

Amara Raja

Estimate changes

TP change

Rating change



Bloomberg	ARENM IN
Equity Shares (m)	183
M.Cap.(INRb)/(USDb)	175.3 / 2
52-Week Range (INR)	1610 / 805
1, 6, 12 Rel. Per (%)	-2/-7/-40
12M Avg Val (INR M)	764

Financials & Valuations (INR b)

Y/E March	2025	2026E	2027E
Sales	124.0	135.3	148.4
EBITDA	16.3	16.1	19.0
Adj. PAT	8.8	8.3	10.2
EPS (INR)	48.2	45.5	55.8
EPS Gr. (%)	-2.7	-5.6	22.8
BV/Sh. (INR)	403	440	484

Ratios

RoE (%)	12.5	10.8	12.1
RoCE (%)	12.4	10.7	12.0
Payout (%)	19.9	19.8	19.7

Valuations

P/E (x)	19.9	21.1	17.2
P/BV (x)	2.4	2.2	2.0
Div. Yield (%)	1.2	1.0	1.2
FCF yield (%)	3.9	4.8	7.0

Shareholding pattern (%)

As On	Jun-25	Mar-25	Jun-24
Promoter	32.9	32.9	32.9
DII	14.0	14.6	14.6
FII	19.4	20.7	23.8
Others	33.8	31.9	28.8

FII Includes depository receipts

CMP: INR958

TP: INR1,030 (+8%)

Neutral

Lower other income leads to PAT miss

Margins to revive in 2H

- Amara Raja's (ARENM) 1QFY26 PAT at INR1.9b was below our estimate of INR2.1b due to lower-than-expected other income. Margins remained under pressure at 11.5% due to higher non-lead alloy costs and higher power costs.
- We cut our FY26/FY27 EPS estimates by 8%/2% to factor in a weaker-than-expected performance in 1Q. While the market is optimistic about ARENM's li-ion initiative, we are cautious about its potential returns. We believe the stock, trading at around 21.1x FY26E/17.2x FY27E EPS, appears fairly valued. Therefore, we maintain a Neutral rating with a TP of INR1,030, based on 18x FY27E EPS.

Lower other income leads to PAT miss

- 1QFY26 standalone revenue grew ~7% YoY to INR33.5b (marginally ahead). Domestic revenue increased by 10%+, led by robust demand from OEMs in the 4W and 2W segments and healthy volumes in the aftermarket segment. In addition, its HUPS and tubular batteries business delivered a strong seasonal performance, while its allied business gained market momentum and penetration. In the industrial segment, ARENM saw strong traction in UPS/data centers, with 15% growth. The new energy business was driven by healthy volumes in the stationary business. The lead-acid business contributed 96% of revenues (INR32.8b). Export volumes remained subdued on account of muted demand conditions.
- Gross margins came in below our expectations at 29.5%, primarily due to rising prices of non-lead alloy. EBITDA margins at 11.5% (down ~220bp YoY and flat QoQ) were below our estimates of 12%. EBITDA fell 10.2% YoY to INR 3.9b (in-line).
- Other income of INR139m came in much lower than our estimate of INR245m. This resulted in an Adj. PAT miss, which fell 20.7% YoY to INR1.9b (vs. estimate of INR2.1b).

Highlights from the management commentary

- Demand outlook: 2W replacement is likely to grow at 10-11% and 4W replacement at 6-7%. Similarly, UPS segment is likely to post 5-6% growth. However, exports may remain subdued at least in the near term.
- Management expects margins to improve from 2Q onward as tubular battery production ramps up and recycling plant scales up. ARENM expects power costs to normalize by 3Q.
- Gigafactory update: The construction of a customer qualification plant (CQP) and a research lab is on track and expected to be completed by the end of FY26. The phase 1 for the 1 GWh cylindrical NMC cells is set to commence production by FY27. Deliberations are ongoing on whether to expand to 2 GWh or diversify into LFP cylindrical cells. The long-term capacity target of 16 GWh by FY30 has been stated.

Research analyst - Aniket Mhatre (Aniket.Mhatre@MotilalOswal.com)

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.

- ARENM has invested around INR12b in its EV subsidiary so far, with an additional INR12b required for CQP, R&D and other working capital requirements.
- FY26 capex is estimated at INR12-13b, with INR8-9b for new energy projects and the balance for the lead-acid business.

Valuation and view

- ARENM's venture into the lithium-ion business is strategically sound given the opportunities in the segment and risks facing its core business. However, there are notable challenges: 1) market opportunities are limited by existing OEM partnerships; 2) low-margin nature of lithium-ion business is likely to dilute returns; and 3) long-term viability of technology remains uncertain despite the large capital investment.
- While the market is optimistic about ARENM's li-ion initiative, we are cautious about its potential returns. We believe the stock, trading at around 21.1x FY26E /17.2x FY27E EPS, appears fairly valued. Therefore, we maintain a Neutral rating with a TP of INR1,030, based on 18x Jun'27E EPS.

Quarterly Performance- SA

Y/E March (INR m)	FY25				FY26E				FY25	FY26E	(INR M)	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			1QE	VAR (%)
Net Sales	31,312	31,358	31,640	29,739	33,499	33,240	34,488	34,047	124,049	135,274	32,564	2.9
YoY Change (%)	13.0	11.6	9.8	6.3	7.0	6.0	9.0	14.5	10.2	9.0	4.0	
RM Cost (% of sales)	68.9	67.6	66.9	67.7	70.5	69.5	69.0	67.8	67.8	69.2	68.6	190bp
Staff Cost (% of sales)	5.9	6.1	6.0	6.1	5.9	6.0	5.8	5.9	6.0	5.9	5.9	0bp
Other Exp (% of sales)	11.5	12.2	13.9	14.7	12.0	13.0	13.0	14.0	13.1	13.0	13.5	-150bp
EBITDA	4,304	4,407	4,158	3,422	3,867	3,823	4,208	4,201	16,291	16,098	3,908	-1.1
Margins (%)	13.7	14.1	13.1	11.5	11.5	11.5	12.2	12.3	13.1	11.9	12.0	-50bp
Depreciation	1,183	1,220	1,233	1,284	1,292	1,289	1,294	1,301	4,921	5,176	1,250	3.4
Interest	90	131	107	95	104	110	115	122	422	450	120	-13.8
Other Income	256	185	293	200	139	155	180	179	933	653	245	-43.1
PBT before EO expense	3,287	3,240	3,111	2,244	2,610	2,579	2,979	2,957	11,881	11,125	2,783	-6.2
Extra-Ord expense	0	0	-1,111	0	0	0	0	0	0	0	0	
PBT after EO	3,287	3,240	4,222	2,244	2,610	2,579	2,979	2,957	11,881	11,125	2,783	-6.2
Tax	841	833	1,103	576	670	645	760	729	3,353	2,803	696	
Tax Rate (%)	25.6	25.7	26.1	25.7	25.7	25.0	25.5	24.7	28.2	25.2	25.0	
Adj PAT	2,446	2,407	2,298	1,668	1,940	1,934	2,219	2,228	8,528	8,321	2,087	-7.0
YoY Change (%)	23.1	6.3	-9.1	-26.8	-20.7	-19.7	-3.4	33.6	-5.9	-2.4	-14.7	

E: MOFSL Estimates



Key takeaways from the management commentary

Result highlights

- Lead-acid battery business grew 4.5% YoY to INR32.7b, contributing to 96% of ARENM's revenue mix.
- 4W domestic aftermarket sales grew 5% YoY, whereas OEM sales grew 12-13% YoY. 2W OEM and aftermarket both grew by 5-6% YoY.
- Overall, industrial volumes declined 3-4% YoY. Within the industrial segment, UPS volumes grew 15% YoY, while telecom declined ~30% YoY. However, lithium pack volumes crossed 100 MWh sales to telecom for the first time.
- New energy business revenue stood at INR1.22b, driven by stationary/telecom demand, while EV slowed down due to weak OEM offtake.
- Trading revenue mix rose to 23% in Q1 (vs. 19% last year). This impacted EBITDA margin in 1Q.
- Exports have remained weak. APAC and Middle East markets are seeing tariff-led competitive intensity, impacting exports.

Auto demand outlook

- **Demand outlook:** 2W replacement is likely to grow 10-11% and 4W replacement 6-7%. Similarly, UPS segment is likely to post 5-6% growth.
- Export volumes declined 7-8% YoY due to tariff challenges and weaker demands in some of the markets. Management expects recovery in 1-2 quarters from the new markets that it has recently penetrated.

Margin outlook

- 1Q standalone EBITDA margins stood at 11.5% (11.8% excluding trading).
- Margins were subdued primarily due to higher material costs (mainly antimony, which will be normalized subsequently), higher power and employee costs, and higher traded mix.
- Management expects margins to improve from 2Q onwards as tubular battery production ramps up and recycling plant scales up. ARENM expects power costs to normalize by 3Q.
- Based on the recent GST rationalization expectations, lead-acid and lithium-ion batteries would be taxed at the same rate of 18% (lead acid was at 28%).

Update on New Energy business

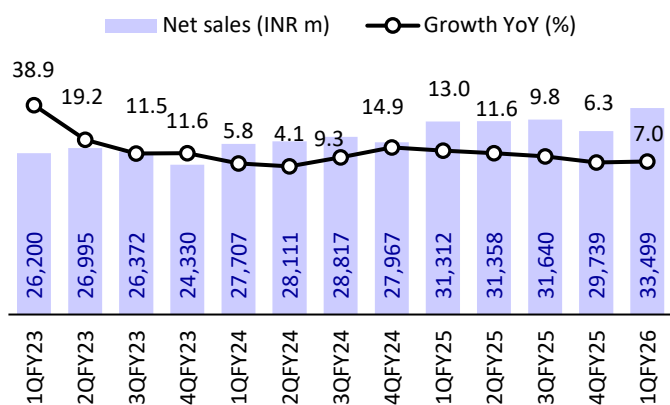
- Revenue from new energy business was at INR1.22b this quarter, with strong stationary and telecom demand; however, demand for EV packs and chargers was subdued.
- Lithium pack volumes exceeded 100 MWh sales in telecom. 2W and 3W battery packs' commercialization is ongoing, with LFP packs for 3W launched in 1Q.
- Gigafactory update: The construction of CQP and research lab is on track and expected to be completed by FY26 end. The phase 1 for the 1 GWh cylindrical NMC cells is set to commence production by FY27. Deliberations are ongoing on whether to expand to 2 GWh or diversify into LFP cylindrical cells.
- Cumulative investment into the EV subsidiary so far has been around INR12b, with another INR12b required for CQP, R&D and other working capital requirements.

Capex guidance

- FY26 capex is estimated at INR12-13b, with INR8-9b for new energy projects and the balance for the lead-acid business.
- Tubular battery plant at Chittoor with a total capacity of 1.5m units per annum has commenced production in Jul'25, and is expected to ramp up to full capacity in a couple of quarters.
- An advanced recycling plant of 1.5 LTPA had started its refining operations in Dec'2024. Battery breaking operation is expected to commence by 3QFY26.

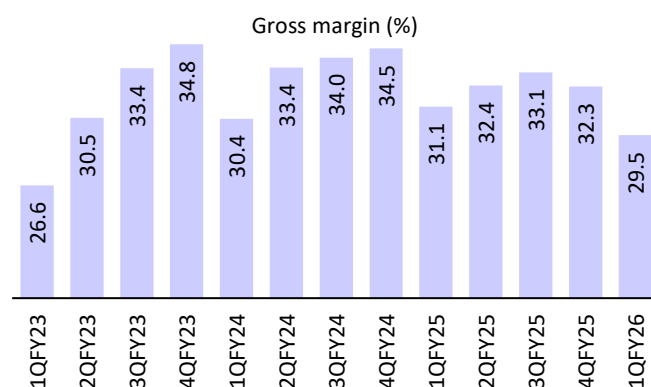
Key exhibits

Exhibit 1: Trend in revenue and growth



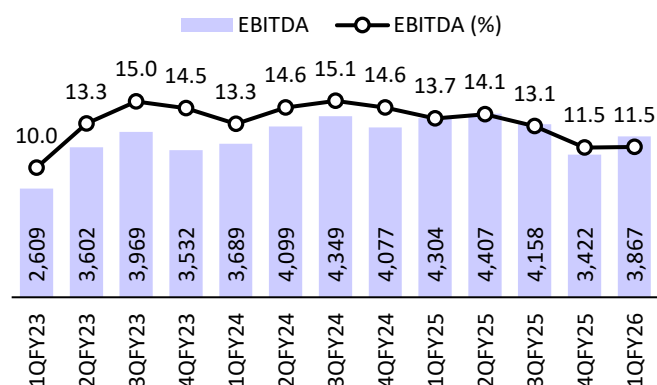
Source: Company, MOFSL

Exhibit 2: Gross margin impacted by RM cost inflation



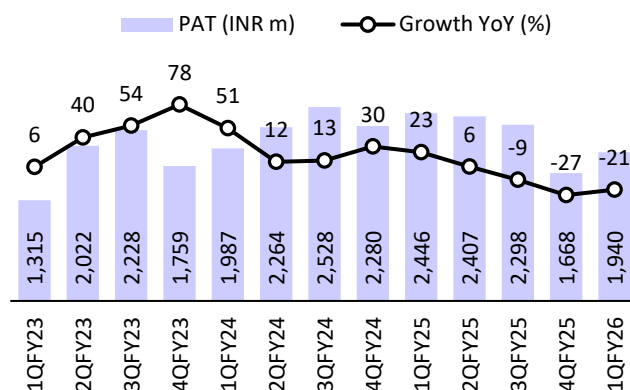
Source: Company, MOFSL

Exhibit 3: Trend in EBITDA and EBITDA margin



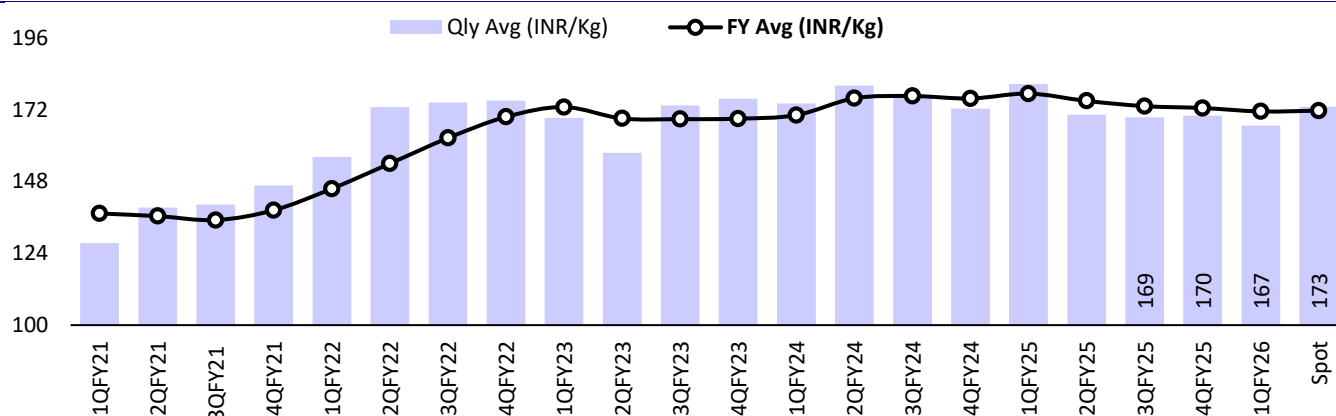
Source: Company, MOFSL

Exhibit 4: PAT and growth trend



Source: Company, MOFSL

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



Source: Bloomberg, MOFSL

Valuation and view

- **ARENM to emerge as one of the beneficiaries of steady outlook in LAB:** The outlook on both auto and industrial segments remains strong. In the auto segment, strong growth posted by the industry over the last three years is expected to translate into healthy replacement demand in the coming years. The industrial segment is expected to benefit from the surge in demand for power backup for data centers. Thermal power generation is seeing a comeback and should see strong incremental demand with growth visibility for the next 5-6 years. Given its strong position in LAB in both auto and industrial segments, we expect the company to emerge as a beneficiary of the healthy demand outlook in the industry.
- **EV transition remains the real risk for LAB in the long run:** Transition to electrification globally and in India is emerging as a big risk for LAB players in the long run. The only saving grace for Indian players in the near term is the fact that EV transition is picking up pace currently in 2Ws and 3Ws only and the same in PVs is likely to take a bit longer. However, lithium-ion batteries are now increasingly finding application even in various industrial use cases, including telecom, traction, UPS, etc. This transition is clearly emerging as a significant risk for LAB players like ARENM in the long run.
- **Foray into lithium-ion will have its own challenges:** Given the significant imminent risk to its core business, the company has forayed into manufacturing of lithium-ion cells in partnership with a Chinese major. The total capex outlay will be INR95b over a 10-year period, which will have an eventual cell manufacturing capacity of 16 GWh. It plans to start with a customer qualification plant having capacity of 2 Gwh initially and get the same approved from key customers. The company is also looking for a partner for cell manufacturing, who could help it set up and stabilize the plant and also help in securing and localizing supply chain. While ARENM can fund the initial couple of years of this project through internal accruals, we expect the company would need to raise funds to finance the remaining project. Further, we think the company's foray into lithium-ion cell manufacturing is likely to see multiple challenges in the coming years, which include: 1) most domestic PV OEMs either having their own lithium-ion manufacturing plans or having existing tie-ups, limiting Amara's potential addressable market in this space; 2) given Amara is setting up a greenfield in this segment without prior experience, we expect its facility to take at least a couple of years to stabilize operations as it goes through its testing and validation phase initially for interested OEMs; 3) since lithium-ion cell manufacturing is a low-margin business, we expect this business to be return-dilutive for Amara in the long run, even if this venture is successful; and 4) given that it is still not certain if the lithium-ion cell technology will emerge as a sustainable technology in the long run, we think the outcome of this venture remains highly uncertain at this stage, despite the significant capital commitment required.

- **Valuations fair; reiterate our Neutral rating:** We cut our FY26/FY27 EPS estimates by 8%/2% to factor in a weaker-than-expected performance in 1Q. While the market is optimistic about ARENM's li-ion initiative, we are cautious about its potential returns. We believe the stock, trading at around 21.1x FY26E/17.2x FY27E EPS, appears fairly valued. Therefore, we maintain a Neutral rating with a TP of INR1,030, based on 18x FY27E EPS.

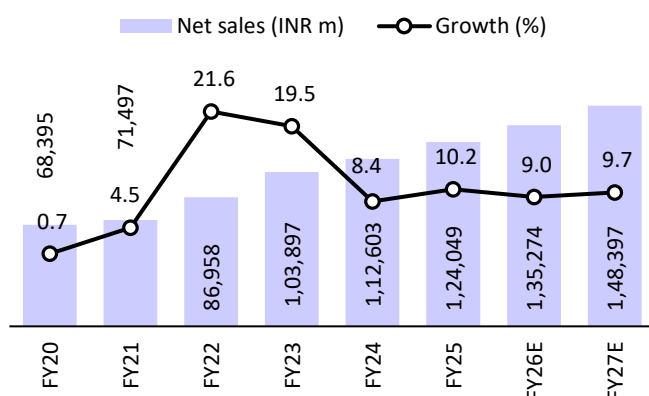
Exhibit 6: Revisions to our estimates

(INR M)	FY26E			FY27E		
	Rev	Old	Chg (%)	Rev	Old	Chg (%)
Net Sales	135,274	135,274	0.0	148,397	148,397	0.0
EBITDA (%)	11.9	12.5	-60bp	12.8	12.8	0bp
Net Profit	8,321	9,046	-8.0	10,215	10,403	-1.8
EPS (INR)	45.5	49.4	-8.0	55.8	56.8	-1.8

Source: MOFSL

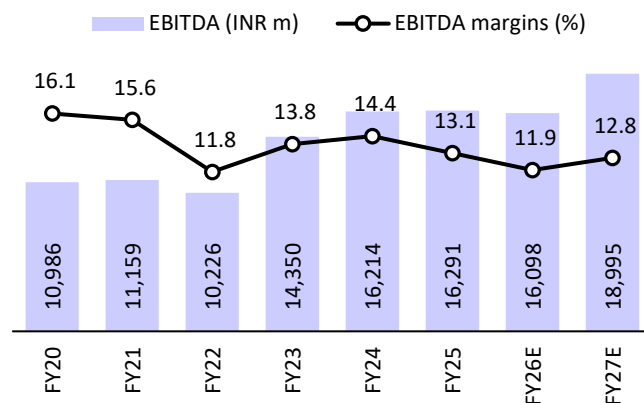
Story in charts

Exhibit 7: Trend in revenue



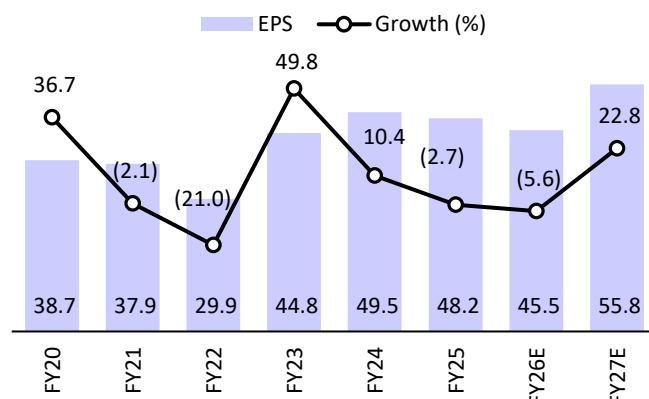
Source: Company, MOFSL

Exhibit 8: EBITDA and EBITDA margin trend



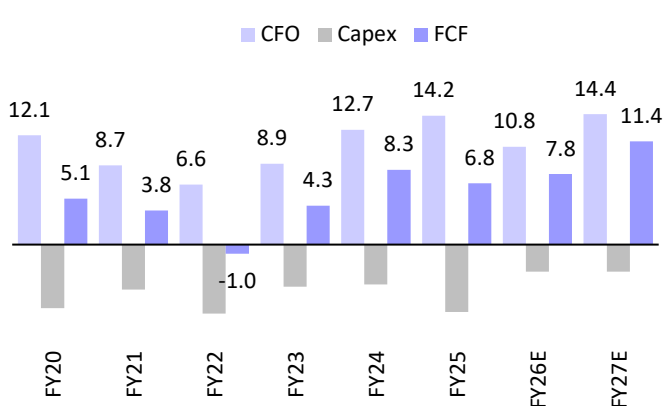
Source: Company, MOFSL

Exhibit 9: Earnings likely to see stability from FY25E



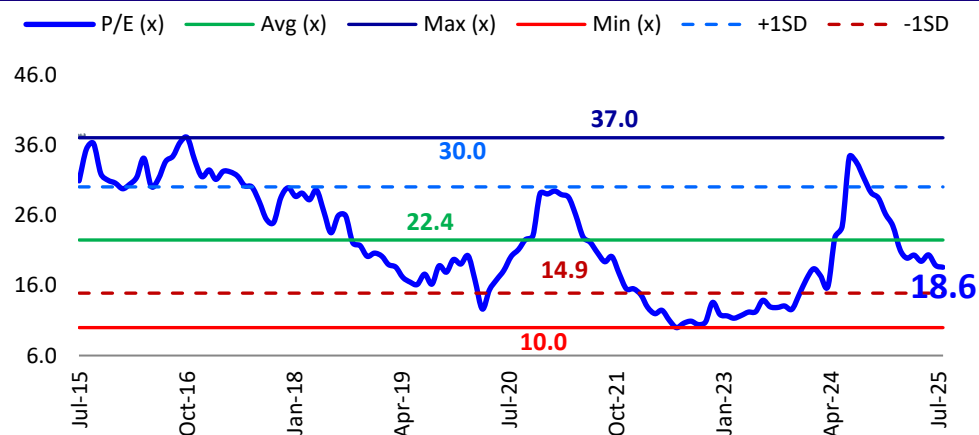
Source: Company, MOFSL

Exhibit 10: Trend in CFO, capex, and FCF



Source: Company, MOFSL

Exhibit 11: Valuations – P/E trading bands



Source: Company, MOFSL

Financials and valuations

Standalone - Income Statement

(InR M)

Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Net Sales	68,395	71,497	86,958	103,897	112,603	124,049	135,274	148,397
Change (%)	0.7	4.5	21.6	19.5	8.4	10.2	9.0	9.7
EBITDA	10,986	11,159	10,226	14,350	16,214	16,291	16,098	18,995
Margin (%)	16.1	15.6	11.8	13.8	14.4	13.1	11.9	12.8
Growth	15.4	1.6	-8.4	40.3	13.0	0.5	-1.2	18.0
Depreciation	3,007	3,192	3,957	4,504	4,787	4,921	5,176	5,281
EBIT	7,978	7,967	6,269	9,846	11,427	11,370	10,922	13,714
Int. and Finance Charges	122	105	151	296	332	422	450	580
Other Income - Rec.	551	874	780	897	1,015	933	653	522
PBT bef. EO Exp.	8,407	8,736	6,898	10,447	12,110	11,881	11,125	13,657
EO Expense/(Income)	0	0	0	477	0	-1,111	0	0
PBT after EO Exp.	8,407	8,736	6,898	9,970	12,110	12,992	11,125	13,657
Current Tax	1,799	2,265	1,786	2,620	3,191	3,259	2,892	3,551
Deferred Tax	0	0	0	43	-140	93	-89	-109
Tax Rate (%)	21.4	25.9	25.9	26.7	25.2	25.8	25.2	25.2
Reported PAT	6,608	6,470	5,112	7,307	9,059	9,639	8,321	10,215
PAT Adj for EO items	6,608	6,470	5,113	7,656	9,059	8,815	8,321	10,215
Change (%)	36.7	-2.1	-21.0	49.8	18.3	-2.7	-5.6	22.8

Standalone - Balance Sheet

(InR M)

Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Equity Share Capital	171	171	171	171	183	183	183	183
Total Reserves	36,385	41,932	45,343	59,886	67,504	73,600	80,274	88,476
Net Worth	36,556	42,103	45,514	60,056	67,687	73,783	80,457	88,659
Deferred Liabilities	441	407	314	1,036	885	732	643	534
Total Loans	343	234	234	2,014	1,527	2,583	3,300	3,400
Capital Employed	37,341	42,744	46,062	63,106	70,098	77,098	84,400	92,593
Gross Block	29,269	38,628	42,498	57,236	59,035	63,199	66,199	69,199
Less: Accum. Deprn.	10,977	14,081	17,575	20,354	23,532	28,452	33,628	38,909
Net Fixed Assets	18,292	24,548	24,923	36,882	35,503	34,747	32,571	30,290
Capital WIP	8,270	3,993	8,297	2,343	3,217	8,441	8,441	8,441
Total Investments	1,562	2,805	778	4,860	14,791	19,979	27,979	35,979
Curr. Assets, Loans&Adv.	21,882	26,625	29,761	35,288	34,833	36,763	37,912	42,844
Inventory	11,427	14,382	18,038	16,752	18,095	20,364	21,496	23,581
Account Receivables	6,363	7,875	7,926	7,797	10,171	11,428	11,860	13,010
Cash and Bank Balance	326	967	343	894	892	1,528	498	1,801
Loans and Advances	3,766	3,401	3,455	9,845	5,674	3,443	4,058	4,452
Curr. Liability & Prov.	12,665	15,227	17,697	16,267	18,245	22,832	22,503	24,961
Account Payables	6,149	7,465	8,065	7,514	8,398	10,465	11,489	12,604
Other Current Liabilities	4,685	5,623	7,177	6,005	6,924	8,863	9,469	10,388
Provisions	1,832	2,140	2,455	2,749	2,923	3,503	1,544	1,970
Net Current Assets	9,217	11,398	12,064	19,021	16,588	13,931	15,409	17,883
Appl. of Funds	37,341	42,744	46,062	63,106	70,098	77,098	84,400	92,593

E: MOFSL Estimates

Financials and valuations

Ratios								
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Basic (INR)								
EPS	38.7	37.9	29.9	44.8	49.5	48.2	45.5	55.8
Growth	36.7	-2.1	-21.0	49.8	10.4	-2.7	-5.6	22.8
Cash EPS	56.3	56.6	53.1	71.2	75.7	75.1	73.8	84.7
BV/Share	214.0	246.5	266.5	351.6	369.9	403.2	439.7	484.5
DPS	11.0	11.0	4.5	6.1	9.9	11.3	9.6	11.8
Payout (%)	34.1	29.0	15.0	14.3	20.0	19.9	19.8	19.7
Valuation (x)								
P/E	24.8	25.3	32.0	21.4	19.3	19.9	21.1	17.2
Cash P/E	17.0	16.9	18.0	13.5	12.7	12.8	13.0	11.3
P/BV	4.5	3.9	3.6	2.7	2.6	2.4	2.2	2.0
EV/Sales	2.4	2.3	1.9	1.6	1.5	1.3	1.2	1.1
EV/EBITDA	14.9	14.6	16.0	11.5	10.1	10.1	10.3	8.7
Dividend Yield (%)	1.1	1.1	0.5	0.6	1.0	1.2	1.0	1.2
FCF per share	27.9	17.9	-7.4	28.8	47.8	34.5	42.6	62.2
Return Ratios (%)								
RoE	18.9	16.5	11.7	14.5	14.2	12.5	10.8	12.1
RoCE	18.6	16.4	11.8	14.4	14.0	12.4	10.7	12.0
RoIC	21.6	19.0	13.0	15.7	16.1	17.2	17.3	21.9
Working Capital Ratios								
Inventory (Days)	61	73	75	58	58	60	58	58
Debtor (Days)	34	40	33	27	33	34	32	32
Creditor (Days)	33	38	34	26	27	31	31	31
Working Capital Turnover (Days)	47	53	49	64	51	36	40	40
Leverage Ratio (x)								
Current Ratio	1.7	1.7	1.7	2.2	1.9	1.6	1.7	1.7
Interest Cover Ratio	65	76	42	33	34	27	24	24

Standalone - Cash Flow Statement

(InR M)

Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Net P/L Before Tax and E/O Items	8,407	8,733	6,898	10,447	12,110	12,992	11,125	13,657
Depreciation	3,007	3,192	3,957	4,504	4,787	4,921	5,176	5,281
Interest & Finance Charges	122	105	151	-601	-684	-511	-203	58
Direct Taxes Paid	2,364	1,995	1,993	2,563	3,289	3,283	2,803	3,442
(Inc)/Dec in WC	2,892	-1,301	-2,406	-2,866	-271	85	-2,507	-1,171
CF from Operations	12,065	8,734	6,607	8,921	12,654	14,204	10,787	14,382
Others	-296	-714	-277	641	488	-452	0	0
CF from Operating incl EO	11,769	8,020	6,329	9,562	13,142	13,752	10,787	14,382
(inc)/dec in FA	-6,999	-4,964	-7,598	-4,647	-4,401	-7,440	-3,000	-3,000
Free Cash Flow	4,770	3,056	-1,268	4,915	8,741	6,312	7,787	11,382
(Pur)/Sale of Investments	-14,803	-14,598	-13,440	-27,976	-35,190	-37,490	0	0
Others	13,305	13,212	16,219	24,731	28,871	33,386	-7,347	-7,478
CF from Investments	-8,497	-6,350	-4,819	-7,892	-10,720	-11,543	-10,347	-10,478
(Inc)/Dec in Debt	-275	-321	-359	-377	-871	583	628	-9
Interest Paid	-52	-40	-67	-161	-188	-253	-450	-580
Dividend Paid	-3,311	-854	-1,708	-581	-1,367	-1,904	-1,647	-2,013
CF from Fin. Activity	-3,638	-1,215	-2,135	-1,119	-2,425	-1,573	-1,469	-2,602
Inc/Dec of Cash	-365	455	-624	551	-2	636	-1,030	1,302
Add: Beginning Balance	2,512	512	967	343	894	892	1,528	498
Closing Balance	2,147	967	343	894	892	1,528	498	1,801

E: MOFSL Estimates

Investment in securities market are subject to market risks. Read all the related documents carefully before investing

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 be within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://online.reports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg. No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets (Singapore) Pte. Ltd. ("MOCMSPL") (UEN 201129401Z), which is a holder of a capital markets services license and an exempt financial adviser in Singapore. This report is distributed solely to persons who (a) qualify as "institutional investors" as defined in section 4A(1)(c) of the Securities and Futures Act of Singapore ("SFA") or (b) are considered "accredited investors" as defined in section 2(1) of the Financial Advisers Regulations of Singapore read with section 4A(1)(a) of the SFA. Accordingly, if a recipient is neither an "institutional investor" nor an "accredited investor", they must immediately discontinue any use of this Report and inform MOCMSPL.

In respect of any matter arising from or in connection with the research you could contact the following representatives of MOCMSPL. In case of grievances for any of the services rendered by MOCMSPL write to grievances@motilaloswal.com.

Nainesh

Rajani

Email: nainesh.rajani@motilaloswal.com

Contact: (+65) 8328 0276

Specific Disclosures

- Research Analyst and/or his/her relatives do not have a financial interest in the subject company(ies), as they do not have equity holdings in the subject company(ies). MOFSL has financial interest in the subject company(ies) at the end of the week immediately preceding the date of publication of the Research Report: Yes.
Nature of Financial interest is holding equity shares or derivatives of the subject company
- Research Analyst and/or his/her relatives do not have actual/beneficial ownership of 1% or more securities in the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report.
MOFSL has actual/beneficial ownership of 1% or more securities of the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report: No
- Research Analyst and/or his/her relatives have not received compensation/other benefits from the subject company(ies) in the past 12 months.
MOFSL may have received compensation from the subject company(ies) in the past 12 months.
- Research Analyst and/or his/her relatives do not have material conflict of interest in the subject company at the time of publication of research report.
MOFSL does not have material conflict of interest in the subject company at the time of publication of research report.
- Research Analyst has not served as an officer, director or employee of subject company(ies).
- MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months.
- MOFSL has not received compensation for investment banking /merchant banking/brokerage services from the subject company(ies) in the past 12 months.

8. MOFSL may have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company(ies) in the past 12 months.
9. MOFSL may have received compensation or other benefits from the subject company(ies) or third party in connection with the research report.
10. MOFSL has not engaged in market making activity for the subject company.

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

This report is meant for the clients of Motilal Oswal only.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263;

www.motilaloswal.com. Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN : 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dpgrievances@motilaloswal.com.