Neutral



Aurobindo Pharma

Estimate change	1
TP change	1
Rating change	\leftarrow

Bloomberg	ARBP IN
Equity Shares (m)	586
M.Cap.(INRb)/(USDb)	358.1 / 4.3
52-Week Range (INR)	648 / 397
1, 6, 12 Rel. Per (%)	-4/31/2
12M Avg Val (INR M)	912

Financials & Valuations (INR b)

i manciais & valuations (nett b)										
Y/E MARCH	FY23	FY24E	FY25E							
Sales	248.6	272.4	289.7							
EBITDA	40.3	47.4	52.4							
Adj. PAT	22.5	26.0	29.3							
EBIT Margin (%)	11.2	12.3	13.1							
Cons. Adj. EPS (INR)	38.4	44.4	50.0							
EPS Gr. (%)	-12.8	15.7	12.4							
BV/Sh. (INR)	458.4	497.9	541.8							
Ratios										
Net D:E	0.0	0.0	-0.1							
RoE (%)	8.7	9.3	9.6							
RoCE (%)	8.0	8.5	9.0							
Payout (%)	10.9	11.2	12.0							
Valuations										
P/E (x)	15.9	13.7	12.2							
EV/EBITDA (x)	8.6	7.6	6.5							
Div. Yield (%)	0.7	0.8	1.0							
FCF Yield (%)	-2.2	-3.3	5.9							
EV/Sales (x)	1.4	1.3	1.2							

Shareholding pattern (%)

As On	Mar-23	Dec-22	Mar-22
Promoter	51.8	51.8	51.8
DII	15.1	14.9	17.5
FII	23.0	22.3	20.8
Others	10.1	11.0	9.9

FII Includes depository receipts

TP: INR600 (-2%) Earnings decline for second consecutive year

Levers in place to deliver growth over next two years

CMP: INR610

- Aurobindo Pharma (ARBP) delivered a better-than-expected operating performance in 4QFY23, driven by healthy growth in the US/EU/ROW formulation and API segments. In addition to robust ANDA filings, ARBP continues to work toward building a niche portfolio in the biosimilar/ peptide space. Its ambitious Pen-G project is also on track for commercialization in FY25.
- We raise our FY24/FY25 EPS estimates by 3%/4% to factor in 1) additional new business opportunities due to regulatory issues at peers, 2) limitedcompetition product launches, and 3) a better outlook on operational costs, particularly raw material and freight costs. We value ARBP at 11x 12M forward earnings to arrive at a TP of INR600.
- Growth prospects look encouraging for the next 2-3 years on the back of 1) better scope to garner US generics business, given its presence across the manufacturing value chain, 2) regulatory-compliant facilities, and 3) work-in-progress to develop complex products. However, the current valuation adequately prices in the upside in earnings. Maintain Neutral.

Higher opex/R&D spending affect profitability on YoY basis

- 4QFY23 sales grew 11% YoY to INR65b (est. INR63b). Total formulation sales rose 11% YoY to INR54.6b. US generics revenue grew 12% YoY to INR31b (flat YoY in CC terms at USD370m; 47% of sales). Growth Market sales jumped 51% YoY to INR6b (9% of sales). Europe formulation sales grew 8% YoY to INR16.6b (26% of sales). ARV sales declined 33% YoY to INR1.6b (2% of sales). API sales rose 11% YoY to INR10.2b (16% of sales).
- Gross margin contracted 190bp YoY to 54.7% due to product mix change.
- EBITDA margin declined 130bp to 15.5% (est. 15%). Lower gross margin and higher other expenses (+210bp YoY as a % of sales) hurt profitability for the quarter, marginally offset by a decline in employee/R&D expenses (-150bp/-110bp as a % of sales).
- EBITDA grew 3% YoY to INR10b (est. INR9.5b).
- Adjusting for the forex gain of INR227m, PAT declined 10% YoY to INR5.2b (est. INR4.7b), due to higher depreciation/interest cost.
- In FY23, revenue grew 6% YoY to INR249b, while EBITDA/PAT declined 8%/14% YoY to INR40b/INR22b.

Highlights from the management commentary

- ARBP has guided for double double-digit YoY growth in Eugia revenue in FY24.
- It plans to launch g-Revlimid in Oct'23.
- The company intends to file b-Xolair for the US market in CY25, three to six months ahead of patent expiry (Nov'25).
- ARBP plans to spend USD130-140m for the Pen-G project in FY24 (USD120m spent in FY23).

Tushar Manudhane - Research Analyst (Tushar.Manudhane@MotilalOswal.com)

Quarterly performance (Consolidated) (INR b)												
Y/E March		FY2	2			FY2	3		FY22	FY23	FY23	\$E
_	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			4QE	vs Est
Net Sales	57.0	59.4	60.0	58.1	62.4	57.4	64.1	64.7	234.6	248.6	63.2	2.4%
YoY Change (%)	-3.8	-8.4	-5.7	-3.2	9.4	-3.4	6.7	11.4	-5.3	6.0	8.8	
EBITDA	12.1	11.9	10.2	9.7	10.2	10.5	9.5	10.0	43.9	40.3	9.5	6.0%
YoY Change (%)	-8.2	-17.2	-25.7	-23.6	-15.3	-11.3	-6.1	2.9	-18.7	-8.1	-2.9	
Margins (%)	21.2	20.0	16.9	16.8	16.4	18.3	14.9	15.5	18.7	16.2	15.0	
Depreciation	2.8	2.9	3.0	2.5	2.8	3.0	3.2	3.5	11.3	12.4	3.2	
EBIT	9.3	8.9	7.2	7.2	7.5	7.5	6.3	6.6	32.6	27.9	6.3	
YoY Change (%)	-12.4	-24.1	-34.3	-28.5	-19.8	-15.5	-11.7	-8.9	-24.8	-14.5	-13.1	
Interest	0.1	0.1	0.2	0.1	0.1	0.3	0.4	0.6	0.5	1.4	0.5	
Other Income	0.8	0.9	0.5	0.3	0.4	0.6	0.8	1.1	2.5	2.9	0.8	
PBT before EO expense	10.0	9.8	7.5	7.4	7.7	7.9	6.7	7.1	34.6	29.4	6.6	8.6%
Forex loss/(gain)	-0.3	0.0	-0.2	-0.2	0.3	0.5	-0.1	-0.2	-0.7	0.4	0.0	
Exceptional (expenses)/income	0.0	0.0	0.3	-1.6	-0.6	0.0	0.0	0.0	-1.3	-0.6	0.0	
PBT	10.3	9.8	8.0	6.0	6.8	7.4	6.8	7.4	34.0	28.4	6.6	12.1%
Tax	2.5	2.7	1.9	0.2	1.6	1.1	1.9	2.2	7.3	6.8	1.6	
Rate (%)	24.1	27.7	23.7	2.9	23.2	15.3	27.8	30.4	21.3	24.1	24.4	
Minority Interest	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.0	
Reported PAT	7.7	7.0	6.0	5.8	5.2	6.2	4.9	5.1	26.5	21.4	4.9	2.5%
Adj PAT	7.5	7.0	5.6	5.7	5.9	6.6	4.8	5.1	25.8	22.5	4.7	9.5%
YoY Change (%)	-7.4	-13.2	-26.5	-27.4	-21.4	-4.5	-14.3	-10.3	-18.5	-12.8	-18.1	
Margins (%)	13.1	11.7	9.4	9.9	9.4	11.6	7.5	7.9	11.0	9.0	7.4	

Margins (%)
E: MOFSL Estimates

Key performance Indicators (Consolidated) (INR b)									(INR b)		
Y/E March		FY2	2			FY23	E		FY22	FY23	FY23E
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			4QE
Formulations	48.9	51.6	49.9	49.0	53.3	47.7	54.5	54.6	199.4	210.1	53.6
YoY Change (%)	-4.9	-8.7	-12.1	-5.9	9.0	-7.6	9.2	11.4	-8.1	5.4	9.5
ARV form.	3.0	1.5	1.6	2.4	3.8	1.6	2.5	1.6	8.3	9.5	2.4
YoY Change (%)	-30.3	-71.2	-64.9	-51.9	28.1	13.1	61.3	-32.6	-55.3	24.0	0.9
US generic form.	26.8	29.7	27.5	27.3	29.7	26.4	30.0	30.5	111.2	116.5	30.7
YoY Change (%)	-13.7	-7.0	-13.4	-4.5	10.8	-11.1	9.3	11.6	-9.8	4.8	12.6
EU and ROW form.	19.1	20.5	20.9	19.3	19.8	19.7	22.0	22.5	79.8	84.0	20.5
YoY Change (%)	18.6	4.5	1.2	4.0	3.5	-3.9	5.2	16.6	6.5	5.2	6.3
APIs	8.1	7.8	10.1	9.1	9.1	9.7	9.5	10.2	35.2	38.5	9.6
YoY Change (%)	4.1	-5.8	48.0	14.9	11.6	24.1	-5.5	11.4	13.9	9.5	5.0
Cost Break-up											
RM Cost (% of Sales)	41.5	42.2	45.7	43.5	46.3	41.0	45.4	45.3	43.2	44.3	44.6
Staff Cost (% of Sales)	15.3	14.5	14.5	14.7	14.1	15.1	14.4	13.2	14.7	14.2	14.8
R&D Expenses(% of Sales)	6.3	6.7	6.5	7.4	5.0	4.8	6.5	6.3	6.7	5.7	6.8
Other Cost (% of Sales)	15.8	16.7	16.3	17.7	18.2	20.7	18.9	19.7	16.6	19.6	18.8
Gross Margins(%)	58.5	57.8	54.3	56.5	53.7	59.0	54.6	54.7	56.8	55.7	55.4
EBITDA Margins(%)	21.2	20.0	16.9	16.8	16.4	18.3	14.9	15.5	18.7	16.2	15.0
EBIT Margins(%)	16.3	15.0	11.9	12.4	12.0	13.1	9.9	10.1	13.9	11.2	9.9

E: MOFSL Estimates

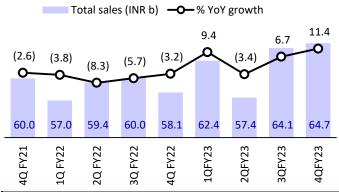


Conference call highlights

- ARBP intends to file b-Herceptin for the US market by 4QFY24.
- It has filed five oral solid products from its China plant. The initial focus will be on supplying to EU markets (1QFY25 onwards). Subsequently, it would be utilized for Chinese markets as well.
- The company indicated ~20 ANDA launches in FY24.
- ARBP has started manufacturing exhibit batches at the Vizag plant. It will supply to the EU and US markets.
- It has filed DMF for Liraglutide (peptide product) and hopes to file one more peptide DMF by FY24-end.
- The company has invested INR1.9b so far in the biosimilar segment.

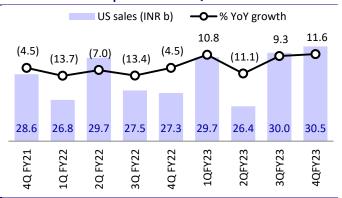
Key Exhibits

Exhibit 1: Revenue grew 11% YoY in 4QFY23



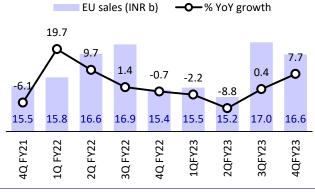
Source: MOFSL, Company

Exhibit 2: US sales up 12% YoY in 4QFY23 in INR terms



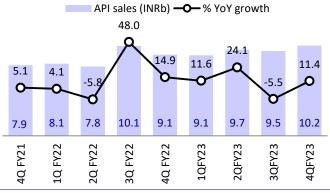
Source: MOFSL, Company

Exhibit 3: EU sales increased 8% YoY in 4QFY23



Source: MOFSL, Company

Exhibit 4: API sales rose 11% YoY in 4QFY23



Source: MOFSL, Company

4QFY23

3QFY23

Exhibit 5: ARBP filed 12 ANDAs in 4QFY23

6

4QFY21

1QFY22

2QFY22

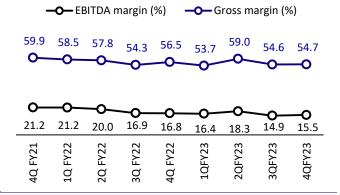
3QFY22

4QFY22

1QFY23

2QFY23

Exhibit 6: EBITDA margin contracted 130bp YoY



Source: MOFSL, Company Source: MOFSL, Company

Enhanced effort to revive earnings growth over next 2-3 years

US generics - Niche launches and reduced price erosion to drive growth

- In FY23, ARBP's US sales declined 3% in CC terms to USD1.5b. Considering the YoY price erosion of 15-20% at the industry level, ARBP's performance was decent with a low single-digit YoY decline. Amid currency tailwinds, revenue grew by 5% YoY in INR terms to INR117b.
- ARBP is positioned well on the regulatory front as well for developed markets.
- We believe that ARBP is well positioned to gain better traction given the increasing number of drugs in shortage, easing competition and a consistent pace of approvals for ARBP.
- Further, a pipeline of 175 ANDAs pending for approval gives ARBP an upper hand on the opportunities present in the US markets.
- Additionally, the contribution from g-revlimid from 3QFY24 onward would aid growth in the US business.
- After considering the above factors, we expect an 11% sales CAGR over FY23-25 to INR144b (USD1.8b).

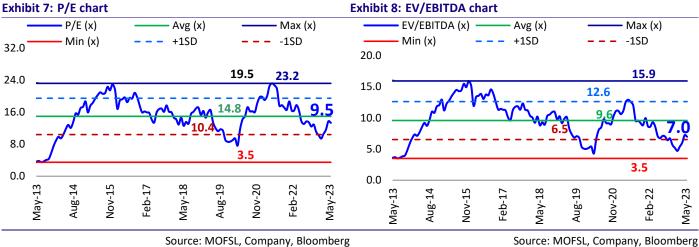
Biosimilars/peptides: work in progress for building additional levers for growth

- ARBP has been working towards development as well as filing biosimilars globally. Particularly, ARBP plans to file b-Herceptin in India in Jul'23, followed by a filing in EU in Sep'23 and the US in 4QFY24. It has b-Xolair (indicated for chronic idiopathic urticarial) under phase III clinical trial. It intends to file this product before patent expiry. With USD4b market size and limited competition, it can be a growth opportunity for ARBP. There is another immunology biosimilar for which 40% of the recruitment requirement is met. For the third immunology biosimilar, ARBP has submitted the phase-3 application to the European medicine agency and is likely to start phase-3 trials from 3QFY24 onward. ARBP plans to file this product in FY25 in India and emerging markets.
- ARBP is focusing on oncology peptides and anti-diabetic peptides. It has filed DMF for Liraglutude. It is in the process of filing another DMF of GLP-1 analogue by the end of FY24.

Valuation and view

We raise our FY24/FY25 EPS estimates by 3%/4% to factor in 1) additional new business opportunities due to regulatory issues at peers, 2) limited-competition product launches, and 3) a better outlook on operational costs, particularly raw material and freight costs. We value ARBP at 11x 12M forward earnings to arrive at a TP of INR600.

Growth prospects encouraging for the next 2-3 years on the back of 1) better scope to garner US generics business, given its presence across the manufacturing value chain, 2) regulatory-compliant facilities, and 3) work-inprogress to develop complex products. However, the current valuation adequately prices in the upside in earnings. Maintain Neutral.

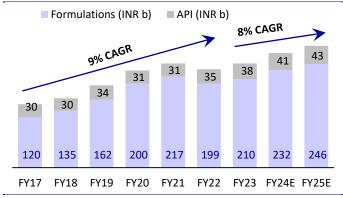


Source: MOFSL, Company, Bloomberg

5 29 May 2023

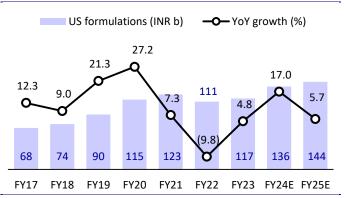
Story in charts

Exhibit 9: Expect sales CAGR of 8% over FY23-25



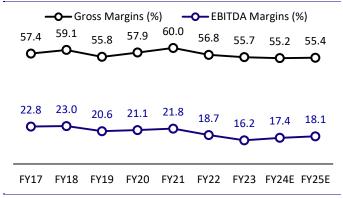
Source: Company, MOFSL

Exhibit 10: US sales to clock 11% CAGR over FY23-25



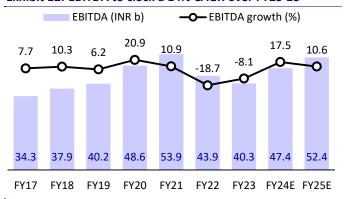
Source: Company, MOFSL

Exhibit 11: EBITDA margin to expand over FY23-25



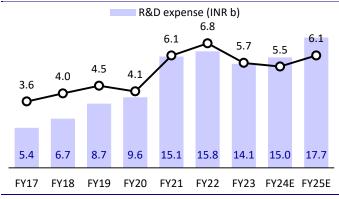
Source: Company, MOFSL

Exhibit 12: EBITDA to clock a 14% CAGR over FY23-25



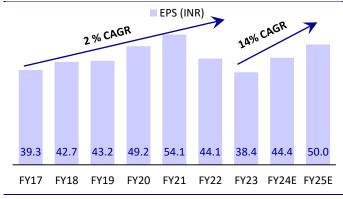
Source: Company, MOFSL

Exhibit 13: R&D expense to increase over FY23-25



Source: Company, MOFSL

Exhibit 14: Expect EPS CAGR of 14% over FY23-25



Source: Company, MOFSL

Financials and valuations

Consolidated - Income Statement									(INR b)
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Total Income from Operations	150.9	165.0	195.6	231.0	247.7	234.6	248.6	272.4	289.7
Change (%)	8.1	9.3	18.6	18.1	7.3	-5.3	6.0	9.6	6.4
Total Expenditure	116.6	127.1	155.4	182.3	193.8	190.7	208.2	225.0	237.3
EBITDA	34.3	37.9	40.2	48.6	53.9	43.9	40.3	47.4	52.4
Margin (%)	22.8	23.0	20.6	21.1	21.8	18.7	16.2	17.4	18.1
Depreciation	4.3	5.6	6.7	9.7	10.6	11.3	12.4	13.9	14.6
EBIT	30.1	32.3	33.5	39.0	43.4	32.6	27.9	33.5	37.9
Int. and Finance Charges	0.7	0.8	1.6	1.6	0.7	0.5	1.4	1.8	1.4
Other Income	0.5	1.0	1.2	0.9	2.4	2.5	2.9	3.3	3.5
PBT bef. EO Exp.	29.9	32.5	33.1	38.2	45.0	34.6	29.4	34.9	40.0
EO Items	0.6	-0.2	-2.2	-0.7	29.0	-0.6	-1.0	0.0	0.0
PBT after EO Exp.	30.6	32.4	30.9	37.6	74.0	34.0	28.4	34.9	40.0
Current Tax	7.6	8.2	7.3	9.1	20.1	7.3	6.8	8.8	10.6
Tax Rate (%)	24.9	25.3	23.5	24.3	27.2	21.3	24.1	25.2	26.5
Less: Minority Interest	-0.1	0.0	0.0	0.1	0.6	0.3	-0.1	0.1	0.1
Reported PAT	23.0	24.2	23.6	28.3	53.3	26.5	21.4	26.0	29.3
Adjusted PAT	23.0	25.0	25.3	28.8	31.7	25.8	22.5	26.0	29.3
Change (%)	13.6	8.7	1.1	13.9	9.9	-18.5	-12.8	15.7	12.4
Margin (%)	15.3	15.2	12.9	12.5	12.8	11.0	9.0	9.6	10.1
Consolidated - Balance Sheet Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	(INR b) FY25E
Equity Share Capital	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Total Reserves	93.1	116.2	138.3	167.5	218.7	245.2	267.8	290.9	316.7
Net Worth	93.7	116.8	138.9	168.1	219.3	245.8	268.4	291.5	317.2
Minority Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Deferred Liabilities	-1.2	0.8	1.0	1.4	1.2	1.2	-2.9	-2.9	-3.0
Total Loans	30.8	44.8	67.5	54.2	49.7	23.7	48.6	38.6	30.6
Capital Employed	123.4	162.4	207.4	223.7	270.2	270.7	314.3	327.3	345.0
Gross Block	53.6	70.7	98.0	116.4	134.3	158.4	175.4	195.9	208.9
Less: Accum. Deprn.	7.2	11.8	18.3	28.0	38.5	49.8	62.2	76.2	90.7
Net Fixed Assets	46.5	58.9	79.7	88.4	95.8	108.7	113.2	119.8	118.2
Goodwill on Consolidation	4.1	8.2	8.3	9.2	4.3	4.8	6.0	6.0	6.0
Capital WIP	12.4	14.0	13.4	16.2	24.3	29.4	45.0	45.0	45.0
Total Investments	2.5	3.1	3.6	5.5	5.9	10.0	5.4	5.4	5.4
Curr. Assets, Loans&Adv.	95.4	125.3	157.7	168.3	203.8	183.6	222.6	215.5	237.3
Inventory	43.3	58.6	72.5	77.0	90.3	75.5	85.1	100.7	106.9
Account Receivables	35.0	38.7	34.1	43.2	35.0	40.1	44.7	50.8	54.8
Cash and Bank Balance	5.1	12.6	19.6	28.4	54.7	41.9	60.8	37.3	48.8
Loans and Advances	12.0	15.4	31.5	19.7	23.7	26.0	31.9	26.8	26.8
Curr. Liability & Prov.	37.4	47.1	55.3	63.9	63.8	65.6	77.9	64.4	66.9
Account Payables	24.9	26.3	25.5	25.4	27.9	27.0	38.7	33.8	36.3
Other Current Liabilities	11.4	18.2	26.1	33.5	32.6	35.2	35.4	30.0	30.0
Provisions	1.1	2.6	3.6	4.9	3.3	3.4	3.7	0.6	0.6

E: MOFSL Estimates

Net Current Assets

Deferred Tax assets

Misc Expenditure

Appl. of Funds

29 May 2023 7

58.0

0.0

0.0

123.4

78.3

0.0

0.0

162.4

102.4

0.0

0.0

207.4

104.3

0.0

0.0

223.7

140.0

0.0

0.0

270.2

117.9

0.0

0.0

270.7

144.7

0.0

0.0

314.3

151.1

0.0

0.0

327.3

170.4

0.0

0.0

345.0

Financials and valuations

Ratios									
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Basic (INR)									
EPS	39.3	42.7	43.2	49.2	54.1	44.1	38.4	44.4	50.0
Cash EPS	46.6	52.2	54.6	65.7	72.0	63.3	59.7	68.2	74.9
BV/Share	160.0	199.4	237.1	286.9	374.3	419.5	458.4	497.9	541.8
DPS	1.9	3.7	2.5	2.5	2.5	3.5	4.0	5.0	6.0
Payout (%)	6.0	10.9	6.8	5.2	2.7	7.7	10.9	11.2	12.0
Valuation (x)									
P/E	15.5	14.3	14.1	12.4	11.3	13.8	15.9	13.7	12.2
Cash P/E	13.1	11.7	11.2	9.3	8.5	9.6	10.2	8.9	8.1
P/BV	3.8	3.1	2.6	2.1	1.6	1.5	1.3	1.2	1.1
EV/Sales	2.5	2.4	2.1	1.7	1.4	1.4	1.4	1.3	1.2
EV/EBITDA	11.2	10.3	10.1	7.9	6.5	7.7	8.6	7.6	6.5
Dividend Yield (%)	0.3	0.6	0.4	0.4	0.4	0.6	0.7	0.8	1.0
FCF per share	27.0	7.2	1.6	50.4	12.5	35.7	-13.5	-20.3	36.0
Return Ratios (%)									
RoE	27.6	23.8	19.8	18.8	16.3	11.1	8.7	9.3	9.6
RoCE	19.0	17.4	14.4	14.1	13.6	10.3	8.0	8.5	9.0
RoIC	22.5	20.4	16.9	17.1	17.6	13.7	10.8	11.3	11.5
Working Capital Ratios									
Fixed Asset Turnover (x)	2.8	2.3	2.0	2.0	1.8	1.5	1.4	1.4	1.4
Inventory (Days)	238	275	277	280	308	298	266	278	293
Debtor (Days)	98	82	68	61	58	58	62	64	66
Creditor (Days)	140	138	109	96	98	99	109	108	99
Working Cap. (Days)	196	219	235	246	267	258	219	233	261
Leverage Ratio (x)									
Current Ratio	2.6	2.7	2.9	2.6	3.2	2.8	2.9	3.3	3.5
Interest Cover Ratio	45	42	21	24	58	67	20	18	27
Net Debt/Equity	0.3	0.3	0.3	0.2	0.0	-0.1	0.0	0.0	-0.1
Consolidated - Cash Flow Statement									(INR b)
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
OP/(Loss) before Tax	30.6	32.4	30.9	37.4	45.0	34.6	29.4	34.9	40.0
Depreciation	4.3	5.6	6.7	9.7	10.6	11.3	12.4	13.9	14.6
Interest / Dividend received	0.4	0.5	1.4	1.2	-1.6	-2.0	-1.5	-1.5	-2.1
Direct Taxes Paid	-7.7	-7.0	-7.7	-7.3	-20.1	-7.3	-6.8	-8.8	-10.6
(Inc)/Dec in WC	5.3	-10.4	-14.8	2.8	-9.3	9.2	-7.8	-30.0	-7.8
CF from Operations	32.9	21.2	16.4	43.8	24.5	45.8	25.7	8.6	34.1
Others	-0.1	-1.6	0.1	0.0	8.7	4.4	-1.0	0.0	0.0
CF from Operating incl EO	32.8	19.5	16.5	43.8	33.3	50.2	24.7	8.6	34.1
(inc)/dec in FA	-16.9	-15.3	-15.6	-14.3	-26.0	-29.2	-32.6	-20.5	-13.0
Free Cash Flow	15.8	4.2	0.9	29.5	7.3	20.9	-7.9	-11.9	21.1
(Pur)/Sale of Investments	-0.9	-4.0	-13.4	-1.4	0.4	4.1	-4.5	0.0	0.0
CF from Investments	-17.9	-19.3	-29.0	-15.7	6.0	-32.1	-39.8	-20.5	-13.0
Inc/(Dec) in Debt	-17.3	2.9	26.2	-13.1	-4.5	-26.0	25.0	-10.0	-7.9
Interest Paid	-0.6	-0.7	-1.5	-1.3	-0.7	-0.5	-1.4	-1.8	-1.4
Dividend Paid	-1.4	-2.6	-1.6	-1.9	-1.5	-2.1	-2.3	-2.9	-3.5
Others	1.5	7.7	-3.4	-2.8	-6.9	-1.2	12.8	3.1	3.3
CF from Fin. Activity	-17.7	7.2	19.8	-19.1	-13.6	-29.7	34.0	-11.7	-9.5
Inc/Dec of Cash	-2.8	7.5	7.3	9.1	25.6	-11.6	18.9	-23.6	11.5
Opening Balance	7.9	5.1	12.6	19.6	28.4	54.7	41.9	60.8	37.3
Others incl. impact of fx	0.0	0.0	-0.3	-0.2	0.7	-1.2	0.0	0.0	0.0
Closing Balance	5.1	12.6	19.6	28.4	54.7	41.9	60.8	37.3	48.8
						.2.0	30.0	37.0	

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

 $\underline{\text{http://onlinereports.motilaloswal.com/Dormant/documents/List\%20of\%20Associate\%20companies.pdf}$

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.nseindia.com, www.nseindia.com, www.nseindia.com, www.nseindia.com, www.nseindia.com, <a href="www.nseindia.com, www.nseindia.com, <a href="www.nseindia.com, www.nseindia.com, <a href="www.nseindia.com, www.nseindia.com, <a href="www.nseindia.com, www.nseindia.com, www.nseindia.com

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.

Motial 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.
- MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- MOPSL, Research Analyst and/or his relatives have not neceived compensation/point benefits from the subject company in the past 12 months.
 MOPSL, 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.
- MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication
 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
- 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

29 May 2023

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.