

Estimate change	↑
TP change	↑
Rating change	↔

**CMP: INR3,839      TP: INR4,400(15%)      Buy**

**Weak revenue led to a 5% PAT miss; cost broadly in line**

Bloomberg	MCX IN
Equity Shares (m)	51
M.Cap.(INRb)/(USD\$b)	195.8 / 2.4
52-Week Range (INR)	4073 / 1285
1, 6, 12 Rel. Per (%)	14/57/136
12M Avg Val (INR M)	2297
Free float (%)	100.0

**Financials & Valuations (INR b)**

Y/E Mar	2024	2025E	2026E
Sales	6.8	9.2	11.0
EBIT Margin (%)	4.2	55.6	58.7
PAT	0.8	4.7	5.9
EPS (INR)	16.3	92.8	115.6
EPS Gr. (%)	-44.2	469.4	24.6
BV/Sh. (INR)	270.3	288.9	312.0

**Ratios**

RoE (%)	5.8	33.2	38.5
---------	-----	------	------

**Valuations**

P/E (x)	235.6	41.4	33.2
P/BV (x)	14.2	13.3	12.3
Div Yield (%)	0.0	0.9	0.9

**Shareholding pattern (%)**

As On	Mar-24	Dec-23	Mar-23
DII	56.9	53.0	52.7
FII	23.4	26.8	27.1
Others	19.7	20.2	20.2

FII Includes depository receipts

- MCX reported PAT of INR878m, 5% lower than our estimates of INR923m. Total revenue came in at INR1.8b, up 35% YoY (~13.4% miss). The miss was due to lower non-transaction revenues and lower-than-expected premium to notional turnover in the options segment.
- Overall volumes improved significantly, rising by 97% YoY to INR83t. Futures volumes came in at INR11.1t, down 15% YoY and 16% QoQ. Option volumes jumped 148% YoY and 18% QoQ to INR71.6t.
- For FY24, revenue increased 33% YoY to INR 6.8b and PAT declined 44% YoY to INR831m.
- We have raised our FY25 and FY26 EPS estimates to factor in a stronger volume trajectory and anticipated new product launches. We reiterate our BUY rating with a one-year TP of INR4,400 (premised on 38x FY26E EPS).

**Energy and bullion drive overall volume growth**

- Volumes in the Energy segment jumped 121% YoY, fueled by a 127% YoY surge in crude oil volumes in 4QFY24.
- Bullion volumes rose 56% YoY, driven by 69%/42% YoY rise in gold/silver volumes.
- Overall base metal volumes dropped 53% YoY, due to a 60% YoY decline in each Aluminum/Copper volumes in 4QFY24.
- Futures volumes came in at INR11t, down 15% YoY/16% QoQ. Options volumes surged 148% YoY/18% QoQ to INR71.6t.
- Overall volumes improved 97% YoY to INR83t. Total revenue for 4QFY24 grew 35% YoY to INR1.81b (~13.4% miss), mainly led by non-transaction revenues.
- Staff costs increased 31% YoY to INR307m (in line). Software expenses stood at INR233m, down 73% YoY (in line) and 84% QoQ.
- Other income declined 9% YoY but grew 3% QoQ to INR183m (broadly in line with our expectations).

**Key takeaways from the management commentary**

- The launch of new products is still work in progress. MCX has approval for 10g gold futures monthly contracts. Currently, 10g gold monthly contract is in the testing phase.
- The run rate of total operating technology cost (including AMC cost to TCS) and depreciation shall be in range of INR600m. Going forward, costs will no longer be linked to volumes, resulting in relatively stable costs going forward.
- When volatility is higher, maximum trades happen in long-dated contracts, which carry lower premium realization, leading to a decline in the premium-to-notional turnover ratio.

**Valuation and view – Maintain BUY**

We expect MCX to deliver a CAGR of 27%/231%/166% in revenue/EBITDA/PAT over FY24-26, led by a 53% CAGR in options volumes. We highlight several near- to medium-term drivers of volume growth: 1) new product launches – futures & options (short-duration contracts); 2) continued volatility in key commodity prices (gold, crude oil & natural gas) amid global uncertainties; and 3) a rise in retail participation in the options market. Additionally, the company has launched direct market access for Category II FPIs, which would drive volumes in the medium term. We expect no impact from competition on MCX's volumes, as similar products are currently available on other exchanges. With the technology overhang behind MCX and near-term potential drivers in place, we see meaningful re-rating potential. We maintain our BUY rating with a TP of INR4,400 (based on 38x FY26E EPS).

**Quarterly Performance**

	FY23				FY24				FY24	Est. 4QFY24	Var. (%/bp)
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			
<b>Sales</b>	<b>1,088</b>	<b>1,274</b>	<b>1,436</b>	<b>1,338</b>	<b>1,458</b>	<b>1,651</b>	<b>1,915</b>	<b>1,811</b>	6,835	2,091	(13.4)
Yo-Y Gr. (%)	24.2	53.1	60.3	25.6	34.0	29.6	33.4	35.4	33.1	56.3	
Staff Costs	227	229	229	234	253	274	290	307	1,123	305	0.7
Other expenses	368	389	879	1,083	1,098	1,664	1,822	484	5,069	616	(21.4)
<b>EBITDA</b>	<b>493</b>	<b>656</b>	<b>327</b>	<b>21</b>	<b>107</b>	<b>-287</b>	<b>-197</b>	<b>1,020</b>	<b>643</b>	<b>1,170</b>	<b>(12.8)</b>
Depreciation	58	58	43	58	43	66	113	138	359	161	(14.7)
<b>EBIT</b>	<b>435</b>	<b>598</b>	<b>285</b>	<b>-37</b>	<b>64</b>	<b>-353</b>	<b>-310</b>	<b>882</b>	<b>283</b>	<b>1,009</b>	<b>(12.6)</b>
Margins (%)	40.0	47.0	19.8	-2.8	4.4	-21.4	-16.2	48.7	4.1	48.2	
Interest Costs	1	0	1	1	1	1	1	1	3	0	
Other Income	93	182	201	201	204	189	177	183	754	188	(2.5)
<b>PBT bef. Exceptional items</b>	<b>527</b>	<b>781</b>	<b>485</b>	<b>163</b>	<b>267</b>	<b>-164</b>	<b>-133</b>	<b>1,065</b>	<b>1,035</b>	<b>1,196</b>	<b>(11)</b>
Tax	106	135	90	86	58	16	-91	205	189	273	(24.9)
Rate (%)	20.1	17.2	18.5	52.6	21.6	-9.9	68.3	19.3	18.2	22.8	
Profit from associate	-6	-5	-7	-23	-13	-10	-11	19	-15	0.0	
<b>PAT</b>	<b>415</b>	<b>641</b>	<b>388</b>	<b>55</b>	<b>197</b>	<b>-191</b>	<b>-54</b>	<b>878</b>	<b>831</b>	<b>923</b>	<b>(5)</b>
Y-o-Y Gr. (%)	4	96	13	-85	-53	-130	-114	1,512	-44	1,594	
<b>EPS (INR)</b>	<b>8.2</b>	<b>12.6</b>	<b>7.6</b>	<b>1.1</b>	<b>3.9</b>	<b>-3.7</b>	<b>-1.1</b>	<b>17.3</b>	<b>16.3</b>	<b>18.1</b>	<b>(5)</b>
<b>Total volumes (INR t)</b>	<b>28.7</b>	<b>35.9</b>	<b>40.7</b>	<b>42.0</b>	<b>51.8</b>	<b>67.0</b>	<b>73.6</b>	<b>82.7</b>	<b>275.0</b>	<b>88.0</b>	<b>(6.1)</b>
Q-o-Q Gr. (%)	9.8	25.4	13.4	3.0	23.4	29.3	9.9	12.4		19.6	
Y-o-Y Gr. (%)	49.6	71.2	89.0	60.7	80.7	86.3	80.6	97.1	86.7	109.8	

## Key takeaways from the management commentary

### Business

- Total income for FY24 stood at INR6,840m, of which ~INR5,600m was transactional income (INR2,080 from options and INR3,510m from futures) and ~INR840m was interest income on margin.
- For the quarter, transaction income from options stood at INR1,030m and treasury income from clearing corporation came in at INR210m.
- In 4Q, the revenue decline was attributed to a drop in futures turnover (futures revenue down INR50m). Treasury income earned on margin declined by INR50m during the quarter.
- When volatility is higher, maximum trades happen in long-dated contracts, which carry lower premium realization, leading to a decline in the premium-to-notional turnover ratio.
- The run rate of total operating technology cost (including AMC cost to TCS) and depreciation will be in the range of INR600m. During the quarter, INR103.8m was paid to CME as part of software support and licensing fees.
- The proposal for inter-operability in terms of collateral transfer between exchanges was made to the regulator and this is still under process.
- Total traded UCC during the quarter stood at 0.53m.

### New launches

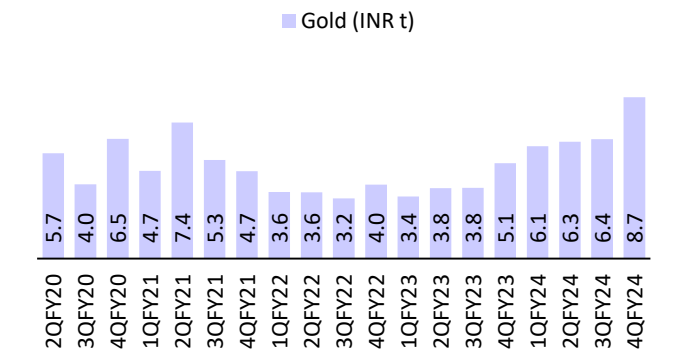
- The launch of new products is still work in progress. MCX has not made application for monthly contracts expiring each week as they need to have a system ready before making the application.
- MCX has approval for 10g gold futures monthly contracts. Currently, 10g gold monthly contract is in the testing phase.
- No exchange has received approval for electricity contracts (application made by MCX two years back)
- From 23rd Apr'24, mini crude and natural gas option contracts got traded on MCX.
- Index options on commodities were permitted by the regulator; however, MCX now needs to file an application to SEBI for the launch of these options (from application to launch - time line ~5-8 months).

**Exhibit 1: Volume performance**

	1QFY23	2QFY23	3QFY23	4QFY23	1QFY24	2QFY24	3QFY24	4QFY24
Volumes (INR b)								
Agro Commodities	118	42	41	11	16	15	10	15
Base Metals	2,131	2,643	2,639	2,067	1,400	1,343	1,119	963
Bullion	7,013	7,863	8,892	9,752	12,477	12,624	13,630	15,253
Energy	19,322	25,334	29,121	30,086	37,856	52,965	58,802	66,434
Index	72	62	54	39	35	21	14	10
<b>Total</b>	<b>28,655</b>	<b>35,944</b>	<b>40,748</b>	<b>41,954</b>	<b>51,783</b>	<b>66,967</b>	<b>73,575</b>	<b>82,675</b>
Mix (%)								
Agro Commodities	0	0	0	0	0	0	0	0
Base Metals	7	7	6	5	3	2	2	1
Bullion	24	22	22	23	24	19	19	18
Energy	67	70	71	72	73	79	80	80
<b>Index</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Yoy Growth (%)								
Agro Commodities	(69)	-85	(86)	-94	(86)	-65	-76	43
Base Metals	(52)	-29	(26)	-39	(34)	-49	-58	-53
Bullion	(13)	15	33	31	78	61	53	56
Energy	220	155	170	102	96	109	102	121
Index	(65)	-69	(78)	-81	(51)	-66	-74	-75
<b>Total</b>	<b>50</b>	<b>71</b>	<b>89</b>	<b>61</b>	<b>81</b>	<b>86</b>	<b>81</b>	<b>97</b>
QoQ Growth (%)								
Agro Commodities	(36)	-65	(1)	-74	52	-9	-33	54
Base Metals	(37)	24	(0)	-22	(32)	-4	-17	-14
Bullion	(5)	12	13	10	28	1	8	12
Energy	29	31	15	3	26	40	11	13
Index	(64)	-14	(12)	-29	(9)	-40	-33	-32
<b>Total</b>	<b>10</b>	<b>25</b>	<b>13</b>	<b>3</b>	<b>23</b>	<b>29</b>	<b>10</b>	<b>12</b>
FUTCOM	16,078	15,484	15,476	12,986	13,313	11,987	13,087	11,052
FUTIDX	72	62	54	39	35	21	14	10
OPTFUT	12,505	20,398	25,218	28,930	38,435	54,959	60,473	71,613
<b>Total</b>	<b>28,655</b>	<b>35,944</b>	<b>40,748</b>	<b>41,954</b>	<b>51,783</b>	<b>66,967</b>	<b>73,575</b>	<b>82,675</b>
Mix (%)								
FUTCOM	56	43	38	31	26	18	18	13
FUTIDX	0	0	0	0	0	0	0	0
<b>OPTFUT</b>	<b>44</b>	<b>57</b>	<b>62</b>	<b>69</b>	<b>74</b>	<b>82</b>	<b>82</b>	<b>87</b>
YoY Growth (%)								
FUTCOM	(9)	-8	(1)	-21	(17)	-23	-15	-15
FUTIDX	(65)	-69	(78)	-81	(51)	-66	-74	-75
OPTFUT	929	413	351	205	207	169	140	148
<b>Total</b>	<b>50</b>	<b>71</b>	<b>89</b>	<b>61</b>	<b>81</b>	<b>86</b>	<b>81</b>	<b>97</b>
QoQ Growth (%)								
FUTCOM	(2)	-4	(0)	-16	3	-10	9	-16
FUTIDX	(64)	-14	(12)	-29	(9)	-40	-33	-32
OPTFUT	32	63	24	15	33	43	10	18
<b>Total</b>	<b>10</b>	<b>25</b>	<b>13</b>	<b>3</b>	<b>23</b>	<b>29</b>	<b>10</b>	<b>12</b>

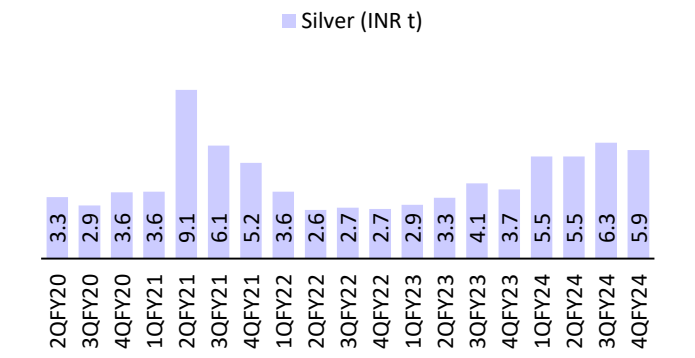
Source: Company, MOFSL

**Exhibit 2: Gold volumes improved (INR t)**



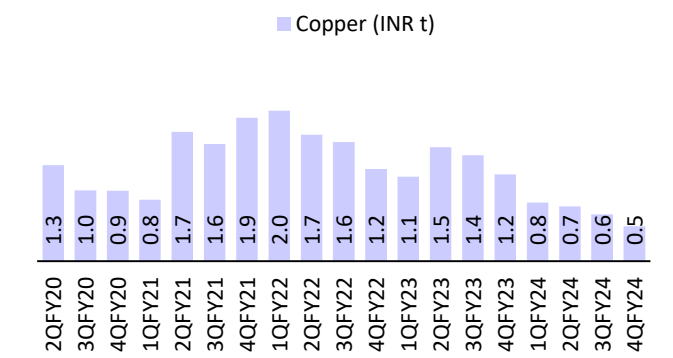
Source: Company, MOFSL

**Exhibit 3: Silver volumes increase (INR t)**



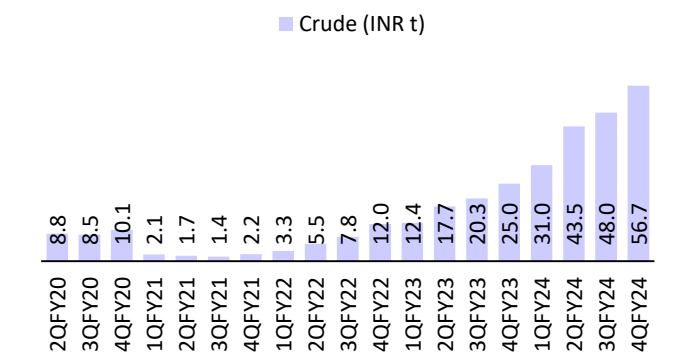
Source: Company, MOFSL

**Exhibit 4: Copper volumes declined (INR t)**



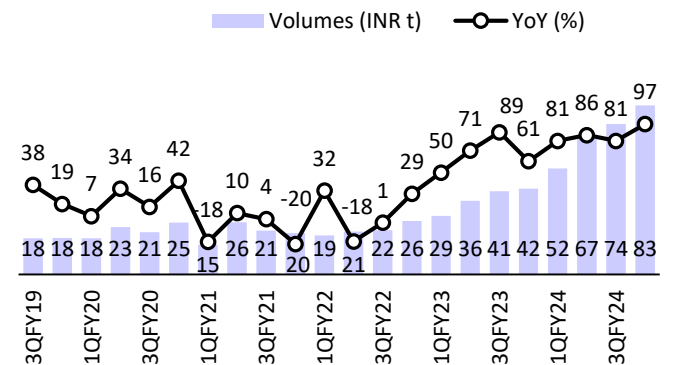
Source: Company, MOFSL

**Exhibit 5: Crude oil volumes strong (INR t)**



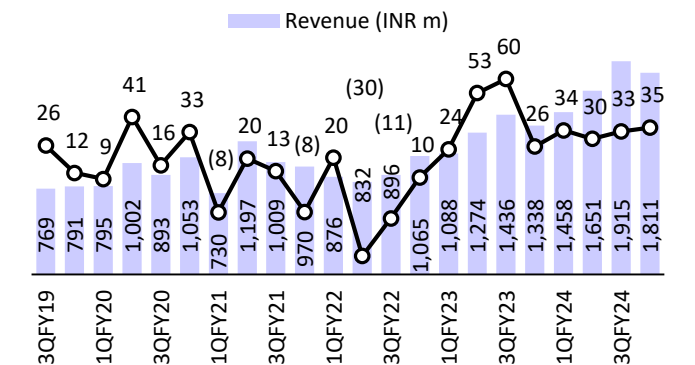
Source: Company, MOFSL

**Exhibit 6: Volumes sustained led by the options segment...**



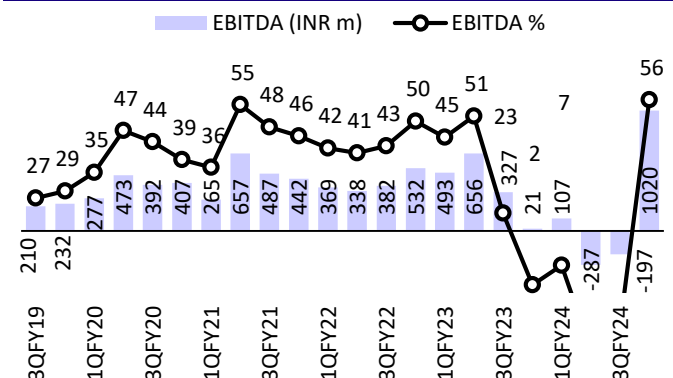
Source: MOFSL, Company

**Exhibit 7: ...translating into revenue growth of 34% YoY**



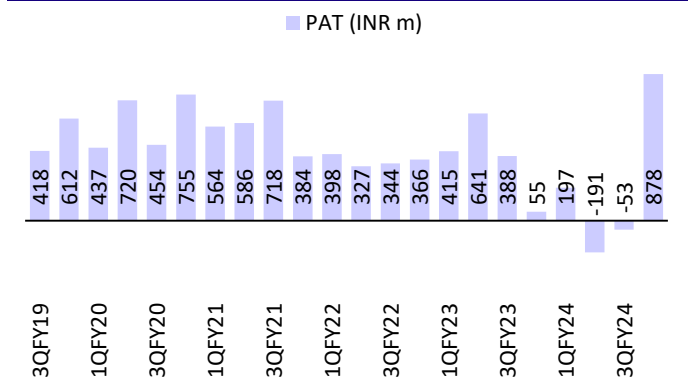
Source: MOFSL, Company

**Exhibit 8: Loss at EBIDTA level due to payment to 63moons**



Source: MOFSL, Company

**Exhibit 9: Trend in PAT (INR m)**



Source: MOFSL, Company

## Financials and valuations

Income statement							(INR m)
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E
<b>Sales</b>	<b>3,742</b>	<b>3,906</b>	<b>3,668</b>	<b>5,135</b>	<b>6,836</b>	<b>9,161</b>	<b>11,008</b>
Change (%)	25	4	(6)	40	33	34	20
Cost of Services	1,463	1,388	1,440	2,880	5,052	2,274	2,566
SG&A Expenses	730	667	607	759	1,140	1,229	1,384
Provisions							
<b>EBITDA</b>	<b>1,549</b>	<b>1,851</b>	<b>1,621</b>	<b>1,497</b>	<b>643</b>	<b>5,657</b>	<b>7,058</b>
% of Net Sales	41	47	44	29	9	62	64
Depreciation	182	221	227	216	359	560	595
<b>EBIT</b>	<b>1,367.1</b>	<b>1,630.7</b>	<b>1,394.5</b>	<b>1,281.0</b>	<b>284</b>	<b>5,097</b>	<b>6,463</b>
Interest	2	2	3	2	3	3	3
Other Income	1,289	1,038	665	677	754	821	911
EO Item (net)	-	-	204	-	-	-	-
<b>PBT</b>	<b>2,654</b>	<b>2,667</b>	<b>1,853</b>	<b>1,956</b>	<b>1,035</b>	<b>5,915</b>	<b>7,371</b>
Tax	389	415	406	416	189	1,183	1,474
Rate (%)	15	16	22	21	18	20	20
PAT before MI	2,266	2,251	1,447	1,540	846	4,732	5,897
Minority Interest	(99)	(1)	12	50	15	-	-
<b>PAT</b>	<b>2,365</b>	<b>2,252</b>	<b>1,435</b>	<b>1,490</b>	<b>831</b>	<b>4,732</b>	<b>5,897</b>
Extraordinary							
<b>Net Income</b>	<b>2,365</b>	<b>2,252</b>	<b>1,435</b>	<b>1,490</b>	<b>831</b>	<b>4,732</b>	<b>5,897</b>
Change (%)	62	(5)	(36)	4	(44)	469	25

Balance Sheet							(INR m)
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E
Share Capital	510	510	510	510	510	510	510
Reserves	13,084	13,672	13,671	14,283	13,275	14,221	15,401
<b>Net Worth</b>	<b>13,594</b>	<b>14,182</b>	<b>14,181</b>	<b>14,793</b>	<b>13,785</b>	<b>14,731</b>	<b>15,911</b>
SGF	4,098	4,692	5,256	5,898	7,806	7,806	7,806
Loan & other long term liab.	546	576	658	561	656	668	679
<b>Capital Employed</b>	<b>18,237</b>	<b>19,451</b>	<b>20,095</b>	<b>21,252</b>	<b>22,246</b>	<b>23,204</b>	<b>24,395</b>
<b>Net Block</b>	<b>1,820</b>	<b>1,857</b>	<b>2,513</b>	<b>3,172</b>	<b>3,938</b>	<b>4,309</b>	<b>4,759</b>
CWIP	5	12	434	519	79	79	79
Other LT Assets	149	185	3,018	2,543	11,561	11,833	12,119
Investments	10,508	11,885	4,440	8,441	6,025	6,146	6,269
<b>Curr. Assets</b>	<b>15,028</b>	<b>11,283</b>	<b>18,225</b>	<b>16,259</b>	<b>14,504</b>	<b>14,935</b>	<b>15,509</b>
Current Investments	6,618	5,985	7,135	2,024	3,114	4,114	5,114
Debtors	65	90	115	146	679	693	707
Cash & Bank Balance	7,593	4,261	9,755	11,779	9,656	9,053	8,591
Loans & Advances	2	1	222	1,328	543	554	565
Other Current Assets	751	948	998	983	511	522	532
<b>Current Liab. &amp; Prov</b>	<b>9,109</b>	<b>5,575</b>	<b>7,911</b>	<b>8,976</b>	<b>11,842</b>	<b>12,079</b>	<b>12,320</b>
<b>Net Current Assets</b>	<b>5,919</b>	<b>5,709</b>	<b>10,314</b>	<b>7,283</b>	<b>2,662</b>	<b>2,856</b>	<b>3,189</b>
<b>Application of Funds</b>	<b>18,401</b>	<b>19,647</b>	<b>20,719</b>	<b>21,958</b>	<b>24,266</b>	<b>25,224</b>	<b>26,415</b>

E: MOFSL Estimates

## Financials and valuations

<b>Ratios</b>							
<b>Y/E March</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>	<b>FY25E</b>	<b>FY26E</b>
<b>Basic (INR)</b>							
<b>EPS</b>	<b>46.4</b>	<b>44.2</b>	<b>28.1</b>	<b>29.2</b>	<b>16.3</b>	<b>92.8</b>	<b>115.6</b>
Cash EPS	50.4	49.2	33.6	34.3	24.6	106.0	129.6
Book Value	266.6	278.1	278.1	290.1	270.3	288.9	312.0
DPS	30.0	27.7	30.0	19.1	-	35.0	35.0
Payout %	83.0	77.1	129.6	63.2	-	80.0	80.0
<b>Valuation (x)</b>							
P/E	82.8	86.9	136.4	131.4	235.6	41.4	33.2
Cash P/E	76.1	78.1	114.4	111.8	155.9	36.2	29.6
Price/Book Value	14.4	13.8	13.8	13.2	14.2	13.3	12.3
Dividend Yield (%)	0.8	0.7	0.8	0.5	-	0.9	0.9
<b>Profitability Ratios (%)</b>							
RoE	18.1	16.2	10.1	10.3	5.8	33.2	38.5

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

## NOTES



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

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

#### Disclosures

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

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on [www.motilaloswal.com](http://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](http://www.nseindia.com), [www.bseindia.com](http://www.bseindia.com). Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

#### Regional Disclosures (outside India)

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

#### For Hong Kong:

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

#### For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

#### For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets (Singapore) Pte. Ltd. ("MOCMSPL") (UEN 201129401Z), which is a holder of a capital markets services license and an exempt financial adviser in Singapore. This report is distributed solely to persons who (a) qualify as "institutional investors" as defined in section 4A(1)(c) of the Securities and Futures Act of Singapore ("SFA") or (b) are considered "accredited investors" as defined in section 2(1) of the Financial Advisers Regulations of Singapore read with section 4A(1)(a) of the SFA. Accordingly, if a recipient is neither an "institutional investor" nor an "accredited investor", they must immediately discontinue any use of this Report and inform MOCMSPL.

In respect of any matter arising from or in connection with the research you could contact the following representatives of MOCMSPL. In case of grievances for any of the services rendered by MOCMSPL write to [grievances@motilaloswal.com](mailto:grievances@motilaloswal.com).

Nainesh Rajani

Email: [nainesh.rajani@motilaloswal.com](mailto:nainesh.rajani@motilaloswal.com)

Contact: (+65) 8328 0276

#### Specific Disclosures

- 1 MOFSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- 2 MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOFSL has not received any compensation or other benefits from third party in connection with the research report
- 10 MOFSL has not engaged in market making activity for the subject company

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)

- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

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

#### Analyst Certification

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

#### Terms & Conditions:

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

#### Disclaimer:

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

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); CD SL 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 dp@grievances@motilaloswal.com.