

Multi Commodity Exchange of India Ltd.

October 04, 2021





Multi Commodity Exchange of India Ltd.

Industry	LTP	Recommendation	Base Case Fair Value	Bull Case Fair Value	Time Horizon
NBFC-HFC	Rs.1672	Buy at LTP of Rs.1672 & add more on dips of Rs.1504	Rs.1825	Rs.1953	2 quarters

HDFC Scrip Code	MCXLTDEQNR
BSE Code	534091
NSE Code	MCX
Bloomberg	MCX
CMP Oct 01, 2021	1672
Equity Capital (Rs mn)	510
Face Value (Rs)	10
Equity Share O/S (mn)	51
Market Cap (Rs bn)	85.27
Book Value (Rs)	278.6
Avg. 52 Wk Volumes	690527
52 Week High	1875.0
52 Week Low	1,434.8

Share holding Pattern % (Jun, 2021)	
Promoters	-
Institutions	75.96
Non Institutions	24.04
Total	100.0



HDFCsec Retail research
stock rating meter

for details about the ratings, refer at the end of the report

* Refer at the end for explanation on Risk Ratings

Fundamental Research Analyst

Nisha Sankhala

Nishaben.shankhala@hdfcsec.com

Our Take:

MCX has a near monopoly in commodity exchange business with ~92.6% market share as on Q1FY22. The exchange has been facing headwinds since past few years due to Covid-19 lockdown, crude impact, subdued trend in Gold prices and SEBI's new margin rules. However we feel that worst in terms of volume growth is over and things could start improving in near term. We believe volumes would recover with increase in algo trading, pick-up in crude volume (reduction in margin) and implementation of cross margin benefits. The company has recently launched a few new products. Permission to DIIs to participate in commodity markets was one of the significant measures. Approval of Index derivatives will aid the growth of Institutional participation which in turn could bring large volumes on the exchange. Recent traction in option volumes is noteworthy; the company will start charging for options contracts effective Oct-21. The shift to the new trading platform will result in cost savings, leading to a ~260bps margin tailwind in FY23E.

We had issued Initiating Report on MCX on 14th September, 2020 and recommended Buy at LTP and add on dips to Rs.1375-1385 band, for base case target of Rs.1729 and bull case target of Rs.1839 over the next two quarters. The bull case target of Rs.1839 was achieved on the same day itself, yielding return of 18.3%.

Link for the Initiating Coverage:

<https://www.hdfcsec.com/hsl.research.pdf/MCX%20-%20Initiating%20Coverage%20-%2014092020.pdf>

Valuation & Recommendation:

We expect MCX to post 25.7% EBITDA CAGR, driven by revenue CAGR of 14% over FY21-23E. Net profit is envisaged to grow by 16.3% CAGR over same time frame. EBITDA margin is estimated to reach to 57.6% in FY23E vs 47.4% in FY21. We expect volume decline trend to be over and it will start to recover from here on aided by higher volatility in Gold and Crude oil prices. Considering the asset-light nature of the business, we expect RoE to recover to 20.3% in FY23E vs 16.2% in FY21. Considering the way the exchange and depository stocks have gone rated recently (as platform companies) and the rise in unofficial rates for NSE stock, we think MCX is likely to get rerated soon given its free cash flow, balance sheet-light business with a 90% dividend payout. A high quality monopoly exchange with high structural growth and cyclical resilience deserve higher multiples. MCX currently trades at 38.3x FY22E and 28x FY23E EPS. Detailed SOTP calculation is shown in below table.



Multi Commodity Exchange of India Ltd.

We believe that investors can buy MCX at LTP of Rs. 1672(31.5xCore EPS + Cash) and add more at Rs.1504 (27.5xCore EPS + Cash) for the base case fair value of Rs.1825 (35xCore EPS + Cash) and for the bull case fair value of Rs.1953 (38xCore EPS + Cash) over the next two quarters.

Financial Summary

Particulars (Rs mn)	Q1 FY22	Q1 FY21	YoY (%)	Q4 FY21	QoQ (%)	FY20	FY21	FY22E	FY23E
Net Revenues	876	730	20.0	970	(9.7)	3,978	3,906	4,025	5,074
EBITDA	369	265	38.9	443	(16.7)	1,784	1,852	1,857	2,924
APAT	398	564	(29.5)	384	3.5	2,365	2,252	2,217	3,044
Diluted EPS (Rs)	7.8	11.1	(29.5)	7.6	3.5	46.5	44.3	43.6	59.8
P/E (x)						36.0	37.7	38.3	28.0
EV / EBITDA (x)						41.0	39.1	38.5	24.2
RoE (%)						18.1	16.2	15.4	20.3

(Source: Company, HDFC sec)

Recent Developments

Q1FY22 Result Update

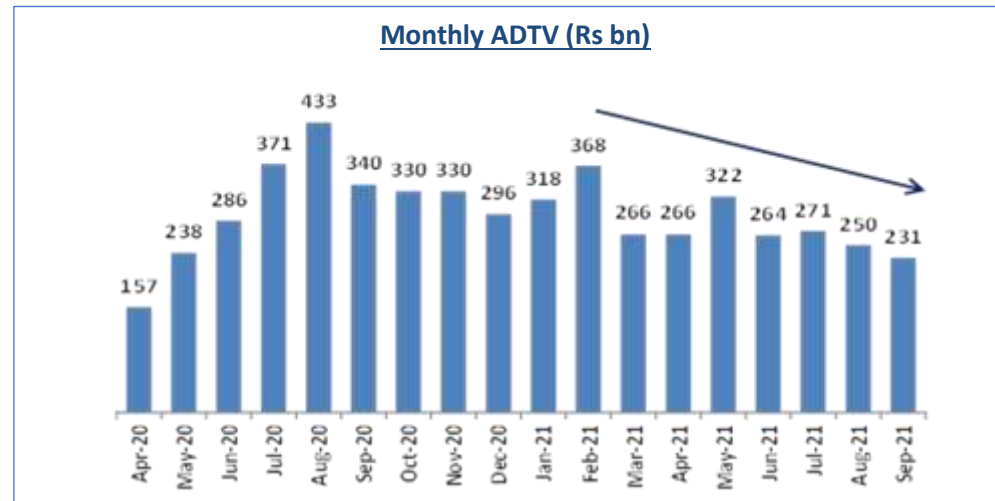
Revenue for the quarter came at Rs. 876 mn, up 20% YoY and down 10% QoQ. EBITDA margin stood at 42.1%, down 358bps QoQ, on account of lower revenue and higher employee expenses. EBITDA increased by 39% to Rs.369 mn for Q1FY22 from Rs.265 mn over the corresponding quarter of FY21, while net profit at Rs. 398 mn declined by 30% YoY. The company has planned to use Rs.120 mn MAT credit of FY21 in FY22 and it should converge to normal tax rates from FY23E onwards.

The total traded value was at Rs.17.73tn (-10.6/+25.7% QoQ/YoY) and ADTV stood at Rs.277bn (-12.0/+19.8% QoQ/YoY). Bullion/energy/metals/agri ADTV was down 22.1/2.2/2.4/2.9% QoQ respectively. ADTV declined sequentially for the third consecutive quarter due to an increase in upfront margin requirements. Active UCC was up 16/79% QoQ/YoY, indicating higher retail participation. New Unique Client Codes (UCCs), have more than doubled in the last 5 quarters. Volume from algo channel was at around 40-45% of total trades. Option volumes have been gaining traction since past couple of quarters. The company has also launched silver mini options contracts.

Post Q1 also the volumes have kept on declining. Compared to Q1FY22 ADTV of Rs.277bn, Aug-21 ADTV came in at Rs250bn and that in Sep-21 ADTV has been around Rs231bn. The volumes of key commodities have trended lower. However, option volume has shown



resilience led by crude oil, which has contributed ~70% to total options volume in FY22 so far. Note that September is the fourth and the last stage of the new SEBI margining rules being implemented.



New Product launches

As and when derivative trading on electricity is permitted, MCX would have the opportunity to launch electricity derivative contracts, subject to regulatory approvals, and serve the stakeholders in the Indian electricity industry. Towards this objective, MCX entered into a licensing agreement with Indian Energy Exchange (IEX) to use their spot prices as the underlying for the MCX electricity derivatives, when they are traded after receiving requisite approvals.

During FY21, MCX introduced products in new categories such as Options in Goods and Commodity Indices. The company is looking forward to launch more products in these new categories, subject to market demand and feedback. In FY21, MCX and Mjunction Services Ltd agreed to enter into a Memorandum of Understanding with the objective of jointly exploring business opportunities and capitalizing on the synergies of the two companies by setting up a joint venture for running a coal exchange. Further, management has also informed that they are looking forward to regulatory reforms that can lead to opening of new opportunities, such as ETFs in many more commodities and their derivatives, apart from the currently-permitted ETFs in gold futures.

SEBI has recently approved framework for Gold spot exchange. MCX could be one of the first exchanges to take advantage of this development.

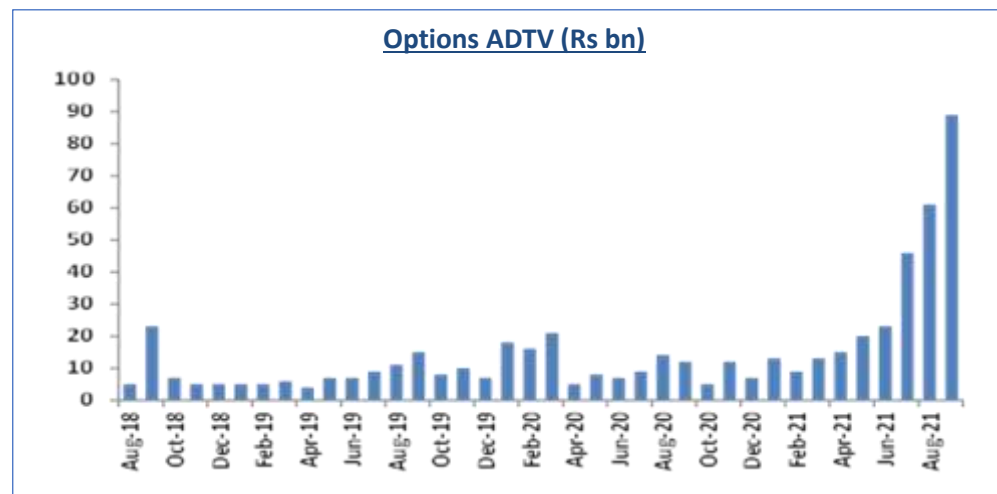


Shift to the new trading platform

MCX is developing new software with TCS, for which the first drop has been delivered. The second and third drops should be delivered subsequently. Management expects to go live with the platform from September 2023. Annual maintenance charges (AMC) would be small component and the total cost of software will be amortized over six years. The shift to the new trading platform could result in cost savings, leading to a ~260bps margin tailwind in FY23E. Currently, technology costs are at 14-15% of transaction revenues.

The company will start charging for options contracts effective Oct-21

In 2017, the company has launched options contracts on commodities futures. Recently these have gained popularity and the volume has started to improved (accounting for >30% of the futures turnover). Among these, all crude-oil contracts have received more traction as the margin requirement on crude oil future contracts is one of the highest. Now the company has decided to start charging Rs.50 per Rs.1 lakh (up to Rs.50 mn and if it exceeds beyond that it will be Rs.40) of the premium value from 1st October 2021. This will add new earning avenue but at the current level this is insignificant.



Implementation of cross margin rules for index futures

SEBI's has given approval for cross margin benefit on index futures versus the underlying commodities futures. Cross margining allows market participants to reduce the total margin payment required if they are taking two mutually offsetting positions. The move helps market participants transfer excess margin from one account to another. This will also reduce the cost of trading and boost liquidity in such products. This over the long run could benefit the exchanges such like MCX as it could bring higher volumes.



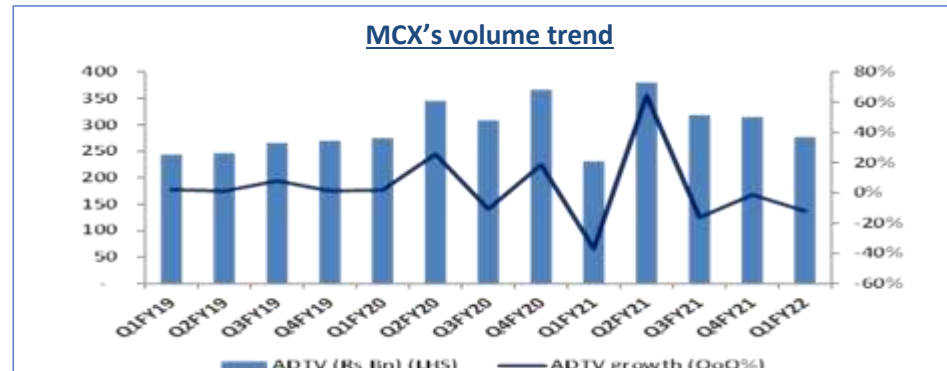
Index derivatives could aid growth of Institution participation

Permission to domestic financial institutions to participate in commodity markets was one of the significant measures as the entry of institutional participants can boost depth and volumes, spur retail participation and ease the access of small stakeholders, including the hedgers, to the hedging and investment platform of commodity exchanges. The initial participation of institutional investors has remained low but the potential is huge. Globally Institutions account for ~50% of the total commodity derivatives volume.

The Exchange had received permission from SEBI and has launched futures on indices like iComdex Bullion (for precious metals like Gold and Silver) and iComdex Base Metals (five metals – copper, aluminum, lead, nickel and zinc). Recently, approval for launch of iCOMDEX Energy Index (ENRGDEX) was also received. This will aid the growth of Institutional participation which in turn could bring large volume on the exchange.

Worst impact of new margin rules is behind us

The exchange has been observing headwinds since past few years. Covid-19 lockdown and crude oil volatility impact had affected H1FY21 resulted and after that the SEBI's new margin rules has created additional pressure on volume growth. To ensure smooth transit, implementation was done in four phases (with rising margin requirements). A significant drop in volumes is seen in Sep-21, as the fourth and the last stage of the new rules is being implemented. Q1FY22 was the third consecutive quarter of declining ADTV sequentially. However, as time passes we believe that the impact will start fading off and aided by lower base we could see a decent growth in volumes. Recent high volatility in metal and energy products and expected volatility in Gold and Crude oil could drive volume growth. The management has also indicated that the volume impact due to regulatory changes was only ~3% in phase-3 vs. ~20% in phases 1 and 2. Probable reduction in crude oil trading margin and Mutual funds launching schemes including commodities are some other triggers for MCX.





Risks & Concerns

- Any adverse change in regulations could hurt the business in major way.
- High competition from other exchanges, especially after permitting of trading of commodity derivatives on NSE/BSE.
- Cybersecurity threat is becoming more and more critical with technological advancements. Measures to tackle competition and changes in latest technology are important in this business. MCX is also developing new software with TCS.
- The possibility of third wave and fresh lock downs could hurt the business as volumes are closely linked with economic conditions both the domestic and the global.
- As the Exchange's transaction fee is calculated on the basis of the value of commodity futures contracts traded on the Exchange, the volume and value of contracts traded on it have a direct impact on MCX's revenues. Falling prices of base metals and bullion could impact its revenues adversely.
- This business has inherent risk of volatility. Market volatility (especially downward) has high correlation with volumes growth. So any prolonged period of negative returns from commodities market can hurt company's revenues hard.
- MCX may have to take an Rs18.8 cr write-off of the investment in a spot trading system following non-fulfilment of conditions.

Company Background:

Having commenced operations on November 10, 2003, Multi Commodity Exchange of India Limited (MCX) is India's first listed, national-level, electronic exchange. It is also the first exchange to introduce commodity options in India. The market share of MCX stood at 92% in commodity futures segment. MCX offers the benefits of fair price discovery and price risk management to the Indian commodity market ecosystem. Various commodities across segments are traded on the Exchange platform. These include bullion, energy, metals and agri commodities. The exchange has forged strategic alliances with various international exchanges, as well as Indian and international trade associations.

The Company has a national reach with 620 members, having 48,427 Authorised Persons, operating through 42.5 lakh terminals connected through various available modes of connectivity (including Computer to Computer Link (CTCL), Internet Based Trading and Wireless Trading) across 1,000 cities/towns across India. Unique Client Code (UCC) is 69.86 lakh.

Peer comparisons

Company	MCap	CMP (Rs)	P/E (x)			Dividend Yield (%)			RoE (%)		
	(Rs bn)		FY21	FY22E	FY23E	FY21	FY22E	FY23E	FY21	FY22E	FY23E
MCX	85.3	1672	37.7	38.3	28.0	2.0	2.0	2.7	16.2	15.4	20.3
BSE	54.83	1218	31.3	21.8	18.1	1.7	2.9	3.7	7	9.8	11.5
CDSL	134.8	1290	69	48	40	0.8	0.7	0.9	22.8	27.8	27.9



Multi Commodity Exchange of India Ltd.

SOTP Valuations:

	Base Case	Bull Case
Core PAT FY23E (Rs mn)	2,177	2,177
Core P/E Multiple (x)	35	38
Core Mcap (Rs mn)	76,206	82,738
Add: Net Cash (Rsmn) ex SGF	16,646	16,646
Target Mcap (Rs mn)	92,852	99,384
Target Price (Rs)	1,825	1,953

Quarterly trend analysis:

MCX ADTV (Rs bn)	Q1FY19	Q2FY19	Q3FY19	Q4FY19	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21	Q3FY21	Q4FY21	Q1FY22
Bullion	55.2	54.7	59.0	66.8	74.1	131.6	101.7	141.2	131.9	243.8	168.8	154.5	120.3
Energy	79.8	79.8	113.5	108.5	120.1	144.0	153.2	170.3	58.1	65.5	78.9	83.4	81.6
Metals	104.6	108.3	89.7	90.3	75.7	67.0	50.4	49.7	39.0	68.0	66.6	70.9	69.2
Agri & others	4.0	3.8	3.9	4.1	4.7	2.7	3.2	5.0	2.3	3.0	4.3	6.2	6.0
ADTV	243.6	246.5	266.1	269.8	274.7	345.3	308.5	366.3	231.3	380.3	318.7	314.9	277.1

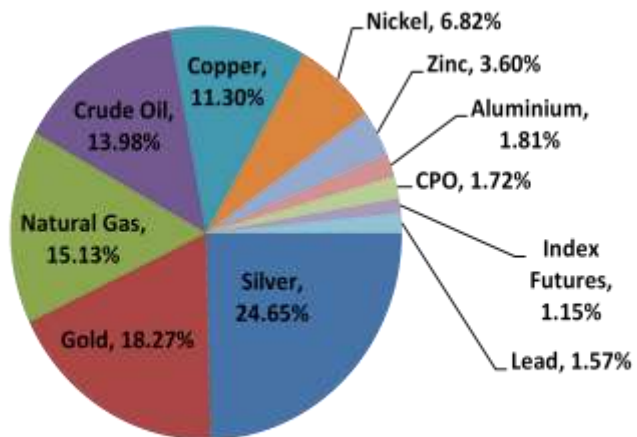
MCX Futures Volume (Rs bn)	Q1FY19	Q2FY19	Q3FY19	Q4FY19	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21	Q3FY21	Q4FY21	Q1FY22
Bullion	3,587	3,498	3,775	4,278	4,671	8,551	6,611	9,322	8,048	16,093	10,972	9,730	7,700
Energy	5,188	5,107	7,266	6,946	7,569	9,358	9,960	11,243	3,542	4,323	5,130	5,256	5,223
Metals	6,801	6,932	5,740	5,782	4,771	4,355	3,277	3,279	2,378	4,487	4,332	4,467	4,427
Agri & others	257	242	251	262	297	177	206	329	141	199	280	389	383
Total Volume (Rs bn)	15,834	15,779	17,033	17,268	17,308	22,442	20,055	24,173	14,108	25,102	20,713	19,841	17,733

MCX QoQ %	Q1FY19	Q2FY19	Q3FY19	Q4FY19	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21	Q3FY21	Q4FY21	Q1FY22
Bullion	5.7%	-1.0%	7.9%	13.3%	10.9%	77.4%	-22.7%	38.9%	-6.6%	84.8%	-30.8%	-8.5%	-22.1%
Energy	-6.0%	0.0%	42.3%	-4.4%	10.7%	19.8%	6.4%	11.2%	-65.9%	12.8%	20.5%	5.7%	-2.2%
Metals	9.0%	3.5%	-17.2%	0.7%	-16.2%	-11.5%	-24.7%	-1.5%	-21.5%	74.4%	-2.0%	6.4%	-2.4%
Agri & others	-22.3%	-4.4%	3.8%	4.3%	15.3%	-42.2%	16.2%	57.0%	-53.4%	30.3%	42.5%	43.3%	-2.9%
ADTV	2.2%	1.2%	7.9%	1.4%	1.8%	25.7%	-10.6%	18.7%	-36.9%	64.4%	-16.2%	-1.2%	-12.0%

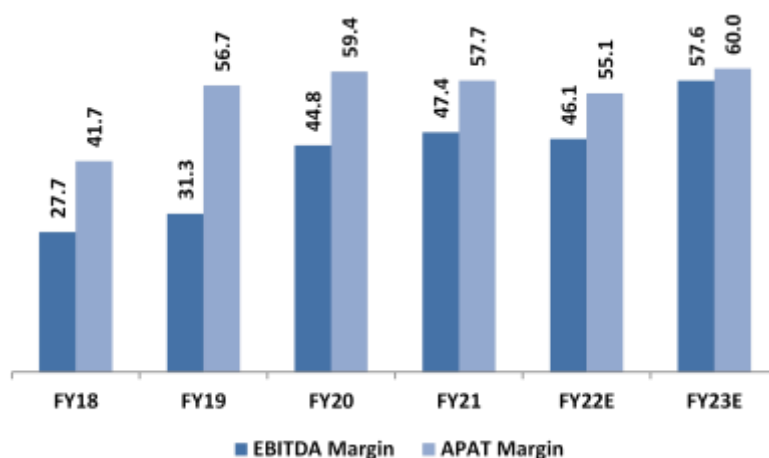


Multi Commodity Exchange of India Ltd.

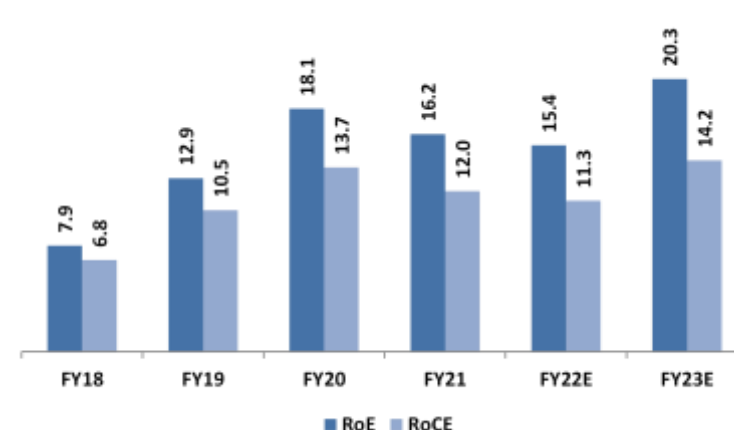
Mix Of Major Traded Commodities On MCX



Margin trend(%)

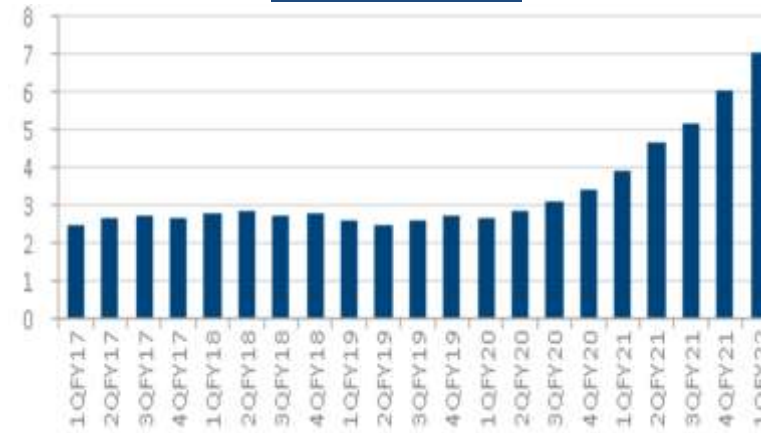


Return Ratios(%)



Commodity Segment	MCX Market Share in Indian Commodity Futures	Proportion of MCX's turnover
Precious Metals & Stones	99.99%	43.62%
Energy	100.00%	29.11%
Base Metals	100.00%	25.13%
Agri- Commodities	21.16%	2.14%

No of UCCs (in mn)





Multi Commodity Exchange of India Ltd.

Financials

Income Statement

(Rs mn)	FY19	FY20	FY21	FY22E	FY23E
Net Revenues	3,000	3,978	3,906	4,025	5,074
Growth (%)	15.5	32.6	(1.8)	3.1	26.1
Software support charges	614	689	636	646	515
Employee Expenses	725	773	751	813	879
Tech & SG&A Expenses	205	206	211	226	244
Other Operating Expenses	517	526	456	483	512
EBITDA	940	1,784	1,852	1,857	2,924
EBITDA Margin (%)	31.3	44.8	47.4	46.1	57.6
EBITDA Growth (%)	30.7	89.9	3.8	0.3	57.5
Depreciation	154	182	221	244	269
EBIT	785	1,602	1,632	1,613	2,655
Other Income (Including EO Items)	748	1,053	1,038	1,093	1,059
Interest	0	2	3	3	3
PBT	1,533	2,653	2,667	2,703	3,712
Tax (Incl Deferred)	75	289	415	487	668
Minority Interest & Associate profit	4.3	0.4	0.9	0.9	0.9
RPAT	1,462	2,365	2,252	2,217	3,044
EO (Loss) / Profit (Net Of Tax)	-238	0	0	0	0
APAT	1,700	2,365	2,252	2,217	3,044
APAT Growth (%)	56.9	39.1	(4.8)	(1.5)	37.3
Core PAT (ex other income)	747	1,428	1,377	1,322	2,177
Core PAT Growth (%)	83.7	91.2	(3.5)	(4.0)	64.6
Adjusted EPS (Rs)	33.41912	46.48	44.25	43.56734	59.8163

Balance Sheet

(Rs mn)	FY19	FY20	FY21	FY22E	FY23E
SOURCES OF FUNDS					
Share Capital	510	510	510	510	510
Reserves	11,999	13,084	13,672	14,133	14,798
Total Shareholders' Funds	12,509	13,594	14,182	14,643	15,308
Settlement guarantee fund	3,298	4,098	4,692	4,786	4,882
Net Deferred Taxes (Net)	14	18	22	22	22
Long Term Provisions & Others	401	528	554	554	554
TOTAL SOURCES OF FUNDS	16,221	18,237	19,451	20,005	20,766
APPLICATION OF FUNDS					
Net Block	1,580	1,583	1,594	1,591	1,627
CWIP	190	237	263	263	263
Investments	123	123	124	124	124
LT Loans & Advances	614	708	667	701	736
Total Non-current Assets	2,506	2,651	2,649	2,679	2,750
Debtors	60	65	90	66	83
Other Current Assets	945	753	948	772	973
Cash & Equivalents	17,243	23,878	21,339	22,238	24,141
Total Current Assets	18,248	24,695	22,377	23,076	25,198
Trading margin from members	3,518	7,599	4,175	4,141	5,330
Other Current Liabilities & Provns	1,016	1,510	1,400	1,610	1,851
Total Current Liabilities	4,533	9,109	5,575	5,750	7,182
Net Current Assets	13,715	15,586	16,802	17,326	18,016
TOTAL APPLICATION OF FUNDS	16,221	18,237	19,451	20,005	20,766

(Source: Company, HDFC sec)

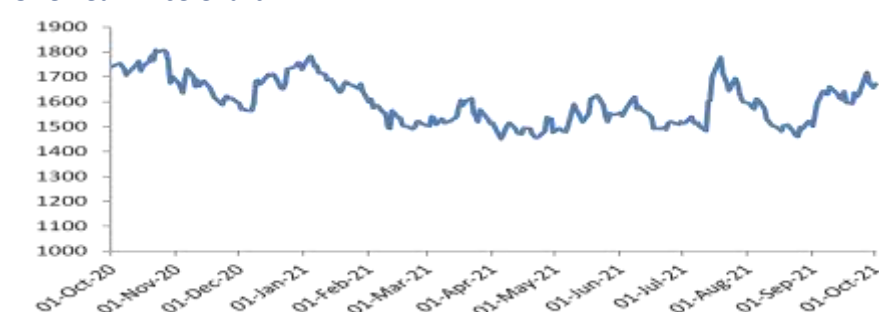


Multi Commodity Exchange of India Ltd.

Cash Flow Statement

(Rs mn)	FY19	FY20	FY21	FY22E	FY23E
Reported PBT	1533	2653	2667	2703	3712
Non-operating & EO items	-954	-1224	-981	-1093	-1059
Interest expenses	0	2	2	3	3
Depreciation	155	181	221	244	269
Working Capital Change	2153	3402	-3274	343	1179
Tax Paid	-295	-523	-479	-487	-668
OPERATING CASH FLOW (a)	2591	4492	-1844	1714	3435
Capex	-271	-277	-211	-241	-304
Free cash flow (FCF)	2320	4215	-2055	1472	3130
Investments	0	0	0	0	0
Non-operating Income	445	407	302	1093	1059
INVESTING CASH FLOW (b)	174	130	91	852	755
Debt Issuance/(Repaid)	0	0	0	0	0
Interest Expenses	0	0	0	-3	-3
FCFE	2320	4215	-2055	1469	3128
Share Capital Issuance	0	0	0	0	0
Dividend	-1045	-1230	-1530	-1663	-2283
FINANCING CASH FLOW (c)	-1045	-1230	-1530	-1666	-2286
NET CASH FLOW (a+b+c)	1719	3392	-3284	899	1904
EO Items, Others	-1258	3243	744	0	0
Closing Cash & Equivalents	17243	23878	21339	22238	24141

One Year Price Chart



Key Ratios

	FY19	FY20	FY21	FY22E	FY23E
PROFITABILITY (%)					
GPM	79.6	82.7	83.7	84	89.9
EBITDA Margin	31.3	44.8	47.4	46.1	57.6
APAT Margin	56.7	59.4	57.7	55.1	60
RoE	12.9	18.1	16.2	15.4	20.3
RoIC (or Core RoCE)	17.7	25.4	23.4	23.4	31.2
RoCE	10.5	13.7	12	11.3	14.2
EFFICIENCY					
Tax Rate (%)	4.9	10.9	15.6	18	18
Fixed Asset Turnover (x)	0.1	0.1	0.2	0.2	0.2
Debtors (days)	7	6	8	6	6
Other Current Assets (days)	115	69	89	70	70
Other Current Liab & Provns (days)	277	388	392	434	532
Cash Conversion Cycle (days)	-155	-313	-295	-358	-456
Net D/E (x)	-1	-1	-1	-1	-1
PER SHARE DATA (Rs)					
EPS	33.4	46.5	44.3	43.6	59.8
CEPS	36.5	50	48.6	48.4	65.1
Dividend	20	30	33.2	32.7	44.9
Book Value	245.9	267.2	278.6	287.7	300.8
VALUATION					
P/E (x)	50.1	36	37.7	38.3	28
P/BV (x)	6.8	6.3	6	5.8	5.6
EV/EBITDA (x)	79.4	41	39.1	38.5	24.2
Dividend Yield (%)	1.2	1.8	2	2	2.7



Multi Commodity Exchange of India Ltd.



HDFC Sec Retail Research Rating description

Green Rating stocks

This rating is given to stocks that represent large and established business having track record of decades and good reputation in the industry. They are industry leaders or have significant market share. They have multiple streams of cash flows and/or strong balance sheet to withstand downturn in economic cycle. These stocks offer moderate returns and at the same time are unlikely to suffer severe drawdown in their stock prices. These stocks can be kept as a part of long term portfolio holding, if so desired. This stocks offer low risk and lower reward and are suitable for beginners. They offer stability to the portfolio.

Yellow Rating stocks

This rating is given to stocks that have strong balance sheet and are from relatively stable industries which are likely to remain relevant for long time and unlikely to be affected much by economic or technological disruptions. These stocks have emerged stronger over time but are yet to reach the level of green rating stocks. They offer medium risk, medium return opportunities. Some of these have the potential to attain green rating over time.

Red Rating stocks

This rating is given to emerging companies which are riskier than their established peers. Their share price tends to be volatile though they offer high growth potential. They are susceptible to severe downturn in their industry or in overall economy. Management of these companies need to prove their mettle in handling cyclicity of their business. If they are successful in navigating challenges, the market rewards their shareholders with handsome gains; otherwise their stock prices can take a severe beating. Overall these stocks offer high risk high return opportunities.

Disclosure:

I, **Nisha Sankhala, (MBA)**, authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. HSL has no material adverse disciplinary history as on the date of publication of this report. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

Research Analyst or her relative or HDFC Securities Ltd. **does not have** any financial interest in the subject company. Also Research Analyst or his relative or HDFC Securities Ltd. or its Associate may have beneficial ownership of 1% or more in the subject company at the end of the month immediately preceding the date of publication of the Research Report. Further Research Analyst or her relative or HDFC Securities Ltd. or its associate **does not have** any material conflict of interest.

Any holding in stock – No

HDFC Securities Limited (HSL) is a SEBI Registered Research Analyst having registration no. INH000002475.

Disclaimer:

This report has been prepared by HDFC Securities Ltd and is meant for sole use by the recipient and not for circulation. The information and opinions contained herein have been compiled or arrived at, based upon information obtained in good faith from 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. This document is for information purposes only. Descriptions of any company or companies or their securities mentioned herein are not intended to be complete and this document is not, and should not be construed as an offer or solicitation of an offer, to buy or sell any securities or other financial instruments.

This report is not directed to, or intended for display, downloading, printing, reproducing or for distribution to or use by, any person or entity who is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, reproduction, availability or use would be contrary to law or regulation or what would subject HSL or its affiliates to any registration or licensing requirement within such jurisdiction.

If this report is inadvertently sent or has reached any person in such country, especially, United States of America, the same should be ignored and brought to the attention of the sender. This document may not be reproduced, distributed or published in whole or in part, directly or indirectly, for any purposes or in any manner.

Foreign currencies denominated securities, wherever mentioned, are subject to exchange rate fluctuations, which could have an adverse effect on their value or price, or the income derived from them. In addition, investors in securities such as ADRs, the values of which are influenced by foreign currencies effectively assume currency risk.

It should not be considered to be taken as an offer to sell or a solicitation to buy any security. HSL may from time to time solicit from, or perform broking, or other services for, any company mentioned in this mail and/or its attachments.

HSL and its affiliated company(ies), their directors and employees may; (a) from time to time, have a long or short position in, and buy or sell the securities of the company(ies) mentioned herein or (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.

HSL, its directors, analysts or employees do not take any responsibility, financial or otherwise, of the losses or the damages sustained due to the investments made or any action taken on basis of this report, including but not restricted to, fluctuation in the prices of shares and bonds, changes in the currency rates, diminution in the NAVs, reduction in the dividend or income, etc.

HSL and other group companies, its directors, associates, employees may have various positions in any of the stocks, securities and financial instruments dealt in the report, or may make sell or purchase or other deals in these securities from time to time or may deal in other securities of the companies / organizations described in this report.

HSL or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months.

HSL or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from t date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service in a merger or specific transaction in the normal course of business.

HSL or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither HSL nor Research Analysts have any material conflict of interest at the time of publication of this report. Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. HSL may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report.

Research entity has not been engaged in market making activity for the subject company. Research analyst has not served as an officer, director or employee of the subject company. We have not received any compensation/benefits from the subject company or third party in connection with the Research Report.

HDFC securities Limited, I Think Techno Campus, Building - B, "Alpha", Office Floor 8, Near Kanjurmarg Station, Opp. Crompton Greaves, Kanjurmarg (East), Mumbai 400 042 Phone: (022) 3075 3400 Fax: (022) 2496 5066

Compliance Officer: Binkle R. Oza Email: complianceofficer@hdfcsec.com Phone: (022) 3045 3600

HDFC Securities Limited, SEBI Reg. No.: NSE, BSE, MSEI, MCX: INZ000186937; AMFI Reg. No. ARN: 13549; PFRDA Reg. No. POP: 11092018; IRDA Corporate Agent License No.: CA0062; SEBI Research Analyst Reg. No.: INH000002475; SEBI Investment Adviser Reg. No.: INA000011538; CIN - U67120MH2000PLC152193

Mutual Funds Investments are subject to market risk. Please read the offer and scheme related documents carefully before investing.