MOTILAL OSWAL

FINANCIAL SERVICES

	1 February 202
3QFY24 Results Update	Sector: Healthcare

Max Healthcare

Estimate change	1
TP change	1
Rating change	

Bloomberg	MAXHEALT IN
Equity Shares (m)	970
M.Cap.(INRb)/(USDb)	780.5 / 9.4
52-Week Range (INR)	813 / 412
1, 6, 12 Rel. Per (%)	17/30/59
12M Avg Val (INR M)	1586

Financials & Valuations (INR b)

		-	
Y/E MARCH	FY24E	FY25E	FY26E
Sales	68.8	84.6	101.4
EBITDA	19.0	23.7	28.8
Adj. PAT	14.2	17.6	21.4
EBIT Margin (%)	23.8	24.2	25.0
Cons. Adj. EPS (INR)	14.6	18.1	22.1
EPS Gr. (%)	26.5	23.9	21.9
BV/Sh. (INR)	97.5	115.7	137.8
Ratios			
Net D:E	(0.1)	(0.2)	(0.3)
RoE (%)	16.2	17.0	17.4
RoCE (%)	14.8	16.3	17.0
Payout (%)	0.0	0.0	0.0
Valuations			
P/E (x)	55.0	44.4	36.4
EV/EBITDA (x)	40.4	31.9	25.6
Div. Yield (%)	11.2	8.9	7.3
FCF Yield (%)	0.2	1.5	2.4
EV/Sales (x)	11.2	8.9	7.3

Shareholding pattern (%)

As On	Dec-23	Sep-23	Dec-22
Promoter	49.1	49.1	45.7
DII	18.9	18.0	13.8
FII	6.5	6.5	8.7
Others	25.5	27.2	31.8

FII Includes depository receipts

CMP: INR803

TP: INR930 (+16%)

Buy

Improved realization led to growth in earnings

On track to expand bed capacity

- Max Healthcare (MAX) delivered in-line 3QFY24 performance. Despite 3Q being a seasonally weak quarter, MAX had exhibited healthy mid-teens (15%) growth in both revenue and EBITDA. The EBITDA per bed continues to inch up, backed by payor mix/case mix optimization. The company remains on track with its bed expansion initiative.
 - We raise our earnings estimate by 2%/4%/4% for FY24/FY25/FY26, factoring in a) improved ARPOB across institutional/international patients, and b) better operational efficiency. We also raise EV/EBITDA multiple to 28x (from 25x earlier) on the back of a) superior execution across both – operating hospitals as well as building hospitals, b) calibrated approach to drive profitable growth and deliver better-than-industry performance. Accordingly, we value MAX on SOTP basis (28x EV/EBITDA for hospital business, 20x EV/EBITDA for Max Lab, 4x EV/Sales for Max@home) to arrive at a TP of INR930.
 - We remain positive on MAX as it remains one of the leading hospitals delivering consistent growth in earnings, driven by a combination of increased patient base as well as optimizing patient realization. Further, the potential for adding hospitals in the next five years is substantial, given a significant portion of it being brownfield projects. Reiterate BUY.

Volume of patients treated stable YoY/EBIDTA per bed trends upwards

- For 3QFY24, Max network revenues (including trust business) grew 15% YoY to INR16.8b (in line).
- EBITDA margin was flat at 27.6% (our est. 27.5%).
- Accordingly, EBITDA grew 15% YoY to INR4.7b (in line).
- Adj. PAT grew 20% YoY to INR3.4b (est: INR3.5b), led by strong operational performance and interest income in 3QFY24 (vs. interest expense in 3QFY23).
- EBITDA per bed (annualized) stood at INR7.6m (+14% YoY and +1% QoQ).
- In 9MFY24, Revenue/EBITDA/PAT grew 16%/17%/24% to INR50b/INR14b/INR10b. EBITDA margin expanded 30bp YoY to 27.4%.
- In 3QFY24, ARPOB stood at INR76.8K (+15% YoY/+3% QoQ). The growth in ARPOB was driven by a) a general improvement in ARPOB across all specialties and hospitals compared to 3QFY23, and b) an increase in the share of Oncology, contributing to both YoY and QoQ growth in ARPOB. The occupancy came in at 73% in 3QFY24 (vs. 77% in 3QFY23) and was 77% in 2QFY24.

Highlights from the management commentary

- The 15% CAGR in ARPOB over the past three years comprise price hikes (3%), increased OPDs (2%), oncology-led growth (3%), payor mix, and other specialities (6-7%).
- International patients formed 5.8% of the bed share and witnessed a notable 9% YoY increase in realization during the quarter.

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

Research Analyst-Sumit Gupta (sumit.g@motilaloswal.com) | Akash Manish Dobhada- (Akash.Dobhada@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.

Consolidated - Quarterly Farning

Consolidated - Quarterly	Earning									(INRm)		
Y/E March		F١	23			FY	24E		FY23	FY24E	FY24E	% var
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4QE			3QE	
Gross Sales	13,903	14,717	14,640	15,490	16,220	17,190	16,820	18,537	58,750	68,767	16,690	0.8
YoY Change (%)	5.5	9.6	13.5	26.9	16.7	16.8	14.9	19.7	13.6	17.1	14.0	
Total Expenditure	10,228	10,712	10,590	11,150	11,930	12,350	12,170	13,269	42,680	49,719	12,100	
EBITDA	3,675	4,005	4,050	4,340	4,290	4,840	4,650	5,269	16,070	19,049	4,590	1.3
Margins (%)	26.4	27.2	27.7	28.0	26.4	28.2	27.6	28.4	27.4	27.7	27.5	
Depreciation	650	630	630	690	640	660	700	707	2,600	2,707	668	
Interest	200	140	70	-20	-30	-170	-140	-126	390	-466	-55	
Other Income	30	100	130	30	70	130	60	49	290	309	140	
PBT before EO expense	2,855	3,335	3,480	3,700	3,750	4,480	4,150	4,737	13,370	17,117	4,117	
Extra-Ord expense	110	120	180	-20	190	190	40	0	390	420	0	
РВТ	2,745	3,215	3,300	3,720	3,560	4,290	4,110	4,737	12,980	16,697	4,117	
Тах	456	-1,896	610	530	660	910	730	539	-300	2,839	576	
Rate (%)	16.6	-59.0	18.5	14.2	18.5	21.2	17.8	11.4	-2.3	17.0	14.0	
Reported PAT	2,289	5,111	2,690	3,190	2,900	3,380	3,380	4,199	13,280	13,859	3,541	
Adj PAT	2,381	2,835	2,837	3,173	3,055	3,530	3,413	4,199	11,226	14,196	3,541	-3.6
YoY Change (%)	15.6	31.6	12.2	53.5	28.3	24.5	20.3	32.3	27.5	26.5	24.8	
Margins (%)	17.1	19.3	19.4	20.5	18.8	20.5	20.3	22.7	19.1	20.6	21.2	

E: MOFSL Estimates; *Network financials from 1QFY22

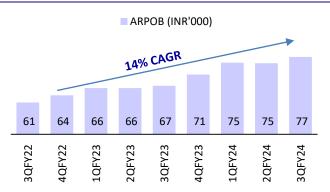


Conference call highlights

- Max is poised for significant expansion with a) the addition of 300 beds from Dwarka (FY24), b) another 300-bed addition from Gurgaon (FY25), c) an increase of 329 beds from Nanavati (FY25), and d) the incorporation of 190 beds at Mohali (FY25). Further, an addition of another 250 beds is anticipated in Lucknow once the deal is finalized.
- Max recorded a gain of INR140m in 3QFY24 due to a price revision for institutional patients
- Oncology retained its position as a major indication for Max (26% of sales) and grew 27% YoY for 9MFY24
- Max lab services are now available in 41 cities vs. 36 cities in 2QFY24.
- Max Shalimar Bagh reported 36%/42% YoY growth in revenue/EBITDA for the quarter with average occupancy of 74%.
- It has surplus cash of INR13b at the end of 3QFY24.

MOTILAL OSWAL

Exhibit 1: ARPOB continues to strengthen YoY/QoQ



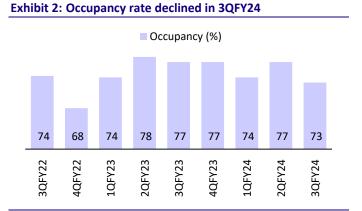
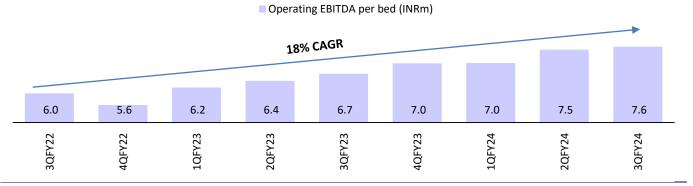


Exhibit 3: Operating EBITDA per bed increased 11% YoY in 3QFY24



Source: MOFSL, Company

Strong execution across all segments to drive profitability

Multiple factors to fuel growth in ARPOB

- In 9MFY24, ARPOB grew 14% YoY to INR75K. ARPOB growth was driven by a) increased traction from medical tourism, b) case mix optimization, c) price revisions, including those in the Institutional (CGHS) segment, d) improved share of oncology in IPD, e) increased OPD footfalls. Moreover, the number of robotic surgeries, which are high ARPOB procedures, have doubled over the last year.
- Payor mix improved considerably with a) International revenue share increasing 90bp YoY to more than 9% of revenues, b) insurance share increasing 100bp YoY to 39% and c) the institutional segment revenue share increased 100bp YoY to 18%, due to price revision in the CGHS segment.
- We expect momentum to sustain with a 5% CAGR in ARPOB to INR86.5k over FY24-26.

Bed expansion drive through both organic and inorganic channels

- In 9MFY24, occupancy came in at 75% (vs. 76% in 9MFY23). This occurred despite a modest 2% YoY growth in OBDs and an expansion in bed capacity. The occupancy rate has remained robust.
- MAX is undertaking capex to add another 1,169 beds, with 300/300/390/190 beds in Dwarka/Gurugram/Nanavati/Mohali. Additionally, following the successful completion of a deal in Lucknow, the company anticipates incorporating an additional 250 beds into its facilities.
- Further, it has surplus cash to add beds on an inorganic basis.
- Accordingly, we expect the hospital segment to grow on the back of bed additions and ARPOB growth, leading to sales CAGR of 21% to INR101b over FY24-26.

Increased penetration to drive growth in Diagnostic business

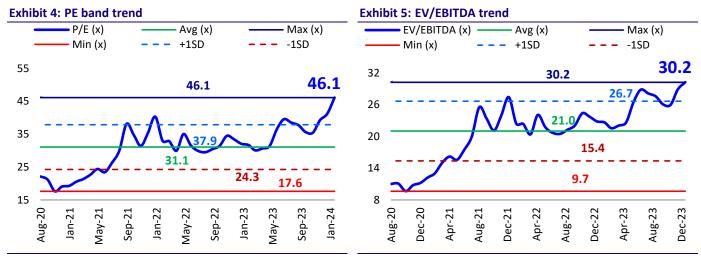
- In 9MFY24, MaxLab revenue grew 26% YoY to INR1b, largely led by an increase in the number of footfalls and average realization. MaxLab had more than 1,070 partners at the end-9MFY24 and has expanded reach across 41 cities.
- We expect MaxLab revenue to reach INR2b at a 25% CAGR over FY24-26.
- Moreover, Max@Home revenue grew 22% YoY to INR1.3b, led by critical care and medical rooms services lines. We expect a 19% revenue CAGR in this segment over FY24-26.

Reiterate BUY

We raise our earnings estimate by 2%/4%/4% for FY24/Fy25/FY26, factoring a) improved ARPOB across institutional/international patients, and b) better operational efficiency. We also raise EV/EBITDA multiple to 28x (from 25x earlier) on the back of a) superior execution across both – operating hospitals as well as building hospitals, b) calibrated approach to drive profitable growth and deliver better-than-industry performance. Accordingly, we value MAX on SOTP basis (28x EV/EBITDA for hospital business, 20x EV/EBITDA for Max Lab, 4x EV/Sales for Max@home) to arrive at a price target of INR930.

MOTILAL OSWAL

We remain positive on MAX as it remains one of the leading hospitals delivering consistent growth in earnings, driven by a combination of increased patient base as well as optimizing patient realization. Further, the potential for adding hospitals in the next five years is substantial, given a significant portion of it being brownfield projects. We reiterate our BUY rating on the stock.



Source: MOFSL, Company, Bloomberg

Source: MOFSL, Company, Bloomberg

Story in charts

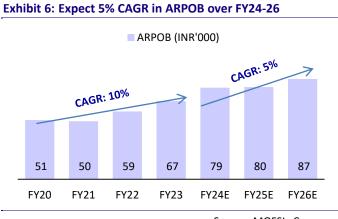
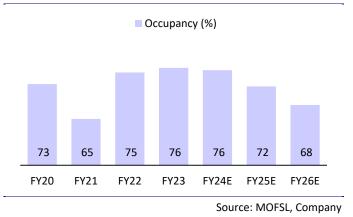
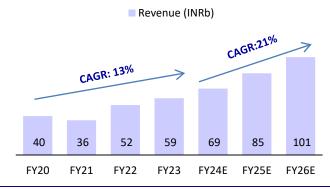


Exhibit 7: Expect occupancy to decline due to bed additions in FY26



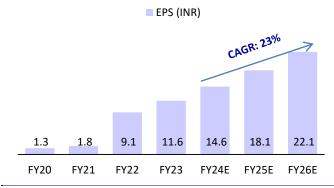
Source: MOFSL, Company

Exhibit 8: Network revenue to see 21% CAGR over FY24-26



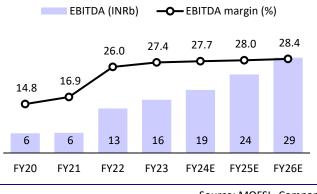
Source: MOFSL, Company

Exhibit 10: EPS to clock 23% CAGR over FY24-26



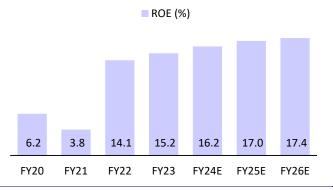
Source: MOFSL, Company

Exhibit 9: Expect EBITDA margin to expand ~70bp to 28.4% over FY24-26



Source: MOFSL, Company

Exhibit 11: Expect ROE to stabilize at ~17% over FY24-26



Source: MOFSL, Company

Financials and valuations

Y/E March	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
Total Income from Operations	40,264	36,010	51,710	58,750	68,767	84,635	1,01,370
Change (%)	12.1	-10.6	43.6	13.6	17.1	23.1	19.8
Total Expenditure	34,310	29,920	38,270	42,680	49,719	60,937	72,581
% of Sales	85.2	83.1	74.0	72.6	72.3	72.0	71.6
EBITDA	5,954	6,090	13,440	16,070	19,049	23,698	28,789
Margin (%)	14.8	16.9	26.0	27.4	27.7	28.0	28.4
Depreciation	2,087	2,160	2,480	2,600	2,707	3,227	3,438
EBIT	3,866	3,930	10,960	13,470	16,342	20,471	25,351
Int. and Finance Charges	3,135	1,870	1,120	390	-466	-172	-127
Other Income	1,013	280	470	290	309	592	659
PBT bef. EO Exp.	1,743	2,340	10,310	13,370	17,117	21,235	26,137
EO Items	-520	-2,790	-500	-390	-420	0	C
PBT after EO Exp.	1,223	-450	9,810	12,980	16,697	21,235	26,137
Total Tax	-32	500	1,430	-300	2,839	3,652	4,705
Tax Rate (%)	-2.6	-111.1	14.6	-2.3	17.0	17.2	18.0
Minority Interest	0	0	0	0	0	0	C
Reported PAT	1,256	-950	8,380	13,280	13,859	17,583	21,432
Adjusted PAT	1,308	1,755	8,807	11,226	14,196	17,583	21,432
Change (%)	NA	34.2	401.8	27.5	26.5	23.9	21.9
Margin (%)	3.2	4.9	17.0	19.1	20.6	20.8	21.1

Consolidated - Dalance Sheet							
Y/E March	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
Equity Share Capital	9,045	9,660	9,696	9,696	9,696	9,696	9,696
Total Reserves	24,815	47,721	57,484	71,004	84,862	1,02,445	1,23,877
Net Worth	33,860	57,380	67,180	80,700	94,559	1,12,141	1,33,573
Total Loans	19,270	11,280	9,180	6,820	4,820	2,820	2,820
Deferred Tax Liabilities	20	1,580	1,850	-500	-500	-500	-500
Capital Employed	53,150	70,240	78,210	87,020	98,879	1,14,461	1,35,893
Gross Block	25,767	29,900	37,100	39,210	43,885	52,510	60,416
Less: Accum. Deprn.	2,087	2,160	2,480	2,600	5,307	8,534	11,972
Net Fixed Assets	23,680	27,740	34,620	36,610	38,578	43,976	48,444
Goodwill on Consolidation	7,680	37,730	37,730	37,730	37,730	37,730	37,730
Intangibles	2,515	6,580	6,880	6,810	6,810	6,810	6,810
Capital WIP	0	0	0	0	4,675	5,820	4,414
Total Investments	21,380	20	20	20	20	20	20
Curr. Assets, Loans&Adv.	8,625	17,779	17,192	22,997	31,100	44,724	67,901
Inventory	940	740	830	1,040	1,212	1,485	1,769
Account Receivables	3,245	3,157	4,533	4,340	6,029	7,420	8,887
Cash and Bank Balance	4,110	6,660	6,150	15,650	16,307	26,524	46,112
Loans and Advances	330	7,222	5,679	1,967	7,552	9,295	11,132
Curr. Liability & Prov.	10,730	19,609	18,233	17,147	20,034	24,619	29,425
Account Payables	4,664	3,946	5,667	6,438	7,500	9,193	10,949
Other Current Liabilities	5,487	7,574	8,369	5,940	6,953	8,557	10,249
Provisions	579	8,089	4,197	4,768	5,581	6,869	8,227
Net Current Assets	-2,105	-1,830	-1,040	5,850	11 ,0 66	20,105	38,475
Appl. of Funds	53,150	70,240	78,210	87,020	98,879	1,14,462	1,35,893

E: MOFSL Estimates

Financials and valuations

Y/E March	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
Basic (INR)							
EPS	1.3	1.8	9.1	11.6	14.6	18.1	22.1
Cash EPS	3.5	4.0	11.6	14.3	17.4	21.5	25.7
BV/Share	34.9	59.2	69.3	83.2	97.5	115.7	137.8
DPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Payout (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valuation (x)							
P/E	596.8	444.6	88.6	69.5	55.0	44.4	36.4
Cash P/E	229.9	199.3	69.1	56.4	46.2	37.5	31.4
P/BV	23.0	13.6	11.6	9.7	8.3	7.0	5.8
EV/Sales	12.1	19.4	15.1	13.1	11.2	8.9	7.3
EV/EBITDA	81.5	114.9	58.3	48.0	40.4	31.9	25.6
Dividend Yield (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FCF per share	4.9	4.7	4.4	17.8	1.9	11.8	19.4
Return Ratios (%)							
RoE	6.2	3.8	14.1	15.2	16.2	17.0	17.4
RoCE	13.5	14.6	13.5	17.2	14.8	16.3	17.0
RoIC	16.3	18.2	13.8	19.2	18.2	21.2	24.8
Working Capital Ratios							
Fixed Asset Turnover (x)	1.6	1.2	1.4	1.5	1.6	1.6	1.7
Asset Turnover (x)	0.8	0.5	0.7	0.7	0.7	0.7	0.7
Inventory (Days)	9	8	6	6	6	6	6
Debtor (Days)	29	32	32	27	32	32	32
Creditor (Days)	42	40	40	40	40	40	39
Leverage Ratio (x)							
Current Ratio	0.8	0.9	0.9	1.3	1.6	1.8	2.3
Interest Cover Ratio	1.2	2.1	9.8	34.5	-35.1	-119.1	-199.8
Net Debt/Equity	-0.2	0.1	0.0	-0.1	-0.1	-0.2	-0.3
Consolidated - Cash Flow Statement							(INR m)
Y/E March	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
OP/(Loss) before Tax	1,743	2,340	10,310	13,370	16,697	21,235	26,137

consolidated cash now statement							(
Y/E March	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
OP/(Loss) before Tax	1,743	2,340	10,310	13,370	16,697	21,235	26,137
Depreciation	2,087	2,160	2,480	2,600	2,707	3,227	3,438
Interest & Finance Charges	3,135	1,870	1,120	390	-775	-764	-786
Direct Taxes Paid	32	-500	-1,430	300	-2,839	-3,652	-4,705
(Inc)/Dec in WC	-3,188	2,275	-1,300	2,609	-4,558	1,177	1,218
CF from Operations	3,811	8,145	11,180	19,269	11,232	21,223	25,302
Others	0	0	0	0	0	0	0
CF from Operating incl EO	3,811	8,145	11,180	19,269	11,232	21,223	25,302
(Inc)/Dec in FA	-924	-4,060	-6,880	-1,990	-9 <i>,</i> 350	-9,770	-6,500
Free Cash Flow	2,887	4,085	4,300	17,279	1,882	11,453	18,802
(Pur)/Sale of Investments	-21,358	21,360	0	0	0	0	0
Others	1,013	280	470	290	309	592	659
CF from Investments	-21,269	17,580	-6,410	-1,700	-9,041	-9,178	-5,841
Issue of Shares	2,045	615	37	0	0	0	0
Inc/(Dec) in Debt	6,606	-7,990	-2,100	-2,360	-2,000	-2,000	0
Interest Paid	-3,135	-1,870	-1,120	-390	466	172	127
Dividend Paid	0	0	0	0	0	0	0
CF from Fin. Activity	5,516	-9,246	-3,183	-2,750	-1,534	-1,828	127
Inc/Dec of Cash	-11,943	16,480	1,587	14,819	657	10,217	19,588
Opening Balance	0	4,110	6,660	6,150	15,650	16,307	26,524
Closing Balance	4,110	6,660	6,150	15,650	16,307	26,524	46,112

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

Explanation of Investment Rating					
Investment Rating	Expected return (over 12-month)				
BUY	>=15%				
SELL	< - 10%				
NEUTRAL	< - 10 % to 15%				
UNDER REVIEW	Rating may undergo a change				
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation				

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall be within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

Disclosures

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

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

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 MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in the resource resource to a res service transactions. Details of pending Enquiry Proc 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 Act of 4040 as amended (the "Advisor Act" and together with the 1034 Act the "Acts) and 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. 2011294012) 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

- 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 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months 6
- MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months 8
- MOFSL has not received any compensation or other benefits from third party in connection with the research report 9
- 10 MOFSL has not engaged in market making activity for the subject company

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.
- The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

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

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

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

Disclaimer:

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

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

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263; www.motilaloswal.com. Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell

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

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); ODSL and NSDL: IN-DP-16-2015; Research Analyst: INH00000412 . 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