

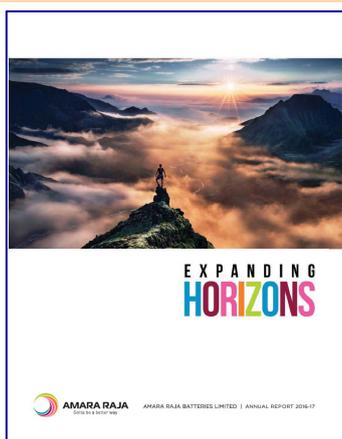
Amara Raja Batteries

BSE SENSEX
32,382

S&P CNX
10,021

CMP: INR847 TP: INR1,095(+29%)
Buy

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Stock Info

Bloomberg	AMRJ IN
Equity Shares (m)	170.8
52-Week Range (INR)	1,077/807
1,6,12 Rel. Perf. (%)	-3/-21/-21
M.Cap. (INR b)	144.6
M.Cap. (USD b)	2.2
Avg Val, INRm	353.0
Free float (%)	47.9

Financials Snapshot (INR b)

Y/E Mar	2017	2018E	2019E
Sales	53.2	62.1	73.6
EBITDA	8.5	9.9	11.7
NP	4.8	6.0	7.2
EPS (INR)	28	35	42
EPS Gr. (%)	(2.7)	26.1	19.2
BV/Sh. (INR)	152	181	215
RoE (%)	20.3	21.2	21.3
RoCE (%)	19.4	20.3	20.4
P/E (x)	30.2	24.0	20.1
P/BV (x)	5.6	4.7	3.9

Shareholding pattern (%)

As On	Jun-17	Mar-17	Jun-16
Promoter	52.1	52.1	52.1
DII	10.9	8.9	8.2
FII	19.0	19.7	20.6
Others	18.0	19.4	19.2

FII Includes depository receipts

Strengthening products and market presence

Expanding technology and offerings to challenge leader

AMRJ's FY17 annual report, themed 'Expanding Horizons' highlights initiatives on new technologies, applications and markets. It has prioritized segments such as e-rickshaws, renewable energy, motive power products and exports to keep its growth momentum intact in FY18. Further, it is exploring and evaluating possibilities of foraying into other technologies even as it continues to strengthen its leadership in the lead-acid space.

Expanding horizons across every aspect of business

FY17 was an important year for AMRJ, as it expanded its horizon across every aspect of business: (a) Technology – absorbed glass mat batteries, flat plate gel, tubular gel, etc, (b) Products – batteries for micro-hybrid vehicles, customized batteries for UPS segment, etc, and (c) Processes. Further, it is exploring products for renewable energy and e-mobility.

Technological innovations to enhance product offerings

In the lead acid space, AMRJ is targeting to launch flat plate and tubular gel batteries developed on gel-based platforms in FY18. It expects to launch products based on EFB (enhance flooded battery) technology for micro hybrid vehicles in 1HFY18. In FY17, it developed products on AGM (absorbed glass mat) platform and customized batteries for UPS applications. AMRJ expects the domestic battery industry to grow at a CAGR of 7-9% till 2020.

Key priorities for FY18

- Implement punch greed technology across segments
- Capacity enhancement in 2W and 4W space
- Increase in automation levels to handle materials on the shop floor
- Expand network and market share in EXID-dominated East and West markets
- Strengthen marketing of in-house manufactured tubular batteries for home UPS and e-rickshaw applications
- Establish strong presence in high potential exports markets like Saudi Arabia and Australia
- Launch high warranty and energy-efficient products in industrial segment
- Focus on increasing volumes of batteries used in data center applications
- Increase focus on renewable energy and motive power segment

Targets to double 2W battery capacity in three years

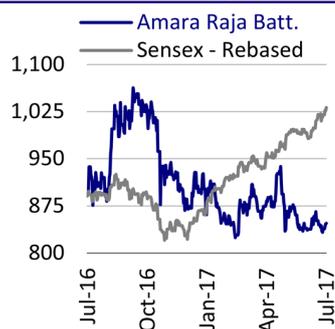
AMRJ intends to continue its capacity expansion drive, as long-term growth prospects remain robust. It is establishing a 14m units/year greenfield 2W battery capacity in four phases over the next five years. This will take its total 2W battery capacity to 24m units/year. In addition to the recently-commissioned 2.25m units/year capacity, AMRJ is setting up three additional lines in the 4W segment.

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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, Bloomberg, Thomson Reuters, Factset and S&P Capital.

Stock Performance (1-year)**Focus on new segments to fuel growth**

AMRJ is targeting new segments like renewable energy, e-mobility, motive power and data center applications. It is banking on government schemes like FAME, Auto Mission Plan II and National Electric Mobility Mission Plan (NEMMP) 2020, which are expected to drive demand for automotive batteries in the future.

On-boarding new customers across segments

In the 2W battery space, AMRJ commenced supplies to Bajaj Auto (BJAUT) in FY17 and has on-boarded Hero MotoCorp (HMCL) as new customer. In 4Ws, AMRJ is the sole supplier to Renault Kwid, and has added new platforms from existing customers. It has also begun supplies to Volvo for its earth-moving vehicles.

Exploring India-like export markets to de-risk India exposure

AMRJ is expanding its presence in key markets such as South-East Asia, the Middle East, Australia and Africa. Its exports grew 48% in FY17 and it targets to raise the contribution of exports from 6.8% of revenue in FY17. For South-East Asian markets, AMRJ is targeting telecom and UPS batteries for volume growth.

Double-digit revenue growth in automotive segment (60% of revenue)

In FY17, automotive segment revenue grew in double digits, led by healthy growth in the 4W and 2W OEM space. AMRJ commenced supplies to BJAUT and will soon start supplies to HMCL to further boost 2W OEM revenue. On the replacement side, AMRJ continued its growth momentum, led by strengthening of brands, expansion of network, and varied product offerings.

Telecom and UPS segments moderated industrial segment growth

AMRJ has highlighted that the entry of Reliance Jio with lithium-ion batteries has impacted volume off-take for replacement batteries. Additionally, lead inflation presented challenges in the telecom and UPS segments. However, preferred supplier status with major OEMs, after sales service, and strong performance of brands like *PowerStack*, *Quanta* and *QRS* supported sales.

Valuation and view

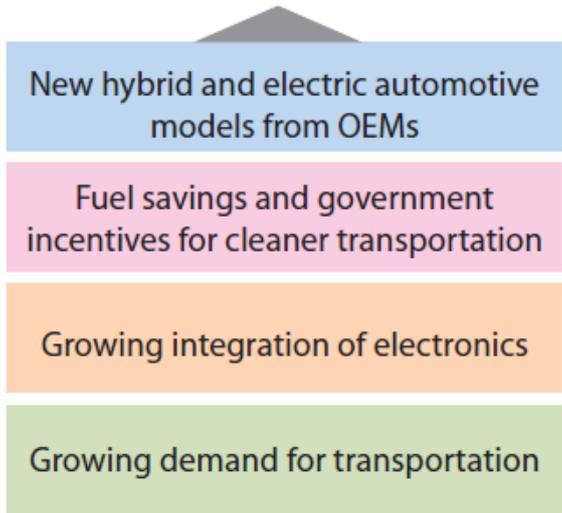
With stable competitive environment and demand recovery, we estimate 17.6% Revenues CAGR, 17.3% EBITDA CAGR and 22.6% PAT CAGR over FY17-19. FCF generation (INR8.2b over FY17-19E) and RoE of 21% coupled with potential shift from unorganized to organized players due to GST would continue to drive stock re-rating. The stock trades at 24x FY18E and 20.1x FY19E EPS. Maintain **Buy** with a target price of ~INR1,095 (25x June 2019E EPS).

Story in charts: Earnings to grow at a CAGR of 22.6% over FY17-19

Exhibit 1: AMRJ projects global battery market at USD17.3b by 2021

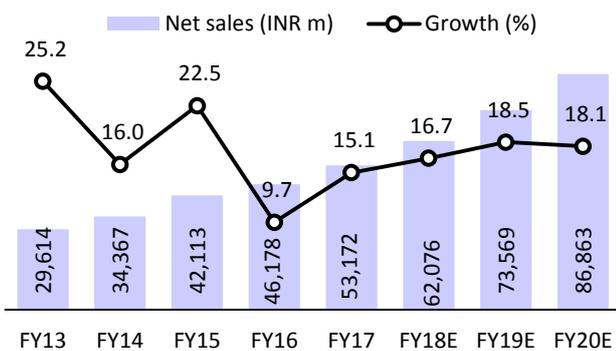
**US\$ 17.26 BILLION
BY 2021**

The global battery market is projected to grow at a CAGR of 4.15% from 2016 to 2021



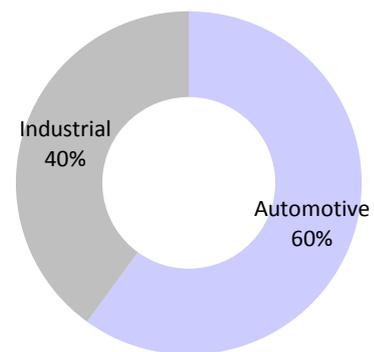
Source: Company

Exhibit 2: Expect revenue CAGR of 17.7% over FY17-19



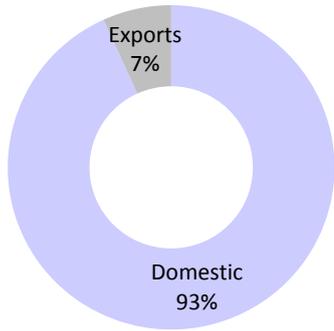
Source: Company, MOSL

Exhibit 3: Autos account for 68% of FY17 revenue pie



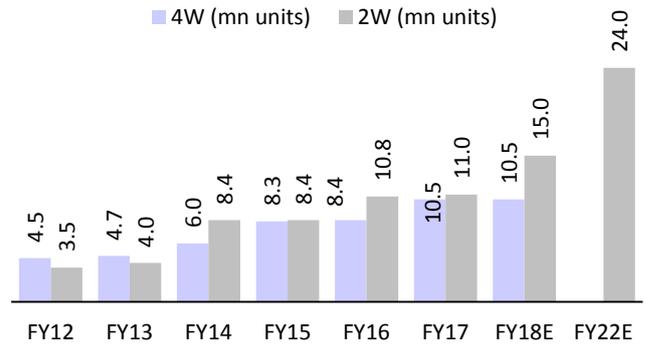
Source: Company

Exhibit 4: Exports' share at just 6.8% of revenue in FY17



Source: Company

Exhibit 5: Capacity build-up to drive growth – 2W capacity to be >2x by FY22



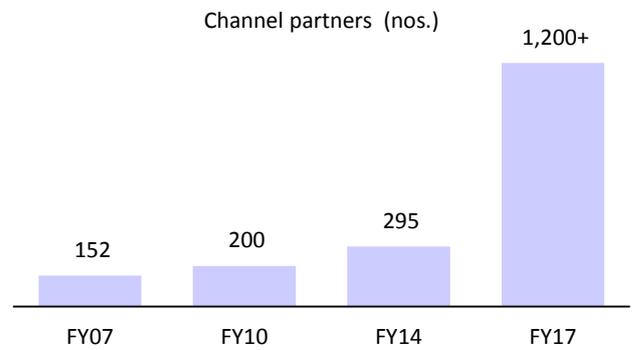
Source: Company

Exhibit 6: Increase in retail network also driving revenue and market share



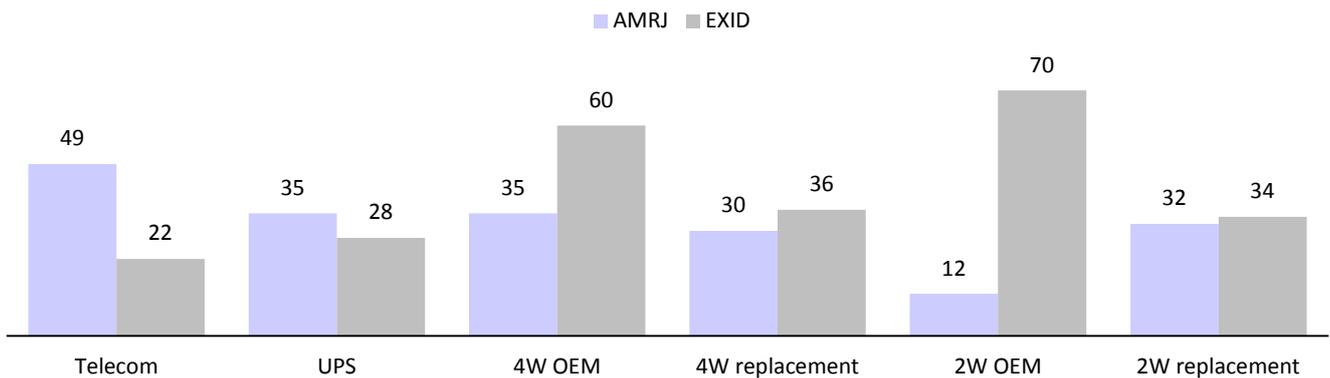
Source: Company

Exhibit 7: Growth in channel partners significant in past three fiscals



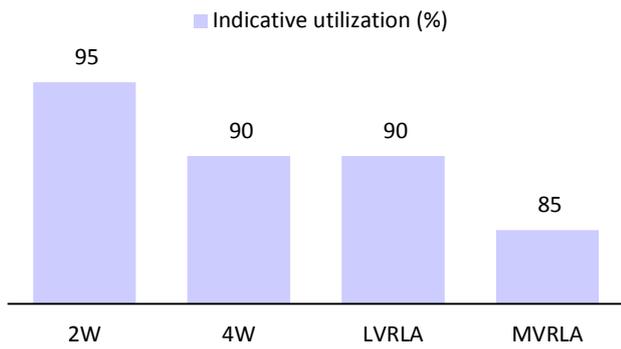
Source: Company

Exhibit 8: Competing head-to-head with EXID – market share across segments



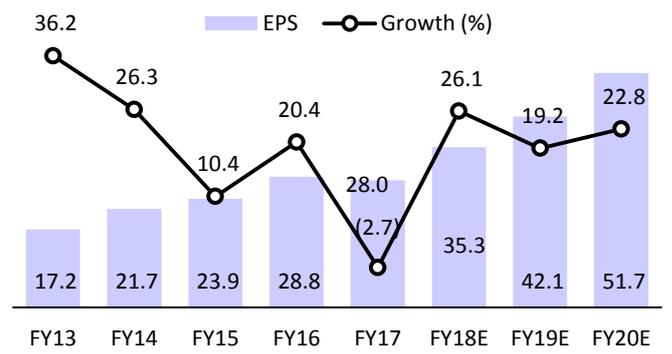
Source: Company, Industry

Exhibit 9: Optimum utilization of capacities



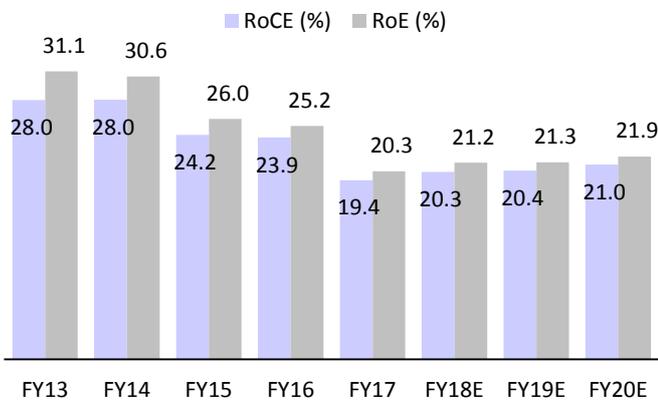
Source: Company, MOSL

Exhibit 10: Earnings to clock CGAR of 20.3% over FY17-19



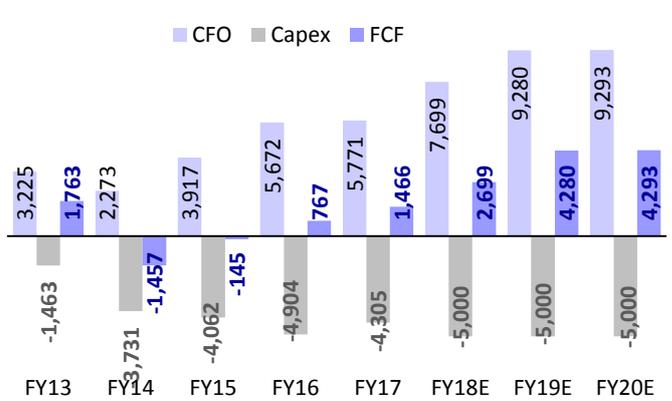
Source: SIAM, MOSL

Exhibit 11: Return profile to remain stable



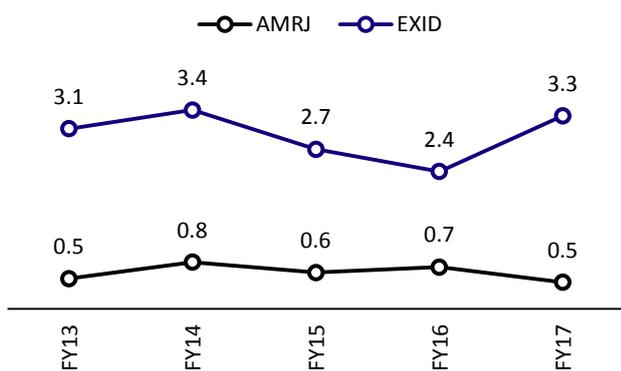
Source: Company, MOSL

Exhibit 12: Increase in FCF led by higher profits



Source: Company, MOSL

Exhibit 13: Distributor-led model saves marketing cost for AMRJ



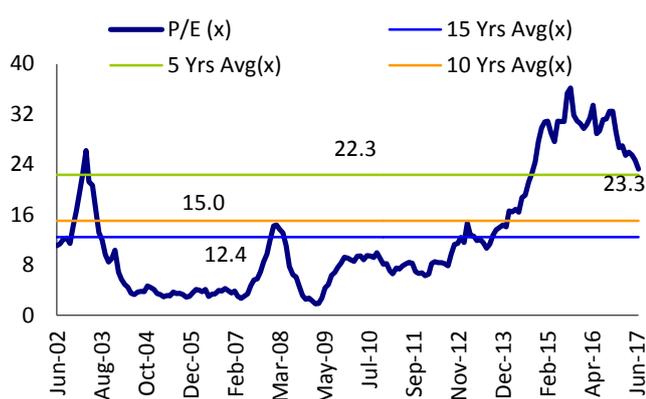
Source: Company, MOSL

Exhibit 14: Increase in warranty costs led by lead cost inflation

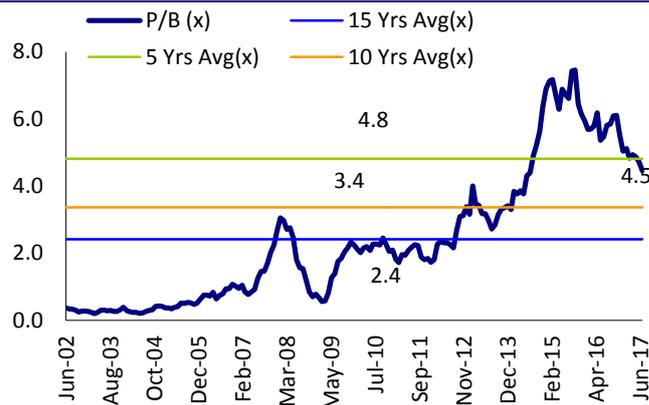


Source: SIAM, MOSL

Exhibit 15: P/E and P/B band



Source: MOSL



Source: MOSL

Exhibit 16: Comparative valuation

	CMP (INR)	Rating	TP (INR)	P/E (x)		EV/EBITDA (x)		RoE (%)		Div Yield (%)		EPS CAGR (%)
				FY18E	FY19E	FY18E	FY19E	FY18E	FY19E	FY18E	FY19E	FY17-19E
Auto OEM's												
Bajaj Auto	2,845	Buy	3,281	20.7	17.4	14.9	12.3	22.2	24.0	2.3	2.8	11.2
Hero MotoCorp	3,707	Neutral	3,818	19.6	18.6	12.6	12.1	34.6	31.5	2.4	2.4	8.5
TVS Motor	570	Buy	606	35.0	22.0	23.1	15.1	28.6	35.2	0.5	0.8	48.5
M&M	1,390	Buy	1,580	20.8	17.4	15.0	12.9	14.1	14.6	1.4	1.4	21.3
Maruti Suzuki	7,515	Buy	8,483	25.7	19.8	15.9	12.6	20.8	22.8	1.1	1.3	23.6
Tata Motors	456	Buy	631	14.7	7.1	4.3	2.7	16.5	27.3	0.1	0.1	80.2
Ashok Leyland	105	Buy	118	20.3	15.1	10.2	7.7	23.2	27.0	1.9	2.1	23.7
Eicher Motors	28,377	Buy	31,326	32.9	25.7	26.7	22.0	40.8	38.0	0.5	0.6	34.0
Auto Ancillaries												
Bharat Forge	1,120	Buy	1,330	29.7	22.5	17.6	14.1	19.8	22.3	0.8	0.9	37.8
Exide Industries	217	Buy	286	22.4	18.2	14.3	11.7	14.8	15.9	1.0	1.0	21.1
Amara Raja Batteries	847	Buy	1,095	24.0	20.1	14.3	11.8	21.2	21.3	0.6	0.8	22.6
BOSCH	24,188	Neutral	23,738	37.2	31.6	24.9	21.2	21.1	21.9	0.9	1.1	27.3
Endurance Tech	913	Buy	1,025	29.9	23.5	14.5	12.1	22.4	23.6	0.4	0.8	28.6

Source: Company, MOSL

Financials and Valuations

Standalone - Income Statement

(INR Million)

Y/E March	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
Gross Revenues	26,029	33,110	38,372	46,372	51,843	59,814	69,525	82,397	97,287
Less: Excise Duty	2,384	3,496	4,005	4,258	5,666	6,642	7,449	8,828	10,424
Net Sales	23,645	29,614	34,367	42,113	46,178	53,172	62,076	73,569	86,863
Change (%)	34.3	25.2	16.0	22.5	9.7	15.1	16.7	18.5	18.1
Gross operating income	26,029	33,110	38,372	46,372	51,843	59,814	69,525	82,397	97,287
Total Expenditure	20,249	25,099	28,764	35,095	37,948	44,672	52,181	61,879	72,901
EBITDA	3396	4515	5603	7018	8,230	8,499	9,895	11,690	13,962
Margin (%)	14.4	15.2	16.3	16.7	17.8	16.0	15.9	15.9	16.1
Depreciation	465	661	646	1,340	1,407	1,912	1,751	2,219	2,629
EBIT	2,931	3,854	4,957	5,678	6,823	6,587	8,144	9,471	11,333
Int. and Finance Charges	25	10	7	2	55	58	51	46	46
Other Income - Rec.	280	466	455	423	459	492	650	850	1,150
PBT bef. EO Exp.	3,186	4,310	5,405	6,099	7,226	7,022	8,743	10,275	12,437
EO Expense/(Income)	0	92	39	73	0	0	0	0	0
PBT after EO Exp.	3,186	4,218	5,367	6,026	7,226	7,022	8,743	10,275	12,437
Tax Rate (%)	32.5	32.0	31.5	33.0	32.0	31.9	31.0	30.0	29.0
Reported PAT	2,151	2,867	3,674	4,036	4,916	4,785	6,032	7,193	8,830
PAT Adj for EO items	2,151	2,929	3,701	4,084	4,916	4,785	6,032	7,193	8,830
Change (%)	45.2	36.2	26.3	10.4	20.4	-2.7	26.1	19.2	22.8
Margin (%)	9.1	9.9	10.8	9.7	10.6	9.0	9.7	9.8	10.2

Standalone - Balance Sheet

(INR Million)

Y/E March	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
Equity Share Capital	171	171	171	171	171	171	171	171	171
Total Reserves	8,064	10,427	13,456	17,674	20,988	25,760	30,682	36,551	43,757
Net Worth	8,235	10,598	13,627	17,845	21,159	25,931	30,853	36,722	43,928
Deferred Liabilities	220	195	301	368	538	815	903	1,005	1,130
Total Loans	855	881	843	741	725	690	725	725	725
Capital Employed	9,310	11,674	14,772	18,954	22,421	27,436	32,480	38,452	45,782
Gross Block	6,213	6,803	9,955	12,434	14,851	18,156	24,558	29,558	34,558
Less: Accum. Deprn.	2,667	3,214	3,860	2,989	1,330	3,257	5,008	7,227	9,855
Net Fixed Assets	3,546	3,589	6,096	9,444	13,520	14,899	19,550	22,331	24,703
Capital WIP	315	1,030	1,447	863	1,229	2,403	1,000	1,000	1,000
Total Investments	161	161	161	189	200	1,467	1,467	1,467	1,467
Curr. Assets, Loans&Adv.	9,493	12,925	13,691	13,394	14,559	17,077	20,928	25,905	33,058
Inventory	2,666	2,929	3,350	4,181	6,016	8,170	8,504	8,062	9,519
Account Receivables	3,197	3,807	4,528	5,541	5,922	5,705	6,660	7,893	9,320
Cash and Bank Balance	2,292	4,108	2,946	2,222	1,503	1,709	4,020	7,883	11,779
Loans and Advances	1,339	2,082	2,867	1,450	1,119	1,494	1,744	2,067	2,440
Curr. Liability & Prov.	4,206	6,030	6,623	4,935	7,087	8,410	10,464	12,251	14,445
Account Payables	949	1,577	1,577	2,660	3,493	4,184	4,885	5,790	6,836
Other Current Liabilities	1,196	1,960	1,858	1,458	2,665	3,285	3,835	4,545	5,366
Provisions	2,061	2,493	3,188	817	929	941	1,744	1,917	2,244
Net Current Assets	5,288	6,895	7,068	8,459	7,472	8,667	10,464	13,654	18,613
Appl. of Funds	9,310	11,674	14,771	18,955	22,421	27,436	32,480	38,452	45,782

E: MOSL Estimates

Financials and Valuations

Ratios

Y/E March	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
Basic (INR)									
EPS	12.6	17.2	21.7	23.9	28.8	28.0	35.3	42.1	51.7
Cash EPS	15.3	21.0	25.4	31.8	37.0	39.2	45.6	55.1	67.1
BV/Share	48.2	62.0	79.8	104.5	123.9	151.8	180.6	215.0	257.2
DPS	1.9	2.5	3.6	3.6	4.3	4.25	5.41	6.5	7.9
Payout (%)	17.4	17.6	19.3	18.4	17.7	18.2	18.4	18.4	18.4
Valuation (x)									
P/E					29.4	30.2	24.0	20.1	16.4
Cash P/E					22.9	21.6	18.6	15.4	12.6
P/BV					6.8	5.6	4.7	3.9	3.3
EV/Sales					3.1	2.7	2.3	1.9	1.5
EV/EBITDA					17.5	16.9	14.3	11.8	9.6
Dividend Yield (%)					0.5	0.5	0.6	0.8	0.9
Return Ratios (%)									
RoE	29.3	31.1	30.6	26.0	25.2	20.3	21.2	21.3	21.9
RoCE	25.5	28.0	28.0	24.2	23.9	19.4	20.3	20.4	21.0
RoIC	29.9	40.6	40.9	29.4	26.4	21.7	23.5	24.5	27.0
Working Capital Ratios									
Gross Fixed Asset Turnover (x)	3.8	4.4	3.5	3.4	3.1	2.9	2.5	2.5	2.5
Inventory (Days)	41.2	36.1	35.6	36.2	47.6	56.1	50.0	40.0	40.0
Debtor (Days)	45	42	43	44	42	35	35	35	35
Creditor (Days)	15	19	17	23	28	29	29	29	29
Working Capital Turnover (Days)	46	34	44	54	47	48	38	29	29
Growth (%)									
Sales	34.3	25.2	16.0	22.5	9.7	15.1	16.7	18.5	18.1
EBITDA	31.9	33.0	24.1	25.3	17.3	3.3	16.4	18.1	19.4
PAT	45.2	36.2	26.3	10.4	20.4	-2.7	26.1	19.2	22.8
Leverage Ratio (x)									
Current Ratio	2.3	2.1	2.1	2.7	2.1	2.0	2.0	2.1	2.3
Debt/Equity	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0

Standalone - Cash Flow Statement

(INR Million)

Y/E March	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
Net P/L Before Tax and E/O Items	3,187	4,218	5,366	6,099	7,226	7,022	8,743	10,275	12,437
Depreciation	470	577	637	1,245	1,407	1,912	1,751	2,219	2,629
Interest & Finance Charges	-28	-110	-808	-29	-43	-3	-599	-804	-1,104
Direct Taxes Paid	1,026	1,366	1,606	1,922	2,181	2,024	2,710	3,083	3,607
(Inc)/Dec in WC	120	-94	-1,315	-1,475	-738	-1,137	515	672	-1,063
CF from Operations	2,723	3,225	2,273	3,917	5,672	5,771	7,699	9,280	9,293
(inc)/dec in FA	-809	-1,463	-3,731	-4,062	-4,904	-4,305	-5,000	-5,000	-5,000
Free Cash Flow	2,176	1,892	-943	-180	637	1,224	2,699	4,280	4,293
Others	82	269	294	176	24,156	27,395	650	850	1,150
CF from Investments	-727	-1,194	-3,437	-3,886	-3,938	-5,294	-4,350	-4,150	-3,850
(Inc)/Dec in Debt	-271	3	-99	-36	772	748	122	103	124
Interest Paid	84	-17	-14	-84	-5	-3	-51	-46	-46
Dividend Paid	-222	-323	-430	-552	-1,614	0	-1,110	-1,323	-1,625
CF from Fin. Activity	-409	-336	-543	-672	-847	745	-1,039	-1,267	-1,547
Inc/Dec of Cash	1,848	1,825	-1,192	-675	757	981	2,310	3,863	3,896
Add: Beginning Balance	444	2,283	4,138	2,897	746	784	1,709	4,019	7,883
Closing Balance	2,292	4,108	2,946	2,222	1,503	1,765	4,019	7,883	11,779

NOTES

Disclosures:

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