

## Multi Commodity Exchange (MCX)

### A Gold(en) Opportunity

**Sustainable competitive position:** Multi Commodity Exchange of India Ltd. (MCX) is a leading commodities exchange, which received permanent recognition from Government of India on September 26, 2003. The company reported a market share of 87.3% as of December 2011. MCX is also the fifth largest commodity futures exchange globally in terms of the number of contracts. As of June 2011, MCX was the largest silver exchange, the second largest gold, copper and natural gas exchange and the third largest crude oil exchange for this period globally.

**Growth strategy in place:** MCX has introduced a variety of new commodity futures contracts; and since inception, the number of products offered by the company has grown from 15 to 49 as of December 31, 2011. MCX has 2,153 members nationwide with over 296,000 terminals, including CTCL spread over 1,572 cities and towns in India. The company intends to continue to increase the number of participants by introducing new products on its exchange by expanding to more geographical areas, which is expected to drive growth going ahead. Regulatory changes can also lend a fillip to MCX as currently option contracts are not allowed to be traded in commodity. Any changes in favor of MCX can lead to a major increase in revenue and profitability going ahead.

**Outlook and valuation:** MCX currently has zero debt on its book, and major capex to fuel growth has already been incurred by the company. Secondly, the company reported investment and cash worth ₹1,324cr at the end of 9MFY2012, which works out to ₹260/share. On an annualized basis, the stock will be trading at 15.1x and 18.1x at the lower and upper band on FY2012E earnings, respectively, which we believe is fair compared to global peers, which trade at 18x-19x TTM earnings; further, the recent off-market deals value MCX's Indian peers, NSE and BSE, at 22x-24x 9MFY2012 annualized earnings. We believe MCX being the only major commodity exchange in India and the world's fifth largest exchange can witness strong growth in revenue and profitability going ahead, which makes its valuation much more attractive than global peers. **Hence, we recommend Subscribe to the issue on account of its relatively fair valuations.**

#### Key financials

Y/E March (₹ cr)	FY2009	FY2010	FY2011	9MFY2012
<b>Net Sales</b>	<b>212</b>	<b>287</b>	<b>369</b>	<b>402</b>
% chg	-	35.3	28.4	9.1
<b>Net Profit</b>	<b>159</b>	<b>221</b>	<b>176</b>	<b>218</b>
% chg	-	39.0	(20.2)	23.6
<b>Adj. Net Profit</b>	<b>67</b>	<b>74</b>	<b>171</b>	<b>210</b>
% chg	-	9.0	132.0	22.9
EBITDA Margin (%)	36.0	49.3	52.0	64.8
<b>FDEPS (₹)</b>	<b>38.9</b>	<b>54.1</b>	<b>34.6</b>	<b>42.7</b>
P/E (x) Lower End	22.1	15.9	24.9	20.1
P/E (x) Upper End	26.5	19.1	29.9	24.1
RoE (%)	32.2	31.7	20.8	20.3

Source: Company, Angel Research Note: Net profit adjusted for sale of investments.

## SUBSCRIBE

Issue Open: February 22, 2012  
 Issue Close: February 24, 2012

#### Issue Details

Face Value: ₹10

Present Eq. Paid-up Capital: ₹51.0cr

Offer Size\*: 0.64cr Shares

Post Eq. Paid-up Capital: ₹51.0cr

Issue size (amount):\*\* ₹553-663cr

Price Band: ₹860-1,032

Post-issue implied mkt cap\*\*: ₹4,386cr-5,263cr

Promoters holding Pre-Issue: 31.2%

Promoters holding Post-Issue: 26.0%

Note:\* 250,000 reserved for employees;

\*\*At the lower and upper price band, respectively

#### Book Building

QIBs	Up to 50%
Non-Institutional	At least 15%
Retail	At least 35%

#### Post Issue Shareholding Pattern

Promoters Group	26.0
MF/Banks/Indian Fls/Fls/Public & Others	74.0

**Sharan lillaney**

022 – 39357800 Ext: 6811

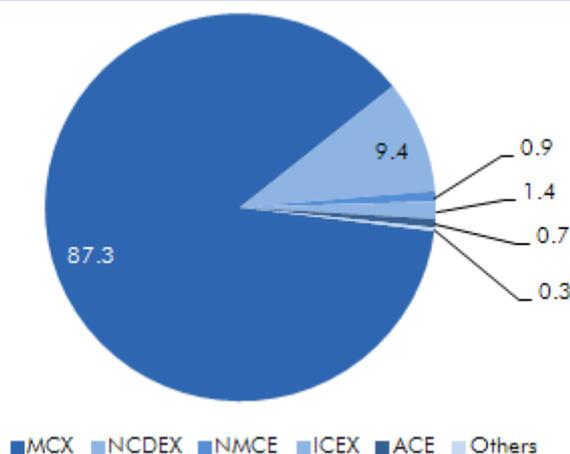
Sharanb.lillaney@angelbroking.com

## Company background

Multi Commodity Exchange of India Ltd. (MCX) is a leading commodities exchange in India based on value of commodity futures contracts traded. A de-mutualized exchange, MCX received permanent recognition from the Government of India on September 26, 2003, to facilitate nationwide online trading, clearing and settlement operations of commodities futures transactions.

The total value of commodity futures contracts traded on MCX in 9MFY2012 was ₹119,807bn. Further, MCX has reported a 45% CAGR in the past four years. According to data maintained by the FMC, these amounts represented 87.3% (9MFY2012), 82.4% (FY2011), 82.3% (FY2010) and 87.4% (FY2009) of the Indian commodity futures industry in terms of the value of commodity futures contracts traded. Currently, MCX offers trading in 49 commodity futures, including bullion, ferrous and non-ferrous metals, energy and agriculture. The same underlying physical asset traded under different contract specifications is regarded as a separate commodity future. As of December 31, 2011, MCX had 2,153 members, with over 296,000 terminals, including CTCL spread over 1,572 cities and towns across India. Silver, gold, crude oil and copper dominate the value with ~90% of total value traded.

### Exhibit 1: Highest market share amongst local peers



Source: Company, Angel Research

## Details of the issue

The IPO comprises an issue of 6.4mn equity shares of face value ₹10 each to the public, with a reservation of 0.25mn equity shares for subscription by eligible employees. The issue shall constitute 12.6% of the post-issue paid-up capital. MCX has fixed the issue price band at ₹860–1,032 per share, valuing the company at US\$877mn to US\$1,052mn (₹4,386cr to ₹5,263cr). The key shareholders who are tendering their shares are Financial Technologies, promoter of MCX, with 2.6mn shares, State Bank of India with 2.1mn shares, and GLG Financials Fund with 0.8mn shares. The remaining 0.9mn shares are being offered by Alexandra, Bank of Baroda, ICICI Lombard and Corporation Bank. MCX will not get any money from this IPO as it is an offer for sale.

## Investment arguments

### Market leader in the commodity futures industry

MCX is a leading commodity futures exchange in India in terms of value of commodity futures contracts traded in metals, energy and certain agricultural commodities. According to FMC, the total value of commodity futures contracts traded on MCX for the nine months ended December 31, 2011, FY2011 and FY2010 constituted 87.3%, 82.4% and 82.3%, respectively, of the Indian commodity futures industry during those periods. Among national commodities exchanges in India, MCX's market share based on the total value of commodities traded in futures markets for the nine months ended December 31, 2011, for gold, crude oil, silver, copper and natural gas futures contracts was approximately 97.1%, 94.8%, 98.5%, 94.9% and 99.9%, respectively. (Source: Information derived from FMC April – December 2011 data). MCX is the fifth largest commodity futures exchange globally, among all commodity exchanges considered in the FIA survey, in terms of the number of contracts traded and were among the leading commodity exchanges in the world in terms of trading volumes of certain commodities. Based on the comparison of the trading volumes of the exchange with leading global commodity futures exchanges in the world, for CY2010 and the six months ended June 30, 2011, MCX is the largest silver exchange, the second largest gold, copper and natural gas exchange and the third largest crude oil exchange for this period.

#### Exhibit 2: Top ranked contracts by volume in the world

Commodity futures contracts	World Rank
MCX Crude Oil Futures	6
MCX Silver Mini Futures	7
MCX Copper Futures	9
MCX Silver Futures	10
MCX Silver Micro Futures	11

Source: Company, Angel Research

#### Exhibit 3: 5<sup>th</sup> largest commodity exchange by volume

Rank	Particulars	1HCY2010	1HCY2011	Growth yoy
1	CME Group	299	353	18.1
2	Zhengzhou CX	227	218	(4.0)
3	ICE Group	134	159	18.4
4	Shanghai FE	300	129	(57.2)
5	MCX	90	128	41.5

Source: Company, Angel Research

## Growth strategy going ahead

### New products and services to drive growth

MCX has introduced a variety of new commodity futures contracts since inception. The number of products offered by MCX has grown from 15 as of March 31, 2004, to 49 as of December 31, 2011. The company is expected to continue to focus on offering futures trading in commodities, which are significant in the Indian and global contexts, and will continue to offer trading in commodities through contracts that will be customized to meet the needs of Indian markets, such as Gold Mini and Gold Petal contracts, which are aimed at local retail investors.

#### Exhibit 4: Strong volume growth in 9MFY2012

Commodity	FY2009	FY2010	FY2011	9MFY2012
Gold Guinea	3	4	4	8
Gold	15	11	11	10
Gold Mini	14	13	15	23

Source: Company, Angel Research

### Increasing market presence and participants

As of December 31, 2011, MCX has 2,153 members nationwide with over 296,000 terminals including CTCL spread over 1,572 cities and towns in India. It intends to continue to increase the number of participants by introducing new products on its exchange by expanding to more geographical areas and by continuing its efforts to disseminate knowledge and information about the commodity futures industry. Along with its alliance partners, MCX plans to establish and grow its presence in additional regions across India.

### **Capitalize on changes proposed in regulations**

MCX also intends to capitalize on changes proposed in regulations governing the Indian commodities derivatives industry, permitting trading in options and intangibles, including indices. For example, it has already developed the software technology infrastructure and other in-house expertise to launch trading in commodities options when such trading is permitted to reduce the lead time to the market. Similarly, if and when trading in commodity indices is permitted, investors will be able to trade in MCX's composite commodity index, MCX-COMDEX and other indices that it has developed.

### **Increasing revenue from existing products**

MCX intends to develop new revenue sources that are not transaction-driven. We believe market data products and information offerings have the potential to become a source of revenue for MCX, as is the case for various leading exchanges in India and the rest of the world. MCX currently has such arrangements with Bloomberg Finance L.P., NewsWire 18 Private Limited, IQN Data Solutions Private Limited, Reuters India Private Limited, Interactive Data (Europe) Limited and TickerPlant Limited. MCX aims to further develop its market data offerings by integrating proprietary information generated by the exchange into new market data products designed to meet the needs of a higher number of customers.

### **Scalable technology platform and business model**

We believe the company's technology platform and business model are highly scalable and have the potential to generate better margins at greater volumes. MCX plans to structure its business costs based on its historical and expected growth. Consequently, the company has made significant investments in developing fixed operating infrastructure, including technology systems, to support anticipated growth and increased demand for its products. MCX's current technology infrastructure is sufficient to handle daily trading volumes of up to 10,000,000 trades a day. Increased trading activity on the exchange would result in higher profitability. Further, the company intends to increase the use of data generated from commodity futures contracts traded on the exchange to capitalize on opportunities in market data products and information dissemination. We believe the company's overall business model is highly scalable and offers growth potential with limited incremental costs.

## Key concerns

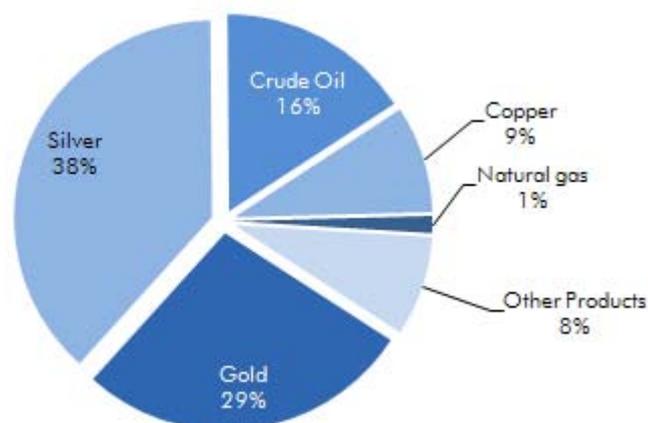
### Decline in volumes can lead to lower revenue

MCX's business depends, in part, on its ability to maintain and increase its members and turnover on the exchange and the resultant income from transaction fees. Income from transaction fees depends on the average daily turnover generated by members and is, therefore, correlated with the value of commodity futures contracts. Any decline in the trading volume or the number of members trading on the exchange could lead to a decline in the income from transaction fees.

### Decline in commodity prices can directly lead to lower revenue

Transaction fees charged by MCX is directly related to the value of commodity futures contracts traded on the exchange; hence, income and results of operations could be adversely affected by any decline in total value of commodity futures contracts for these commodities traded on the exchange and their volumes. For the nine months ended December 31, 2011, the value of contracts of four commodities traded on the exchange, namely silver, gold, crude oil and copper, accounted for 38.2%, 27.5%, 15.9% and 8.8%, respectively, of the total value of commodity futures contracts traded.

#### Exhibit 5: Revenue dependent on four major commodities (9MFY2012)



Source: Company, Angel Research; Note: Segment revenue of the total revenue

### Competition may lead to margin compression

The derivatives exchange industry is generally highly competitive. MCX's ability to maintain and enhance its competitiveness will have a direct impact on its business, financial condition and results of operations. There are currently 21 associations recognized by Government of India that are authorized to organize and regulate futures trading in various commodities. Of these, MCX faces competition mainly from national commodity exchanges such as NCDEX, NMCE, ICEX and ACE, which have a combined market share of only 12.4%.

### **Policy paralysis could hamper growth strategies**

Under the current regulatory environment, foreign institutional investors, banks and mutual funds cannot trade on commodity exchanges. Further, trading in options in commodities futures is prohibited in India. If changes in policy are not brought into force in a timely manner, or at all, MCX's ability to introduce new products on the exchange and implementation on new growth strategy could be adversely affected.

### **Outlook and valuation**

MCX currently has zero debt on its book, and major capex to fuel growth has already been incurred by the company. Secondly, the company reported investment and cash worth ₹1,324cr at the end of 9MFY2012, which works out to ₹260/share. On an annualized basis, the stock will be trading at 15.1x and 18.1x at the lower and upper band on FY2012E earnings, respectively, which we believe is fair compared to global peers, which trade at 18x-19x TTM earnings; further, the recent off-market deals value MCX's Indian peers, NSE and BSE, at 22x-24x 9MFY2012 annualized earnings. We believe MCX being the only major commodity exchange in India and the world's fifth largest exchange can witness strong growth in revenue and profitability going ahead, which makes its valuation much more attractive than global peers. **Hence, we recommend Subscribe to the issue on account of its relatively fair valuations.**

## Industry Overview

### The Global Commodity Futures Market

There are over 30 commodity futures and options exchanges worldwide that trade commodities ranging from energy, metals, agriculture to livestock in many countries including the United States, China, Japan, Malaysia and the United Kingdom. (Source: *Futures Industry Association ('FIA'), FI magazine September 2011 ('FIA Report')*). According to the FIA Report, strong levels of growth were seen in the trading volume of commodity futures and options, especially those relating to non-precious metals, agricultural, energy and precious metals commodities.

### Metals Futures

The metal futures contracts include a wide variety of metal commodities, which are typically classified into precious and non-precious metals. Precious metals include gold, silver and platinum. Non-precious metals include lead, aluminium, copper and zinc. Gold is the most popular precious metal in metal futures contracts trading. Trading in gold futures provides individual investors with an easy and convenient alternative to the traditional means of investing in gold, such as bullion, coins, and mining stocks.

### Energy Futures

Energy futures contracts include energy commodities such as crude oil, natural gas, heating oil, gasoline and coal. Over the past several years, the markets for energy commodities trading have been characterised by rapid growth and high liquidity, which we believe is due to several factors, including 1) increased market acceptance of the value of commodity futures as risk management tools; 2) increased price fluctuation in crude oil, partially created by geopolitical conditions in oil producing 3) increased price fluctuation in natural gas, partially created by weather conditions and increased demand in emerging economies; 4) increased awareness of the ability to obtain or hedge market exposure through the use of futures and options contracts.

### The Indian Commodities Market

India has over 7,000 regulated agricultural markets, or *mandis*, and the majority of the nation's agricultural production is consumed domestically, according to the Agricultural Marketing Information Network (Source: *Agricultural Marketing Information Network official website*). There are currently 21 commodity exchanges recognised by FMC in India offering trading in over 60 commodity futures with the approval of FMC. The total value of commodities traded on commodity futures exchanges in India for the first nine months ended December 31, 2011 was ₹ 137,228.55 billion.

### Industry Growth in India

Commodity futures trading in India has grown since the Government of India issued a notification on April 1, 2003 permitting futures trading in commodities. The total value of commodities futures traded in India in the fiscal 2011 was ₹ 119,489.42 billion, representing growth of approximately 90-fold from the value of commodity futures contracts traded in the fiscal 2004, which was ₹ 1,293.67 billion. Commodity futures trading volumes have risen at a compound annual growth rate of 90.9% between fiscal 2004 and fiscal 2011.

**Income statement**

Y/E March (₹ cr)	FY2009	FY2010	FY2011	9MFY2012
<b>Income</b>				
Transaction fees	186.1	264.1	349.5	386.8
% chg		41.9	32.4	10.7
Membership Admission fees	10.5	7.0	3.5	4.1
% chg		(33.8)	(49.5)	17.7
Annual subscription fees	13.6	13.6	13.5	9.9
% chg		0.2	(1.1)	(26.7)
Terminal charges	2.2	2.7	2.4	1.5
% chg		21.5	(13.0)	(36.7)
<b>Income from operations</b>	<b>212.4</b>	<b>287.4</b>	<b>368.9</b>	<b>402.3</b>
% chg		35.3	28.4	9.1
Staff costs	25.4	21.8	26.4	20.1
% Net Sales	12.0	7.6	7.2	5.0
Administration and other operating exp.	110.6	124.1	150.7	121.7
% Net Sales	52.1	43.2	40.9	30.2
Total Expenditure	136.0	145.8	177.1	141.8
<b>EBITDA</b>	<b>76.4</b>	<b>141.6</b>	<b>191.8</b>	<b>260.5</b>
<b>Margin</b>	<b>36.0</b>	<b>49.3</b>	<b>52.0</b>	<b>64.8</b>
Depreciation/ Amortisation	20.0	24.7	24.7	20.4
EBIT	56.5	116.8	167.1	240.1
Interest	0.2	-	-	-
Other Income	153.4	206.3	78.7	72.2
<b>Net profit before tax</b>	<b>209.7</b>	<b>323.1</b>	<b>245.8</b>	<b>312.2</b>
Provision for tax	52.2	102.4	72.7	91.7
%PBT	24.9	31.7	29.6	29.4
Current tax	45.3	100.4	70.4	91.4
Prior period tax	-	-	0.2	(2.7)
Deferred tax	6.3	1.9	2.1	3.0
Wealth tax	-	-	-	-
Fringe benefit tax	0.6	-	-	-
<b>Net profit after tax before share of profit of Asso.</b>	<b>157.4</b>	<b>220.7</b>	<b>173.1</b>	<b>220.5</b>
Margin	74.1	76.8	46.9	54.8
Share of profit of Associate	0.0	0.3	0.3	0.1
Impact of prior period adjustments	1.4	(0.2)	2.9	(2.7)
<b>Net profit</b>	<b>158.8</b>	<b>220.8</b>	<b>176.3</b>	<b>218.0</b>
Margin	74.8	76.8	47.8	54.2
% chg		39.0	(20.2)	13.4
Exceptional Items	91.4	147.3	5.6	8.2
<b>Adj. Net profit</b>	<b>67.5</b>	<b>73.6</b>	<b>170.6</b>	<b>209.8</b>
% chg		9.0	132.0	22.9
Margin	31.8	25.6	46.3	52.1
<b>Basic EPS</b>	<b>38.9</b>	<b>54.1</b>	<b>34.6</b>	<b>42.7</b>

Source: Company, Angel Research; Note: Net profit adjusted for sale of property which in non-recurring in nature.

**Balance sheet**

Y/E March (₹ cr)	FY2009	FY2010	FY2011	9MFY2012
<b>Gross block</b>	<b>259</b>	<b>268</b>	<b>292</b>	<b>310</b>
Less : Accumulated depreciation/ amortisation	51	75	96	117
<b>Net block</b>	<b>209</b>	<b>193</b>	<b>195</b>	<b>193</b>
Add: Capital work-in-progress	-	-	-	-
<b>Total Fixed Assets</b>	<b>209</b>	<b>193</b>	<b>195</b>	<b>193</b>
Investments (B)(Refer Annexure X)	470	617	824	1,096
<b>Current Assets, Loans and Advances</b>				
Sundry debtors	27	30	49	49
Cash and bank balances	406	270	331	229
Other Current Assets	9	8	11	10
Loans and advances	45	111	90	96
<b>Total Current Assets</b>	<b>487</b>	<b>419</b>	<b>481</b>	<b>384</b>
Liabilities and Provisions:				
Current liabilities and provisions	663	521	639	583
<b>Total Current Liabilities</b>	<b>663</b>	<b>521</b>	<b>639</b>	<b>583</b>
<b>Total Net Current Assets</b>	<b>(176)</b>	<b>(102)</b>	<b>(158)</b>	<b>(199)</b>
Deferred tax liability (net) (E)	9	11	13	16
<b>Total Assets</b>	<b>494</b>	<b>697</b>	<b>849</b>	<b>1,074</b>
Share capital	41	41	51	51
Stock Option Outstanding Account	-	-	-	-
Reserves and Surplus	-	-	-	-
Securities Premium	226	227	217	217
Amount recoverable from MCX ESOP Trust	(22)	(17)	(11)	(4)
Settlement Guarantee Fund	2	2	2	2
General Reserves	39	61	78	78
Balance in Profit and Loss Account	208	383	512	730
Minority interest	-	-	-	-
<b>Total Liabilities</b>	<b>494</b>	<b>697</b>	<b>849</b>	<b>1,074</b>

### Cash Flow Statement

	FY2009	FY2010	FY2011	9MFY2012
<b>Cash flow from operating activities</b>				
Net profit before tax, as restated	2,109	3,231	2,458	3,122
Depreciation/Amortization	200	247	247	204
Interest expense	2	-	-	-
Dividend from investments	(260)	(144)	(323)	(309)
Diminution in value of investments	72	6	-	3
Profit on sale of investments	(914)	(1,473)	(56)	(82)
Loss on sale of assets or assets scrapped	3	1	13	1
Advertisement expense	-	6	-	-
Interest income	(171)	(220)	(174)	(140)
<b>Operating profit before working capital chg.</b>	<b>1,040</b>	<b>1,654</b>	<b>2,165</b>	<b>2,801</b>
(Inc.)/decrease in trade and other receivables	(176)	(566)	(56)	119
(Decrease)/inc.in trade payables and prov.	2,245	(1,453)	1,136	(462)
Cash generated from / (used in) operations	3,109	(365)	3,245	2,458
Tax paid	(256)	(553)	(546)	(821)
<b>Net cash generated from / operating activities</b>	<b>2,853</b>	<b>(919)</b>	<b>2,700</b>	<b>1,637</b>
<b>Cash flow from investing activities</b>				
Additions to fixed assets	(757)	(96)	(312)	(187)
Deletion / Adjustment to Fixed Assets	34	9	27	5
Purchase of investments	(110,907)	(99,346)	(109,269)	105,446.65
Redemption/sale of investments	110,145	99,421	106,784	103,699
Dividend from investments	260	144	323	309
Interest received	97	234	139	157
Cash generated from / (used in) investing activities	(1,129)	366	(2,309)	1,464.55
Tax Paid	(242)	(489)	(18)	(9)
<b>Net Cash generated from / investing activities</b>	<b>(1,371)</b>	<b>(123)</b>	<b>(2,326)</b>	<b>1,473.29</b>
<b>Cash flow from financing activities</b>				
Proceeds from:				
Equity share capital	16	-	-	-
Securities premium	213	-	-	-
Minority Shareholders of Subsidiary Co.	-	-	-	-
Share issue expenses adjusted in Securities Premium Account	(63)	-	-	-
Dividend paid (including tax thereon)	(47)	(239)	(238)	(296)
Interest paid	(2)	(0)	(0)	(0)
<b>Net cash generated from /financing activities</b>	<b>116</b>	<b>(239)</b>	<b>(238)</b>	<b>(296)</b>
<b>Net cash (outflow) / inflow during the year</b>	<b>1,598</b>	<b>(1,280)</b>	<b>135</b>	<b>(132)</b>
<b>Net incr./ (decr.) in cash and cash equivalents</b>	<b>1,598</b>	<b>(1,280)</b>	<b>135</b>	<b>(132)</b>

Research Team Tel: 022 - 39357800

E-mail: [research@angelbroking.com](mailto:research@angelbroking.com)

Website: [www.angelbroking.com](http://www.angelbroking.com)

## DISCLAIMER

This document is solely for the personal information of the recipient, and must not be singularly used as the basis of any investment decision. Nothing in this document should be construed as investment or financial advice. Each recipient of this document should make such investigations as they deem necessary to arrive at an independent evaluation of an investment in the securities of the companies referred to in this document (including the merits and risks involved), and should consult their own advisors to determine the merits and risks of such an investment.

Angel Broking Limited, its affiliates, directors, its proprietary trading and investment businesses may, from time to time, make investment decisions that are inconsistent with or contradictory to the recommendations expressed herein. The views contained in this document are those of the analyst, and the company may or may not subscribe to all the views expressed within.

Reports based on technical and derivative analysis center on studying charts of a stock's price movement, outstanding positions and trading volume, as opposed to focusing on a company's fundamentals and, as such, may not match with a report on a company's fundamentals.

The information in this document has been printed on the basis of publicly available information, internal data and other reliable sources believed to be true, but we do not represent that it is accurate or complete and it should not be relied on as such, as this document is for general guidance only. Angel Broking Limited or any of its affiliates/ group companies shall not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. Angel Broking Limited has not independently verified all the information contained within this document. Accordingly, we cannot testify, nor make any representation or warranty, express or implied, to the accuracy, contents or data contained within this document. While Angel Broking Limited endeavours to update on a reasonable basis the information discussed in this material, there may be regulatory, compliance, or other reasons that prevent us from doing so.

This document is being supplied to you solely for your information, and its contents, information or data may not be reproduced, redistributed or passed on, directly or indirectly.

Angel Broking Limited and its affiliates may seek to provide or have engaged in providing corporate finance, investment banking or other advisory services in a merger or specific transaction to the companies referred to in this report, as on the date of this report or in the past.

Neither Angel Broking Limited, nor its directors, employees or affiliates shall be liable for any loss or damage that may arise from or in connection with the use of this information.

**Note: Please refer to the important 'Stock Holding Disclosure' report on the Angel website (Research Section). Also, please refer to the latest update on respective stocks for the disclosure status in respect of those stocks. Angel Broking Limited and its affiliates may have investment positions in the stocks recommended in this report.**

6th Floor, Ackruti Star, Central Road, MIDC, Andheri (E), Mumbai - 400 093. Tel: (022) 39357800

## Research Team

### Fundamental:

Sarabjit Kour Nangra	VP-Research, Pharmaceutical	sarabjit@angelbroking.com
Vaibhav Agrawal	VP-Research, Banking	vaibhav.agrawal@angelbroking.com
Shailesh Kanani	Infrastructure	shailesh.kanani@angelbroking.com
Bhavesh Chauhan	Metals & Mining	bhaveshu.chauhan@angelbroking.com
Sharan Lillaney	Mid-cap	sharanb.lillaney@angelbroking.com
V Srinivasan	Research Associate (Cement, Power)	v.srinivasan@angelbroking.com
Yaresh Kothari	Research Associate (Automobile)	yareshb.kothari@angelbroking.com
Hemang Thaker	Research Associate (Capital Goods)	hemang.thaker@angelbroking.com
Nitin Arora	Research Associate (Infra, Real Estate)	nitin.arora@angelbroking.com
Ankita Somani	Research Associate (IT, Telecom)	ankita.somani@angelbroking.com
Varun Varma	Research Associate (Banking)	varun.varma@angelbroking.com
Saurabh Taparia	Research Associate (Cement, Power)	Sourabh.taparia@angelbroking.com

### Technical:

Shardul Kulkarni	Sr. Technical Analyst	shardul.kulkarni@angelbroking.com
Sameet Chavan	Technical Analyst	sameet.chavan@angelbroking.com
Sacchitanand Uttekar	Technical Analyst	sacchitanand.uttekar@angelbroking.com

### Derivatives:

Siddarth Bhamre	Head - Derivatives	siddarth.bhamre@angelbroking.com
-----------------	--------------------	----------------------------------

### Institutional Sales Team:

Mayuresh Joshi	VP - Institutional Sales	mayuresh.joshi@angelbroking.com
Hiten Sampat	Sr. A.V.P- Institution sales	Hiten.Sampat@angelbroking.com
Meenakshi Chavan	Dealer	meenakshis.chavan@angelbroking.com
Gaurang Tisani	Dealer	gaurangp.tisani@angelbroking.com
Akshay Shah	Sr. Executive	akshayr.shah@angelbroking.com

### Production Team:

Simran Kaur	Research Editor	simran.kaur@angelbroking.com
Dilip Patel	Production	dilipm.patel@angelbroking.com