MOSL, Company

Capex, working capital cycle elongation lead to negative FCF

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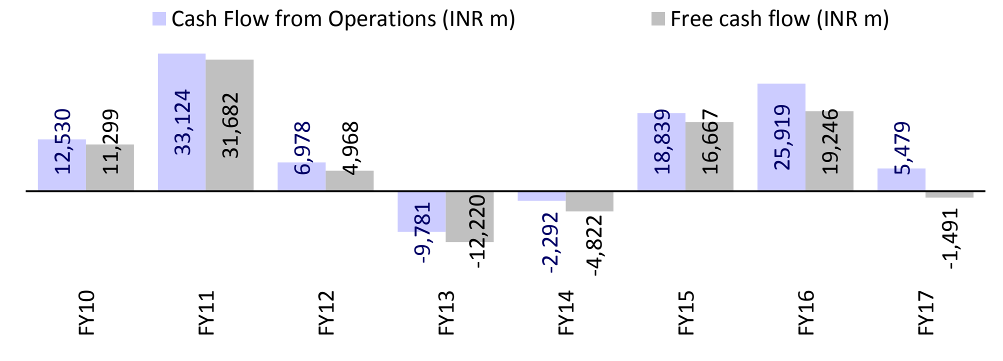
- Free cash flow (FCF) for FY17 turned negative, led by capex of INR6.1b and working capital cycle elongation.

Exhibit 9: Free cash flow turns negative on higher WC requirement and capex



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Valuation and view

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- We expect BHE to report EPS of INR7.4 in FY18 and INR8.2 in FY19. We maintain **Buy** with a revised TP of INR215 (25x June FY19E EPS, its peak historical valuation to factor in improved pace of decision-making in defense sector).

Exhibit 10: Operating metrics

INR M	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E
Order book	249,490	234,520	216,170	320,220	402,420	457,520	491,882
Y-o-Y growth	-3.1%	-6.0%	-7.8%	48.1%	25.7%	13.7%	7.5%
Order inflow	52,425	42,300	51,300	170,940	163,000	163,000	154,850
Y-o-Y growth	-32.7%	-19.3%	21.3%	233.2%	-4.6%	0.0%	-5.0%
Execution	59,905	61,223	66,755	71,737	82,961	107,900	120,488
Y-o-Y growth	6.0%	2.2%	9.0%	7.5%	15.6%	30.1%	11.7%
Book to bill ratio (x)	4.2	3.8	3.2	4.5	4.9	4.2	4.1
Revenues	**59,905**	**61,223**	**66,755**	**71,737**	**82,961**	**107,900**	**120,488**
Defence	51,882	52,087	56,075	59,541	68,028	87,399	97,596
Non Defence	9,156	10,668	10,681	12,195	14,933	20,501	22,893
Revenues							
Indigeniously developed	NA	41.0%	38.0%	39.0%			
In association with DRDO, etc	NA	44.0%	42.0%	47.0%			
Total Indigenous	**78.0%**	**85.0%**	**80.0%**	**86.0%**			
ToT from Foreign OEM's	22.0%	15.0%	20.0%	14.0%			
Revenues							
Domestic	58,340	59,232	63,111	66,042	78,671	102,323	113,238
Exports	1,782	2,510	3,645	5,695	4,290	5,577	7,250
Exports, % of Total	3.0%	4.1%	5.5%	7.9%	5.2%	5.2%	6.0%
Cost structure (% of Revenues)							
Raw material cost	62.4	57.9	55.2	52.2	51.2	56.2	57.5
Employee Cost	18.2	16.4	18.5	17.2	18.0	17.0	16.4
Other Expenses	6.0	6.3	6.0	6.0	5.2	5.5	5.5
Provisions/write off	2.9	5.4	3.6	6.0	5.1	3.3	3.2
R&D Expenses (INR M)	5099	4670	5489	7043			
R&D Expenses % to Sales	8.4	7.4	8.0	9.6			
Net cash/(Debt) (INR M)	53,025	45,644	58,815	71,653	37,735	54,442	64,164
Core NWC (Days)	396	418	346	342	349	379	379
Customer Advances	353	307	265	314	258	258	258
Reported NWC (Days)	**43**	**111**	**81**	**28**	**91**	**121**	**121**

Financials and Valuations

Income statement							(INR Million)
Y/E March	**2013**	**2014**	**2015**	**2016**	**2017**	**2018E**	**2019E**
Net Sales	**61,038**	**62,755**	**68,427**	**73,278**	**86,119**	**110,110**	**122,809**
Change (%)	5.8	2.8	9.0	7.1	17.5	27.9	11.5
Manufacturing Expenses	41,739	40,241	41,937	42,670	48,600	67,938	77,370
Staff Cost	11,108	10,304	12,635	12,573	15,483	18,713	20,161
Office & Site Establishment Exps	1,767	3,299	2,422	4,319	4,418	3,655	3,962
EBITDA	**6,425**	**8,911**	**11,433**	**13,716**	**17,617**	**19,804**	**21,316**
% of Net Sales	10.5	14.2	16.7	18.7	20.5	18.0	17.4
Depreciation	1,307	1,421	1,540	1,722	1,915	2,180	2,318
Interest	8	34	14	45	118	50	50
Other Income	6,100	4,285	4,780	5,371	4,710	4,000	5,100
PBT	**11,210**	**11,741**	**14,659**	**17,320**	**20,294**	**21,574**	**24,048**
Tax	2,248	2,431	2,994	4,248	4,818	5,057	5,637
Rate (%)	20.1	20.7	20.4	24.5	23.7	23.4	23.4
Adjusted PAT	**8,962**	**9,310**	**11,665**	**13,072**	**15,476**	**16,517**	**18,411**
EO Income (Net of Expenses)	-64	6	8	0	0	0	0
Reported PAT	**8,898**	**9,316**	**11,672**	**13,072**	**15,476**	**16,517**	**18,411**
Change (%)	7.2	4.7	25.3	12.0	18.4	6.7	11.5

Balance sheet							(INR Million)
Y/E March	**2013**	**2014**	**2015**	**2016**	**2017**	**2018E**	**2019E**
Share Capital	800	800	800	2,400	2,234	2,234	2,234
Reserves	62,429	69,498	78,141	87,484	72,937	95,190	106,619
Net Worth	**63,229**	**70,298**	**78,941**	**89,884**	**75,170**	**97,424**	**108,852**
Loans	0	0	0	0	167	0	0
Deffered Tax Liability	-2,716	-2,995	-3,378	-4,608	-5,323	-3,000	-3,000
Capital Employed	**60,513**	**67,304**	**75,565**	**85,276**	**70,014**	**94,424**	**105,852**
Gross Fixed Assets	20,732	22,267	24,852	27,243	31,948	34,948	36,148
Less: Depreciation	14,978	15,757	17,140	17,479	19,394	21,575	23,893
Net Fixed Assets	**5,755**	**6,509**	**7,712**	**9,764**	**12,553**	**13,373**	**12,255**
Capital WIP	1,614	1,969	1,398	4,297	6,563	2,000	2,000
Investments	120	120	191	3,191	4,597	120	120
Curr. Assets	**134,257**	**133,680**	**139,319**	**159,378**	**142,525**	**195,926**	**221,966**
Inventory	32,711	33,701	34,269	41,775	49,050	52,793	58,881
Debtors	33,347	41,508	38,180	37,119	43,549	60,334	67,293
Cash & Bank Balance	53,025	45,644	58,815	71,653	37,902	54,442	64,164
Loans & Advances	14,382	12,164	7,520	855	806	27,150	30,282
Other Current Assets	792	663	535	7,976	11,219	1,207	1,346
Current Liab. & Prov.	**81,233**	**74,974**	**73,056**	**91,357**	**96,225**	**116,995**	**130,488**
Liabilities	74,071	68,979	65,289	82,185	83,222	104,928	117,030
Provisions	7,162	5,995	7,767	9,172	13,003	12,067	13,459
Net Current Assets	**53,024**	**58,705**	**66,263**	**68,022**	**46,301**	**78,931**	**91,477**
Misc. Expenses	0	0	1	0	0	0	0
Application of Funds	**60,513**	**67,303**	**75,565**	**85,274**	**70,014**	**94,424**	**105,852**

E: MOSL Estimates

Financials and Valuations

Ratios							
Y/E March	**2013**	**2014**	**2015**	**2016**	**2017**	**2018E**	**2019E**
Adjusted EPS	**3.7**	**3.9**	**4.9**	**5.4**	**6.9**	**7.4**	**8.2**
Growth (%)	7.2	4.7	25.3	12.0	27.2	6.7	11.5
Cash EPS	4.3	4.5	5.5	6.2	7.8	8.4	9.3
Book Value	26.3	29.3	32.9	37.5	33.7	43.6	48.7
DPS	0.7	0.8	1.0	1.7	2.3	2.4	2.7
Payout (incl. Div. Tax.)	20	20	20	31	32	32	32
Valuation (x)							
P/E (standalone)	10.3	9.8	31.1	27.8	23.1	22.3	21.8
Cash P/E	9.0	8.5	27.5	24.5	20.5	19.7	19.4
EV/EBITDA	6.1	5.2	26.6	21.2	18.1	15.9	15.9
EV/Sales	0.6	0.8	4.6	4.1	3.9	2.9	2.8
Price/Book Value	1.5	1.3	4.6	4.0	4.8	3.8	3.7
Dividend Yield (%)	1.9	2.0	0.6	1.1	1.4	1.5	1.5
Profitability Ratios (%)							
RoE	14.2	13.2	14.8	14.5	20.6	17.0	16.9
RoCE	15.0	14.0	15.6	15.5	18.8	19.2	17.9
RoIC	-89.4	46.9	45.3	85.0	88.4	45.9	37.6
Turnover Ratios							
Debtors (Days)	199	241	204	185	185	200	200
Inventory (Days)	196	196	183	208	208	175	175
Fixed Asset Turnover (x)	2.9	2.7	2.7	2.6	2.6	3.1	3.3

Cash flow statement							(INR Million)
Y/E March	**2013**	**2014**	**2015**	**2016**	**2017**	**2018E**	**2019E**
PBT before Extraordinary Items	**11,209**	**11,740**	**14,659**	**17,320**	**20,294**	**21,574**	**24,048**
Add : Depreciation	1,307	1,421	1,540	1,722	1,915	2,180	2,318
Interest	8	34	14	45	118	50	50
Less : Direct Taxes Paid	2,248	2,431	2,994	4,248	4,818	5,057	5,637
(Inc)/Dec in WC	-19,994	-13,062	5,614	11,080	-12,031	-16,090	-2,824
CF from Operations	**-9,717**	**-2,298**	**18,831**	**25,919**	**5,479**	**2,657**	**17,955**
Extra-ordinary Income	-64	6	8	0	0	0	0
CF from Operations after EOI	**-9,781**	**-2,292**	**18,839**	**25,919**	**5,479**	**2,657**	**17,955**
(Inc)/Dec in FA	-2,439	-2,530	-2,171	-6,674	-6,970	1,563	-1,200
Free Cash Flow	**-12,220**	**-4,822**	**16,667**	**19,246**	**-1,491**	**4,220**	**16,755**
(Pur)/Sale of Investments	0	0	-71	-3,001	-1,406	4,477	0
CF from Investments	**-2,439**	**-2,530**	**-2,242**	**-9,674**	**-8,376**	**6,041**	**-1,200**
(Inc)/Dec in Networth	-389	-344	-684	1,551	-25,035	14,325	0
(Inc)/Dec in Debt	0	0	0	0	167	-167	0
Less : Interest Paid	8	34	14	45	118	50	50
Dividend Paid	2,083	2,181	2,728	4,911	5,870	6,265	6,983
CF from Fin. Activity	**-2,481**	**-2,559**	**-3,427**	**-3,404**	**-30,856**	**7,843**	**-7,033**
Inc/Dec of Cash	**-14,700**	**-7,381**	**13,170**	**12,841**	**-33,753**	**16,541**	**9,722**
Add: Beginning Balance	67,725	53,025	45,644	58,815	71,653	37,902	54,442
Closing Balance	**53,025**	**45,644**	**58,813**	**71,656**	**37,900**	**54,443**	**64,164**

E: MOSL Estimates

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