

Estimate change	↑
TP change	↑
Rating change	↔

Bloomberg	BATA IN
Equity Shares (m)	129
M.Cap.(INRb)/(USD\$b)	223.5 / 2.8
52-Week Range (INR)	2204 / 1567
1, 6, 12 Rel. Per (%)	-9/-13/-21
12M Avg Val (INR M)	789

Financials & Valuations (INR b)

Y/E March	FY22	FY23E	FY24E
Sales	23.9	34.8	39.1
EBITDA	4.2	8.7	10.3
Adj. PAT	1.0	3.8	5.1
EBITDA Margin (%)	17.5	25.0	26.4
Adj. EPS (INR)	8.0	29.9	39.5
EPS Gr. (%)	-220.1	272.6	32.2
BV/Sh. (INR)	141.2	171.0	210.5

Ratios

Net D:E	0.0	-0.2	-0.3
RoE (%)	5.8	19.1	20.7
RoCE (%)	6.0	15.0	16.6
Payout (%)	0	0	0

Valuations

P/E (x)	217.3	58.3	44.1
EV/EBITDA (x)	53.8	25.5	21.1
EV/Sales (X)	9.4	6.4	5.6
Div. Yield (%)	0.0	0.0	0.0
FCF Yield (%)	0.7	2.6	3.1

Shareholding pattern (%)

As On	Sep-22	Jun-22	Sep-21
Promoter	50.2	50.2	53.0
DII	29.0	30.1	28.0
FII	7.9	6.8	5.4
Others	13.0	12.9	13.7

FII Includes depository receipts

CMP: INR1,741 TP: INR1,900 (+9%) Neutral

Witnessing a gradual recovery

- BATA reported a healthy recovery in revenue, up 35% YoY and 15% from pre-COVID levels. However, rising RM prices and higher ad spends pulled down PAT 23% below pre-COVID levels (33% miss).
- The slower recovery from pre-COVID levels, the impact of inflation on consumers, and GST rate hikes are still affecting the Mass Consumer segment. However, the ongoing cool-off in RM prices is a silver lining.
- Subsequently, we have cut our FY23 PAT estimate by 6%, factoring in a revenue/PAT CAGR of 23%/81% over FY22-25. We maintain our neutral rating.

Higher RM and SG&A dented margin; PAT up 47% YoY

- Consolidated revenue rose 35% YoY and 15% from pre-COVID levels to INR8.3b (inline) due to increased footfalls during the festive season and better performance by the Sneaker segment.
- Gross margin grew 210bp YoY to 55%, but remained 140bp below pre-COVID levels due to higher RM cost. Gross profit grew 40% YoY to INR4.6b (inline).
- Reported EBITDA declined by 13% from pre-COVID levels to INR1.6b. However, the same increased by 35% YoY (19% miss). Adjusting for the provision of INR110m, EBITDA margin grew 130bp YoY, but fell 500bp below pre-COVID levels, to 20.7%.
- PAT increased by 47% YoY, but fell 23% from pre-COVID levels, to INR550m (33% miss).
- FCF stood at INR1.9b in 1HFY23 v/s INR1.6b in FY22, led by higher profit in 1HFY23, especially in 1Q (INR1.2b v/s INR1b in FY22). WC days fell to 64 in 1HFY23 from 74 in FY22.
- Net cash stood at INR3.3b in 1QFY23 v/s INR9.7b in FY22 due to a dividend payout of INR7b.

Key takeaways from the management interaction

- Revenue came in 15% higher than pre-COVID levels, of which 6-7% came in from volume growth and rest from ASP. It will not be able to raise its ASP as the Mass segment is still under pressure.
- The management is following a capital efficient model, and targets 500 franchise stores by FY24.
- It expects the inflation in RM cost to reverse, which may lead to an increase in gross margin.
- Advertisement expenditure is expected to be nearly 3%. The management expects spending on renovation of stores to return an SSSG of 7-8%.

Valuation and view

- BATA's strong net cash position, healthy FCF generation, return profile, and the huge runway for growth for the industry as a whole offer positive levers.
- However, the recovery from the COVID levels remained weak. Slower revenue recovery than its peers and acceptance of the recently launched Sneaker segment remains a key monitorable going forward.
- BATA continues to target: a) 500 franchise stores by FY24, and b) ramping up of sales through its online and MBO networks.
- We ascribe a P/E of 40x on a FY25 basis to arrive at our TP of INR1,900. We maintain our Neutral rating.

Consolidated - Quarterly Earning

(INR m)

Y/E March	FY22				FY23E				FY22	FY23E	FY23E	Est
	1Q	2Q	3Q	4Q	1Q	2Q	3QE	4QE		2QE	Var (%)	
Revenue	2,670	6,141	8,413	6,652	9,430	8,298	9,459	7,607	23,877	34,793	8,002	3.7
YoY Change (%)	97.7	66.9	36.7	12.8	253.1	35.1	12.4	14.3	39.8	45.7	30.3	
Gross Profit	1,500	3,248	4,431	3,831	5,339	4,562	5,601	4,412	13,009	19,914	4,513	1.1
Gross margin%	56.2	52.9	52.7	57.6	56.6	55.0	59.2	58.0	54.5	57.2	56.4	-141.5
Total Expenditure	2,986	4,949	6,727	5,031	6,983	6,688	6,861	5,574	19,692	26,107	6,010	11.3
EBITDA	-315	1,192	1,686	1,621	2,447	1,609	2,598	2,033	4,185	8,686	1,992	-19.2
EBITDA margin	-11.8	19.4	20.0	24.4	25.9	19.4	27.5	26.7	17.5	25.0	24.9	-550.6
Change YoY (%)	-63.3	557.0	43.2	44.6	-876.5	35.0	54.0	25.4	158.0	107.6	67.1	
Depreciation	501	586	616	718	693	736	737	782	2,420	2,948	737	-0.2
Interest	230	220	233	245	249	272	272	282	928	1,074	275	-1.2
Other Income	122	115	135	187	93	119	112	124	560	448	112	5.9
PBT before EO expense	-924	502	973	846	1,597	720	1,701	1,094	1,397	5,112	1,092	-34.1
Extra-Ord expense	0	0	0	0	0	0	0	0	0	0	0	
PBT	-924	502	973	846	1,597	720	1,701	1,094	1,397	5,112	1,092	-34.1
Tax	-229	130	249	216	404	172	425	273	367	1,274	273	-36.9
Rate (%)	24.8	25.9	25.6	25.6	25.3	23.9	25.0	25.0	26.3	24.9	25.0	
MI & Profit/Loss of Asso. Cos.	0	0	0	0	0	0	0	0				
Reported PAT	-695	372	723	630	1,194	548	1,275	820	1,030	3,837	819	-33.1
Adj PAT	-695	372	723	630	1,194	548	1,275	820	1,030	3,837	819	-33.1
YoY Change (%)	-31	-184	133	114	-272	47	76	30	-222	273	120	-60.7
Margins (%)	-1.2	-3.0	1.6	1.7	-2.9	0.6	0.8	0.4	-0.9	0.8	1.5	-93.2

Exhibit 1: Valuation-based on FY25E

Particulars	INR/Share
EPS	48
Target PE (x)	40
Equity value/share (INR)	1,900
Upside/(Downside) (%)	9%
CMP (INR)	1,741

Source: MOFSL, Company



Key takeaways from the management interaction

Key highlights

- Revenue are 15% higher than pre-COVID where 6-7% came from volume growth and rest from ASP. Will not be able to raise ASP given mass segment is still in pressure.
- Following a capital efficient model, vision of achieving 500 franchisee stores by FY24.
- Expecting RM inflation led cost to reverse which may led to increase in gross margin.
- Advertisement expenditure to be nearly 3% Also spending in renovation of store which could return SSSG of 7-8%

Detailed notes

Market condition

- There are some sluggishness because of the inflation and price increase that have seen.
- The traction on the premium side is extremely high and will continue.
- However, raw material price are turning around that should basically help in terms of margins, bringing back price points.
- Digitally enabled sales have contributed highest of about 7% this quarter and focusing significantly in the eCommerce business.

Price equation; Cost management

- However, revenue are 15% higher than pre-COVID where 6-7% came from volume growth and rest from ASP.
- Expect the RM price turning around could uplift the GM.
- Expecting some reversals of RM inflation: Not able to pass on the entire price increase especially to the mass customers as they are still under the pain. ASP not been able to increase from this level and are initiating all kinds of cost saving initiatives, which will have an impact.
- On Margin, mass category, has a lot more impact due to material related inflation, taxation change.
- GM in online channel is lower, rest all the other channels GM is in the same zone.
- Other expenses increased led by a) expanding some of the channels like franchise model and e-commerce channel, b) the direct cost associated to the new channel line do not come before Gross Profit but at other expenses, c) consolidating warehousing footprint, further they may get benefit from larger freight providers, as well as warehouse locations.

Category mix and growth

- On pre-covid level, the formal shoe have grown 8%.
- The mix of open and closed footwear is 50:50
- 40% is in-house manufacturing and rest is outsourced.

Store renovation and expansion

- Renovations in existing 54 stores and about 20 odd renovation in this quarter.

- Renovation capex per store is in the range of INR 3-5m and that store should generate same-store growth in the range of about 7-8%
- The contribution of COCO stores has come down to 66% from 68% in the previous quarter.
- The sneakers categories led by North Star and Floatz that have basically significantly outpaced.
- Vision of 500 franchised stores by FY24.
- Following a capital-efficient model, therefore a large part of the footprint expansion will be driven through franchise as well as distribution model.

Sneaker focused expansion

- Have expanded sneakers stores. Currently at 450+ and is a big driver of the sneaker growth.
- Continue to push on sneakers through existing stores, multi-brand distribution and e-commerce business.
- Launching sneakers campaign for this season as winter is a season for sneakers.
- Sneakers have significantly outperformed other premium categories of Bata.

Marketing investments continue

- Will keep on investing in brand by spending ~3% in advertisement.
- Various campaigns were started in Sep and Oct'22 led by festive campaigns and sneaker campaign.
- Continuously investing for the brand and to build the franchise for the future.
- Initiatives taken during the quarter-
 - by regional Sourcing, now they are ready for Sourcing in the South for the demand in South and should seeing distribution cost benefits going forward.
 - by escalating warehousing operations on retail network.
 - significant technology initiatives- inventory software, for better control and efficiency measures.

Exhibit 2: Quarterly performance

Consol P&L (INR m)	2QFY20	2QFY22	1QFY23	2QFY23	YoY%	QoQ%	Pre covid%	2QFY23E	v/s Est (%)
Total Revenue	7,220	6,141	9,430	8,298	35	-12	15	8,002	4
Raw Material cost	3,148	2,894	4,091	3,735	29	-9	19	3,489	7
Gross Profit	4,072	3,248	5,339	4,562	40	-15	12	4,513	1
Gross margin (%)	56.4	52.9	56.6	55.0	210.2	-163.1	-141.5	56.4	-141.5
Employee Costs	890	897	1,048	1,070	19	2	20	1,000	7
SGA Expenses	1,231	1,159	1,844	1,883	63	2	53	1,520	24
EBITDA	1,854	1,192	2,447	1,609	35	-34	-13	1,992	-19
EBITDA margin (%)	25.7	19.4	25.9	19.4	-2.1	-655.4	-628.2	24.9	-550.6
Depreciation and amortization	749	586	693	736	26	6	-2	737	0
EBIT	1,105	606	1,753	873	44	-50	-21	1,255	-30
EBIT margin (%)	15.3	9.9	18.6	10.5	65.3	-806.8	-477.7	15.7	-516.2
Finance Costs	308	220	249	272	24	9	-12	275	-1
Other income	177	115	93	119	3	28	-33	112	6
Profit before Tax	974	502	1,597	720	43	-55	-26	1,092	-34
Tax	261	130	404	172	33	-57	-34	273	-37
Tax rate (%)	26.8	25.9	25.3	23.9	-7.6	-134.2	-285.2	25.0	NM
Profit after Tax	713	372	1,194	548	47	-54	-23	819	-33
Adj Profit after Tax	713	372	1,194	548	47	-54	-23	819	-33

Source: MOFSL, Company

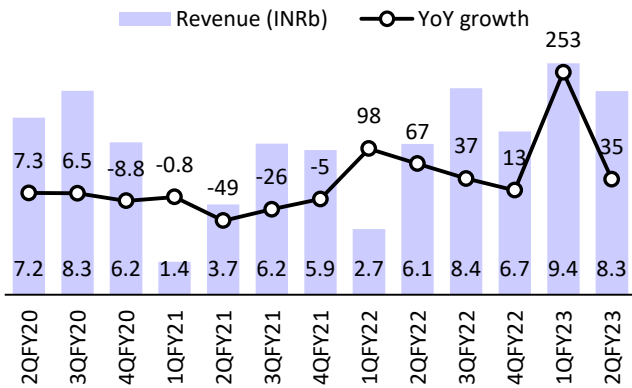
Exhibit 3: Summary of our change in estimates

	FY23E	FY24E	FY25E
Revenue (INR m)			
Old	34,793	39,090	43,918
Actual/New	34,793	39,090	43,918
Change (%)	0.0	0.0	0.0
EBITDA (INR m)			
Old	9,076	10,300	11,594
Actual/New	8,686	10,300	11,594
Change (%)	-4.3	0.0	0.0
EBITDA margin (%)			
Old	26.1	26.4	26.4
Actual/New	25.0	26.4	26.4
Change (bp)	-112	0	0
Net Profit (INR m)			
Old	4,102	5,072	6,118
Actual/New	3,865	5,074	6,119
Change (%)	-5.8	0.0	0.0
EPS (INR)			
Old	32	39	48
Actual/New	30.1	39.5	47.6
Change (%)	-5.8	0.0	0.0

Source: MOFSL, Company

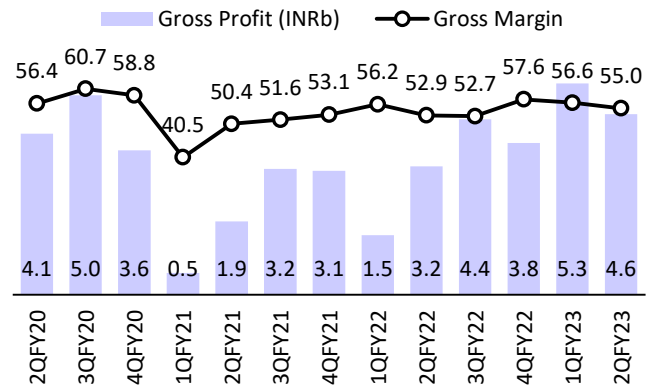
Story in charts

Exhibit 4: Revenue were up 35/15% on YoY/Pre-covid basis



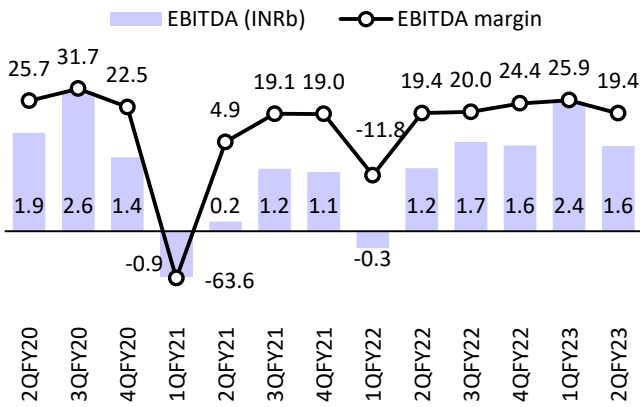
Source: MOFSL, Company

Exhibit 5: Gross profit grew improved YoY on lower base



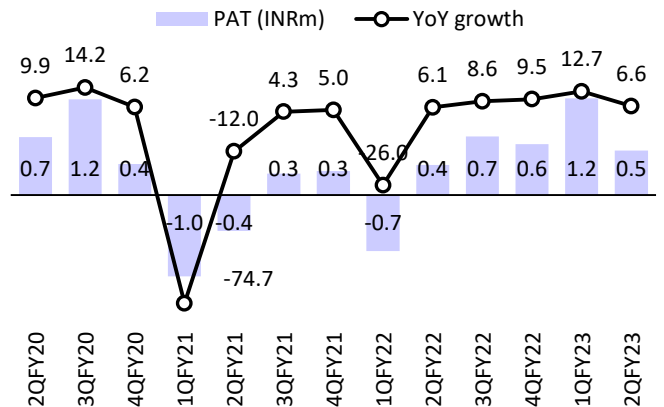
Source: MOFSL, Company

Exhibit 6: EBITDA still below pre-covid



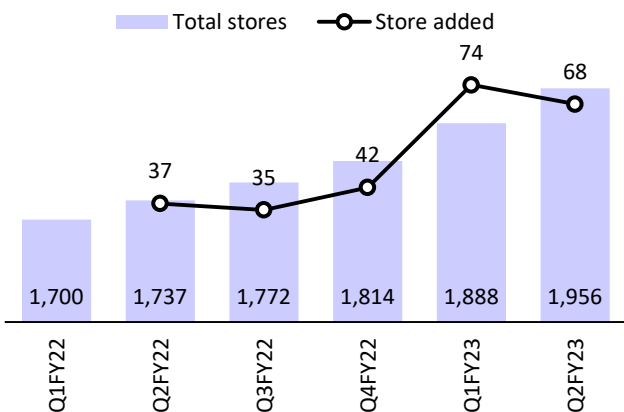
Source: MOFSL, Company

Exhibit 7: PAT grew 77% YoY but missed estimates



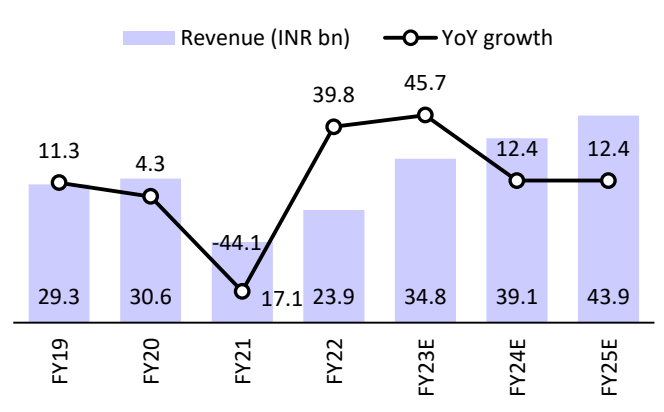
Source: MOFSL, Company

Exhibit 8: 68 new store adds mainly franchisee led



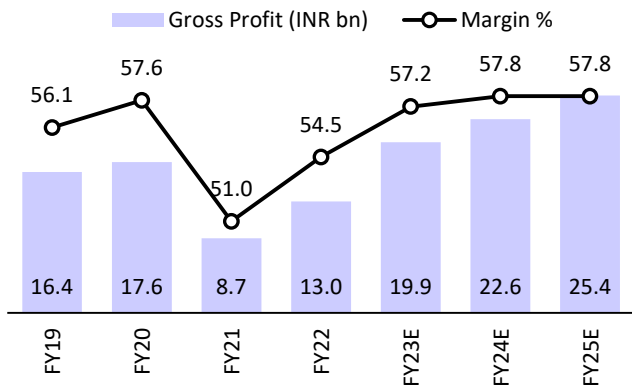
Source: MOFSL, Company

Exhibit 9: Expect 23% revenue CAGR for next 3 years



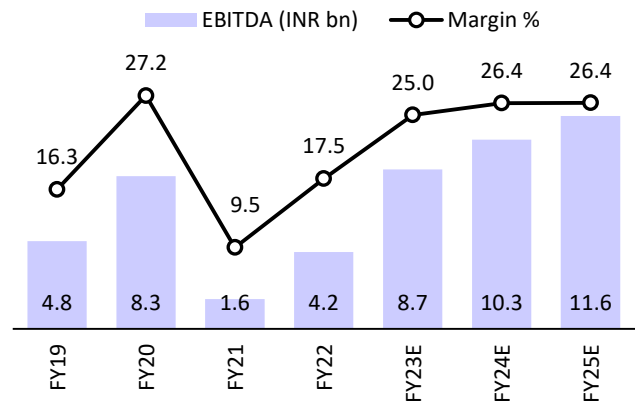
Source: MOFSL, Company

Exhibit 10: Expect GP to grow at 25% CAGR for next 3 years



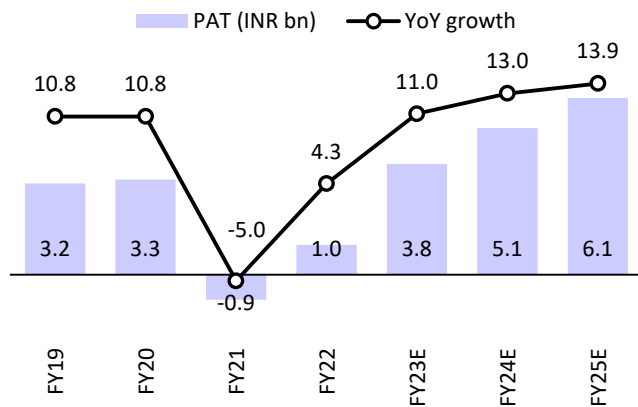
Source: MOFSL, Company

Exhibit 11: Expect EBITDA to grow at 40% CAGR, higher than revenue



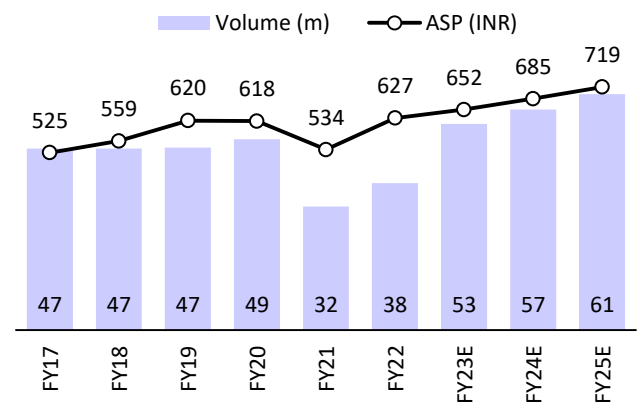
Source: MOFSL, Company

Exhibit 12: Expect margin to expand from FY23 onwards



Source: MOFSL, Company

Exhibit 13: Revenue contributing from both vol/ASP



Source: MOFSL, Company

Financials and valuations

Consolidated - Income Statement

(INR m)

Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
Total Income from Operations	26,342	29,311	30,561	17,085	23,877	34,793	39,090	43,918
Change (%)	6.5	11.3	4.3	-44.1	39.8	45.7	12.4	12.4
Raw Materials	12,024	12,871	12,966	8,375	10,868	14,880	16,496	18,533
Gross Profit	14,318	16,440	17,595	8,710	13,009	19,914	22,594	25,385
Margin (%)	54.4	56.1	57.6	51.0	54.5	57.2	57.8	57.8
Employees Cost	2,956	3,311	3,764	3,398	3,787	4,356	4,789	5,358
Other Expenses	7,848	8,357	5,510	3,690	5,037	6,872	7,505	8,432
Total Expenditure	22,828	24,539	22,240	15,463	19,692	26,107	28,790	32,324
% of Sales	86.7	83.7	72.8	90.5	82.5	75.0	73.7	73.6
EBITDA	3,514	4,772	8,321	1,622	4,185	8,686	10,300	11,594
Margin (%)	13.3	16.3	27.2	9.5	17.5	25.0	26.4	26.4
Depreciation	605	640	2,958	2,648	2,420	2,948	3,009	3,075
EBIT	2,909	4,132	5,363	-1,026	1,765	5,738	7,291	8,519
Int. and Finance Charges	42	35	1,177	1,035	928	1,074	1,108	1,118
Other Income	503	685	687	941	560	448	582	757
PBT bef. EO Exp.	3,370	4,782	4,872	-1,120	1,397	5,112	6,765	8,159
EO Items	0	-199	0	46	0	0	0	0
PBT after EO Exp.	3,370	4,981	4,872	-1,166	1,397	5,112	6,765	8,159
Total Tax	1,165	1,691	1,583	-273	367	1,274	1,691	2,040
Tax Rate (%)	34.6	33.9	32.5	23.4	26.3	24.9	25.0	25.0
Minority Interest	0	0	0	0	0	0	0	0
Reported PAT	2,205	3,290	3,290	-893	1,030	3,837	5,074	6,119
Adjusted PAT	2,205	3,159	3,290	-858	1,030	3,837	5,074	6,119
Change (%)	27.0	43.2	4.1	-126.1	-220.1	272.6	32.2	20.6
Margin (%)	8.4	10.8	10.8	-5.0	4.3	11.0	13.0	13.9

Consolidated - Balance Sheet

(INR m)

Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
Equity Share Capital	643	643	643	643	643	643	643	643
Total Reserves	14,145	16,823	18,323	16,938	17,504	21,341	26,415	32,534
Net Worth	14,787	17,465	18,966	17,581	18,147	21,984	27,058	33,177
Total Loans	0	0	12,491	10,323	10,942	11,040	11,149	11,242
Lease Liabilities			12,491	10,323	10,942	11,040	11,149	11,242
Deferred Tax Liabilities	0	0	0	0	0	0	0	0
Other Liabilities	1,059	1,025	25	21	20	20	20	20
Capital Employed	15,846	18,491	31,482	27,924	29,109	33,044	38,227	44,439
Gross Block	8,890	9,731	19,125	17,670	18,661	19,264	19,985	20,730
Less: Accum. Deprn.	5,926	6,566	5,431	6,475	6,402	6,953	7,833	8,803
Net Fixed Assets	2,945	3,146	13,675	11,195	12,259	12,311	12,152	11,927
Capital WIP	121	173	199	336	52	52	52	52
Total Investments	1,853	1,996	2,370	1,832	1,899	1,899	1,899	1,899
Curr. Assets, Loans&Adv.	15,476	18,375	19,996	18,578	20,000	24,766	30,457	37,806
Inventory	7,621	8,391	8,737	6,083	8,709	9,988	10,847	12,186
Account Receivables	886	653	612	794	717	667	750	842
Cash and Bank Balance	5,885	8,390	9,624	10,968	9,688	13,067	17,688	23,459
Loans and Advances	1,083	941	1,023	733	886	1,044	1,173	1,318
Curr. Liability & Prov.	5,602	6,296	5,867	5,400	6,143	7,024	7,374	8,285
Account Payables	4,792	5,156	5,032	4,397	4,562	5,911	6,553	7,363
Other Current Liabilities	707	983	752	917	1,491	1,044	782	878
Provisions	103	157	83	86	90	70	39	44
Net Current Assets	9,874	12,079	14,129	13,178	13,858	17,741	23,083	29,521
Deferred Tax assets	1,054	1,098	1,110	1,384	1,042	1,042	1,042	1,042
Appl. of Funds	15,846	18,491	31,482	27,924	29,109	33,044	38,227	44,439

Financials and valuations

Ratios

Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
Basic (INR)								
EPS (diluted from FY17)	17.2	24.6	25.6	-6.7	8.0	29.9	39.5	47.6
Cash EPS (diluted from FY17)	21.9	29.6	48.6	13.9	26.8	52.8	62.9	71.5
BV/Share (diluted from FY17)	115.0	135.9	147.6	136.8	141.2	171.0	210.5	258.1
DPS	4.0	6.3	4.0	4.0	0.0	0.0	0.0	0.0
Payout (%)	23.3	24.4	15.6	-57.6	0.0	0.0	0.0	0.0
Valuation (x)								
P/E	101.5	70.8	68.0	-260.9	217.3	58.3	44.1	36.6
Cash P/E	79.6	58.9	35.8	125.0	64.9	33.0	27.7	24.3
P/BV	15.1	12.8	11.8	12.7	12.3	10.2	8.3	6.7
EV/Sales	8.3	7.3	7.4	13.1	9.4	6.4	5.6	4.8
EV/EBITDA	62.0	45.1	27.2	137.6	53.8	25.5	21.1	18.2
Dividend Yield (%)	0.2	0.4	0.2	0.2	0.0	0.0	0.0	0.0
FCF per share	6.2	20.4	38.4	33.1	12.7	46.0	54.8	62.5
Return Ratios (%)								
RoE	15.7	19.6	18.1	-4.7	5.8	19.1	20.7	20.3
RoCE	15.9	19.7	16.7	-0.2	6.0	15.0	16.6	16.8
RoIC	25.1	34.3	26.6	-4.6	8.1	24.3	29.9	34.0
Working Capital Ratios								
Fixed Asset Turnover (x)	3.0	3.0	1.6	1.0	1.3	1.8	2.0	2.1
Asset Turnover (x)	1.7	1.6	1.0	0.6	0.8	1.1	1.0	1.0
Inventory (Days)	231	238	246	265	292	245	240	240
Debtor (Days)	12	8	7	17	11	7	7	7
Creditor (Days)	145	146	142	192	153	145	145	145
Leverage Ratio (x)								
Current Ratio	2.8	2.9	3.4	3.4	3.3	3.5	4.1	4.6
Interest Cover Ratio	69.3	118.1	4.6	-1.0	1.9	5.3	6.6	7.6
Net Debt/Equity	-0.5	-0.6	0.0	-0.1	0.0	-0.2	-0.3	-0.4

Consolidated - Cash Flow Statement

Y/E March	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
OP/(Loss) before Tax	3,400	4,783	4,851	-1,167	1,397	5,112	6,765	8,159
Depreciation	604	640	2,958	2,627	2,420	2,948	3,009	3,075
Interest & Finance Charges	42	35	1,177	1,035	928	1,074	1,108	1,118
Direct Taxes Paid	-1,152	-1,409	-1,869	468	-68	-1,274	-1,691	-2,040
(Inc)/Dec in WC	-991	122	-719	2,066	-1,982	-504	-721	-666
CF from Operations	1,903	4,171	6,398	5,030	2,694	7,356	8,471	9,645
Others	-347	-727	-600	-420	-579	-448	-582	-757
CF from Operating incl EO	1,557	3,444	5,798	4,611	2,115	6,908	7,888	8,888
(Inc)/Dec in FA	-754	-822	-857	-357	-477	-1,000	-850	-850
Free Cash Flow	803	2,622	4,941	4,254	1,638	5,908	7,038	8,038
(Pur)/Sale of Investments	-748	-2,461	-1,669	-920	940	0	0	0
Others	428	512	653	750	466	448	582	757
CF from Investments	-1,074	-2,770	-1,873	-527	928	-552	-268	-93
Inc/(Dec) in Debt	0	0	0	-515	-514	0	0	0
Interest Paid	-15	-14	-13	-11	-9	-1,074	-1,108	-1,118
Dividend Paid	-541	-618	-969	0	0	0	0	0
Others	0	0	-3,379	-3,165	-2,886	-1,902	-1,891	-1,907
CF from Fin. Activity	-556	-631	-4,361	-3,691	-3,410	-2,977	-2,999	-3,024
Inc/Dec of Cash	-73	42	-435	393	-367	3,379	4,621	5,771
Opening Balance	631	559	586	150	543	176	3,555	8,176
Closing Balance	559	600	150	543	176	3,555	8,176	13,948
Other Bank Balance	5,326	7,790	9,473	10,425	9,512	9,512	9,512	9,512
Net Closing Balance	5,885	8,390	9,624	10,968	9,688	13,067	17,688	23,459

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 - 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") (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.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022-3980

4263; 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.:022-71881085.

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL: IN-DP-16-2015; NSDL: IN-DP-NSDL-152-2000; 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.