

Estimate changes

TP change

Rating change



Bloomberg	EXID IN
Equity Shares (m)	850
M.Cap.(INRb)/(USD\$)	314.7 / 3.7
52-Week Range (INR)	620 / 328
1, 6, 12 Rel. Per (%)	-5/-18/-28
12M Avg Val (INR M)	2057

Financials & Valuations (INR b)

Y/E MARCH	FY25	FY26E	FY27E
Net Sales	165.9	178.0	194.6
EBITDA	18.9	21.4	23.3
Adj. PAT	10.8	12.2	13.2
Adj. EPS (INR)	12.7	14.3	15.6
EPS Gr. (%)	2.3	13.1	8.7
BV/Sh. (INR)	169.9	181.2	193.6

Ratio

RoE (%)	7.5	7.9	8.0
RoCE (%)	7.8	8.2	8.4
Payout (%)	15.8	20.9	20.9

Valuations

P/E (x)	29.2	25.8	23.7
P/BV (x)	2.2	2.0	1.9
Div Yield (%)	0.5	0.8	0.9
FCF Yield (%)	2.8	3.5	3.8

Shareholding pattern (%)

As On	Mar-25	Dec-24	Mar-24
Promoter	46.0	46.0	46.0
DII	17.2	17.6	18.6
FII	11.6	11.7	13.6
Others	25.3	24.6	21.9

FII Includes depository receipts

CMP: INR370

TP: INR368 (-1%)

Neutral

Rising input costs drive margin pressure

Lithium-ion trial production to start in CY25; all eyes on firm order wins

- Exide's 4QFY25 performance was in line with our estimates, with PAT declining 10% YoY to INR2.5b. Margin contracted 170bp YoY to 11.2% due to the rise in input costs and write-offs taken in the quarter. Exide has implemented price hikes to offset the recent cost increase.
- We have maintained our estimates. Given the significant imminent risk to its core business, Exide has forayed into the manufacturing of lithium-ion cells in partnership with S-Volt, with a total investment of INR60b across two phases. While the market appears to be upbeat on Exide's lithium-ion foray, we remain cautious of the returns from the same. **Hence, we reiterate our Neutral rating on the stock with a revised TP of INR368 (based on 20x FY27E EPS).**

Margin impacted by higher input costs and write-offs

- Exide's 4QFY25 revenue grew 4% YoY to INR41.6b, in line with our estimate.
- Nearly 75% of its business—comprising the mobility aftermarket segment, solar, and I-UPS—posted double-digit growth. However, the remaining 25%—including auto OEMs (especially PVs), telecom, and home inverters—saw a decline.
- EBITDA margin contracted 170bp YoY to 11.2%. Q4 margins were impacted by: 1) a sharp rise in input costs (impact of INR500m) and 2) write-off taken on certain non-moving assets in the quarter (INR250m).
- As a result, EBITDA declined 10% YoY to INR4.7b, in line with our estimates.
- Overall, PAT declined 10% YoY to INR2.5b and was in line with our estimates.
- For FY25, revenue grew 4% YoY to INR166b. About 75% of its business posted more than 10% growth. However, the remaining 30% witnessed a 9% decline in FY25.
- Margins contracted 30bp YoY to 11.4% due to the rise in input costs and an adverse mix.
- Overall, PAT grew 2% YoY to INR10.8b in FY25.
- FCF for FY25 stood at INR8.7b following a capex of INR4.2b.

Highlights from the management commentary

- For Q4, management indicated that almost 75% of its business—comprising the mobility aftermarket segment, solar, and I-UPS—posted double-digit growth. However, the remaining 25%—including auto OEMs (especially PVs), telecom, and home inverters—saw a decline. Additionally, exports demand remained weak, primarily due to weakness in Industrial demand in Europe, led by ongoing slowdown in the region.
- Exide implemented three price hikes over the past four months to pass on the rising cost impact.

- The shift to punch grid batteries in motorcycles, along with investments in the continuous casting process, is expected to reduce costs and improve product quality.
- Exide has so far invested INR36b in the first phase of setting up a 6 GWh plant for its lithium-ion business. It is likely to be the first player to commence trial production of this plant in India in CY25. The company continues to be in advanced discussions for potential orders with several OEMs across segments. While the company is not concerned about plant utilization given the significant growth potential, it has refrained from setting specific targets for the project, with its immediate priority being to stabilize operations as quickly as possible.

Valuation and view

- We have maintained our estimates. Given the significant imminent risk to its core business, Exide has forayed into the manufacturing of lithium-ion cells in partnership with S-Volt, with a total investment of INR60b across two phases. While the market appears to be upbeat on Exide's lithium-ion foray, we remain cautious of the returns from the same. Besides, the stock at ~25.8x/23.7x FY26/27E EPS appears fairly-valued. **Hence, we reiterate our Neutral rating on the stock with a revised TP of INR368 (based on 20x FY27E EPS).**

S/A Quarterly Performance

(INR M)

Y/E March	FY24				FY25E				FY24	FY25E	4QE	Var (%)
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Net Sales	40,726	41,067	38,405	40,094	43,128	42,673	38,486	41,594	1,60,292	1,65,881	39,871	4.3
Growth YoY (%)	4.4	10.4	12.6	13.2	5.9	3.9	0.2	3.7	9.8	3.5	-0.6	
RM cost (%)	71.7	68.9	68.5	67.0	69.3	68.5	68.0	68.8	69.1	68.7	68.1	
Employee cost (%)	5.8	6.2	6.4	6.1	6.1	6.3	6.8	6.3	6.1	6.4	6.7	
Other Exp(%)	11.8	13.1	13.6	14.1	13.1	13.9	13.5	13.7	13.1	13.6	13.3	
EBITDA	4,322	4,831	4,399	5,162	4,943	4,836	4,486	4,667	18,714	18,931	4,753	-1.8
EBITDA Margin(%)	10.6	11.8	11.5	12.9	11.5	11.3	11.7	11.2	11.7	11.4	11.9	
Change (%)	11.8	17.1	9.7	40.6	14.4	0.1	2.0	-9.6	19.3	1.2	-8	
Non-Operating Income	192	392	227	34	142	528	132	161	845	962	153	
Interest	98	115	145	128	87	103	120	130	486	439	121	
Depreciation	1,194	1,259	1,274	1,248	1,257	1,270	1,244	1,268	4,975	5,039	1,248	
PBT after EO Exp	3,222	3,849	3,208	3,819	3,741	3,991	3,253	3,430	14,099	14,415	3,537	-3.0
Effective Tax Rate (%)	24.9	25.4	25.1	25.7	25.3	25.4	24.7	25.8	25.3	25.3	24.6	
Adj. PAT	2,419	2,870	2,403	2,838	2,796	2,978	2,450	2,546	10,530	10,769	2,668	-4.6
Change (%)	6.9	16.6	7.7	36.5	15.6	3.8	2.0	-10.3	16.5	2.3	-6.0	

Key performance indicators

Cost Break-up												
RM(%)	71.7	68.9	68.5	67.0	69.3	68.5	68.0	68.8	69.1	68.7	68.1	60bp
Employee cost (%)	5.8	6.2	6.4	6.1	6.1	6.3	6.8	6.3	6.1	6.4	6.7	-40bp
Other Exp(%)	11.8	13.1	13.6	14.1	13.1	13.9	13.5	13.7	13.1	13.6	13.3	50bp
Gross Margin (%)	28.3	31.1	31.5	33.0	30.7	31.5	32.0	31.2	30.9	31.3	31.9	-60bp
EBITDA Margin(%)	10.6	11.8	11.5	12.9	11.5	11.3	11.7	11.2	11.7	11.4	11.9	-70bp
EBIT Margin(%)	7.7	8.7	8.1	9.8	8.5	8.4	8.4	8.2	8.6	8.4	8.8	-60bp



Highlights from the management commentary

Q4FY25 performance update

- For Q4, management indicated that almost 75% of its business—comprising the mobility aftermarket segment, solar, and I-UPS—posted double-digit growth. However, the remaining 25%—which includes auto OEMs (especially PVs), telecom, and home inverters—saw a decline. Additionally, exports demand remained weak, primarily due to weakness in Industrial demand in Europe, led by ongoing slowdown in the region.
- This has led to blended growth of 4% in Q4.
- Traction in the home inverter segment was soft, partly due to internal issues and partly due to weak demand. The Home UPS segment has traditionally been classified under the auto segment and distributed through the same team. As a result, Exide was not present in many sub-segments such as white goods and e-commerce. To address this, management is now setting up a separate distribution network for the home UPS business. At the industry level, demand was weak last year due to the early onset of monsoon, which caused a miss in the peak season. However, Exide is already seeing early signs of a demand pickup in this segment in the current quarter.

FY25 performance update

- For FY25, about 75% of its business posted over 10% growth. However, the remaining 30% saw a 9% decline in FY25.
- The 4W aftermarket segment (contributes to 25-30% of revenue) posted double-digit growth. The solar division also posted a strong 25% growth in FY25 (on track to become an INR12b franchise). 2W growth was hurt by Exide's transition to punch grid plates (from conventional cast plates). Although the segment ended FY25 with low double-digit growth, it was largely back-ended (1Q: 2%, 2Q: 6%, 3Q: 10%, 4Q: 18%).
- Auto exports posted 25-30% growth in FY25.
- Overall, the mobility division, which contributes 35% to the business, posted 15% growth in FY25.
- However, the infrastructure segment remained a drag on the overall business. Within this, the telecom segment posted a 25-30% decline over a high base (the 5G rollout in FY24 saw the setup of many telecom towers). While telecom demand itself was weak, the LAB segment was also impacted as demand continued to shift in favor of the lithium-ion segment. According to management, the telecom segment for LAB applications is likely to have bottomed out, with new growth expected in the lithium-ion space.
- The home inverter segment's demand also remained subdued for the abovementioned reasons.
- On the other hand, the I-UPS segment posted double-digit growth, led by new products introduced in data centers, hospitals, etc.

Reasons for margin impact in Q4

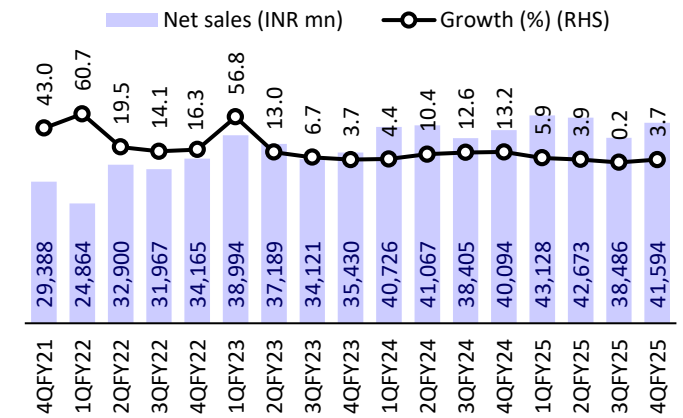
- Q4 margins were impacted by: 1) a sharp rise in input costs (impact of INR500m) and 2) some write-off taken during the quarter.
- Antimony prices saw a sharp rise in Q4. To offset this, Exide implemented a price hike of 1.5% in mid-Feb'25, Mar'25, and again in Apr'25.
- The price hike now fully covers the rising cost pressures experienced so far.
- Management has also been able to convince some of its OEMs for a pass-through of the same.
- Further, it has taken a write-off of some non-moving assets worth INR250mn in Q4.
- Adjusted for both these factors, margins could have been 13%.
- Operational performance has improved, led by the transition to punch grid batteries from Jan. This is driving material cost saving, higher automation levels, and improvement/consistency in quality. So far, it has upgraded 50% of its motorcycle capacity and plans to upgrade the remaining by Nov'25.
- Additionally, it has invested in continuous casting process in collaboration with East Penn, offering positive benefits on cost and quality. The company has already converted one line and plans to convert two more lines soon.
- Both these initiatives are expected to reduce its warranty costs, which were rising due to manufacturing inconsistencies.

Update on the lithium-ion business

- The company invested INR10b in this business in FY25 and another INR3b in Apr'25. Together, it has invested INR36b in this business so far. The first-phase cell manufacturing capacity is expected at 6GW hr.
- The company expects to start trial production in CY25. Post this, it will look to homologate its lines with OEM requirements, which will take 4-5 months, followed by the commencement of series production.
- Exide is setting up multiple lines with different cell chemistries to cater to varied applications. It is setting up two lines for NMC chemistry cells and two lines for LFP chemistry cells.
- The company is currently in advanced discussions with two leading 2W OEMs for the supply of NMC cells and is also in talks with 3W/4W OEMs, as well as for stationary applications for LFP chemistry.
- The company anticipates local procurement in India to take off first in segments like 2Ws, 3Ws, and stationary storage applications. Accordingly, it plans to start NMC production initially.
- It is currently supplying battery packs to a few 2W/3W OEMs (with outsourced cells). This is considered a risky venture as it may drive a sharp rise in warranty costs at a later stage.
- Management has refrained from providing any profitability guidance or returns target, even in the long run. It has indicated that its immediate priority is to secure orders for this new business and stabilize operations (reduce rejection rates) of the current investment till 80% utilization. Following this, the company will have a fair understanding of what returns to expect from this business in the long run.
- Given the significant rise in demand for lithium-ion applications (estimate of market size at 120-130 GW hr by 2030), management is not concerned about utilizing the current capacity.

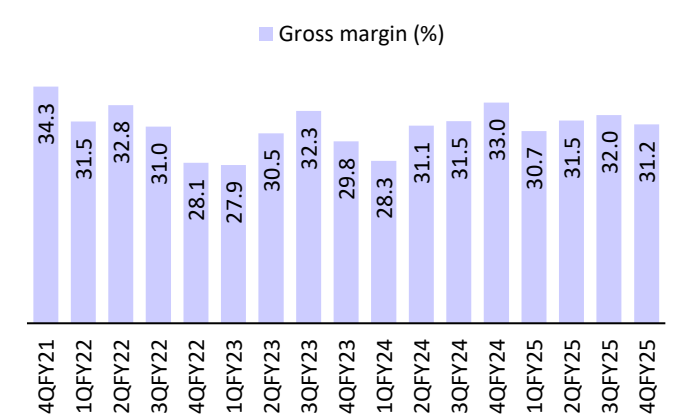
Key exhibits

Exhibit 1: Trends in revenue and growth



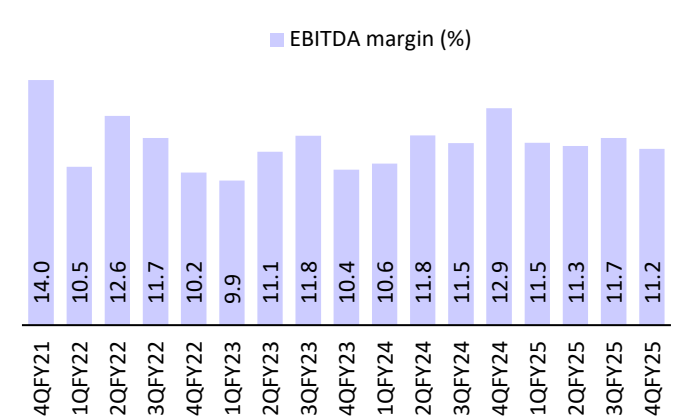
Source: Company, MOFSL

Exhibit 2: Trend in gross margin



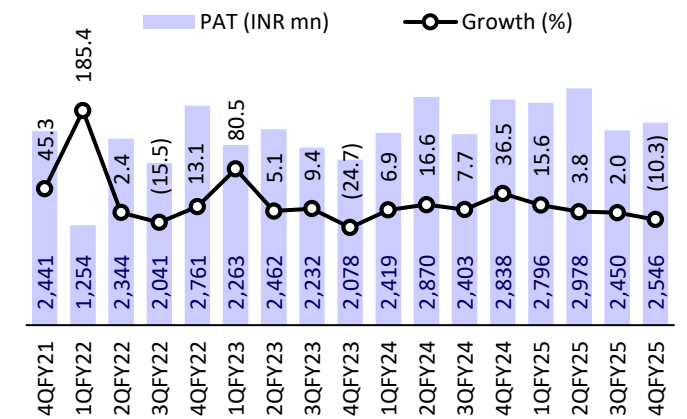
Source: Company, MOFSL

Exhibit 3: Trend in EBITDA margin



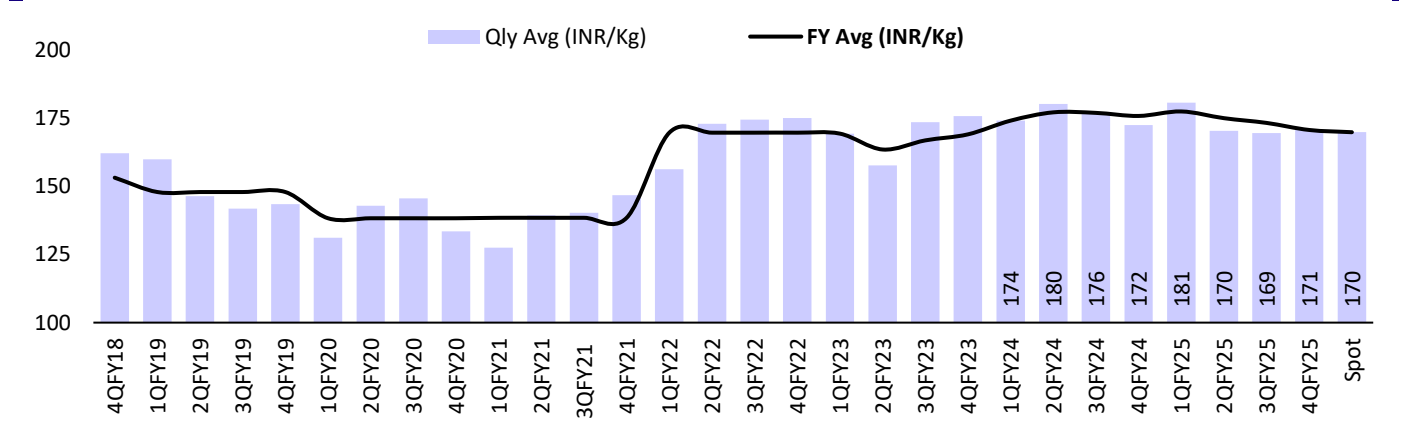
Source: Company, MOFSL

Exhibit 4: Trend in PAT and growth



Source: Company, MOFSL

Exhibit 5: Lead price is expected to remain at elevated levels



Source: Company, MOFSL

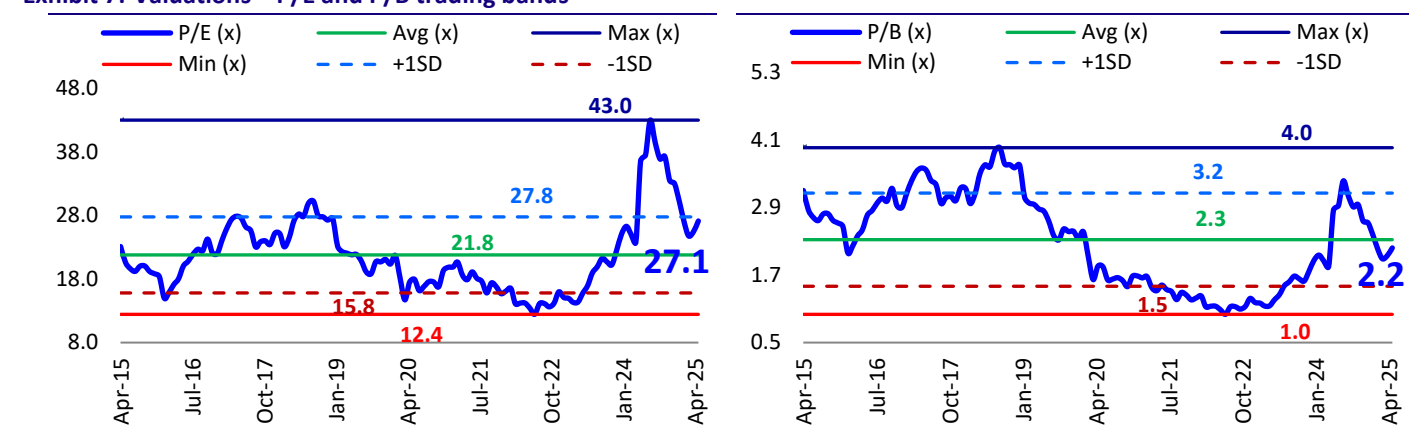
Valuation and view

- **Exide continues to enjoy a strong position in the LAB industry:** Exide remains a market leader across all key segments in the LAB industry except telecom. In the Auto OEM segment, it has a dominant presence in both 2Ws and 4Ws. The replacement battery market is largely a duopoly, with Exide leading the market. Additionally, it holds a strong position in both the UPS and inverter segments, and is a dominant player in power and traction batteries. Exide has the largest distribution network in India with 115k channel partners. Through digitization initiatives, the company now offers on-the-spot warranty resolutions, which serve as one of its key USPs.
- **EV transition remains the real risk for LAB in the long run:** The transition to electrification globally as well as in India is expected to emerge as a significant risk for lead acid battery players in the long run. The only saving grace for Indian players in the near term is that the EV transition is currently picking up pace in 2Ws and 3Ws, with the shift in PVs expected to take longer. However, lithium-ion batteries are now increasingly finding applications in various Industrial use cases, including telecom, traction, and UPS. This transition is clearly set to emerge as a significant risk for LAB players such as Exide in the long run.
- **Foray into lithium-ion will have its own challenges:** Given the significant imminent risk to its core business, Exide has forayed into the manufacturing of lithium-ion cells in partnership with S-Volt, with a total investment of INR60b across two phases. Further, Exide recently announced a non-binding partnership with Hyundai-Kia for the localization of LFP cells, which will be produced in India for one of its global platforms. While Exide can fund this venture through its internal accruals without significant funding requirements for this phase, we believe the company's foray into lithium-ion cell manufacturing will likely face multiple challenges in the coming years, as: 1) most domestic PV OEMs either have their own lithium-ion manufacturing plans or existing tie-ups, limiting Exide's potential addressable market in this space; 2) the current partnership with Hyundai is non-binding, so we will need to wait and see whether it eventually evolves into a binding partnership; 3) Exide is setting up a greenfield facility in this segment without prior experience, and we expect it to take at least a couple of years to stabilize operations, as it undergoes testing and validation phases initially for interested OEMs; 4) Exide is not participating in PLI, which could limit its competitiveness relative to peers who qualify for it; 5) given that lithium-ion cell manufacturing is a low-margin business globally, we expect this business to be returns-dilutive for Exide in the long run, even if it proves successful; and 6) given the significant capital commitment required and the uncertainty around whether lithium-ion cell technology will emerge as a sustainable technology in the long run, we believe the outcome of this venture remains highly uncertain at this stage.
- **Valuation and view:** We have maintained our estimates. While Exide's LAB business is likely to drive steady cash generation, we continue to remain cautious of the returns from the company's foray into the lithium-ion segment. Besides, the stock at ~25.8x/23.7x FY26/27E EPS appears fairly valued. **Reiterate Neutral with a TP of INR368 (based on 20x FY27E EPS).**

Exhibit 6: Our revised estimates

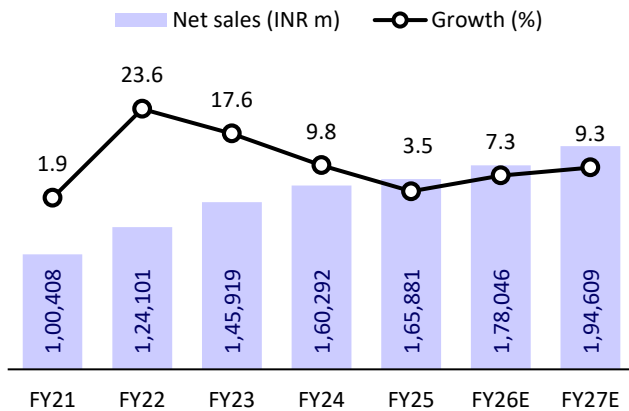
(INR m)	FY26E			FY27E		
	Rev	Old	Chg (%)	Rev	Old	Chg (%)
Net Sales	1,78,046	1,79,398	-0.8	1,94,609	1,97,471	-1.4
EBITDA Margin (%)	12.0	12.0	0bp	12.0	12.0	-10bp
PAT	12,179	12,032	1.2	13,243	13,139	0.8
EPS (INR)	14.3	14.2	1.2	15.6	15.5	0.8

Source: MOFSL

Exhibit 7: Valuations – P/E and P/B trading bands


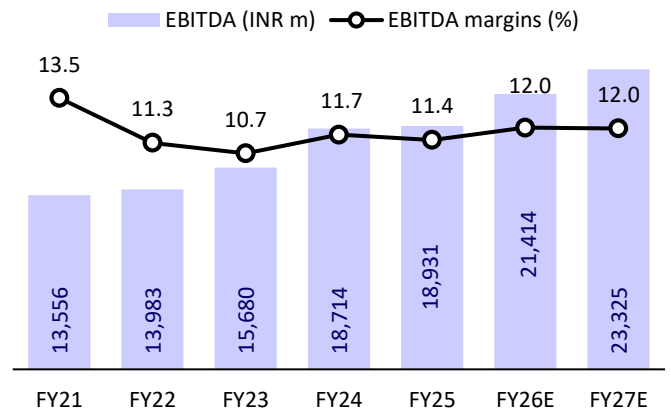
Story in charts

Exhibit 8: Trends in revenue and growth



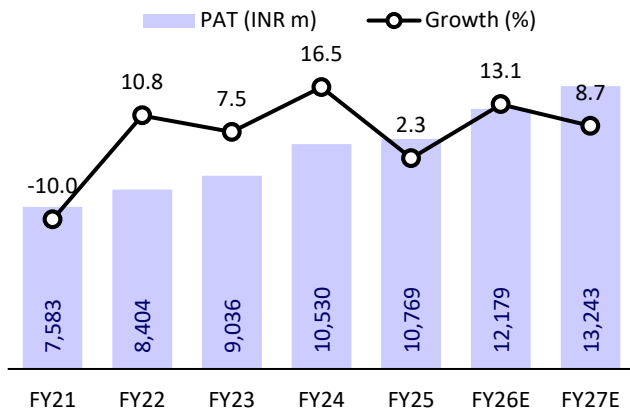
Source: Company, MOFSL

Exhibit 9: Trends in EBITDA and EBITDA margin



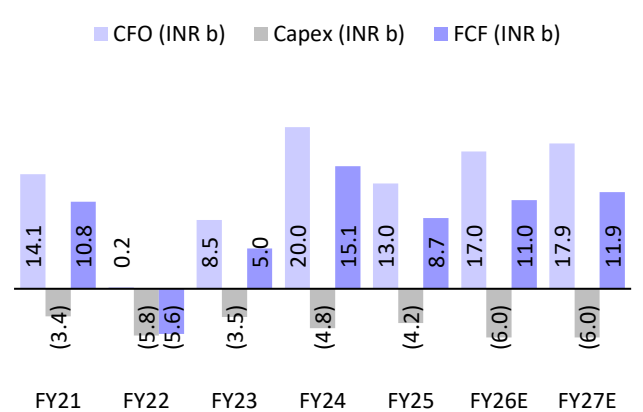
Source: Company, MOFSL

Exhibit 10: PAT and PAT growth trends



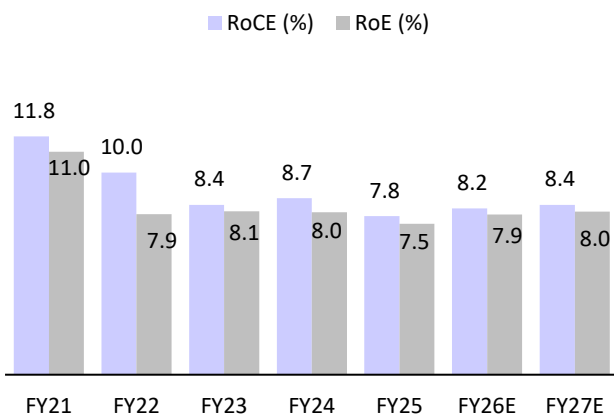
Source: Company, MOFSL

Exhibit 11: Strong FCF driven by healthy CFO



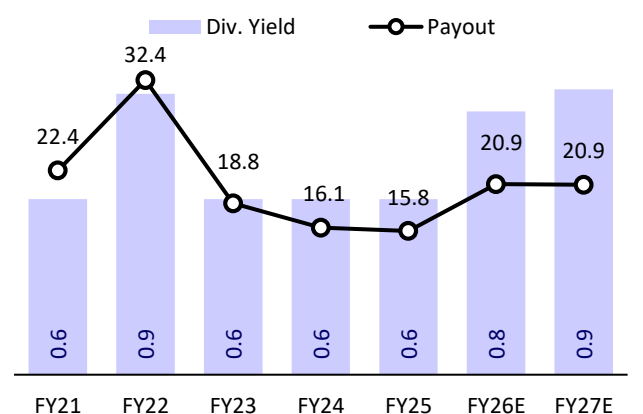
Source: Company, MOFSL

Exhibit 12: Trend in return ratios



Source: Company, MOFSL

Exhibit 13: Dividend yield and dividend payout (%) trends



Source: Company, MOFSL

Financials and valuations

Income Statement								(INR M)
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Total Income	98,567	1,00,408	1,24,101	1,45,919	1,60,292	1,65,881	1,78,046	1,94,609
Change (%)	-6.9	1.9	23.6	17.6	9.8	3.5	7.3	9.3
EBITDA	13,651	13,557	13,984	15,681	18,715	18,932	21,415	23,326
EBITDA Margins (%)	13.8	13.5	11.3	10.7	11.7	11.4	12.0	12.0
Change (%)	-3.3	-0.7	3.1	12.1	19.3	1.2	13.1	8.9
Depreciation	3,626	3,794	4,131	4,558	4,975	5,039	5,491	5,844
EBIT	10,025	9,763	9,852	11,123	13,740	13,893	15,924	17,482
Interest Charges	94	238	394	295	486	439	505	580
Other Income	639	654	805	1,324	845	962	885	828
EO Exp/(Inc)	217	-	(46,938)	-	-	-	-	-
PBT	10,352	10,179	57,199	12,151	14,099	14,415	16,304	17,728
Tax	2,097	2,596	10,356	3,115	3,569	3,646	4,125	4,485
Effective Rate (%)	20.3	25.5	18.1	25.6	25.3	25.3	25.3	25.3
Rep. PAT	8,255	7,583	46,843	9,036	10,530	10,769	12,179	13,243
Change (%)	-2.2	-8.1	517.8	-80.7	16.5	2.3	13.1	8.7
Adj. PAT	8,428	7,583	8,404	9,036	10,530	10,769	12,179	13,243
Change (%)	9.4	-10.0	10.8	7.5	16.5	2.3	13.1	8.7

Balance Sheet								(INR M)
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Share Capital	850	850	850	850	850	850	850	850
Reserves	62,111	68,085	1,05,131	1,11,248	1,30,522	1,43,573	1,53,202	1,63,683
Net Worth	62,961	68,935	1,05,981	1,12,098	1,31,372	1,44,423	1,54,052	1,64,533
Loans	0	0	0	2,708	3,856	3,752	3,752	3,752
Deferred Tax Liability	1,019	771	-654	-1,160	-137	108	108	108
Capital Employed	63,980	69,706	1,05,327	1,13,646	1,35,092	1,48,283	1,57,912	1,68,393
Application of Funds								
Gross Fixed Assets	36,039	42,740	48,245	53,473	58,005	63,151	69,151	75,151
Less: Depreciation	12,645	16,361	20,509	24,970	29,353	34,392	39,882	45,727
Net Fixed Assets	23,394	26,379	27,736	28,503	28,652	28,759	29,269	29,425
Capital WIP	2,969	2,008	3,124	1,009	2,017	1,375	1,375	1,375
Investments	21,148	31,012	60,773	63,477	86,258	99,766	1,05,706	1,15,206
Curr.Assets	34,911	36,889	41,352	46,362	51,600	58,291	59,123	63,442
Inventory	21,923	23,462	24,647	29,891	32,493	38,274	36,585	39,988
Sundry Debtors	8,154	8,874	11,945	12,745	12,650	15,772	14,634	15,995
Cash & Bank Balance	1,449	825	1,536	681	2,174	1,113	3,026	2,127
Loans & Advances	322	383	0	0	0	0	0	0
Other Current Assets	3,064	3,345	3,223	3,045	4,282	3,132	4,878	5,332
Current Liab. & Prov.	18,441	26,582	27,657	25,705	33,435	39,908	37,560	41,054
Sundry Creditors	10,361	16,483	16,268	15,360	23,199	28,431	21,951	23,993
Other Liabilities	4,478	6,856	8,191	6,962	6,456	6,794	11,707	12,796
Provisions	3,602	3,244	3,198	3,383	3,780	4,683	3,902	4,265
Net Current Assets	16,470	10,307	13,695	20,657	18,165	18,383	21,563	22,388
Application of Funds	63,980	69,705	1,05,327	1,13,646	1,35,092	1,48,283	1,57,912	1,68,393

E: MOFSL Estimates

Financials and valuations

Ratios

Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Basic (INR)								
EPS	9.9	8.9	9.9	10.6	12.4	12.7	14.3	15.6
Cash EPS	14.2	13.4	14.7	16.0	18.2	18.6	20.8	22.5
Book Value per Share	74.1	81.1	124.7	131.9	154.6	169.9	181.2	193.6
DPS	4.1	2.0	3.2	2.0	2.0	2.0	3.0	3.3
Payout (Incl. Div. Tax) %	41.3	22.4	32.4	18.8	16.1	15.8	20.9	20.9
Valuation (x)								
P/E	37.3	41.5	37.4	34.8	29.9	29.2	25.8	23.7
Cash P/E	26.1	27.6	25.1	23.1	20.3	19.9	17.8	16.5
EV/EBITDA	21.4	20.9	18.0	16.1	12.3	11.5	9.8	8.6
EV/Sales	3.0	2.8	2.0	1.7	1.4	1.3	1.2	1.0
Price to Book Value	5.0	4.6	3.0	2.8	2.4	2.2	2.0	1.9
Dividend Yield (%)	1.1	0.5	0.9	0.5	0.5	0.5	0.8	0.9
Profitability Ratios (%)								
RoE	13.4	11.0	7.9	8.1	8.0	7.5	7.9	8.0
RoCE	13.8	11.8	10.0	8.4	8.7	7.8	8.2	8.4
RoIC	21.4	19.6	21.3	18.7	22.0	22.9	25.4	26.8
Turnover Ratios								
Debtors (Days)	30	32	35	32	29	35	30	30
Inventory (Days)	81	85	72	75	74	84	75	75
Creditors (Days)	38	60	48	38	53	63	45	45
Working Capital (Days)	73	58	60	68	50	56	60	60
Gross Fixed Asset Turnover (x)	2.7	2.3	2.6	2.7	2.8	2.6	2.6	2.6
Leverage Ratio								
Net Debt/Equity (x)	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0

Cash Flow Statement

Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
(INR M)								
OP/(Loss) before Tax	10,352	10,179	57,199	12,151	14,099	14,415	15,923	17,481
Interest/Dividends Received	-429	-362	-225	-233	-237	-212	885	828
Depreciation & Amortisation	3,626	3,794	4,131	4,558	4,975	5,039	5,491	5,844
Direct Taxes Paid	-2,494	-2,721	-10,472	-3,212	-3,707	-3,726	-4,125	-4,485
(Inc)/Dec in Working Capital	-2,155	3,044	-3,479	-4,538	4,874	-2,637	-1,220	-1,724
Other Items	237	200	-46,951	-242	-38	100	0	0
CF from Oper. Activity	9,137	14,134	205	8,484	19,965	12,979	16,954	17,944
(Inc)/Dec in FA+CWIP	-4,646	-3,384	-5,783	-3,493	-4,844	-4,245	-6,000	-6,000
Free Cash Flow	4,491	10,750	-5,579	4,991	15,122	8,735	10,954	11,944
(Pur)/Sale of Invest.	1,397	-9,385	8,537	-5,385	-11,328	-7,558	-5,986	-9,500
CF from Inv. Activity	-3,249	-12,769	2,754	-8,878	-16,172	-11,803	-11,986	-15,500
Interest Rec./ (Paid)	-100	-289	-549	-461	-601	-539	-505	-580
Dividends Paid	-4,986	-1,700	-1,698	0	-2,848	-1,596	-2,550	-2,763
CF from Fin. Activity	-5,086	-1,989	-2,247	-461	-2,301	-2,239	-3,055	-3,343
Inc/(Dec) in Cash	802	-623	711	-855	1,493	-1,062	1,913	-899
Add: Beginning Balance	647	1,449	826	1,536	681	2,174	1,113	3,026
Closing Balance	1,449	826	1,536	681	2,174	1,113	3,026	2,127

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://onlinereports.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

- 1 MOFSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- 2 MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOFSL has not received any compensation or other benefits from 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.