

Estimate change	↑
TP change	↑
Rating change	↔

Motilal Oswal values your support in the Asiamoney Brokers Poll 2023 for India Research, Sales, Corporate Access and Trading team. We request your ballot.



Bloomberg	JSTL IN
Equity Shares (m)	2417
M.Cap.(INRb)/(USDb)	1900.1 / 23.2
52-Week Range (INR)	823 / 573
1, 6, 12 Rel. Per (%)	-1/-3/15
12M Avg Val (INR M)	1763

Financials & Valuations (INR b)

Y/E MARCH	2023	2024E	2025E
Sales	1,660	1,791	2,025
EBITDA	185	303	398
Adj. PAT	36	114	176
EBITDA Margin (%)	11	17	20
Cons. Adj. EPS (INR)	15	47	73
EPS Gr. (%)	-83	219	55
BV/Sh. (INR)	272	309	368
Ratios			
Net D:E	0.9	0.8	0.7
RoE (%)	5.3	16.2	21.5
RoCE (%)	5.3	9.9	12.4
Payout (%)	23.1	20.0	20.0
Valuations			
P/E (x)	53.5	16.7	10.8
P/BV (x)	2.9	2.5	2.1
EV/EBITDA(x)	13.4	8.3	6.3
Div. Yield (%)	0.4	1.2	1.9
FCF Yield (%)	4.6	3.8	5.9

Shareholding pattern (%)

As On	Jun-23	Mar-23	Jun-22
Promoter	45.4	45.4	45.0
DII	25.1	25.0	9.6
FII	11.5	11.5	11.3
Others	18.0	18.1	34.1

FII Includes depository receipts

CMP: INR786 **TP: INR730 (-7%)** **Neutral**

EBITDA beats estimates; capacity expansion on track

Consolidated performance

- JSTL posted revenue of INR422b in 1QFY24 (up 11% YoY), 6% above our estimate of INR397b. ASP stood at INR73,928/t (higher than our estimate of INR71,327/t).
- EBITDA stood at INR70b (up 64% YoY), 43% above our estimate of INR49b. EBITDA was supported by better performance of its Ohio and European subsidiaries, better realizations in export markets, and lower input costs. EBITDA/t stood at INR12,340/t vs. our estimate of INR8,715/t.
- APAT jumped 179% YoY to INR23b, aided by better operating performance and lower depreciation, offset by higher-than-expected tax outgo.
- Combined crude steel production (incl. JISPL) stood at 6.4mt (+12% YoY/-2% QoQ). Sales volumes came in at 5.7mt (+27% YoY/-13% QoQ). Due to some scheduled shutdowns at Indian operations during the quarter, the average capacity utilization was 92% (96% in 4Q FY23).
- Steel sales were affected by channel destocking. Exports were hit by delayed loading due to a cyclone on the western coast of India at 1Q end.
- Net debt stood at INR672b, with a net debt-to-EBITDA ratio of 3.14x (down from 3.2x in 4QFY23).

Standalone performance

- Revenue grew 5% YoY INR328b, in line with our estimate of INR319b. EBITDA grew 45% YoY to INR49b and APAT stood at INR17b (up 78% YoY).
- Crude steel production grew 9% YoY to 5.4mt and sales volumes rose 22% YoY to 4.9mt.

Highlights from management commentary

- In 1QFY24, the coking coal cost was up by USD11/t at USD285/t; however, JSTL was able to mitigate the cost increase to some extent by utilizing a better coal blend.
- The coking coal cost is expected to be down by USD45-50/t in 2QFY24.
- JSTL in 1QFY24 spent INR41b as capex and has earmarked INR188b for FY24 and INR185b for FY25.
- Due to channel destocking and climate disruption in 1QFY24, JSTL had inventory built up of 338kt, which is expected to be sold in 2QFY24.
- The company plans capex across its facilities to enhance VAP volume.
- The management has retained its FY4E guidance at 25mt sales.

JSTL on track to enhance its domestic capacity

- JSTL has undertaken a multi-phase expansion, which will enhance the domestic capacity to 31mt by FY25 and to 50mt by FY31.
- The near-term capacity expansion will be driven by brownfield expansion at Vijayanagar, BPSL and JISPL.
- It is also undertaking a greenfield EAF capex at Kadapa (Andhra Pradesh) and is in an advanced stage to finalize a 13mt greenfield expansion in Odisha, which will be over and above the ongoing capex.

Alok Deora - Research Analyst (Alok.Deora@MotilalOswal.com)

Parthiv Deepak Jhonsa - Research Analyst (Parthiv.Jhonsa@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.

Valuation and view

- Volumes are expected to be aided by a pickup in domestic demand and a higher share of VAP. The coking coal cost has moderated and its benefits are expected to accrue in 2QFY24.
- We expect incremental volume to flow in when the Vijayanagar and BPSL facilities come on stream by the end of FY24.
- The merger of National Steel and Agro, Vallabh Tinplate and Vardhaman Industries has further enhanced the company's VAP portfolio.
- Considering a pickup in demand, an increasing share of VAP and cost reductions expected in 2QFY24, we raise our FY24 revenue/EBITDA/APAT estimates by 7%/14%/34%. We largely retain our estimates for FY25.
- We believe the current valuations at 6.3x FY25E EV/EBITDA and 2.1x FY25E P/B fully price in the positive factors. We reiterate our Neutral rating on the stock with a revised TP of INR730 (INR710 earlier).

Quarterly Performance (INR b)

Y/E March	FY23				FY24E				FY23	FY24E	FY24E vs Est	vs Est (%)
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE				
Sales (kt)	4,490	5,740	5,710	6,530	5,710	6,074	6,581	6,521	22,470	24,885		
Change (YoY %)	29.4	49.9	46.0	27.3	27.2	5.8	15.2	-0.1	37.5	10.7		
Net Sales	381	418	391	470	422	416	469	484	1,660	1,791	397	6.4
Change (YoY %)	31.8	28.5	2.8	0.1	10.8	-0.5	19.9	3.0	13.4	7.9		
Change (QoQ %)	-18.8	9.7	-6.3	20.0	-10.1	-1.5	12.8	3.1				
EBITDA	43	18	45	79	70	75	76	81	185	303	49	43.8
Change (YoY %)	-58.1	-83.2	-50.2	-13.6	63.5	330.4	66.7	2.3	-52.5	63.3		
Change (QoQ %)	-53.1	-59.3	159.5	74.6	-11.2	7.0	0.5	7.1				
EBITDA (INR per ton)	9,597	3,052	7,963	12,158	12,340	12,415	11,519	12,453	8,254	12,171	8,715	41.6
Interest	14	15	18	21	20	20	20	21	69	81	20	
Depreciation	18	18	19	20	19	20	20	20	75	80	21	
Other Income	2	2	2	5	3	3	3	3	10	13	3	
PBT (before EO Item)	13	-14	10	43	35	38	39	43	52	156	11	
EO Items	0	6	0	0	0	0	0	0	6	0		
PBT (after EO Item)	13	-8	10	43	35	38	39	43	58	156	11	
Total Tax	4	1	5	5	11	10	10	11	15	41		
% Tax	34.1	NA	48.7	11.9	29.9	25.2	25.2	25.2	26.2	26.3		
Reported PAT	8	-8	5	37	23	29	29	32	41	114	8	192.3
MI (Profit)/Loss	0.0	0.7	0.2	-0.8	-0.9	0.0	0.0	0.0	0.1	-0.9		
Share of P/(L) of Ass.	-0.2	-0.6	-0.6	-0.1	-0.3	0.0	0.0	0.0	-1.4	-0.3		
Adjusted PAT	8	-14	5	37	23	29	29	32	36	114	8	192.3
Change (YoY %)	-85.8	PL	-88.8	-7.8	179.0	LP	491.6	-11.4	-83.4	219.5		
Change (QoQ %)	-78.9	PL	LP	647.8	-36.2	22.7	1.0	12.0				

Source: Company, MOFSL



Highlights from the management interaction

Guidance

- In 1QFY24, the coking coal cost was up by USD11/t QoQ for JSTL and the company expects the cost to reduce by USD45-50/t in 2QFY24.
- Coking coal prices have corrected sharply from their high in Feb'23 and its benefits are expected to accrue from 2QFY24.
- Iron ore prices have not corrected much and JSTL expects them to decline in the coming quarters and remain range-bound going forward.
- FY24 sales target stands unchanged at 25mt.
- JSTL has around 338kt of inventory due to channel destocking and climate disruption in western India. The channel destocking is almost completed, which will help to offload the inventory in 2QFY24.
- 2QFY24 performance is expected to be better than 1QFY24 as global sentiments have been improving for the last few weeks.
- JSTL believes the steel prices bottomed out in 1QFY24 and expects improvement in the prices from 2QFY24 onward.
- 2QFY24 is likely to see higher sales volumes vs. 1Q FY24.

Capex and capacity enhancement

- Capex stood at INR41b in 1QFY24 and JSTL has earmarked a capex of ~INR188b for FY24 and INR185b for FY25.
- The near-term capex will be driven by a brownfield expansion at Vijayanagar, BPSL and JISPL. JSTL is also undertaking greenfield EAF capex at Kadapa (Andhra Pradesh) and is at an advanced stage to finalize a 13mt greenfield expansion in Odisha, which will be over and above the ongoing capex.
- The Vijayanagar and BPSL brownfield expansions are on track to be completed in FY24.
- JSTL will commence phased commissioning by 4QFY24 and its full benefits will accrue from FY25-26.
- The 0.25mt color-coated line at Rajpura (Punjab) is completed, which has enhanced the VAP portfolio for the company.

Mergers and acquisitions

- The JSPL and JSTL merger has been approved by NCLT and is expected to be concluded by 2QFY24.
- The company concluded the merger of National Steel and Agro, which will further strengthen JSTL's downstream capacity by around 330kt (flat steel galvanized products).
- JSTL completed the merger of Vallabh Tinplate and Vardhaman Industries with JSW Coated products, thereby consolidating the downstream color-coated portfolio into a single company.

Coal and iron ore block

- JSTL focuses on raw material security and is currently enhancing its captive iron ore and coking coal linkages.
- JSTL recently won six iron ore blocks in Maharashtra, Goa and Karnataka (2 blocks in each state).

- The Maharashtra and Goa blocks are progressing well and should be operational soon; however, JSTL is currently undertaking exploration in Karnataka and the exact date of commencement will be updated in coming quarters.
- JSTL has also recently won two coal blocks with a total PRC of 1mt, which will help JSTL meet around 5-7% of its clean coking coal requirement.
- The company is scouting for more iron ore and coal blocks in India and outside India and will acquire financially viable assets in future.

Capacity and Utilization

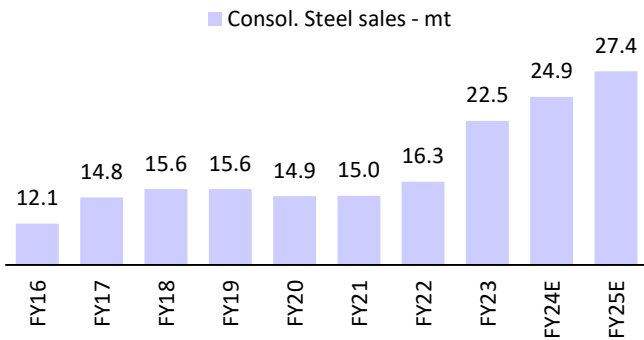
- After the ongoing capex, the capacity would increase to 37mt by FY25 and 50mt by FY31.
- In 1QFY24, JSTL operated at capacity utilization of 92% and achieved 100% of its quarterly production target.

Macro scenario:

- Global sentiments seem to be improving due to lower inflationary pressure, reduction in energy prices and lower input costs.
- Steel demand in the domestic market is expected to grow over 10%, while production is expected to grow 8-9% in FY24 to reach 130mt.
- Higher investment by the private and public sectors, higher spending on infrastructure, easing inflation, realignment of supply chain, higher automobile demand and higher manufacturing capex should drive steel demand in India.
- Higher private sector demand, low inventory at vendors/traders and lower coking coal and input costs should further drive the margins in 2QFY24.

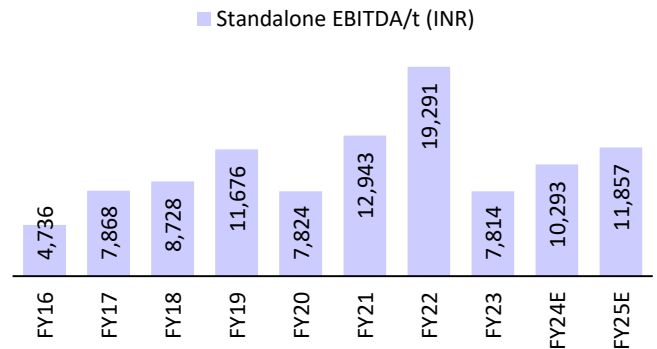
Story in charts

Exhibit 1: Sales volume expected to grow ~11% YoY in FY24



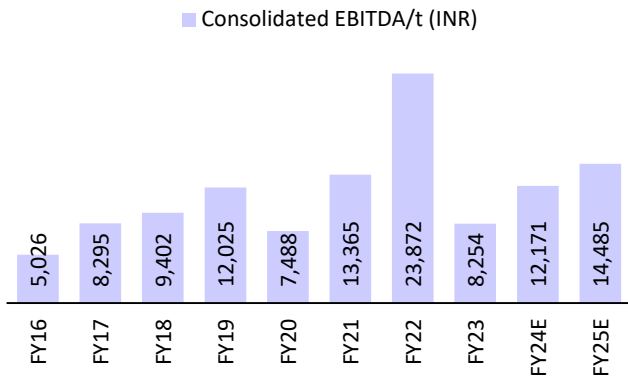
Source: Company, MOFSL

Exhibit 2: Standalone EBITDA/t expected to improve in FY24



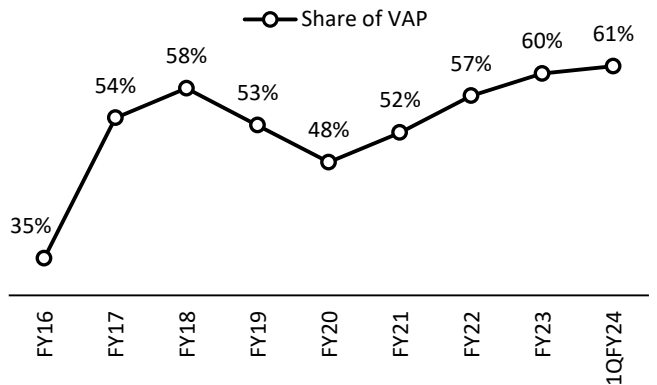
Source: Company, MOFSL

Exhibit 3: Higher volumes, ASP, and lower input costs to support EBITDA in FY24



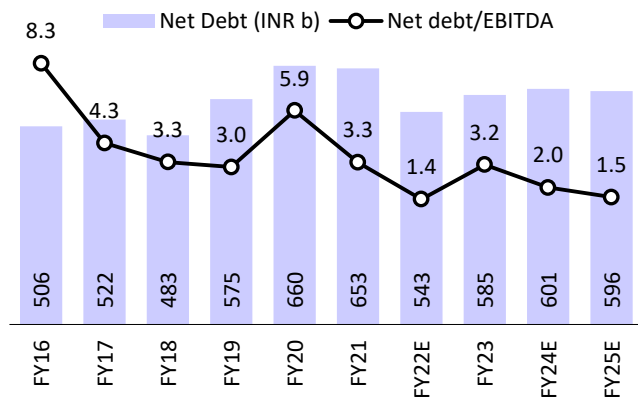
Source: Company, MOFSL

Exhibit 4: Share of VAP has been increasing and is expected to be in the range of 55-60% going forward



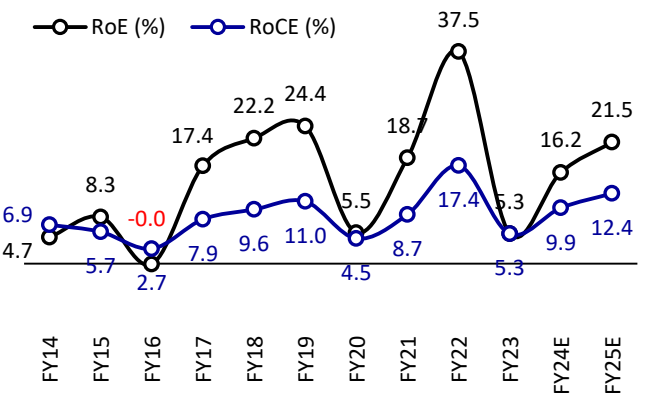
Source: Company, MOFSL

Exhibit 5: JSTL is expected to continuously deleverage



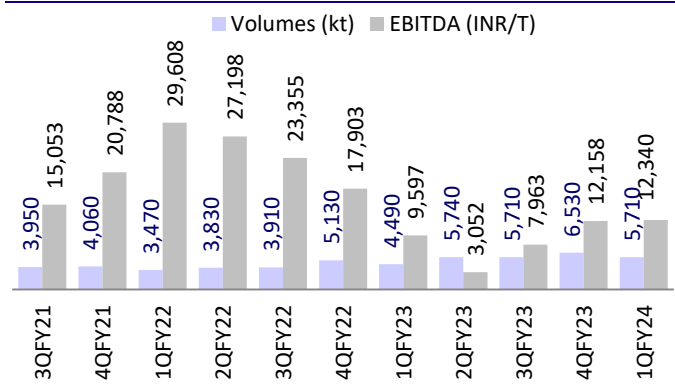
Source: Company, MOFSL

Exhibit 6: Return ratios expected to recover in FY24E



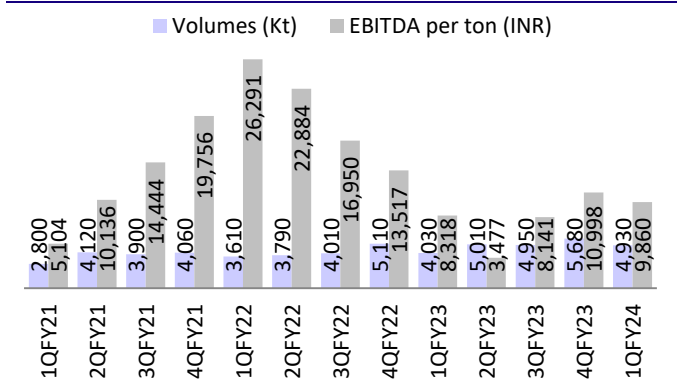
Source: Company, MOFSL

Exhibit 7: Consolidated EBITDA/t recovered in 1QFY24



Source: Company, MOFSL

Exhibit 8: Standalone EBITDA/t remained range-bound



Source: Company, MOFSL

Exhibit 9: Changes in key assumptions and our estimates

Particulars	FY24E			FY25E		
	New	Old	% Change	New	Old	% Change
Volumes - mt	21.9	21.1	3.7	24.3	23.1	5.3
Realisation - INR/t	64,397	63,420	1.5	66,700	67,129	-0.6
EBITDA - INR/t	10,293	9,773	5.3	11,857	12,605	-5.9
Consolidated (INR b)						
Revenue	1,791	1,676	6.9	2,025	1,867	8.5
EBITDA	303	266	14.0	398	398	-0.1
Adj PAT	114	85	34.1	176	173	1.6

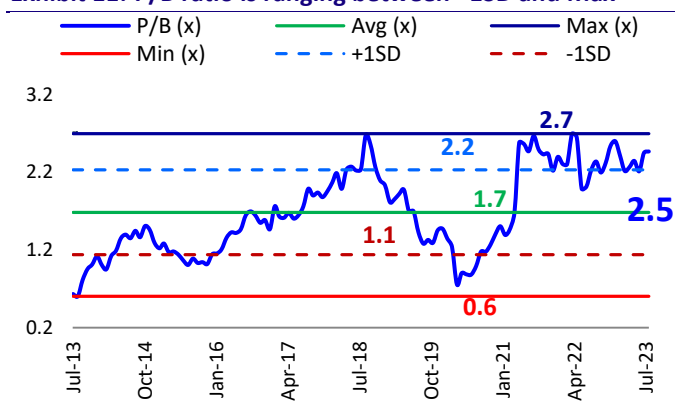
Source: MOFSL

Exhibit 10: Calculation of target price

Y/E March	FY25E
Consolidated sales volume (mt)	27.4
EBITDA/t (INR)	14,485
Consolidated EBITDA (INR b)	398
Target EV/EBITDA (x)	6.0
Target EV (INR b)	2,366
Less: Net debt (INR b)	596
Equity value (INR b)	1,770
No. of shares (b)	2.4
Target price (INR/share)	730

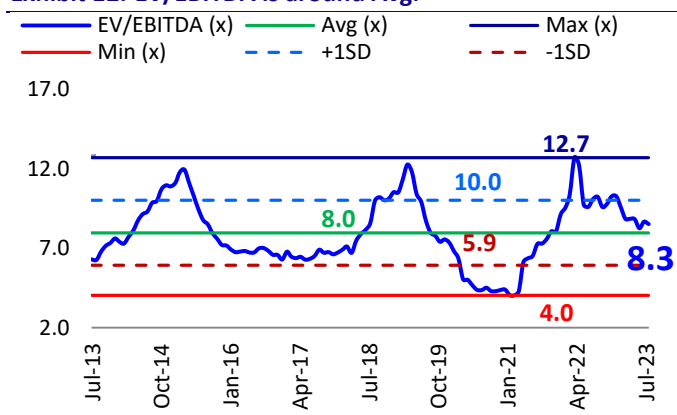
Source: MOFSL

Exhibit 11: P/B ratio is ranging between +1SD and Max



Source: Company, MOFSL

Exhibit 12: EV/EBITDA is around Avg.



Source: Company, MOFSL

Exhibit 13: Global comparable valuation (FY22 – FY24)

Company	M-Cap USD mn	P/E (x)			EV/EBITDA (x)			P/B (x)			RoE (%)		
		CY21/ FY22	CY22/ FY23	CY23/ FY24	CY21/ FY22	CY22/ FY23	CY23/ FY24	CY21/ FY22	CY22/ FY23	CY23/ FY24	CY21/ FY22	CY22/ FY23	CY23/ FY24
India													
Tata*	17,418	3.5	16.5	12.1	3.0	6.5	7.0	1.3	1.5	1.4	44.6	8.3	11.7
JSW*	23,537	8.9	53.5	16.7	6.3	13.4	8.3	2.8	2.9	2.5	37.5	5.3	16.2
JSP*	7,923	7.3	17.2	13.1	4.7	7.0	6.2	1.8	1.6	1.5	25.9	9.9	11.8
SAIL*	4,525	3.0	18.6	9.5	2.5	8.4	5.7	0.7	0.7	0.6	25.1	3.7	7.0
Japan													
JFE	9,296	4.5	8.2	7.0	5.4	6.8	6.0	0.6	0.6	0.5	15.5	7.4	8.5
Nippon Steel	20,834	5.5	4.4	7.6	5.6	5.0	5.7	0.9	0.7	0.6	18.1	17.3	9.1
Kobe Steel	3,936	9.8	8.8	6.3	6.8	7.2	5.1	0.7	0.6	0.6	7.2	7.5	9.4
Korea													
POSCO	33,322	9.8	13.3	10.7	5.6	6.5	5.7	0.8	0.7	0.7	8.3	5.9	6.9
Hyundai Steel	3,457	3.2	5.1	4.4	3.9	4.5	3.8	0.2	0.2	0.2	7.6	4.5	5.1
US													
Nucor	41,708	5.8	9.9	14.8	3.9	5.9	8.2	2.2	1.9	1.8	43.5	21.7	12.2
US Steel	5,587	2.6	6.3	12.9	1.6	3.4	4.9	0.6	0.5	0.5	26.2	10.1	5.0
Steel Dynamics	17,270	4.7	6.5	11.8	3.2	4.5	7.2	2.3	1.8	1.6	51.9	29.7	14.4
Europe													
AM	23,929	2.7	6.0	5.9	2.1	3.9	3.9	0.5	0.4	0.4	18.8	7.7	7.1
TKA	7,348	3.5	6.2	10.2	1.9	3.1	4.5	0.8	1.1	1.1	26.0	18.3	10.9
VOE	5,072	4.8	22.7	8.7	0.6	0.7	0.7	0.4	0.3	0.3	8.4	1.2	3.6
China													
Baosteel	5,927	5.0	5.3	8.1	3.6	3.0	3.9	0.8	0.7	0.7	16.7	13.7	8.3

Source: MOFSL, Company, Bloomberg. (*) denotes MOFSL estimates

Financials and valuations

Income statement (consolidated)								(INR b)	
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Net sales	556.0	701	848	726	796	1,464	1,660	1,791	2,025
Change (%)	32.8	26.0	20.9	-14.3	9.6	83.9	13.4	7.9	13.1
Total Expenses	433.4	554	658	615	596	1,074	1,474	1,488	1,628
EBITDA	122.6	147	190	112	200	390	185	303	398
% of Net Sales	22.0	21.0	22.4	15.4	25.1	26.6	11.2	16.9	19.6
Deprn. & Amortization	35.2	34	40	42	47	60	75	80	92
EBIT	87.4	113	149	69	153	330	111	223	305
Net Interest	37.7	37	39	43	40	50	69	81	83
Other income	1.5	2	2	5	6	15	10	13	13
PBT before EO	51.3	78	112	32	119	296	52	156	235
EO income		6		21	1	-7			
PBT after EO	51.3	83	112	53	120	288	58	156	235
Tax	16.7	23	36	12	41	88	15	41	58
Rate (%)	32.6	27.2	32.5	23.7	34.5	30.6	26.2	26.3	24.6
Reported PAT	35.8	62	76	40	79	207	41	114	176
Minority interests	0.1	1	1	1	0	-3	0	-1	-1
Share of Associates	1.2	0	0	-1	0	9	-1	0	0
Preference dividend	0.0	0	0	0	0	0	0	0	0
Adj. PAT (after MI & Asso)	35.8	56	76	20	78	214	36	114	176
Change (%)	NA	57.5	35.5	-74.2	297.8	173.3	-83.4	219.5	55.0

Balance sheet								(INR b)	
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Share Capital	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Reserves	224.1	278	346	364	465	671	655	745	886
Net Worth	226.5	280	348	366	468	673	657	748	889
Minority Interest	-2.5	-5	-5	-6	-6	12	13	15	16
Total Loans	540.2	496	638	780	782	717	793	823	783
Deferred Tax Liability	29.9	26	38	17	35	76	79	81	80
Capital Employed	794.1	797	1,019	1,157	1,278	1,478	1,542	1,666	1,767
Gross Block	663.8	688	775	811	887	1,297	1,417	1,617	1,817
Less: Accum. Deprn.	76.5	110	149	191	238	298	373	452	545
Net Fixed Assets	587.3	578	626	620	649	999	1,045	1,165	1,272
Capital WIP	43.6	60	119	272	326	169	222	210	195
Investments	10.7	12	18	13	86	49	48	48	48
Curr. Assets	238.5	270	385	414	423	748	797	842	877
Inventory	114.0	126	145	139	142	338	331	358	416
Account Receivables	41.5	47	72	45	45	75	71	77	87
Cash and Bank Balance	17.9	14	63	120	128	174	207	221	187
Others	65.2	83	105	110	107	161	187	187	187
Curr. Liability & Prov.	85.9	122	129	161	205	487	568	599	625
Account Payables	38.5	69	59	81	69	309	382	412	438
Provisions & Others	47.5	53	69	80	136	178	186	186	186
Net Current Assets	152.5	148	256	252	218	261	228	244	252
Appl. of Funds	794.1	797	1,019	1,157	1,278	1,478	1,542	1,666	1,767

Financials and valuations

Ratios									
Y/E March	FY17	FY18	FY19	FY20	FY21E	FY22	FY23	FY24E	FY25E
Basic (INR)									
EPS	14.9	23.4	31.8	8.2	32.4	88.6	14.7	47.0	72.8
Cash EPS	29.6	39.8	48.7	34.5	52.1	110.3	48.1	80.0	111.1
BV/Share	94.4	116.2	145.0	152.5	193.5	278.4	271.8	309.4	367.6
DPS	0.8	2.3	3.3	4.1	6.5	17.4	3.4	9.4	14.6
Payout (%)	6.1	9.6	10.2	50.0	20.1	19.6	23.1	20.0	20.0
Valuation (x)									
P/E	52.7	33.6	24.7	95.8	24.3	8.9	53.5	16.7	10.8
Cash P/E	26.6	19.7	16.1	22.8	15.1	7.1	16.4	9.8	7.1
P/BV	8.3	6.8	5.4	5.2	4.1	2.8	2.9	2.5	2.1
EV/Sales	4.3	3.4	2.9	3.5	3.2	1.7	1.5	1.4	1.2
EV/EBITDA	19.6	16.2	13.0	22.8	12.8	6.3	13.4	8.3	6.3
Dividend Yield (%)	0.1	0.3	0.4	0.5	0.8	2.2	0.4	1.2	1.9
Return Ratios (%)									
EBITDA Margins (%)	22.0	21.0	22.4	15.4	25.1	26.6	11.2	16.9	19.6
Net Profit Margins (%)	6.4	8.0	9.0	2.7	9.8	14.6	2.1	6.3	8.7
RoE	17.4	22.2	24.4	5.5	18.7	37.5	5.3	16.2	21.5
RoCE (pre-tax)	7.9	9.6	11.0	4.5	8.7	17.4	5.3	9.9	12.4
RoIC (pre-tax)	8.5	10.6	13.0	5.9	13.8	24.2	6.9	13.3	16.2
Working Capital Ratios									
Fixed Asset Turnover (x)	0.8	1.0	1.1	0.9	0.9	1.1	1.2	1.1	1.1
Asset Turnover (x)	0.7	0.9	0.8	0.6	0.6	1.0	1.1	1.1	1.1
Debtor (Days)	27.2	24.5	30.8	22.6	20.6	18.6	15.7	15.7	15.7
Inventory (Days)	74.8	65.6	62.6	69.7	65.3	84.3	72.9	72.9	75.0
Creditors(Days)	25.2	36.0	25.5	40.8	31.6	77.0	84.0	84.0	79.0
Working Capital (Days)	76.8	54.1	67.9	51.5	54.3	25.8	4.5	4.5	4.5
Leverage Ratio (x)									
Current Ratio	2.8	2.2	3.0	2.6	2.1	1.5	1.4	1.4	1.4
Interest Cover Ratio	2.3	3.1	3.8	1.6	3.9	6.6	1.6	2.8	3.7
Debt/Equity	2.3	1.7	1.7	1.8	1.4	0.8	0.9	0.8	0.7

Cash flow statement (consolidated)

(INR b)

Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
EBITDA	122.6	147	190	112	200	390	185	303	398
Non cash exp. (income)	-2.7	2	-1	11	-5	-1	23	0	0
(Inc)/Dec in Wkg. Cap.	-38.7	-11	-16	16	13	-73	31	-2	-43
Tax Paid	-2.4	-14	-26	-12	-19	-54	-6	-41	-58
CF from Op. Activity	78.9	124	146	128	188	263	233	260	297
(Inc)/Dec in FA + CWIP	-44.4	-47	-102	-128	-93	-100	-147	-188	-185
(Pur)/sale of Invest.	-2.9	0	3	1	-3	-1	0	0	0
Acquisition in subs.	-1.5	-4	-14	1	-67	-7	-4	0	0
Int. & Dividend Income	1.2	1	2	5	6	6	11	13	13
Others	0.5	1	-2	-75	75	-58	33	2	-1
CF from Inv. Activity	-47.1	-49	-114	-196	-81	-160	-107	-173	-173
Equity raised/(repaid)	0.0	0	-2	0	0	0	0	0	0
Debt raised/(repaid)	10.8	-40	67	111	17	-80	51	30	-40
Dividend (incl. tax)	-2.2	-7	-9	-12	-5	-16	-42	-23	-35
Interest paid	-35.7	-35	-38	-47	-43	-51	-69	-81	-83
CF from Fin. Activity	-27.1	-82	18	52	-31	-147	-60	-73	-158
(Inc)/Dec in Cash	4.7	-7	49	-16	76	-44	66	14	-34
Add: opening Balance	7.3	18	14	63	120	128	174	207	221
Regrouping	5.9	3	0	73	-67	89	-33	0	0
Closing Balance	17.9	14	63	120	128	174	207	221	187

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

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 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 - MOFSL) 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") (Co. Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. As per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

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.

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.