

Estimate changes	↔
TP change	↓
Rating change	↔

Bloomberg	AMRJ IN
Equity Shares (m)	171
M.Cap.(INRb)/(USD\$b)	90.4 / 1.2
52-Week Range (INR)	804 / 494
1, 6, 12 Rel. Per (%)	-1/-10/-43
12M Avg Val (INR M)	819

Financials & Valuations (INR b)

Y/E March	2022	2023E	2024E
Sales	87.0	99.7	109.3
EBITDA	10.2	12.0	14.2
Adj. PAT	5.1	6.1	7.2
EPS (INR)	29.9	35.8	42.1
EPS Gr. (%)	-21.0	19.5	17.7
BV/Sh. (INR)	266	287	314

Ratios

RoE (%)	11.7	12.9	14.0
RoCE (%)	11.8	12.5	13.4
Payout (%)	15.0	41.9	35.6

Valuations

P/E (x)	17.7	14.8	12.6
P/BV (x)	2.0	1.8	1.7
Div. Yield (%)	0.9	2.8	2.8
FCF yield (%)	-1.4	0.7	4.7

Shareholding pattern (%)

As On	Mar-22	Dec-21	Mar-21
Promoter	28.1	28.1	28.1
DII	11.4	11.7	12.6
FII	18.1	19.8	21.3
Others	42.5	40.5	38.0

FII Includes depository receipts

CMP: INR529

TP: INR590 (+12%)

Neutral

Below our estimate; lower 2W volumes and exports hit sales

Migration to stamp grid tech impacts 2W volumes

- AMRJ's 4QFY22 earnings were impacted by RM cost inflation, logistical bottleneck in exports, higher competitive intensity, and migration to a stamp grid tech platform in 2W production. The recent moderation in lead prices will aid a margin recovery. Volumes should see good growth across segments in FY23.
- We largely maintain our FY23/FY24 EPS estimate. However, we cut our P/E multiple to 12x from 14x to account for the recent increase in the risk-free rate and risk due to shift towards EV. We maintain our **Neutral** rating with a TP of INR590/share (12x Mar'24E EPS).

RM cost inflation continues to hurt margin

- Revenue grew 4% YoY to INR21.8b (est. INR24.6b), while EBITDA/adjusted PAT declined by 30.5%/48% YoY to INR2.2b/INR985m in 4QFY22. Revenue grew 22%, while EBITDA/adjusted PAT declined by 8%/21% YoY in FY22.
- Revenue growth of 4% YoY is attributed to the 10% growth in ASP due to lead inflation as volumes declined by 6%. Overall 2W volumes fell 20% YoY. Inverter volumes declined by 25% (on a high base in 4QFY21 due to the benefit of WFH). 4W/Industrial volumes grew 6%/4% YoY.
- Gross margin declined by 470bp YoY to 27.9% (est. 29.7%) due to inflation in lead and plastic cost. AMRJ didn't raise prices in 4QFY22. It took a 2.5-3% price hike in Apr'22.
- EBITDA margin fell 500bp YoY to 10.1% (est. 12.1%) due to high RM costs and operating deleverage. EBITDA fell 30.5% YoY to INR2.2b (est. INR3b).
- Lower other income resulted in a 48% YoY decline in adjusted PAT to INR985m (est. INR1.6b).
- The board declared a final dividend of INR0.5/share. The total dividend for FY22 stood at INR4.5/share.
- FCFF saw outflows of INR1.3b (v/s inflows of INR3b in FY21) due to higher capex, which stood at INR7.6b (v/s INR5b in FY21).

Highlights from the management commentary

- Outlook:** The management sees good volume growth in FY23, led by: a) double-digit growth in the Replacement market, b) 15% growth in exports, c) reversal of the impact of 2W tech transition, d) 10-12% growth in inverters, and e) 7-8% growth in the Industrial segment, led by UPS.
- Volume performance in 4QFY22:** 2W volumes were impacted by migrating to stamp grid tech, as a result production was higher in 3Q, but lower in 4QFY22. Around 75% of 2W capacity has already migrated and the balance will migrate in FY23. 2W OEM volumes declined by 50% in 4QFY22.
- Export** dispatches were impacted by logistical bottlenecks, resulting in weaker exports in 4QFY22. Exports grew 16% in FY22.

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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.motilalosal.com/Institutional-Equities, Bloomberg, Thomson Reuters, Factset and S&P Capital.

Valuation and view

- The stock trades at 14.8x/12.6x FY23E/FY24E EPS. We have trimmed our P/E multiple to 12x from 14x to account for the recent increase in the risk-free rate and risk due to shift towards EV. We maintain our **Neutral** rating, with a TP of INR590/share (12x Mar'24E EPS) as the expectation of better earnings growth balances out the increasing threat of lithium chemistry to the Auto and Industrial businesses.

Quarterly performance

(INR m)	FY21				FY22				FY21	FY22E	FY22E
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			4QE
Net Sales	11,510	19,358	19,601	21,027	18,859	22,642	23,651	21,807	71,497	86,958	24,632
YoY Change (%)	-36.6	14.2	12.1	33.0	63.8	17.0	20.7	3.7	4.5	21.6	17.1
EBITDA	1,524	3,404	3,064	3,165	2,499	2,689	2,840	2,199	11,159	10,226	2,971
Margin (%)	13.2	17.6	15.6	15.1	13.2	11.9	12.0	10.1	15.6	11.8	12.1
Depreciation	748	782	791	871	963	986	1,021	987	3,192	3,957	1047
Interest	27	25	26	28	32	36	38	46	105	151	35
Other Income	88	113	352	321	166	264	190	160	874	780	240
PBT after EO	837	2,710	2,599	2,588	1,670	1,932	1,971	1,325	8,736	6,898	2,129
Tax Rate (%)	25.1	25.6	25.7	26.8	25.8	25.4	26.6	25.6	25.9	25.9	24.7
Adj. PAT	627	2,015	1,932	1,895	1,239	1,441	1,447	985	6,470	5,113	1,603
YoY Change (%)	-55.5	-8.0	17.5	38.7	97.7	-28.5	-25.1	-48.0	-2.1	-21.0	-15.4

Key performance indicators

RM Cost (as a percentage of sales)	66.5	65.3	66.1	67.4	68.9	70.1	70.3	72.1	66.4	70.4	70.3
Staff Cost (as a percentage of sales)	7.3	6.0	6.0	5.1	6.3	5.8	5.5	5.5	6.0	5.7	5.6
Other Exp. (as a percentage of sales)	13.0	11.1	12.2	12.4	11.6	12.2	12.3	12.3	12.1	12.1	12.0
Gross margin (%)	33.5	34.7	33.9	32.6	31.1	29.9	29.7	27.9	33.6	29.6	29.7
EBITDA margin (%)	13.2	17.6	15.6	15.1	13.2	11.9	12.0	10.1	15.6	11.8	12.1
Lead Price (INR/Kg)	127.4	139.2	140.3	146.7	156.2	172.8	174.3	175.0	138.4	169.6	0
Change (%)	-2.8	-2.5	-3.6	9.9	22.6	24.1	24.3	19.3	0.1	22.5	-100

E: MOFSL estimates

**Key takeaways from the management commentary**

- **Outlook:** The management sees good volume growth in FY23, led by: a) double-digit growth in the Replacement market, b) 15% growth in exports, c) reversal of the impact of 2W tech transition, d) 10-12% growth in inverters, and e) 7-8% growth in the Industrial segment, led by UPS.
- **Volume performance in 4QFY22:** 2W volumes were impacted by migrating to stamp grid tech, as a result production was higher in 3Q, but lower in 4QFY22. Around 75% of 2W capacity has already migrated and the balance will migrate in FY23. 2W OEM volumes declined by 50% in 4QFY22.
- **Export** dispatches were impacted by logistical bottlenecks, resulting in weaker exports in 4QFY22. Exports grew 16% in FY22.
- **Price hikes and RM cost inflation:** AMRJ has raised prices by 2.5-3% in Apr'22. Also, there is some moderation in lead prices.
- **Capex in FY22** stood at INR7.6b as two projects (4W expansion and a solar power plant) got accelerated. It also received advances for the recycling plant. **For FY23**, it expects to invest INR7b in the ongoing expansion of 2W/4W capacity, the recycling plant, and a greenfield customer qualification plant for li-ion cell (60-70MW capacity). 2W/4W expansion will be ready in 1HFY23, the recycling plant in 18-20 months, and the li-ion cell plant in 18-24 months.

Key exhibits

Exhibit 1: Trend in revenue and growth

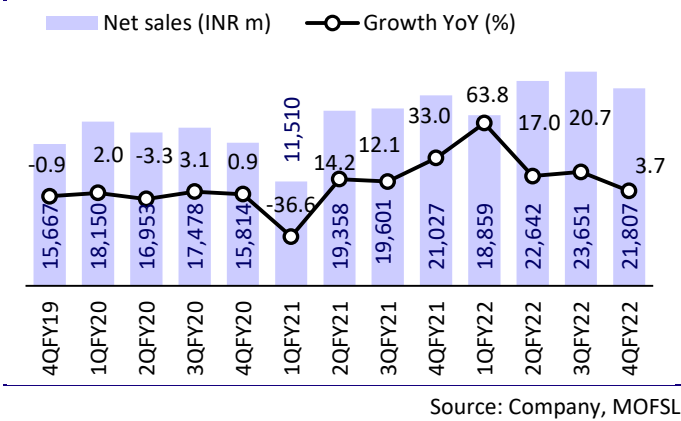


Exhibit 2: Gross margin impacted by RM cost inflation

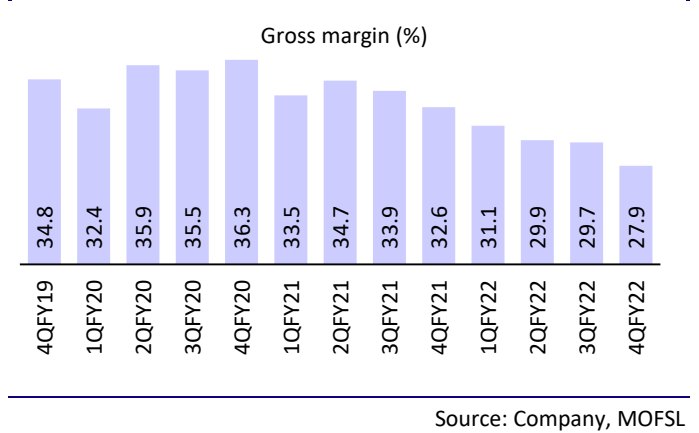


Exhibit 3: Trend in EBITDA and EBITDA margin

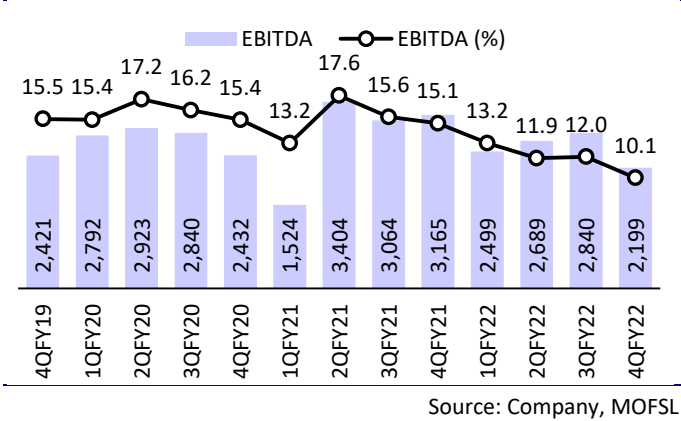


Exhibit 4: PAT and growth trend

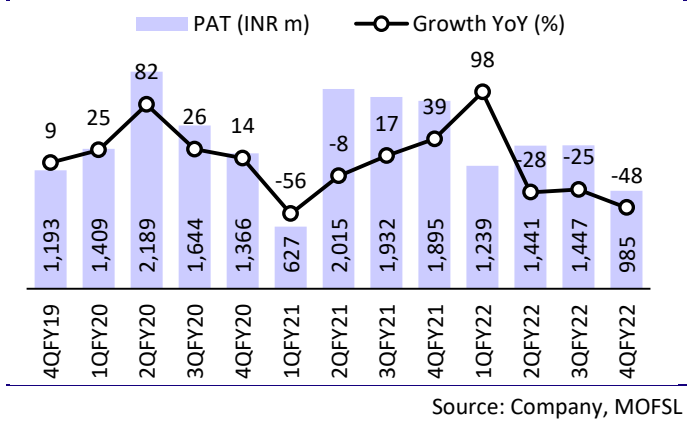
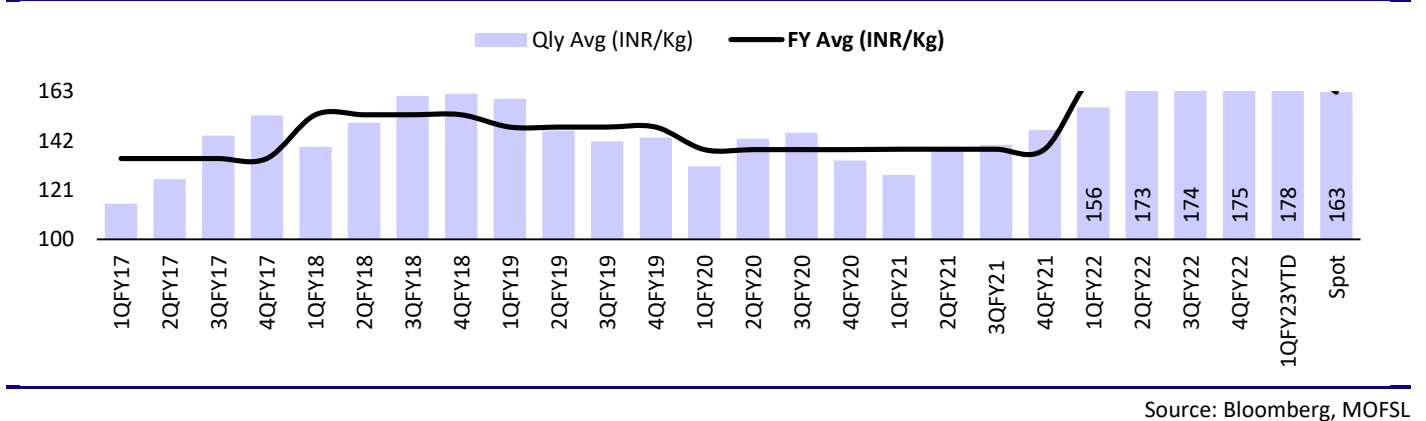


Exhibit 5: Trend in spot lead prices (INR/kg)



Valuation and view

- Industry structure remains a duopoly, but AMRJ strong in second position:** While the industry structure remains largely a duopoly, AMRJ has emerged as a formidable challenger to leader EXID, with market leadership in Telecom (55% share in 4QFY20) and UPS (32–35%) segments and fast-gaining share in Auto. Over FY04-16, it clocked 34%/68% CAGR in net sales/PAT, exceeding EXID’s 20% CAGR each in net sales and PAT. This was driven by a combination of technological innovation (first to introduce maintenance-free, factory-charged, extended-warranty batteries), witty advertising, and a unique distribution model (franchisee-based), supported by operational efficiency-led competitive pricing.

- **Gearing up to lead:** AMRJ is gearing up to be a leader by: a) consolidation in existing areas; b) undertaking new business opportunities within the Battery space, mainly Home UPS, Solar, and Motive Power; and c) undertaking capacity and network expansion. In the Telecom segment, the management expects to maintain its market share at current levels (~55%).
- **Li-ion technology poses a risk to Auto and Industrial segments:** The declining cost of lithium batteries poses a threat to the Auto and the Industrial Batteries business. e-2Ws/e-3Ws do not require a lead acid battery as an auxiliary battery. This will in turn impact 15-20% of revenue of lead acid battery players. At USD100/KwHr, lithium can offer competition to a lead acid battery (LAB) in the Industrial segment – particularly Telecom, UPS, and other nascent, but growth-driving, businesses such as Motive Power and Solar. Any further development in this direction will potentially lead to the de-rating of the P/E multiple (due to the decline in terminal growth).
- **Strategic initiatives to drive growth:** AMRJ is focusing on maximizing its core LAB business and foraying into the New Energy business (in the form of li-ion cells and battery packs, EV charging products, energy storage solutions, etc.). While the LAB business will go global, the New Energy business will focus on opportunities in India. While growth in LAB will recover strongly, the delivery of 15-17% CAGR over the next five years depends on the successful execution of its export strategy. While its entry into the New Energy business is a step in the right direction, its success will depend on a technology partner, cost competitiveness, targeted segments, etc. For lithium cell manufacturing, it is targeting an 8-10GW capacity (requiring an investment of USD0.8-1b) to achieve global competitiveness. As the investment in the New Energy business will be spread over 5-10 years, it can fund the capex through free cash flows in the core business (average INR3-4b p.a.) as well as debt (currently net cash on the Balance Sheet).
- **Valuations fair, maintain our Neutral rating:** We maintain our FY23/FY24 EPS estimate. We expect value migration to organized players (such as EXID and AMRJ) from unorganized ones in the Replacement segment, driven by tax reforms such as GST and lower corporate tax rates. Healthy replacement demand will lead to better capacity utilization and margin. However, its current margin performance may not sustain over the near term as volume recovery with OEMs will result in mean reversion of the mix and margin. Also, with the exit of Johnson Controls, promoters are expected to play a pivotal role in its long-term strategy as well as technology sourcing. The stock trades at 4.8x/12.6x FY23E/FY24E EPS. We have trimmed our P/E multiple to 12x from 14x to account for the recent increase in the risk-free rate and risk due to shift towards EV. We maintain our **Neutral** rating, with a TP of INR590/share (12x Mar'24E EPS) as the expectation of better earnings growth balances out the increasing threat of lithium chemistry to the Auto and Industrial businesses.

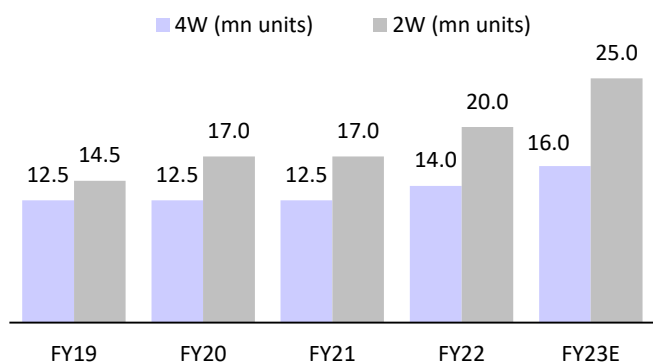
Exhibit 6: Revisions to our estimates

(INR m)	FY23E			FY24E		
	Revised	Old	Change (%)	Revised	Old	Change (%)
Net sales	99,664	1,02,351	-2.6	1,09,331	1,10,817	-1.3
EBITDA (%)	12.0	12.2	-20bp	13.0	13.0	0bp
Net Profit	6,109	6,310	-3.2	7,191	7,316	-1.7
EPS (INR)	35.8	36.9	-3.2	42.1	42.8	-1.7

Source: MOFSL

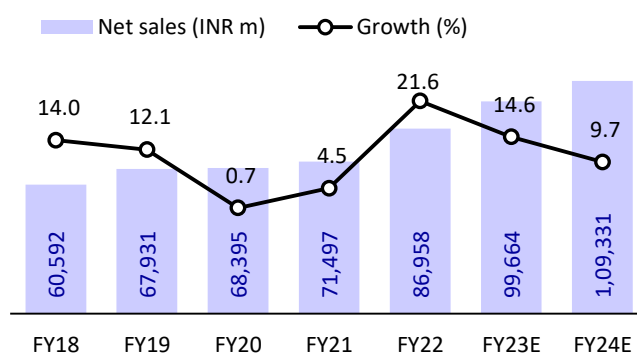
Story in charts

Exhibit 7: Significant addition in 2W capacity



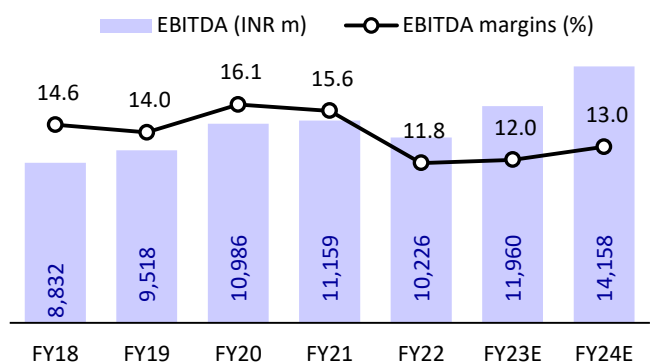
Source: Company, MOFSL

Exhibit 8: Trend in revenue



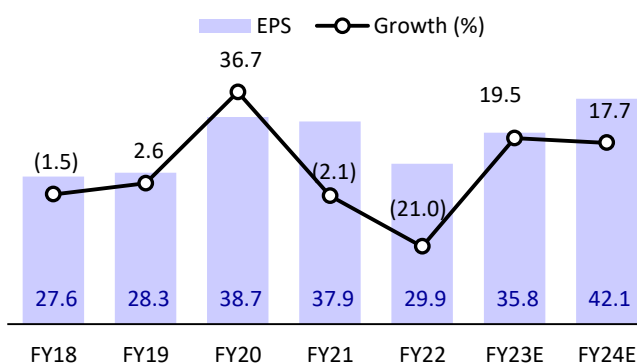
Source: Company, MOFSL

Exhibit 9: EBITDA and EBITDA margin trend



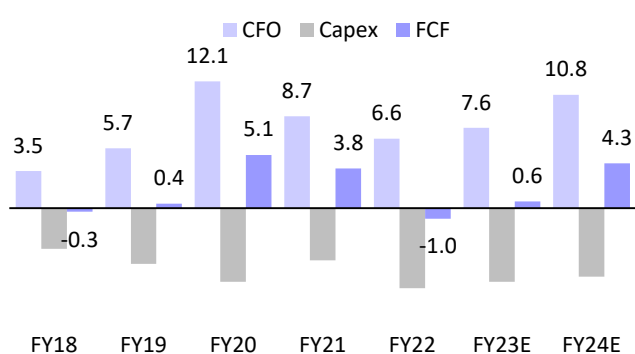
Source: Company, MOFSL

Exhibit 10: Earnings are expected to be bottomed in FY22



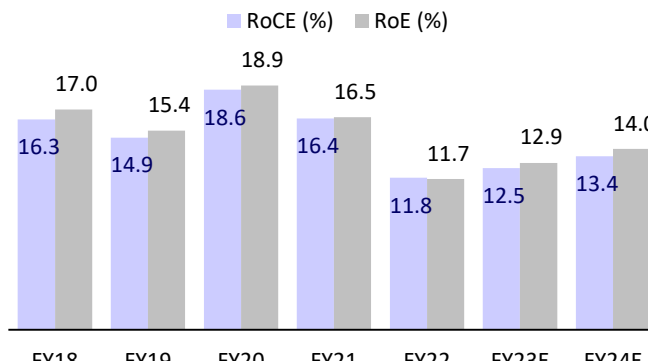
Source: Company, MOFSL

Exhibit 11: Trend in CFO, capex, and FCF



Source: Company, MOFSL

Exhibit 12: Return ratios to recover moderately



Source: Company, MOFSL

Financials and valuations

Standalone Income Statement							(INR m)	
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	
Net Sales	60,592	67,931	68,395	71,497	86,958	99,664	1,09,331	
Change (%)	14.0	12.1	0.7	4.5	21.6	14.6	9.7	
EBITDA	8,832	9,518	10,986	11,159	10,226	11,960	14,158	
Margin (%)	14.6	14.0	16.1	15.6	11.8	12.0	13.0	
Depreciation	2,303	2,612	3,007	3,192	3,957	4,199	5,073	
EBIT	6,529	6,906	7,978	7,967	6,269	7,760	9,085	
Int. and Finance Charges	51	70	122	105	151	150	120	
Other Income – Rec.	664	468	551	874	780	600	700	
PBT bef. EO Exp.	7,142	7,304	8,407	8,736	6,898	8,210	9,665	
EO Expense/(Income)	0	0	0	0	0	0	0	
PBT after EO Exp.	7,142	7,304	8,407	8,736	6,898	8,210	9,665	
Tax Rate (%)	34.0	33.8	21.4	25.9	25.9	25.6	25.6	
Reported PAT	4,713	4,835	6,608	6,470	5,112	6,109	7,191	
PAT Adj. for EO items	4,713	4,835	6,608	6,470	5,113	6,109	7,191	
Change (%)	-1.5	2.6	36.7	-2.1	-21.0	19.5	17.7	
Margin (%)	7.8	7.1	9.7	9.0	5.9	6.1	6.6	
Net Profit	4,713	4,835	6,608	6,470	5,113	6,109	7,191	
Adj. EPS	27.6	28.3	38.7	37.9	29.9	35.8	42.1	

Standalone Balance Sheet							(INR m)	
Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	
Equity Share Capital	171	171	171	171	171	171	171	
Total Reserves	29,203	33,182	36,385	41,932	45,343	48,890	53,519	
Net Worth	29,374	33,353	36,556	42,103	45,514	49,061	53,689	
Deferred Liabilities	878	959	441	407	314	314	314	
Total Loans	584	468	343	234	234	4,000	1,000	
Capital Employed	30,836	34,780	37,341	42,744	46,062	53,374	55,003	
Gross Block	22,529	26,165	29,269	38,628	39,004	51,300	57,800	
Less: Accum. Deprn.	5,497	8,037	10,977	14,081	14,081	18,280	23,353	
Net Fixed Assets	17,033	18,128	18,292	24,548	24,923	33,020	34,447	
Capital WIP	2,264	3,147	8,270	3,993	8,297	3,000	3,000	
Total Investments	351	205	1,562	2,805	778	778	778	
Curr. Assets, Loans, and Adv.	22,038	23,480	21,882	26,625	29,761	33,474	35,934	
Inventory	10,497	10,614	11,427	14,382	18,038	19,114	19,470	
Account Receivables	7,825	7,686	6,363	7,875	7,926	9,557	10,484	
Cash and Bank Balance	1,113	502	326	967	536	817	1,607	
Loans and Advances	2,603	4,678	3,766	3,401	3,262	3,987	4,373	
Curr. Liability and Prov.	10,849	10,179	12,665	15,227	17,697	18,898	19,656	
Account Payables	5,923	5,104	6,149	7,465	8,065	10,103	10,484	
Other Current Liabilities	3,916	3,761	4,685	5,623	7,177	7,973	8,746	
Provisions	1,011	1,314	1,832	2,140	2,455	822	426	
Net Current Assets	11,189	13,301	9,217	11,398	12,064	14,576	16,278	
Appl. of Funds	30,836	34,780	37,341	42,744	46,062	51,374	54,503	

E: MOSL estimates

Financials and valuations

Ratios

Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Basic (INR)							
EPS	27.6	28.3	38.7	37.9	29.9	35.8	42.1
Cash EPS	41.1	43.6	56.3	56.6	53.1	60.3	71.8
BV/Share	172.0	195.3	214.0	246.5	266.5	287.2	314.3
DPS	4.2	7.1	11.0	11.0	4.5	15.0	15.0
Payout (%)	18.1	30.0	34.1	29.0	15.0	41.9	35.6
Valuation (x)							
P/E	19.2	18.7	13.7	14.0	17.7	14.8	12.6
Cash P/E	12.9	12.1	9.4	9.4	10.0	8.8	7.4
P/BV	3.1	2.7	2.5	2.1	2.0	1.8	1.7
EV/Sales	1.5	1.3	1.3	1.3	1.0	0.9	0.8
EV/EBITDA	10.2	9.5	8.2	8.0	8.8	7.8	6.3
Dividend Yield (%)	0.8	1.3	2.1	2.1	0.9	2.8	2.8
Return Ratios (%)							
RoE	17.0	15.4	18.9	16.5	11.7	12.9	14.0
RoCE	16.3	14.9	18.6	16.4	11.8	12.5	13.4
RoIC	17.6	15.8	21.6	19.0	13.0	13.5	13.7
Working Capital Ratios							
Gross Fixed Asset Turnover (x)	2.7	2.6	2.3	1.9	2.2	1.9	1.9
Inventory (Days)	63.2	57.0	61.0	73.4	75.7	70.0	65.0
Debtor (Days)	46	41	34	40	33	35	35
Creditor (Days)	36	27	33	38	34	37	35
Working Capital Turnover (Days)	61	69	47	53	48	50	49
Leverage Ratio (x)							
Current Ratio	2.0	2.3	1.7	1.7	1.7	1.8	1.8
Debt/Equity ratio	0.0	0.0	0.0	0.0	0.0	0.1	0.0

Standalone Cash Flow Statement

(INR m)

Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Net P/L Before Tax and E/O Items	7,142	7,304	8,407	8,733	6,898	8,210	9,665
Depreciation	2,303	2,612	3,007	3,192	3,957	4,199	5,073
Interest and Finance Charges	-5	42	122	105	151	-450	-580
Direct Taxes Paid	2,443	2,417	2,364	1,995	1,993	2,102	2,474
(Inc.)/Dec. in WC	-3,475	-1,843	2,892	-1,301	-2,406	-2,231	-912
CF from Operations	3,522	5,698	12,065	8,734	6,607	7,627	10,772
Others	-306	-284	-296	-714	-277	0	0
CF from Operations incl. EO	3,216	5,413	11,769	8,020	6,329	7,627	10,772
(inc.)/dec. in FA	-3,853	-5,282	-6,999	-4,964	-7,598	-7,000	-6,500
Free Cash Flow	-637	131	4,770	3,056	-1,268	627	4,272
Others	19,117	10,904	13,305	13,212	16,219	600	700
CF from Investments	-2,442	-4,629	-8,497	-6,350	-4,819	-6,400	-5,800
(Inc.)/Dec. in Debt	-89	-51	-275	-321	-3,776	1,766	-1,500
Interest Paid	-7	-11	-52	-40	-67	-150	-120
Dividend Paid	-1,285	-855	-3,311	-854	1,708	-2,562	-2,562
CF from Fin. Activity	-1,382	-916	-3,638	-1,215	-2,135	-946	-4,182
Inc./Dec. in Cash	-607	-131	-365	455	-624	281	790
Add: Beginning Balance	3,251	2,644	2,512	512	967	343	624
Closing Balance	2,644	2,512	2,147	967	343	624	1,415

E: MOSL estimates

NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

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