

BSE SENSEX  
82,989

S&P CNX  
25,384

**CMP: INR5,593 TP: INR6,500 (+16%)**

**BUY**



**Stock Info**

	MCX IN
Bloomberg	51
Equity Shares (m)	51
M.Cap.(INRb)/(USD\$b)	285.2 / 3.4
52-Week Range (INR)	5719 / 1701
1, 6, 12 Rel. Per (%)	17/56/189
12M Avg Val (INR M)	3107
Free float (%)	100.0

**Financials Snapshot (INR b)**

Year End	2025E	2026E	2027E
Sales	10.2	12.9	15.5
EBIT margin (%)	55.5	61.0	63.9
PAT	5.2	7.0	8.7
EPS (INR)	102.2	137.7	170.9
EPS Gr. (%)	527.2	34.7	24.1
BV/Sh. (INR)	290.7	318.3	352.5

**Ratio**

RoE (%)	36.4	45.2	50.9
---------	------	------	------

**Valuations**

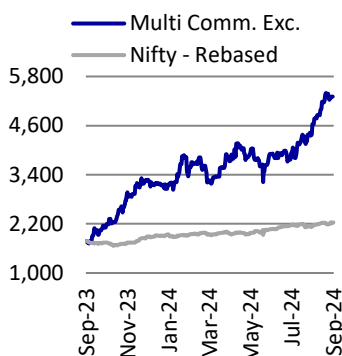
P/E (x)	54.7	40.6	32.7
P/BV (x)	19.2	17.6	15.9
Div Yld (%)	0.6	0.6	0.6

**Shareholding pattern (%)**

As On	Dec-23	Sep-23	Dec-22
Promoter	0.0	0.0	0.0
DII	53.0	56.4	52.8
FII	26.8	25.5	26.0
Others	20.2	19.9	21.2

FII Includes depository receipts

**Stock performance (one-year)**



**New products to be key growth drivers**

- MCX plans to grow volumes by launching new products, such as serial contracts, index options, 10g monthly gold futures, cotton seed wash oil, crude sunflower oil contracts and many more in the pipeline. After future volumes on these products exceed the volume threshold of INR10b, MCX will launch options contracts.
- For MCX, retail participation has increased to ~0.9m participants. Retail participation can strengthen further with new product launches, a change in the transaction rate structure (under true-to-label charges regulation) to make it favorable to traders, strong technology-based offerings from discount brokers, and lower ticket-size contracts from MCX.
- FPIs are showing good traction. MCX currently has around 100 FPIs actively trading on its platform, of which around 90 belong to the CAT I category and 10 to CAT II. With the launch of its direct market access (DMA) facility, along with regulatory support and rising participation, MCX expects strong volume growth.
- Regulatory measures, such as true-to-label charges and the pass-on of interest earned on clearing corporation, will not have much impact on the company's profitability. True-to-label charges have to be implemented and all exchanges have to charge flat fee from 1st Oct'24.
- With all the aforementioned factors and high volatility in the energy basket, we expect ADTV in the options segment to increase to INR1.5t in FY25 from INR940b in FY24 (4QFY24 ADTV was INR1.2t). Our sensitivity analysis yields a ~9% rise in EPS for every 10% rise in ADTV in the options segment or a 10% rise in the options segment's realizations.
- From 1st Oct'24, MCX will start paying the AMC to TCS, which will be fixed in nature, causing no volatility like the previous quarters. This will lead to a marked improvement in profitability. MCX has not charged any penalty to TCS so far. With the completion of this transition, the management's will now focus on scaling up the business.
- We expect MCX to deliver a CAGR of 31%/ 154%/119% in revenue/EBITDA/PAT over FY24-27E, fueled by a 56% CAGR in options ADTV. We reiterate our BUY rating on the stock with a TP of INR6,500 (premised on 42x Sept'26E EPS).

**New products and variations to existing ones to drive volumes**

- MCX is preparing to introduce weekly contracts, which are currently undergoing extensive back-testing prior to the submission to SEBI for approval. This rigorous testing process is essential to ensure the new product operates on the new system without any technical issues.
- It is also looking forward to launch 10g monthly gold contract, which was delayed as it was under the testing phase. It is quite similar to the existing 8g monthly gold contract, which MCX does not plan to discontinue. Both the contracts will run simultaneously. The 10g gold contract will be launched in the future segment first and then in the options segment after it meets the INR10b volume threshold.
- Products like crude sunflower and cotton-seed wash oil futures will take at least 5-6 years to mature and contribute good volumes.

Research Analyst: Prayesh Jain (Prayesh.Jain@MotilalOswal.com)

Research Analyst: Nitin Aggarwal (Nitin.Aggarwal@MotilalOswal.com) / Muskan Chopra (Muskan.Chopra@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](http://www.motilaloswal.com/Institutional-Equities), Bloomberg, Thomson Reuters, Factset and S&P Capital.

- Currently, MCX will focus more on launching the products that are similar to the existing products.
- The mini base-metal contract, which was launched recently, is trading at the same level as the main contract and contributing ~10% of the main contract.
- For the index options contract, it is still in the testing phase and MCX will focus more on other existing product launches in the near term. But this would be a huge contributor as MCX would be the first exchange in the world to launch such a product. Accordingly, demand for such products would boost volumes.

### Impact of SEBI regulations

- As per the exchanges circular, the true-to-label charges regulation will have to be implemented from Oct'24. Under this regulation, the current slab-wise structure of transaction charges has to be moved to a flat fee model. MCX will announce new charges before the implementation date and after taking approval from the board of directors and the regulator.
- As per the circular, the charges have to be in sync with the current net realizations of the exchanges; hence, we do not estimate any hit on revenues. Nevertheless, with only few traders getting benefits of lower realizations, volumes could increase.
- SEBI recently released a consultation paper wherein it has recommended the pass-on of interest income earned on funds for clearing and settlement to end customers. The implementation will be challenging given that identifying the true color of money will be a herculean task at every client level.
- Even if it is implemented, the impact on MCX will not be material. In FY24, the exchange earned INR400m of interest income on clearing and settlement funds. Furthermore, as per our understanding of the consultation paper, only income earned on idle funds would be required to be passed on to customers.
- Faster approvals for new products and variants of existing products can reduce the lead time for MCX.

### MCX volumes remain strong in Aug'24; both futures and options

- Overall ADTO increased 10.3% MoM to INR2.2t in Aug'24, aided by a 10.4% increase in options ADTO.
- The volumes have started to pick up notably in futures ADTO (up 9.6% MoM in Aug'24 to INR272b) after two consecutive months, mainly driven by 16.3%/32% MoM increase in Silver ADTO/Natural Gas ADTO.
- Options ADTO grew 10.4% MoM in Aug'24 to INR1.9t, led by 10.5%/20.7%/268% MoM increase in Crude Oil ADTO/Natural Gas ADTO/Silver ADTO.
- Over FY24-27E, we expect a CAGR of 50% in overall ADTO, 15% in futures ADTO and 56% in options ADTO.

### Good traction in FPI participation

- During the year, MCX has started the process of offering DMA to foreign portfolio investors (FPIs) registered with the market regulator to trade in cash-settled contracts.
- They are currently allowed to trade in only two commodities, Crude Oil and Natural Gas. When the list is expanded, the contribution from FPIs will improve (currently contributes around 1% of the overall trading volume).

- It has been only a few months since FPIs have actively started trading on the MCX platform and there is healthy traction from this segment. MCX expects more and more participation going ahead.
- MCX currently has around 100 FPIs actively trading on the platform, of which around 90 belong to the CAT I category and 10 to CAT II.
- The key target audience for FPIs would be high-frequency traders and FPIs with exposure to commodities in Indian currency.

#### Software transition: Fixed costs to kick in from Oct'24

- Over the past couple of years, MCX has been embroiled in transitioning its core operating software from 63Moons to TCS. This transition impeded the launch of new products and demanded extensive management attention. Additionally, due to the necessity of extending the contract with 63moons thrice, MCX's costs escalated significantly.
- In Oct'23, the company successfully completed its transition and the software has been operating smoothly. This is evidenced by the significant increase in volumes to pre-transition levels.
- At the current volumes, we expect the costs (AMC + depreciation) to be lower than the normal run rate in the pre-transition phase. While there will be no AMC costs until 2QFY25, a fixed AMC cost will kick in from 3QFY25 with no linkages to volumes.
- Back-testing the new products on the new software is key to a glitch-free implementation. So far, new product launches have not seen any major issues.

#### Premium to notional turnover improving

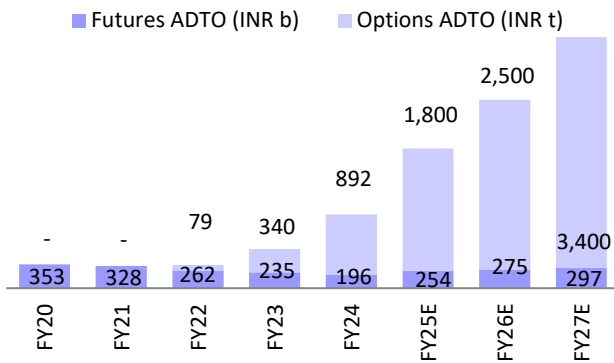
- The premium turnover to notional turnover ratio declined from 2.05% in 3QFY24 to 1.44% in Jul'24. However, it recovered to 1.77% in Aug'24, led by a surge in volumes in gold, silver and natural gas.
- In our assumption, we previously built 1.55% for FY25 and 1.47% for FY26. We now increase the ratio to 1.65%/1.6% for FY25/FY26, resulting in an increase in our EPS estimates by 6%/8%.

#### Valuation and view – Maintain BUY

- We expect MCX to deliver a CAGR of 31%/154%/119% in revenue/EBITDA/PAT over FY24-27E, led by a 56% CAGR in options volumes. We highlight several near- to medium-term drivers of volume growth: 1) new product launches - index options, 10g monthly gold futures, cotton seed wash oil, crude sunflower oil contracts and many more in pipeline; 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. 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 reiterate our BUY rating on the stock with a TP of INR6,500 (premised on 42x Sept'26E EPS).**

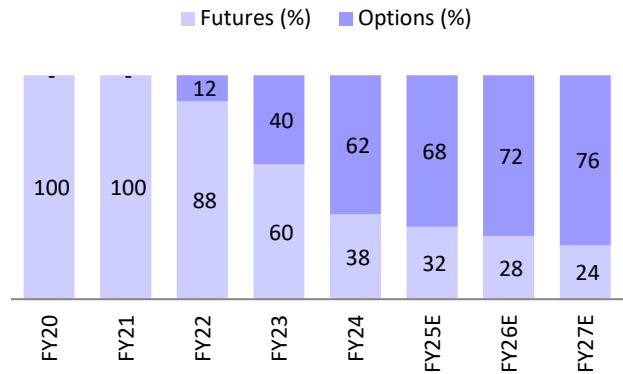
## Key exhibits

**Exhibit 1: Options volume will continue to increase**



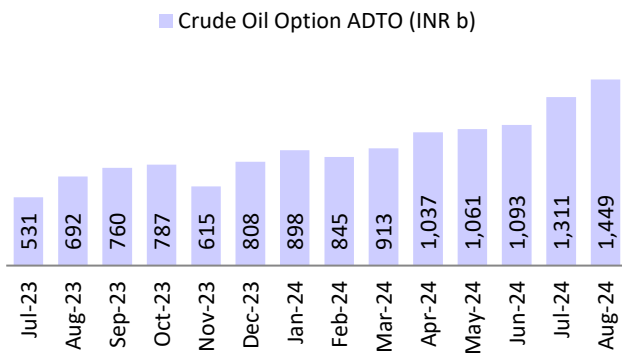
Source: MOFSL, Company

**Exhibit 2: Options volumes % on an upward trend**



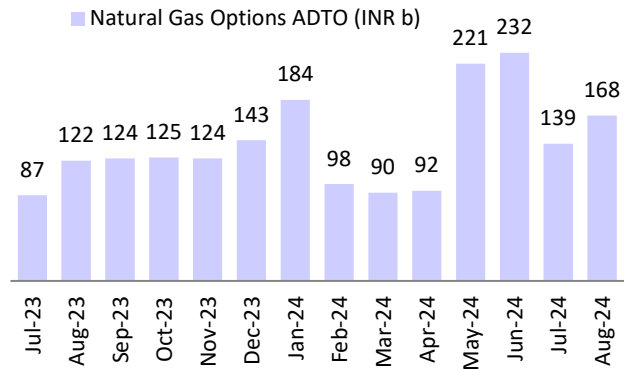
Source: MOFSL, Company

**Exhibit 3: Crude oil forms the highest share as % of option volumes**



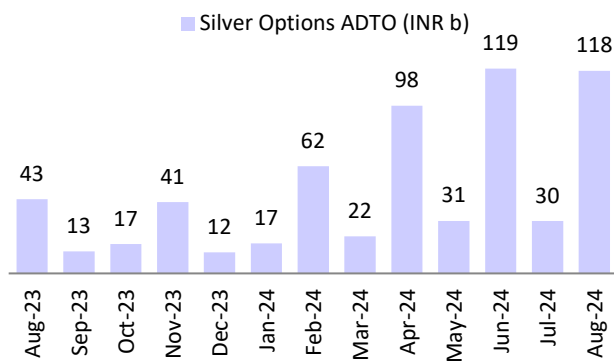
Source: MOFSL, Company

**Exhibit 4: Natural Gas ADTO Trend**



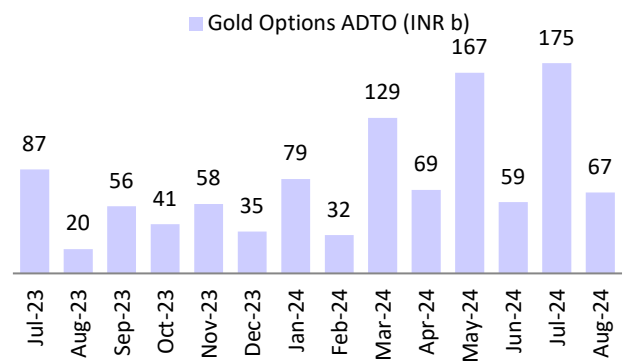
Source: MOFSL, Company

**Exhibit 5: Silver ADTO pickup in Aug'24**



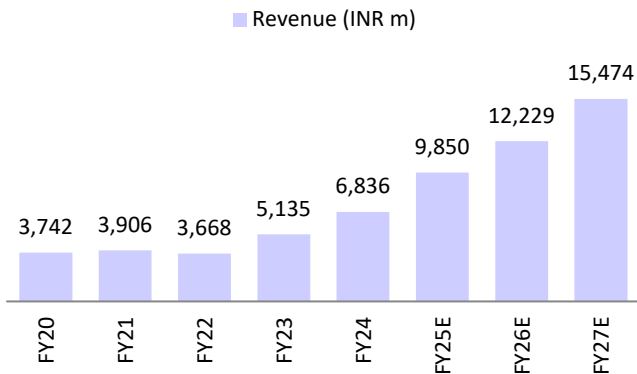
Source: MOFSL, Company

**Exhibit 6: Gold ADTO Trend**



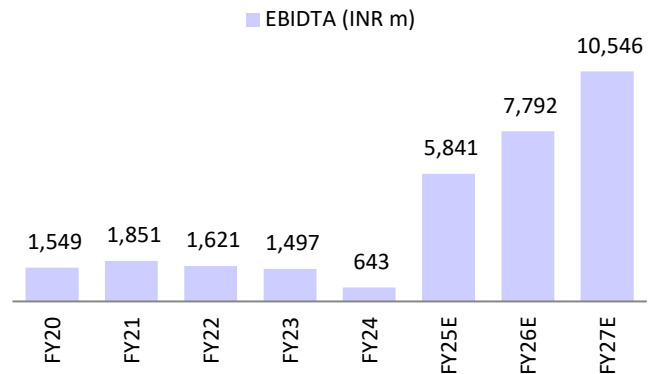
Source: MOFSL, Company

**Exhibit 7: Overall revenue is expected to post 31% CAGR over FY24-27E**



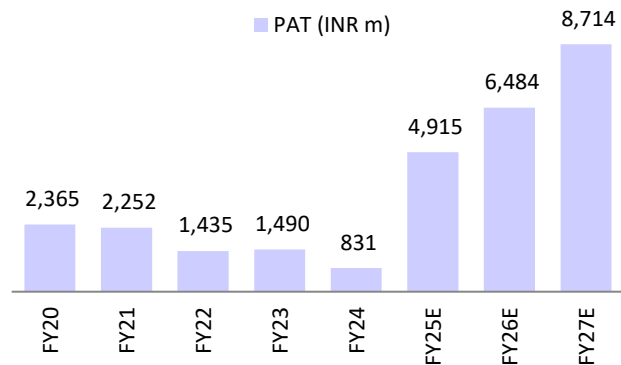
Source: MOFSL, Company

**Exhibit 8: EBITDA to increase in the coming years**



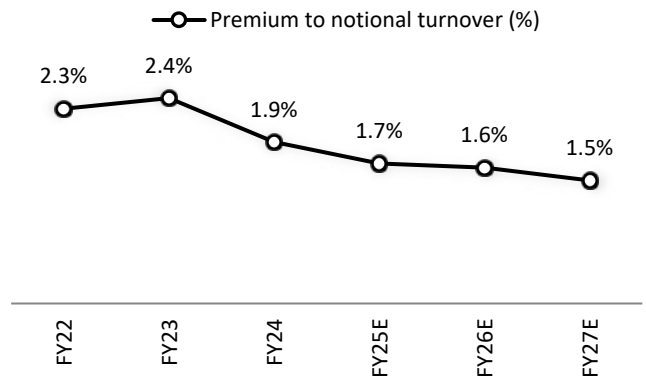
Source: MOFSL, Company

**Exhibit 9: Overall profitability to improve**



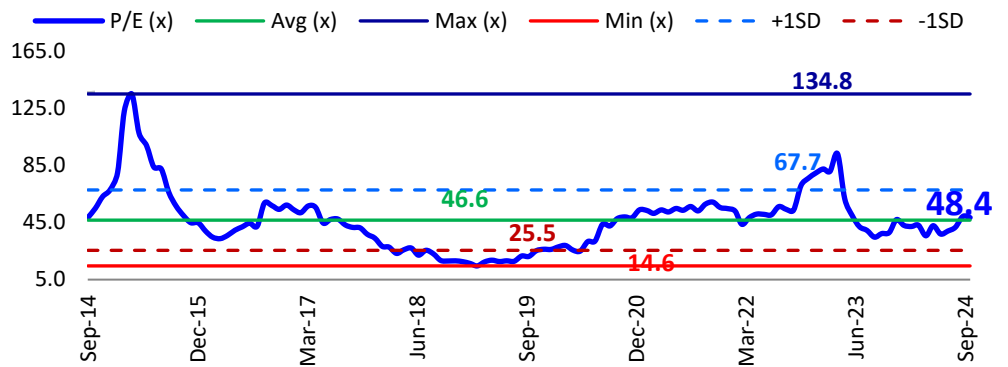
Source: MOFSL, Company

**Exhibit 10: Premium to Notional Turnover (%)**



Source: MOFSL, Company

**Exhibit 11: One-year forward P/E chart**



Source: MOFSL, Company

## Financials and valuations

Income statement						(INR m)		
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
<b>Sales</b>	<b>3,742</b>	<b>3,906</b>	<b>3,668</b>	<b>5,135</b>	<b>6,836</b>	<b>10,222</b>	<b>12,901</b>	<b>15,474</b>
Change (%)	25	4	(6)	40	33	50	26	20
Cost of Services	1,463	1,388	1,440	2,880	5,052	2,179	2,353	2,541
SG&A Expenses	730	667	607	759	1,140	1,830	2,084	2,387
Provisions								
<b>EBITDA</b>	<b>1,549</b>	<b>1,851</b>	<b>1,621</b>	<b>1,497</b>	<b>643</b>	<b>6,213</b>	<b>8,464</b>	<b>10,546</b>
% of Net Sales	41	47	44	29	9	61	65.61	68.15
Depreciation	182	221	227	216	359	539	595	651
<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>5,674</b>	<b>7,869</b>	<b>9,895</b>
Interest	2	2	3	2	3	3	3	3
Other Income	1,289	1,038	665	677	754	821	911	1,001
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>6,492</b>	<b>8,777</b>	<b>10,892</b>
Tax	389	415	406	416	189	1,298	1,755	2,178
Rate (%)	15	16	22	21	18	20	20	20
PAT before MI	2,266	2,251	1,447	1,540	846	5,194	7,022	8,714
Minority Interest	(99)	(1)	12	50	15	(19)	-	-
<b>PAT</b>	<b>2,365</b>	<b>2,252</b>	<b>1,435</b>	<b>1,490</b>	<b>831</b>	<b>5,213</b>	<b>7,022</b>	<b>8,714</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>5,213</b>	<b>7,022</b>	<b>8,714</b>
Change (%)	62	(5)	(36)	4	(44)	527	35	24

Balance Sheet						(INR m)		
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
Share Capital	510	510	510	510	510	510	510	510
Reserves	13,084	13,672	13,671	14,283	13,275	14,317	15,722	17,464
<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>14,827</b>	<b>16,232</b>	<b>17,974</b>
SGF	4,098	4,692	5,256	5,898	7,806	7,806	7,806	7,806
Loan & other long term liab.	546	576	658	561	656	668	679	691
<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>23,300</b>	<b>24,717</b>	<b>26,471</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>	<b>5,209</b>
CWIP	5	12	434	519	79	79	79	79
Other LT Assets	149	185	3,018	2,543	11,561	11,833	12,119	12,419
Investments	10,508	11,885	4,440	8,441	6,025	6,146	6,269	6,394
<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>15,031</b>	<b>15,830</b>	<b>16,955</b>
Current Investments	6,618	5,985	7,135	2,024	3,114	4,114	5,114	6,114
Debtors	65	90	115	146	679	693	707	721
Cash & Bank Balance	7,593	4,261	9,755	11,779	9,656	9,149	8,913	9,002
Loans & Advances	2	1	222	1,328	543	554	565	576
Other Current Assets	751	948	998	983	511	522	532	543
<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>12,567</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>2,953</b>	<b>3,510</b>	<b>4,389</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>25,320</b>	<b>26,736</b>	<b>28,491</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>FY27E</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>102.2</b>	<b>137.7</b>	<b>170.9</b>	
Cash EPS	50.4	49.2	33.6	34.3	24.6	114.9	151.7	186.2	
Book Value	266.6	278.1	278.1	290.1	270.3	290.7	318.3	352.5	
DPS	30.0	27.7	30.0	19.1	-	35.0	35.0	35.0	
Payout %	83.0	77.1	129.6	63.2	-	80.0	80.0	80.0	
<b>Valuation (x)</b>									
P/E	114.7	120.4	189.0	182.1	326.4	52.0	38.6	31.1	
Cash P/E	105.4	108.2	158.5	154.9	216.0	46.3	35.1	28.6	
Price/Book Value	20.0	19.1	19.1	18.3	19.7	18.3	16.7	15.1	
Dividend Yield (%)	0.6	0.5	0.6	0.4	-	0.7	0.7	0.7	
<b>Profitability Ratios (%)</b>									
RoE	18.1	16.2	10.1	10.3	5.8	36.4	45.2	50.9	

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); 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 dp grievances@motilaloswal.com.