





Estimate change	1
TP change	1
Rating change	\leftarrow

Bloomberg	BSE IN
Equity Shares (m)	135
M.Cap.(INRb)/(USDb)	73.2 / 0.9
52-Week Range (INR)	798 / 406
1, 6, 12 Rel. Per (%)	13/-5/-38
12M Avg Val (INR M)	519

Financials & Valuations (INR b)

	•		
Y/E Mar	FY23	FY24E	FY25E
Net Sales	8.2	9.2	10.1
EBITDA	2.0	2.9	3.2
PAT	2.1	2.9	3.2
EPS (INR)	15.2	21.2	23.7
EPS Gr (%)	-16.0	39.2	11.7
BV / Sh (INR)	200	206	214
Ratios (%)			
RoE	7.6	10.3	11.1
Payout ratio	78.8	70.0	70.0
Valuations			
P/E (x)	28.2	20.3	18.1
P / BV (x)	2.1	2.1	2.0

Shareholding pattern (%)

As On	Mar-23	Dec-22	Mar-22
Promoter	0.0	0.0	0.0
DII	0.6	0.6	1.0
FII	33.5	34.6	39.3
Others	65.9	64.8	59.7

FII Includes depository receipts

CMP: INR540 TP: INR550 (+2%) Neutral

Strong performance across parameters

- BSE reported a PAT of INR886m in 4QFY23, up 24% YoY, registering a 75% beat on our estimate. PAT growth was driven by higher-than-estimated revenue in non-transaction securities services and strength in income from the tech subsidiary and clearing corporation. Overall expenses were lower than our estimates. The contribution to the Settlement Guarantee Fund (SGF) during the quarter was NIL (v/s our estimate of INR100m).
- BSE has undertaken new initiatives such as the reduction of tick size in the cash segment for stocks with prices up to INR100 and the introduction of a new strike price for USD-INR contracts in the currency derivatives segment. All these factors, along with the re-launch (w.e.f 15th May'23) of SENSEX and Bankex derivatives contracts with a lower lot size and a different expiry, shall boost the core business.
- The board has declared a final dividend of INR12 per share.
- We have increased our FY24/FY25 revenue estimates by 14%/12%, factoring in strong growth in the securities services segment (excluding transaction charges). We reiterate our Neutral rating with a SoTP-based, one-year TP of INR550.

Lower expenses led to sharp jump in EBIDTA margin

- Operating revenue grew 14% YoY to INR2.2b in 4QFY23 (21% beat). Transaction charges declined 13% YoY on account of cash volumes, which was offset by the currency segment, book building fees and a higher contribution from mutual funds (Star MF). Revenue from services given to corporates grew 10% YoY as book building fees rose 51% YoY.
- Opex (excluding SGF contribution) at INR1.2b was 14% below our estimate.
 EBIDTA margin increased sharply by 1397bp YoY to 43.8% in 4QFY23.
- Investment income stood at INR519m, up 26% YoY (12% miss).
- PAT jumped 24% YoY to INR886m (v/s our estimate of INR507m), owing to lower-than-expected expenses and NIL contribution to core SGF (v/s our estimate of INR100m).
- In FY23, while revenue was higher by 10%, EBIDTA/PAT was lower by 6%/16%.

Key takeaways from the management commentary

- Major steps taken to increase market share:
 - 1) The 1-paisa tick for stocks with a price less than INR100 resulted in an increase in market share from 9% to 11% in the recent past; 2) For currency derivatives, the introduction of a 10-paise strike price has started playing out well; and 3) Equity derivatives segments: reduced the lot size for S&P BSE Sensex and S&P BSE Bankex, and changed the expiry day to Friday from Thursday to scale up derivatives volumes and reduce concentration risk within the overall industry.

Valuation and view: Upgrade our estimates; reiterate Neutral

BSE has multiple levers for growth in revenue and earnings over the medium term, such as: 1) continued momentum in the Star MF business, 2) levy of charges on equity derivatives, 3) levy of charges on the INX platform, 4) possibility of levying a fee for listing of debt securities, 5) start of operations at its Power Exchange, and 6) commencement of revenue from its Gold Spot exchange. We have increased our FY24/FY25 revenue estimates by 14%/12%, factoring in strong growth in the securities services segment (excluding transaction charges). We reiterate our Neutral rating with a SoTP-based one-year TP of INR550.

Cons. Quarterly performance												(INR m)
Y/E March		FY:	22			FY:	23		FY22	FY23	Est.	Var.
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			4Q	(%/bp)
Revenue from operations	1,527	1,818	1,840	1,922	1,731	1,804	1,884	2,196	7,432	8,155	1,812	21.2
YoY Change (%)	47.9	41.6	55.7	29.8	13.4	-0.8	2.4	14.3	49.3	9.7	-6	1999bp
Total Expenditure	1,063	1,278	1,262	1,349	1,256	1,386	1,392	1,234	4,950	5,818	1,442	-14.4
EBITDA	464	540	578	573	475	418	492	962	2,481	2,338	369	160.4
Margins (%)	30.4	29.7	31.4	29.8	27.5	23.2	26.1	43.8	33.4	28.7	20	2341bp
Depreciation	116	117	123	127	104	122	170	207	483	603	180	15.2
Interest	42	52	52	76	76	74	65	60	222	275	73	-18.0
Investment income	331	440	346	412	247	594	566	519	1,204	1,384	590	-12.0
PBT before EO expense	637	811	750	782	542	815	823	1,214	2,981	2,844	707	71.8
Liquidity enhancement expense	94	141	89	88	116	457	258	84	350	363	170	-50.9
PBT	543	671	660	694	426	359	566	1,131	2,631	2,480	537	110.7
Tax	161	280	244	139	135	215	230	336	823	916	175	92.3
Rate (%)	30	42	37	20	32	60	41	30	31	37	33	-284bp
P/L of Asso. Cos.	136	176	169	161	109	150	141	92	642	492	145	0.0
Reported PAT	519	567	586	716	400	294	477	886	2,449	2,057	507	74.7
YoY Change (%)	60	23	86	125	-23	-48	-19	24	73	-16	-29	
Margins (%)	27.7	25.5	26.0	30.5	18.8	13.0	20.9	37.4	33.0	25.2	23	1484bp

Y/E March	FY22					FY23			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
Transaction charges	584	680	630	695	538	641	631	603	
Services to corporates	586	764	815	699	714	673	749	768	
Listing Fees	371	376	424	388	412	421	423	432	
Listing processing and other listing fees	119	192	148	184	145	167	152	176	
Book building fees	85	166	218	91	137	55	118	137	
Other services to corporates	10	30	24	34	19	31	56	23	
Transaction charges income - Equity	471	545	475	530	368	431	392	334	
Transaction charges income - currency derivatives	14	13	17	18	18	20	25	34	
Listing fees	490	568	572	572	557	588	575	608	
Book building and other services	95	196	242	125	156	86	174	160	
Star MF platform	99	120	135	150	150	188	211	237	



Key Perfor Indicators

Key takeaways from the management commentary

Business

Major steps taken to increase market share in various segments include 1) the 1-paisa tick for stocks with price less than INR100 – there has been an increase in market share from 9% before this measure to 11% in the recent past. Also, the delivery volumes in the segment are significant at 80%; 2) Currency derivatives – the introduction of the 10-paise strike price has started playing out well but major traction should be seen over the longer term; and 3) Equity derivatives segment - Reduced the lot size for S&P BSE Sensex and S&P BSE Bankex, changed the expiry day to Friday from Thursday to scale up derivatives volumes and reduce concentration risk within the overall industry.

BSE has discontinued the liquidity enhancement scheme (LES) for the derivative segment as the past spending did not yield commensurate results. Now the exchange will focus on product development, which will drive incidental gains both on P&L and Rol. Also, the company has discontinued the colocation hardware and software support. Cumulative savings from these initiatives will be INR320m on the standalone basis and INR380m on the consolidated basis.

- Transaction charges are at subsidized rates in many areas such as equity options, currency options (one-tenth) and currency futures (one-fifth).
 Colocation was all free earlier. BSE will increase charges once adequate scale is achieved.
- Star MF fee structure has two parts: 1) transaction charges for processing, and
 2) recovery of the costs. Various slabs exist for transaction charges and overall recovery is INR4 per transaction.

New Businesses

- Gift City IFSC ADTO for FY23 came in at USD13.1b, with a market share of 90%+ for BSE. USD70b notes and USD50bn bonds have been listed. A lot of changes are expected in this space and BSE will be a part of it.
- New exchanges The social stock exchange will not generate revenue. The bullion exchange is a separate exchange and Gold has a great potential. Currently, India is not a price setter in spite of a large share in global trade. Its EGR product is in early days but has a huge potential if tax issues are resolved. The power exchange is not generating revenue as it is a new exchange and will take time to scale up. However, BSE is providing technology services and earns revenue for it.

Financials

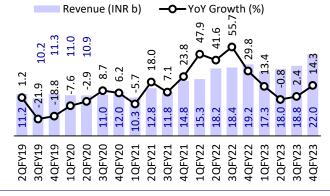
- Increase in other securities services was mainly driven by higher income from the clearing corporation. While other operating income saw an increase from healthy business growth in the Tech subsidiary.
- Other income was higher owing to an income tax refund and an expense reversal of INR20m.
- Going ahead, employee expenses will increase due to inflation and efforts to retain talent. Tech spending will see normal inflation, along with certain essential upgrades.

Exhibit 1: Revisions to our estimates

INR b	Old	Est.	New	/ Est.	Change (%)		
	FY24E	FY25E	FY24E	FY25E	FY24E	FY25E	
Revenue from Operations	8.1	9.0	9.2	10.1	13.6	12.2	
Other income	1.9	2.0	1.6	1.7	-15.8	-16.0	
Total Income	10.0	11.0	10.8	11.8	8.1	7.1	
Operating Expenses	6.2	6.8	6.4	6.9	2.2	2.4	
EBITDA	3.8	4.2	4.4	4.8	17.8	14.8	
Core EBITDA	1.9	2.2	2.9	3.2	50.8	42.0	
Depreciation/Int	0.9	0.9	0.9	0.9	5.1	4.6	
РВТ	2.9	3.3	3.5	3.9	21.5	17.4	
Core PBT	1.0	1.4	2.0	2.3	88.0	65.7	
Tax	1.0	1.2	1.2	1.4	21.5	17.4	
PAT	1.9	2.2	2.3	2.5	21.5	17.4	
PAT after Associate profits	2.5	2.9	2.9	3.2	13.7	10.7	

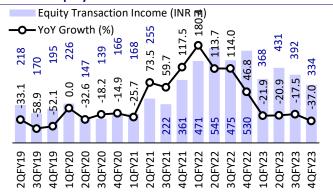
Key exhibits

Exhibit 2: Revenue increased sequentially



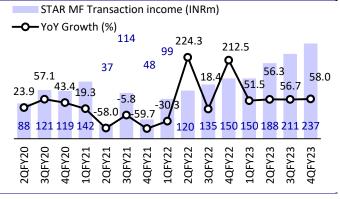
Source: MOFSL, Company

Exhibit 3: Equity Transaction revenue were muted



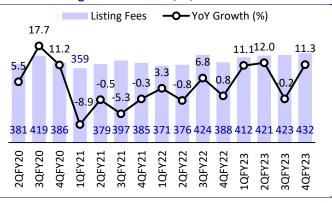
Source: MOFSL, Company

Exhibit 4: Revenue from Star MF improved QoQ



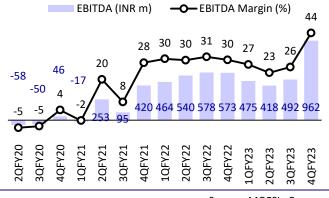
Source: MOFSL, Company

Exhibit 5: Listing fees were flat QoQ



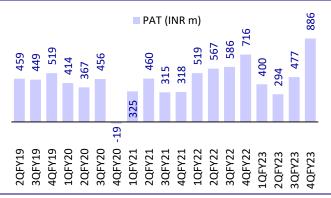
Source: MOFSL, Company

Exhibit 6: EBITDA and Margins increases sharply



Source: MOFSL, Company

Exhibit 7: Sharp increase in PAT sequentially



Source: MOFSL, Company

MOTILAL OSWAL

Financials and valuations

Income Statement									(INR M)
Y/E March	2017	2018	2019	2020	2021	2022	2023	2024E	2025E
Revenue	5,172	5,072	4,503	4,505	5,014	7,432	8,155	9,210	10,110
Change (%)	21.8	-1.9	-11.2	0.0	11.3	48.2	9.7	12.9	9.8
Employee expenses	1,415	1,201	1,392	1,512	1,487	1,773	1,802	1,910	2,025
Technology expenses	1,056	1,111	1,134	1,176	948	969	1,239	1,388	1,554
Admin & Others	1,733	1,684	1,811	2,132	1,854	2,209	2,777	3,054	3,360
Liquidity enhancement expenses	0	21	130	178	337	350	363	0	0
EBITDA	968	1,055	36	-493	388	2,131	1,974	2,858	3,171
EBITDA %	18.7	20.8	0.8	-10.9	7.7	28.7	24.2	31.0	31.4
Depreciation / Amortization	540	455	511	510	579	483	603	619	633
EBIT	429	601	-474	-1,003	-190	1,648	1,371	2,239	2,538
EBIT %	9.7	11.8	-10.5	-22.3	-3.8	22.2	16.8	24.3	25.1
Finance costs	10	10	9	24	103	222	275	275	275
Other Income	2,835	1,917	2,371	1,795	1,533	1,204	1,384	1,570	1,657
PBT	3,254	2,508	1,888	768	1,240	2,631	2,480	3,534	3,921
Tax	406	555	234	149	109	823	916	1,237	1,372
ETR %	12.5	22.1	12.4	19.4	8.8	31.3	36.9	35.0	35.0
PAT before associate profits	2,848	1,953	1,655	619	1,131	1,807	1,564	2,297	2,548
Share of Associates profit	11	199	292	267	432	642	492	566	651
PAT after Associate profits	2,859	2,152	1,947	886	1,562	2,449	2,057	2,863	3,199
Change (%)	38.5	-24.7	-9.5	-54.5	76.4	56.8	-16.0	39.2	11.7
PAT margin %	55.3	42.4	43.2	19.7	31.2	33.0	25.2	31.1	31.6
Exceptional items	208	5	5	-320	145	0	0	0	0
PAT after exceptional items	2,651	2,148	1,941	1,206	1,417	2,449	2,057	2,863	3,199
Balance Sheet									(INR M)
Y/E March	2017	2018	2019	2020	2021	2022	2023	2024E	2025E
Total fixed assets	2,519	2,142	2,181	2,085	1,843	1,681	2,535	2,585	2,635
Non current investments	17,478	17,598	13,096	9,252	8,005	6,298	8,961	9,409	9,879
Other non current assets	1,128	1,676	1,830	4,207	4,914	4,339	9,871	10,069	10,270
Total non current assets	21,125	21,415	17,108	15,543	14,762	12,318	21,367	22,063	22,784
Cash & Current investments	24,258	19,826	15,481	16,092	19,269	35,117	30,496	32,241	34,631
Trade receivables	687	549	490	700	876	634	909	1,474	1,618
Other current assets	5,760	8,191	11,960	12,425	11,364	13,785	7,166	7,477	7,803
Total current assets	30,705	28,566	27,931	29,216	31,509	49,535	38,571	41,192	44,051
TOTAL ASSETS	51,830	49,980	45,039	44,759	46,271	61,854	59,938	63,254	66,835
Share Capital	321	311	320	270	270	271	271	270	270
R&S	26,303	30,495	29,037	23,981	24,796	26,275	26,741	27,600	28,559
Shareholders equity	26,624	30,806	29,357	24,251	25,066	26,545	27,012	27,870	28,829
Core SGF	2,045	3,585	3,945	4,354	5,391	6,409	7,576	7,576	7,576
Minority Interest	2,909	0	0	186	235	1,352	1,278	1,278	1,278
Deferred tax liabilities	0	142	0	1	0	0	0	0	0
LT borrowings	0	0	0	0	0	0	0	0	0
Other LT liabilities	88	95	114	111	124	81	145	145	145
Total non-current liabilities	88	236	114	113	124	81	145	145	145
Outstanding dues to creditors	563	629	419	758	982	729	804	959	1,047
Other current liabilities	19,601	14,725	11,205	15,098	14,473	26,739	23,123	25,426	27,959
Total current liabilities	20,164	15,354	11,623	15,856	15,455	27,467	23,927	26,385	29,006
TOTAL LIABILITIES	51,830	49,981	45,039	44,759	46,271	61,854	59,938	63,254	66,835

MOTILAL OSWAL

Financials and valuations

Ratios									
Y/E March	2017	2018	2019	2020	2021	2022	2023	2024E	2025E
Basic (INR)									
EPS	19.6	15.9	14.4	8.9	10.5	18.1	15.2	21.2	23.7
EPS (excl EOI)	21.2	15.9	14.4	6.6	11.6	18.1	15.2	21.2	23.7
Cash EPS	20.6	16.7	15.3	9.9	11.6	19.0	16.4	22.4	24.9
Book Value	197.2	228.2	217.5	179.6	185.7	196.6	200.1	206.4	213.6
DPS	13.6	17.4	14.1	5.8	7.1	13.5	12.0	14.8	16.6
Payout %	69.4	109.3	97.9	64.6	67.9	74.4	78.8	70.0	70.0
Valuation (x)									
P/E	21.9	27.0	29.9	48.1	41.0	23.7	28.2	20.3	18.1
Cash P/E	20.8	25.7	28.1	43.5	37.2	22.6	26.3	19.2	17.3
Price/Book Value	2.2	1.9	2.0	2.4	2.3	2.2	2.1	2.1	2.0
Dividend Yield (%)	3.2	4.0	3.3	1.3	1.7	3.1	2.8	3.5	3.9
Profitability Ratios (%)									
RoE	10.0	7.0	6.6	5.0	5.7	9.2	7.6	10.3	11.1
RoCE	12.3	8.2	6.5	3.3	5.4	10.7	10.2	13.7	14.6

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.

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://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 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. 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

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

- 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
- 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 acted as a manager or co-manager of public offering of securities of the subject company in past 12 months

 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
- 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

7 11 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.