Jubilant Pharmova

Estimate change	
TP change	Ļ
Rating change	

Motilal Oswal values your support in the Asiamoney Brokers Poll 2022 for India Research, Sales, Corporate Access and Trading team. We <u>request your ballot</u>.



Bloomberg	JUBLPHAR IN
Equity Shares (m)	159
M.Cap.(INRb)/(USDb)	57.5 / 0.7
52-Week Range (INR)	698 / 318
1, 6, 12 Rel. Per (%)	-3/-29/-57
12M Avg Val (INR M)	95

Financials &valuations(INR b)

Y/E MARCH	FY22	FY23E	F24E
Sales	61.3	63.7	67.7
EBITDA	11.6	9.7	11.4
Adj. PAT	4.1	3.0	4.2
EBIT Margin (%)	12.6	9.1	10.9
Cons. Adj. EPS (INR)	26.6	19.5	26.9
EPS Gr. (%)	-50.9	-26.8	38.4
BV/Sh. (INR)	341.4	359.0	383.4
Ratios			
Net D:E	0.3	0.2	0.2
RoE (%)	8.2	5.6	7.3
RoCE (%)	6.7	5.2	6.4
Payout (%)	9.5	9.5	9.5
Valuations			
P/E (x)	13.7	18.7	13.5
EV/EBITDA (x)	6.6	7.4	6.3
Div. Yield (%)	0.6	0.4	0.6
FCF Yield (%)	4.1	9.8	3.7
EV/Sales (x)	1.2	1.1	1.1

Shareholding pattern (%)

Jun-22	Mar-22	Jun-21
50.7	50.7	50.7
0.6	0.6	1.8
23.5	23.5	24.9
25.2	25.2	22.7
	0.6 23.5	0.6 0.6 23.5 23.5

FII includes depository receipts

CMP: INR361

TP: INR340 (-6%)

Neutral

Generics and CDMO API segment drags earnings

Resolution of regulatory issues still a work-in-progress

- JUBLPHAR delivered a lower-than-expected 1QFY23 due to higher operational cost. Revival in YoY growth in the Radiopharma business was more than offset by a decline in: a) the contract development and manufacturing operations (CDMO) Sterile and b) the Generics segment.
- We cut our FY23/FY24 EPS estimate by 27%/30% to factor in: a) price erosion in the Sartan portfolio, b) stabilization issues in the CDMO Sterile segment, c) removal of certain products under the acceptable list by USFDA, and d) prolonged regulatory headwinds in the Generics segment, and e) near term impact on the API segment due to the ongoing asset replacement program.
- Operational as well as regulatory issues are impacting its performance. The reinspection of its import alert site by the USFDA is a welcome move. We await clarity in terms of classification of the inspection. While earnings are expected to decline by 27% YoY in FY23, we see it returning to FY22 levels in FY24, considering a revival in the CDMO business and better profitability in the Radiopharma segment. We continue to value JUBLPHAR at 6x EV/EBITDA to arrive at our TP of INR340. We maintain our Neutral rating on the stock as current valuations adequately factor in an earnings revival in FY24.

Benefit from Radiopharma/CDMO Sterile outweighed by the Generics/ CDMO API segment

- Net sales declined slightly by 11.2% YoY to INR14.5b (est. INR15b).
- Generics sales fell 59% YoY to INR1.8b (12% of sales). Import alert at the Roorkee site, pricing pressure on Sartans in the US, and higher base related to lower Remdesivir sales impacted performance in the Generics segment.
- CDMO sales declined by 10% YoY to INR4.3b (29% of sales). Sales of CDMO Sterile Injectables fell 29% YoY to INR2.6b due to higher COVID-related sales in 1QFY22 and some stabilization-related issues in 1QFY23.
- CDMO API sales grew 54% YoY to INR1.6b due to higher demand from Biotech companies. Specialty Pharma sales grew 14% YoY to INR7.2b (50% of sales) and the same from Drug Discovery Services grew 34% to INR1.2b.
- Gross margin contracted by 460bp YoY to 73.3% in 1QFY23 due to an inferior product mix. While EBITDA margin contracted at a higher rate (down 970bp YoY) to 13.3% (est. 16.3%) due to higher employee costs (up 590bp), the same was partially offset by lower other expenses (down 80bp as a percentage of sales).
- EBITDA declined by 49% YoY to INR1.9b (est. INR2.4b), while adjusted PAT declined by 71% to INR470m (est. INR713m).

Highlights from the management commentary

- USFDA audited its Roorkee facility and has issued six observations. JUBLPHAR will submit an action plan and will engage with USFDA.
- The ramp-up in API volumes will drive much better profitability in the CDMO-API segment in 2H as compared to 4% in 1QFY23.
- JUBLPHAR would be launching around four Radiopharma products over the next 12-24 months.
- The Radiopharmacy business is expected to break even by FY24.

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

Research Analyst: Sumit Gupta (sumit.g@motilaloswal.com); Gaurang Sakare (gaurang.sakare@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 Model

Y/E March	•	FY	22			FY2	3E		FY22	FY23E	<u>, </u>	vs Est
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE			1QE	(%)
Net Sales	16,347	16,575	13,105	15,275	14,517	15,008	16,651	17,498	61 ,302	63,674	15,026	-3.4
YoY Change (%)	41.4	4.2	-26.0	-3.3	-11.2	-9.5	27.1	14.6	-31.2	3.9	-8.1	
EBITDA	3,752	3,395	1,942	2,474	1,924	2,161	2,614	2,979	11,563	9,678	2,449	-21.4
YoY Change (%)	109.3	-2.9	-60.6	-34.0	-48.7	-36.3	34.6	20.4	-39.2	-16.3	-34.7	
Margins (%)	23.0	20.5	14.8	16.2	13.3	14.4	15.7	17.0	18.9	15.2	16.3	
Depreciation	880	998	933	1,006	946	955	975	994	3,817	3,870	960	
EBIT	2,872	2,397	1,009	1,468	978	1,206	1,639	1,985	7,746	5,808	1,489	-34.3
YoY Change (%)	194.2	-9.4	-74.6	-49.1	-65.9	-49.7	62.4	35.2	-46.9	-25.0	-48.1	
Margins (%)	17.6	14.5	7.7	9.6	6.7	8.0	9.8	11.3	12.6	9.1	9.9	
Interest	346	347	366	395	399	410	430	427	1,455	1,667	415	
Other Income	39	45	59	-30	113	85	90	100	113	388	40	
PBT before EO expense	2,565	2,094	702	1,043	692	881	1,299	1,658	6,404	4,530	1,114	-37.9
Extra-Ord expense	0	0	0	0	0	0	0	0	0	0	0	
РВТ	2,565	2,094	702	1,043	692	881	1,299	1,658	6,404	4,530	1,114	-37.9
Тах	860	654	194	466	223	264	396	498	2,174	1,382	301	
Rate (%)	33.5	31.2	27.7	44.6	32.2	30.0	30.5	30.0	34.0	30.5	27.0	
Reported PAT	1,605	1,428	510	596	470	605	822	1,134	4,139	3,031	713	-34.0
Adj PAT	1,605	1,428	510	596	470	605	822	1,134	4,139	3,031	713	-34.0
YoY Change (%)	353.5	-2.8	-77.4	-66.8	-70.7	-57.7	61.2	90.4	-50.9	-26.8	-55.6	
Margins (%)	9.8	8.6	3.9	3.9	3.2	4.0	4.9	6.5	6.8	4.8	4.7	

Highlights from management interaction

- Ruby-Fill installations shows encouraging trend with sales increased both on a YoY and sequential basis in 1QFY23
- JUBLPHAR expects the new launches in RadioPharma business to garner 30-50% market share within first year given the low competition
- Two new lines for Spokane will be coming up by end of FY24/FY27 and Montreal facility expansion will be completed by FY27 for Sterile CDMO business
- USFDA removed Olanzapine, Spironolactone, and Valsartan from the list of excepted products with respect to the Roorkee Import Alert.
- JUBLPHAR CDMO-API segment reported lower revenue as the Nanjangud plant is undergoing asset replacement and plant upgradation, which contributed to lower volumes
- JUBLPHAR expects Nanjangud facility inspection by USFDA to be imminent.
- JUBLPHAR is expected to incur capex of ~INR7-7.5b in FY23 primarily towards expansion in CMO business and enhancement of contract research and development services (CRDS) capabilities and capacities.
- The stabilization issues affected the performance on temporary basis in CDMOsterile injectables segment in 1QFY23.
- API business demerger is effective with appointed date as 1st Apr'22.

Key exhibits



Source: MOFSL, Company

Source: MOFSL, Company

4QFY21	1QFY22	2QFY22	3QFY22	4QFY22	1QFY23
26,000	26,300	27,260	28,590	29,380	30,950
6,710	9,370	8,630	10,220	9,840	10,270
	-430	-390	-450	-940	-1,170
19,280	16,510	18,230	17,920	19,540	19,510
	26,000 6,710	26,000 26,300 6,710 9,370 -430	26,000 26,300 27,260 6,710 9,370 8,630 -430 -390	26,000 26,300 27,260 28,590 6,710 9,370 8,630 10,220 -430 -390 -450	26,000 26,300 27,260 28,590 29,380 6,710 9,370 8,630 10,220 9,840 -430 -390 -450 -940

Source: MOFSL, Company



Source: MOFSL, Company, Bloomberg

Financials and valuations

Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Total Income from Operations	57,491	58,614	75,578	91,108	91,544	89,059	61,302	63,674	67,671
Change (%)	-1.3	2.0	28.9	20.5	0.5	-2.7	-31.2	3.9	6.3
Total Expenditure	45,022	45,161	60,394	72,688	71,933	70,055	49,738	53,996	56,303
% of Sales	78.3	77.0	79.9	79.8	78.6	78.7	81.1	84.8	83.2
EBITDA	12,470	13,453	15,184	18,420	19,611	19,004	11,563	9,678	11, 3 69
Margin (%)	21.7	23.0	20.1	20.2	21.4	21.3	18.9	15.2	16.8
Depreciation	3,467	2,914	3,241	3,709	4,619	4,421	3,817	3,870	3,968
EBIT	9,002	10,539	11,943	14,711	14,992	14,582	7,746	5,808	7,401
Int. and Finance Charges	3,714	3,411	2,843	2,198	2,874	2,469	1,455	1,667	1,412
Other Income	134	249	400	357	474	154	113	388	271
PBT bef. EO Exp.	5,422	7,376	9,501	12,870	12,592	12,267	6,404	4,530	6,259
EO Items	0	0	-910	-3,832	-486	-110	0	0	0
PBT after EO Exp.	5,422	7,376	8,591	9,038	12,105	12,157	6,404	4,530	6,259
Total Tax	1,554	1,630	2,247	3,268	3,123	3,766	2,174	1,382	1,940
Tax Rate (%)	28.7	22.1	26.2	36.2	25.8	31.0	34.0	30.5	31.0
Reported PAT	3,918	5,757	6,428	5,770	8,982	8,360	4,139	3,031	4,195
Adjusted PAT	3,918	5,757	7,100	8,955	9,319	8,436	4,139	3,031	4,195
Change (%)	-470.8	46.9	23.3	26.1	4.1	-9.5	-50.9	-26.8	38.4
Margin (%)	6.8	9.8	9.4	9.8	10.2	9.5	6.8	4.8	6.2

*FY21 includes 10 months of LSI segment operations

Consolidated Balance Sheet									(INR m)
Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Equity Share Capital	155	156	156	159	159	159	159	159	159
Total Reserves	29,507	34,205	40,710	47,930	55,880	47,256	53,026	55,771	59,569
Net Worth	29,663	34,361	40,865	48,089	56,039	47,415	53,186	55,930	59,728
Minority Interest	-381	-393	-515	1	0	0	-22	-22	-22
Total Loans	44,933	40,453	35,449	47,431	43,901	25,840	29,276	26,276	23,277
Deferred Tax Liabilities	1,146	445	26	528	522	926	1,417	1,417	1,417
Capital Employed	75,360	74,865	75,825	96,049	100,461	74,181	83,857	83,601	84,401
Gross Block	35,597	39,102	44,936	50,411	60,641	47,344	52,652	64,619	72,213
Less: Accum. Deprn.	2,864	5,657	9,807	13,516	18,135	22,557	26,374	30,244	34,212
Net Fixed Assets	32,733	33,445	35,129	36,894	42,505	24,788	26,279	34,375	38,001
Goodwill on Consolidation	18,311	17,622	18,877	19,589	20,895	21,300	22,428	22,428	22,428
Capital WIP	6,113	6,838	6,710	9,014	7,684	8,970	10,896	5,429	4,336
Total Investments	854	1,027	1,235	1,151	694	2,410	2,386	2,386	2,386
Curr. Assets, Loans, and Adv.	29,385	30,055	32,621	46,541	51,327	30,167	36,308	34,248	33,349
Inventory	12,031	12,204	13,914	14,174	18,454	11,294	12,549	10,059	10,643
Account Receivables	9,505	10,053	11,308	12,716	12,932	8,199	9,280	8,548	9,270
Cash and Bank Balance	3,446	4,596	2,488	13,704	13,999	6,713	9,842	10,824	8,316
Loans and Advances	4,403	3,202	4,912	5,947	5,942	3,961	4,637	4,817	5,119
Curr. Liability and Prov.	12,038	14,122	18,747	17,141	22,643	13,453	14,439	15,264	16,099
Account Payables	6,328	7,909	11,362	10,201	10,903	5,205	5,677	6,163	6,427
Other Current Liabilities	3,487	4,425	5,897	5,109	9,245	6,410	6,936	7,205	7,657
Provisions	2,222	1,788	1,488	1,831	2,495	1,838	1,825	1,896	2,015
Net Current Assets	17,348	15,933	13,874	29,400	28,684	16,714	21,869	18,984	17,250
Appl. of Funds	75,359	74,865	75,825	96,049	100,461	74,181	83,857	83,601	84,401

Financials and valuations

Ratios									
Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Basic (INR)									
EPS	25.1	36.9	44.9	56.9	59.8	54.1	26.6	19.5	26.9
Cash EPS	47.4	55.7	65.7	80.8	89.5	82.5	51.1	44.3	52.4
BV/Share	190.4	220.5	262.3	308.7	359.7	304.3	341.4	359.0	383.4
DPS	3.1	3.1	3.1	3.1	4.8	4.5	2.2	1.6	2.2
Payout (%)	14.7	10.0	8.9	10.0	10.0	9.5	9.5	9.5	9.5
Valuation (x)									
P/E	14.4	9.8	8.1	6.4	6.1	6.7	13.7	18.7	13.5
Cash P/E	7.7	6.5	5.5	4.5	4.1	4.4	7.1	8.2	6.9
P/BV	1.9	1.6	1.4	1.2	1.0	1.2	1.1	1.0	0.9
EV/Sales	1.7	1.6	1.2	1.0	0.9	0.8	1.2	1.1	1.1
EV/EBITDA	7.9	6.9	5.9	4.9	4.4	4.0	6.6	7.4	6.3
Dividend Yield (%)	0.8	0.8	0.8	0.8	1.3	1.2	0.6	0.4	0.6
FCF per share	48.8	51.7	52.6	30.4	62.6	81.5	15.2	36.4	13.8
Return Ratios (%)									
RoE	14.5	18.0	18.9	20.1	17.9	16.3	8.2	5.6	7.3
RoCE	8.9	11.2	12.1	11.2	11.7	11.7	6.7	5.2	6.4
RolC	9.9	12.9	13.7	13.6	14.8	15.0	8.8	6.4	7.6
Working Capital Ratios								••••	
Fixed Asset Turnover (x)	1.6	1.5	1.7	1.8	1.5	1.9	1.2	1.0	0.9
Asset Turnover (x)	0.8	0.8	1.0	0.9	0.9	1.2	0.7	0.8	0.8
Inventory (Days)	76	76	67	57	74	46	75	58	57
Debtor (Days)	60	63	55	51	52	34	55	49	50
Creditor (Days)	40	49	55	41	43	21	34	35	35
Leverage Ratio (x)									
Current Ratio	2.4	2.1	1.7	2.7	2.3	2.2	2.5	2.2	2.1
Interest Cover Ratio	2.4	3.1	4.2	6.7	5.2	5.9	5.3	3.5	5.2
Net Debt/Equity	1.4	1.0	0.8	0.7	0.5	0.4	0.3	0.2	0.2
				-		-		-	-
Cons Cash Flow statement									
Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
OP/(Loss) before Tax	5,422	7,376	8,591	9,038	12,105	12,120	6,305	4,530	6,259
Depreciation	3,467	2,914	4,151	3,709	4,619	4,517	3,817	3,870	3,968
Interest & Finance Charges	3,686	3,323	2,792	2,088	2,659	2,334	1,455	1,278	1,142
Direct Taxes Paid	-481	-1,439	-2,578	-3,433	-2,487	-3,941	-1,941	-1,382	-1,940
(Inc)/Dec in WC	-1,332	369	142	-3,005	-1,797	2,499	-1,783	3,867	-774
CF from Operations	10,763	12,543	13,096	8,397	15,100	17,528	7,853	12,163	8,655
Others	225	142	-64	2,818	329	314	523	0	0
CF from Operating incl EO	10,989	12,685	13,032	11,215	15,429	17,843	8,375	12,163	8,655
(Inc)/Dec in FA	-3,392	-4,623	-4,837	-6,481	-5,676	-5,143	-6,000	-6,500	-6,501
Free Cash Flow	7,597	8,062	8,195	4,734	9,753	12,700	2,376	5,663	2,154
(Pur)/Sale of Investments	257	74	-116	0	199	-2,024	-23	0	0
Others	10	45	-1,223	-3,637	2,207	-867	2,219	388	271
CF from Investments	-3,125	-4,504	-6,177	-10,118	-3,270	-8,034	-3,804	-6,112	-6,230
Issue of Shares	197	77	10	2,659	3	0	0	0	0
Inc/(Dec) in Debt	-4,558	-4,086	-6,278	6,616	-4,986	-13,497	1,824	-3,000	-2,999
Interest Paid	-3,511	-2,291	-2,183	-2,155	-3,250	-2,922	-1,349	-1,667	-1,412
Dividend Paid	-555	-559	-560	-546	-1,528	-15	-801	-287	-397
CF from Fin. Activity	-8,427	-6,859	-9,011	6,574	-10,504	-17,094	-1,442	-5,071	-4,932
Inc/Dec of Cash	-564	1,322	-2,156	7,671	1,656	-7,286	3,130	981	-2,507
Opening Balance	3,916	3,392	4,564	2,442	10,054	12,308	5,023	8,152	9,133
Forex effect/ sales of business	40	-150	34	-59	599	, 0	, 0	0	, 0
Closing balance	3,392	4,564	2,442	10,054	12,308	5,023	8,152	9,133	6,626
Bank balance	53	32	46	3,650	1,691	1,691	1,690	1,691	1,691
Cash and Cash equivalents	3,446	4,596	2,488	13,704	13,999	6,713	9,842	10,824	8,316
· · ·									

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 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, Investment Advisory Services, Depository participant services & distribution of various financial products. MOFSL is a subsidiary company of Passionate Investment Management Pvt. Ltd.. (PIMPL). MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at http://onlinereports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions. For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the"1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered brokerdealer, 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 MOČMSPL 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.
- 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
- 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
- Research Analyst has not served as director/officer/employee in the subject company
- MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months 6
- 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
- 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
- received compensation/other benefits from the subject company in the past 12 months
- 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.

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 71934200/ 022-71934263; Website www.motilaloswal.com.CIN no.: L67190MH2005PLC153397.Correspondence Office Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad(West), Mumbai-400 064. Tel No: 022 7188 1000.

Registration Nos.: Motilal Oswal Financial Services Limited (MOFSL)*: INZ000158836(BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412. AMFI: ARN - 146822; Investment Adviser: INA000007100; Insurance Corporate Agent: CA0579;PMS:INP000006712. Motilal Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP00000670); PMS and Mutual Funds are offered through MOAMC which is group company of MOFSL. Motilal Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP000004409) is offered through MOWML, which is a group company of MOFSL. Motilal Oswal Financial Services Limited is a distributor of Mutual Funds, PMS, Fixed Deposit, Bond, NCDs,Insurance Products and IPOs.Real Estate is offered through Motilal Oswal Real Estate Investment Advisors II Pvt. Ltd. which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd which is a group company of MOFSL. Notilal Oswal Financial Services II Pvt. Ltd. which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd which is a group company of MOFSL. Investment Advisors II Pvt. Ltd. which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd which is a group company of MOFSL. There is no assurance or guarantee of the returns. Investment in securities market is subject to market risk, read all the related documents carefully before investing. Details of Compliance Officer: Name: Neeraj Agarwal, Email ID: na@motilaloswal.com, Contact No.:022-71881085.

* MOSL has been amalgamated with Motilal Oswal Financial Services Limited (MOFSL) w.e.f August 21, 2018 pursuant to order dated July 30, 2018 issued by Hon'ble National Company Law Tribunal, Mumbai Bench.