

Equities

13 April 2012 | 44 pages

Multi Commodity Exchange Ltd. (MCEI.BO)

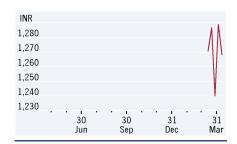
Initiate at Buy: Scarce Commodity

- Initiate at Buy: Structural growth opportunity We initiate on MCX at Buy with a Rs1,580 target price based on 22x 1yr fwd PE. MCX is the dominant exchange (over 86% market share) for commodity derivatives trading in India. It has a highly scalable business, high returns and strong execution track record, and it looks well positioned to benefit from the industry's strong growth potential long-term.
- India's unique, competitive industry structure a) Commodity exchanges distinct from stock exchanges with a separate regulator; b) Multiple competitors (five national exchanges); c) Closely regulated list of products and participants; and d) Pricing is low and based on turnover rather than number of contracts. It is still evolving in structure (regulations, products, competition) and has high growth potential. While this is likely to throw up significant opportunities, there will also be some challenges.
- Why we like MCX? We believe MCX management is a step ahead in innovation, product mix and business volumes, and should retain its potent mix of high returns and potentially high growth. Key reasons for our positive bias: a) Rise in market share to 86% (FY12) from 45% (FY06) despite increase in competitive intensity; b) Strong turnover growth (59% CAGR over FY06-12) even amid declining commodity prices; c) High profitability (EBITDA margins of 59% in 9MFY12) and profit growth (36% CAGR over FY06-12); and d) Cash surplus, with no debt/capex requirements in near future.
- Key stock drivers We believe key catalysts for the stock could be: a) Continued high turnover growth (we believe 20-25% growth sustainable without regulatory opening up); b) Hike in dividend payout; c) Regulatory changes allowing new products (options, indices, intangibles) and participants (FIIs, domestic institutions) - though timing is uncertain; and d) Potential value unlocking from strategic stakes in DGCX, MCX-SX (we assume nil value currently).
- Key risks a) Cyclical business; b) Mono-line business segment and high concentration; c) High commodity prices; d) Competitive industry; e) Regulatory changes, and f) Potential conflicts of interest with parent and technology provider, FT.

- Company Update
- Initiation of Coverage

1
Rs1,268.65
Rs1,580.00
24.5%
0.9%
25.5%
Rs64,699M
US\$1,263M

Price	Performa	nce		
(RIC:	MCEI.BO.	BB:	MCX	IN)



Statistical Abstract

Source: Powered by dataCentral

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2010A	1,304	31.97	28.2	39.7	7.4	21.9	0.4
2011A	1,763	34.57	8.1	36.7	7.6	22.8	0.4
2012E	2,917	57.20	65.5	22.2	6.0	30.4	0.9
2013E	3,665	71.86	25.6	17.7	4.9	30.6	1.6
2014E	4,436	86.98	21.0	14.6	4.0	30.1	2.0

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See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Fiscal year end 31-Mar	2010	2011	2012E	2013E	2014E
Valuation Ratios					
P/E adjusted (x)	39.7	36.7	22.2	17.7	14.6
P/E reported (x)	23.4	36.7	22.2	17.7	14.6
P/BV (x)	7.4	7.6	6.0	4.9	4.0
P/Adjusted BV diluted (x)	7.4	7.6	6.0	4.9	4.0
Dividend yield (%)	0.4	0.4	0.9	1.6	2.0
Per Share Data (Rs)					
EPS adjusted	31.97	34.57	57.20	71.86	86.98
EPS reported	54.12	34.57	57.20	71.86	86.98
BVPS	170.79	166.44	210.14	259.50	318.36
Tangible BVPS	170.79	166.44	210.14	259.50	318.36
Adjusted BVPS diluted	170.79	166.44	210.14	259.50	318.36
DPS	5.00	5.00	12.00	20.00	25.00
Profit & Loss (Rsm)					
Net interest income	12	9	0	0	0
Fees and commissions	2,874	3,689	5,406	6,469	7,619
Other operating Income	2,051	778	1,097	1,380	1,618
Total operating income	4,937	4,476	6,503	7,849	9,237
Total operating expenses	-1,706	-2,018	-2,149	-2,379	-2,617
Oper. profit bef. provisions	3,231	2,458	4,354	5,470	6,621
Bad debt provisions	0	0	0	0	0
Non-operating/exceptionals	0	0	0	0	0
Pre-tax profit	3,231	2,458	4,354	5,470	6,621
Tax	-1,024	-725	-1,437	-1,805	-2,185
Extraord./Min. Int./Pref. Div.	1	30	0	0	_,,
Attributable profit	2,208	1,763	2,917	3,665	4,436
Adjusted earnings	1,304	1,763	2,917	3,665	4,436
Growth Rates (%)	,	,	,-	-,	,
EPS adjusted	28.2	8.1	65.5	25.6	21.0
Oper. profit bef. prov.	54.1	-23.9	77.1	25.6	21.0
Balance Sheet (Rsm)	-				
Total assets	12,289	15,001	17,881	21,115	24,904
Avg interest earning assets	8,814	10,210	12,742	15,295	18,255
Customer loans	0	0	0	0	0,200
Gross NPLs	0	0	0	0	0
Liab. & shar. funds	12,289	15,001	17,881	21,115	24,904
Total customer deposits	0	0	0	0	0
Reserve for loan losses	0	0	0	0	0
Shareholders' equity	6,968	8,488	10,717	13,234	16,236
Profitability/Solvency Ratios (%		-,	-,	-, -	.,
ROE adjusted	, 21.9	22.8	30.4	30.6	30.1
Net interest margin	0.13	0.09	0.00	0.00	0.00
Cost/income ratio	34.6	45.1	33.1	30.3	28.3
Cash cost/average assets	14.2	14.8	13.1	12.2	11.4
NPLs/customer loans	na	na	na	na	na
Reserve for loan losses/NPLs	na	na	na	na	na
Bad debt prov./avg. cust. loans	na	na	na	na	
Loans/deposit ratio					na
Tier 1 capital ratio	na na	na na	na na	na na	na na
Total capital ratio	na	na	na	na	na
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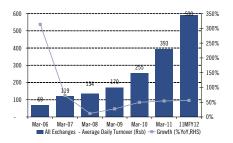
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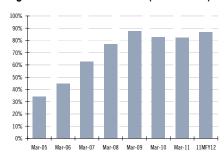
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Figure 1. Indian Commodity Exchanges — ADT & Growth (FY06 – 11M12, Rsb, % YoY)



Source: FMC

Figure 2. MCX - Market Share (FY05 - FY12)



Source: FMC

Investment Summary

Initiate at Buy with Rs1,580 target price

We initiate coverage on MCX shares at Buy (1) with a Rs1,580 target price, implying 25.5% expected total return (including dividend yield).

MCX is India's leading commodities futures exchange with over 86% market share. It is witnessing rapid turnover growth (+58% yoy in FY12) with strengths that lie in an all-electronic technology platform, integrated infrastructure, network of alliances and a strong management team.

The opportunities ahead lie in a growing and vibrant economic environment, rising corporate and institutional hedging requirements, an increasingly intrepid mass of speculators and potential for entry of new products and participants. MCX's high-return, high-growth business has generated 36% recurring profit growth over FY06-12 with a 9MFY12 recurring post-tax margin of 46% and a core ROE of 30%. We believe MCX management is a step ahead in innovation, product mix and business volumes.

Rapid growth and market opportunity

The commodities futures trading market in India has witnessed healthy growth since opening up in 2003; daily trading volumes are currently in excess of US\$11bn (FY12), and growing robustly (+50% yoy). We foresee sustained and high growth levels over the medium term driven by a strong economic environment, rising corporate hedging requirements, greater institutional participation, new product launches and an active and growing class of speculators.

MCX: Market leader in a competitive domestic industry

MCX has emerged as the market leader over the last five years with an 86% market share (from 45% in FY06), despite a rise in competitive intensity (entry of three new and one existing national competitor). MCX has dominant market share in key product segments (energy and precious metals) such as gold (97.1%), silver (98.5%), crude oil (94.8%) and copper (94.9%) which were its top four traded products in 9MFY12.

While turnover growth is intricately linked to commodity prices near term and will likely be volatile, we believe medium- to longer-term growth prospects for the Indian commodity exchanges remain strong and can be boosted by likely regulatory approvals for introduction of new products (options, indices, intangibles) and participants (FIIs, domestic institutions). Also, while turnover in individual commodities is quite volatile, MCX's overall turnover growth has remained quite stable historically, even during periods of sharp decline in commodity prices.

Attractive combination of high-growth and high-returns

The exchange business is a high-return business. With its low-cost build-out (largely fixed cost structure), low operating expenses, and high growth, MCX has generated core ROEs of 30% and recurring post-tax margins of 46% in 9MFY12. Moreover, MCX is cash surplus and does not need to raise debt/capital expenditure near term. We believe most global exchanges are highly scalable and very profitable; however few appear to offer the combination of both high returns and high growth.

Figure 3. MCX – EBITDA Margin & Core ROE (%)



Source: MCX, CIRA estimates

Valuations

We value MCX at Rs1,580 per share based on 22x 1-year forward P/E (currently trading at 18x P/E). We believe P/E ratio would be the most appropriate valuation methodology in a high-margin industry such as exchanges as it factors in the profitability, growth potential, and cyclicality of the business. Also, we are not including any potential value from sale of stakes in strategic investments in DGX, MCX-SX and clearing corporations.

Globally, exchanges in developed markets trade around 12-15x 1-year forward PE, while those in more developing markets trade around 25-30x. We believe MCX's strong growth potential, dominant market share and high returns call for high multiples, but valuation should also be tempered by a competitive industry structure (lack of a monopoly), mono-line business segment and relative concentration in trading turnover. We therefore benchmark MCX closer to the middle of this range and believe it adequately factors in both opportunities and challenges.

Alternatively, we also look at MCX's valuations on EV/EBITDA – our target price implies a 13.5x FY13E multiple on this parameter.

Figure 4. Global Exchanges - Valuation Comparisons

Company	Reuters code	CIRA Rating	Market cap	Price	P/E		P/B	P/B	ROE (%)	I	Div Yield (%)	
		_	US\$M	12-Apr12	2012	2013	2012	2013	2012	2013	2012	2013
Americas												
CME Group Inc	CME.O	1	19,107	287.5	15.2	13.4	0.9	0.9	6%	6%	4.2%	4.8%
NYSE Euronext	NYX.N	2	7,169	27.8	10.7	9.6	1.0	1.0	10%	11%	4.3%	4.3%
The Nasdaq Stock Exchange	NDAQ.O	2	4,326	25.0	9.4	8.3	0.8	0.7	9%	9%	0.0%	0.0%
Europe												
Bolsas y Mercados Espanoles	BME.MC	3	2,039	18.5	10.5	11.0	3.7	3.9	34%	34%	10.7%	10.7%
Deutsche Boerse AG	DB1Gn.DE	2	12,682	49.3	10.5	9.9	3.7	2.2	36%	29%	4.9%	5.1%
Hellenic exchange Holding SA	EXCR.AT	2	259	3.0	23.8	17.5	1.4	1.4	11%	13%	3.2%	5.1%
JSE Limited	JSEJ.J	1	901	81.6	12.2	10.2	3.7	3.3	31%	33%	3.9%	4.7%
Asia												
ASX Ltd	ASX.AX	1	5,830	31.9	15.5	13.9	1.8	1.8	12%	13%	5.8%	6.5%
Bursa Malaysia	BMYS.KL	2	1,221	7.1	24.6	22.4	4.3	4.2	18%	19%	3.8%	4.2%
Hong Kong Exchanges & Clearing	0388.HK	1	17,944	129.0	24.8	20.7	14.0	12.5	59%	64%	3.6%	4.3%
MCX	MCEI.BO	1	1,263	1268.7	22.2	17.7	6.0	4.9	30%	31%	0.9%	1.6%
Singapore exchange	SGXL.SI	3	5,694	6.7	24.0	21.2	8.6	7.9	36%	39%	3.8%	4.3%

Source: Citi Investment Research and Analysis, Bloomberg

Risks: Low systemic risks but high business cyclicality

Low systemic risks and strong risk management systems, though business is cyclical and driven by high commodity prices We believe an electronic only trading platform, strong regulator, and adequate margining and risk management systems suggest relatively low systemic risks. There do however exist meaningful business risks – a) Cyclical nature of trading volumes, b) Mono-line business segment and concentration in few commodities, c) Support from generally strong commodity prices currently, d) High competitive intensity, e) Any adverse regulatory changes, and f) Potential conflicts of interest with its parent and primary technology provider, Financial Technologies.

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MCX is the largest commodity derivatives exchange in India

Has shown strong growth in products, members, geographical reach and business volumes

Has tied up with a number of international exchanges

Company Background

The Multi Commodity Exchange of India Ltd. ("MCX") is a de-mutualized commodities derivatives exchange. It was incorporated in 2002, began commercial operations starting in November 2003, and listed on the Bombay Stock Exchange on 8 March 2012. It provides a centralized, electronic-only and regulated marketplace for the trading of a broad and expanding range of commodity futures. The exchange operates on a pan-India basis through a geographically distributed member base. MCX is the largest commodity exchange in India and one of five national electronic commodity exchanges in India.

Development

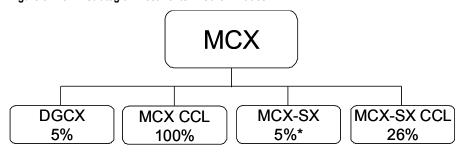
MCX was the second new commodities exchange in India and commenced operations in November 2003, within a year of the government opening up the space and inviting applications for new licenses. It was one of only four such entities which were given a license to start nationwide multi commodity exchanges.

MCX started operations offering only four commodity contracts for trading and has since expanded to 49 as of December 31, 2011. This has been accompanied and driven by an expanding member base (2,153 members as of December 31, 2011), geographic penetration of 1,572 cities and towns through terminals, and consistent and focused marketing and business development initiatives.

MCX has also taken other initiatives to expand the scope of the market, to increase trading volumes and to create the infrastructure for further development. This includes investment in research for product development, tie-ups with international exchanges for global benchmarking, and developing trading and settlement infrastructure.

MCX, in joint venture with its controlling shareholder Financial Technologies India Limited (FT) and the Dubai Metal and Commodity Centre, has also established the Dubai Gold and Commodities Exchange (DGCX), a new commodity exchange in Dubai. MCX also has a 26% direct stake MCX Stock Exchange Clearing Corporation Ltd. (MCX-SX CCL). Furthermore, its parent, FT has seeded various other businesses including a stock exchange, a commodity spot exchange and a warehousing and collateral management entity, all of which are infrastructure and business development supports for the commodity exchange.

Figure 5. MCX - Strategic Investments in Other Entities



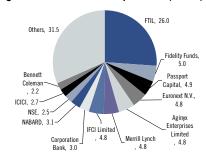
Source: Company Reports, *MCX also has 634.17million warrants issued by MCS-SX

Management

MCX is promoted by FT, which in turn is promoted by Mr. Jignesh Shah. Mr. Shah has built up FT into one of the leading technology providers in the development and deployment of exchange-related software in India. He is the non-executive Vice

Strong management with consistent track and experience of building and managing an exchange

Figure 6. MCX — Ownership Pattern (Mar12)



Source: BSE

Chairman of MCX, assisted by a management team which is largely comprised of senior managers of exchanges and related businesses. The senior management team includes:

- Lambertus (Lamon) Rutten, Managing Director & CEO: Has more than 16 years of international experience in commodity risk management and finance.
- Parveen Singhal, Deputy Managing Director: Has prior experience in stock exchanges (Delhi Stock Exchange), and at SEBI, the regulator for the securities industry in India.
- Joseph Massey, Non Executive Director: Has more than 20 years of diversified experience in the financial sector.

Ownership and key shareholders

MCX's largest shareholder is Financial Technologies (India) Limited (FT), a software development company focused on software for stock broking, commodity trading and foreign exchange trading. FT also has solutions for clearing and settlement, risk management, Internet trading and other exchange-related activities. FT is a market leader in STP processing and has about 26% stake in MCX. FT is also the primary technology and software provider to MCX.

MCX also has minority shareholders. These investors include a number of public-sector banks. Corporation Bank is the largest of these banks, with a 3% stake. Subsequent investors include the National Stock Exchange (NSE), National Bank for Agriculture and Rural Development (NABARD) and the Union Bank of India. Among others, Fidelity Funds (Mauritius) Ltd. has a 5.0% stake in MCX, Passport Capital has 4.9% along with Euronext, Aginyx, Merrill Lynch and IFCI who own 4.8% stakes each.

Earnings Outlook

- Turnover growth for MCX has been robust historically (+59% CAGR over FY06-12), but remains volatile and unpredictable. We assume 20-25% sustainable growth medium term.
- Turnover and volumes are both intricately linked to commodity prices, but overall turnover growth has sustained at high levels even during periods of sharp decline in commodity prices.
- Transaction fees have become the main earnings driver over the past few years and formed 82% of revenues in 9MFY12; we assume transaction yields to continue to decline steadily.
- Revenues have grown at 36% CAGR during FY06-12 led by strong growth turnover and transaction fees (46% CAGR during the same period).
- Significant operating leverage to volumes, have kept profitability quite high EBITDA margins were 59% in 9MFY12, recurring post-tax profit margins were 46%, core ROE and ROA of 30% and 18% respectively.

Buoyant growth expected

Rapidly expanding volumes

Average daily turnover grew at a rapid 59% CAGR over FY06-12

Average daily turnover for MCX has grown rapidly over the last few years (+59% CAGR during FY06-12). Turnover on exchanges however, does remain cyclical and with MCX's relatively short trading history, it was evidenced briefly in FY08 when growth in volumes dipped sharply to 36% from 140% in the previous year, though it still remained quite healthy. Average daily turnover for MCX is currently over Rs508bn (FY12) and still growing at a healthy pace (+58% yoy).

Given high volatility in prices and volumes, we believe it is difficult to predict near-term turnover on exchanges. However, on a more medium-term basis, we expect turnover growth to remain healthy given the nascent stage of development of the Indian commodities market. We think 20-25% turnover growth is quite sustainable medium term even in the absence of any changes in the regulatory structure.

Figure 7. MCX — Average Daily Turnover (Feb 2006 – Feb 2012, Rs Billion)

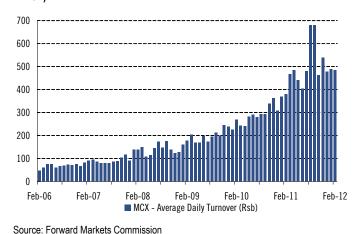
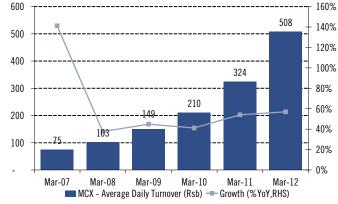


Figure 8. MCX — Average Daily Turnover (FY07-FY12, Rupees Billion, Percent)



Source: FMC, MCX

... driven by new product introductions and increasing investor participation

We believe the key drivers for the significant growth in turnover for MCX have been its frequent product introductions, increasing investor participations and its increasing reach and geographical penetration levels. By comparison, equity derivatives on the NSE also went through a similar cycle of rapid growth and in 10 years of operations, their average daily turnover is currently over Rs1,582bn (2x of MCX currently). This also suggests there is still some room for commodity exchange turnover to rise further.

Relationship between commodity prices and volume traded

MCX's overall turnover growth during FY06-FY12 has been significantly dependent on both price and volume growth – though proportion of price vs. volume varies significantly across commodities. Our analysis suggests that amongst the key commodities, gold and silver have been clearly supported more by the rise in prices over the last few years, whereas the growth in crude oil and copper seem to be more volume driven than prices.

2,500

1,500

1,000

GOLD SILVER CRUDE COPPER

Volume (% Change FY06-FY12)

Price (% Change FY06-FY12)

Source: MCX, Citi Investment Research and Analysis

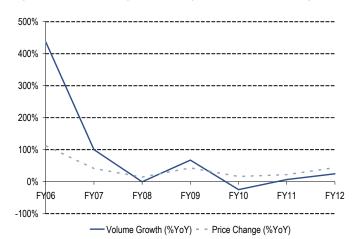
Figure 9. MCX: Cumulative Change in Physical Quantity Traded and Price During FY06-12 (%)

The correlation between prices and volumes of individual commodities are typically high – i.e. a fall in prices is typically accompanied by lower volumes as well (though not always as seen in the case of copper and crude oil in last couple of years and also in silver in FY09). Overall, though we do believe that individual commodity prices bear a relatively high correlation with volumes traded in that commodity,

though given the relatively short trading history for MCX, it is hard to derive meaningful statistical evidence for the same.

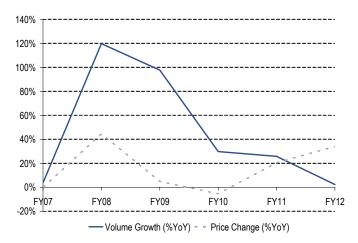
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Figure 10. MCX Gold: Physical Quantity Traded and Price Change (%)



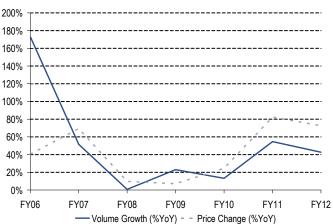
Source: MCX, Citi Investment Research and Analysis

Figure 12. MCX Crude: Physical Quantity Traded and Price Change (%)



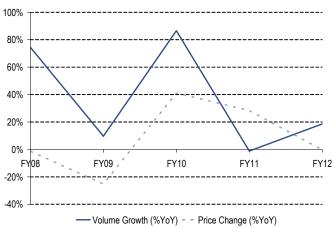
Source: MCX, Citi Investment Research and Analysis

Figure 11. MCX Silver: Physical Quantity Traded and Price Change (%)



Source: MCX, Citi Investment Research and Analysis

Figure 13. MCX Copper: Physical Quantity Traded and Price Change (%)



Source: MCX, Citi Investment Research and Analysis

Price correlation of large commodities traded

While correlation between prices of individual commodities seem to be reasonably high – those of non-precious metals (copper, zinc) and crude seem to be less correlated with the precious metals (gold, silver).

Figure 14. Correlation Between Select Commodity Prices (Percent)

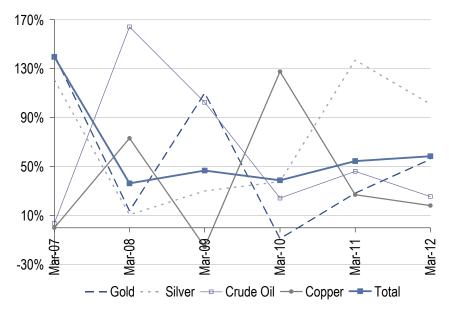
	Gold	Silver	Crude	Zinc	Copper
Gold	100%	96%	88%	55%	87%
Silver	96%	100%	88%	57%	87%
Crude	88%	88%	100%	67%	93%
Zinc	55%	57%	67%	100%	82%
Copper	87%	87%	93%	82%	100%

Source: Citi Investment Research and Analysis, Bloomberg

Interestingly however, despite significant fluctuations in turnover growth of individual commodities on MCX, the overall turnover growth has remained quite stable and strong (the least growth in turnover for MCX was in FY08 at 36% yoy). We believe

this is due to averaging out of the growth in individual commodity segments – leaving the combined turnover on the exchange a lot more stable than individual commodities.

Figure 15. MCX: Overall Turnover More Stable than Individual Commodities (FY07-FY12, % Change YoY)

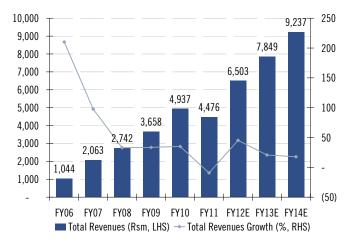


Source: Citi Investment Research and Analysis

Revenues - strong growth, changing mix

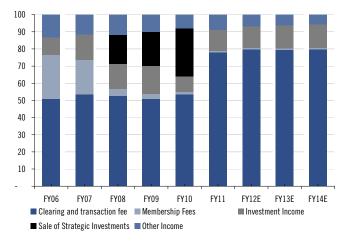
Historically, revenue growth has been strong (36% CAGR over FY06-12E). We expect the growth in revenue generation to continue at a healthy pace, with the key revenue driver being strong growth in transaction volumes.

Figure 16. MCX — Total Revenues and Growth (FY06-FY14E, Rupees Million, Percent)



Source: Company Reports, CIRA estimates

Figure 17. MCX — Changing Revenue Profile (FY06-FY14E, Percent)



Source: Company Reports, CIRA estimates

Pricing for Indian exchanges is based on turnover (and not number of contracts) and therefore there is a direct linkage between value of the contracts and revenues earned by exchanges. Transaction fees have been the main driver of earnings in recent years with a CAGR of 46% between FY06-12E, have continued to grow at a significant pace (+48% yoy in 9MFY12) and contributed over 80% of total revenues in 9MFY12. We believe this is likely to continue to be the key driver and a slowdown in turnover could impact earnings negatively.

Earnings sensitivity to turnover

A relatively high proportion of revenues for MCX are linked to turnover assumptions – over 80% from direct transaction fees and also interest income on margin money received from its members (which in turn is linked to turnover). A sensitivity analysis of its earnings relative to turnover shows a 9% decline in turnover could impact earnings by 14% (as seen in the table below).

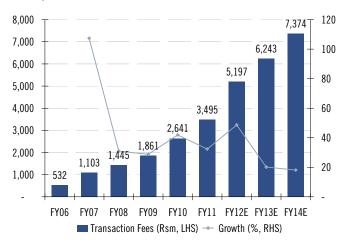
Figure 18. MCX: Earnings Sensitivity to Turnover Growth Assumptions (Percent)

Turnover Growth Assumption (% YoY)	-5%	5%	15%	20%	26% (Base Case)	30%	35%	45%	55%
Change in Turnover (%)	-24%	-17%	-9%	-5%	0%	3%	7%	15%	23%
Change in Transaction fee (%)	-24%	-17%	-9%	-5%	0%	3%	7%	15%	23%
Change in Investment Income (%)	-60%	-40%	-21%	-11%	0%	8%	18%	37%	57%
Change in Total Revenue (%)	-28%	-19%	-10%	-5%	0%	4%	8%	17%	26%
Change in EPS (%)	-40%	-27%	-14%	-7%	0%	5%	12%	25%	38%

Source: Citi Investment Research and Analysis estimates

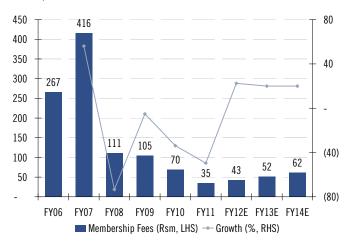
Revenues have grown at 26% CAGR over the last five years with increasing dependence on transaction-based revenues Internationally, exchanges earn a meaningful portion of their revenues from other sources such as data quotation fees, technology and access fees charged to members, and fees for other services provided by the exchange. In India however, we have yet to see exchanges derive significant incomes from data quotation, while for MCX any revenues from the technology portion will likely be captured by the parent FT, in our opinion.

Figure 19. MCX — Growth in Transaction Fees (FY06-FY14E, Rsm, Percent)



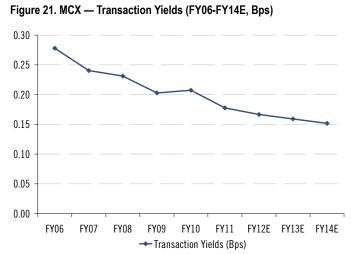
Source: Company Reports, CIRA Estimates

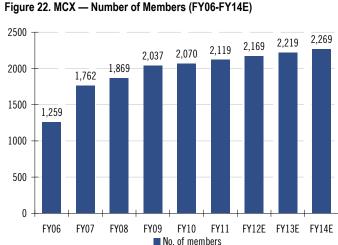
Figure 20. MCX — Growth in Membership Fees (FY06-FY14E, Rsm, Percent)



Source: Company Reports, CIRA Estimates

MCX earns an average transaction fee of 0.2 basis points of single-side turnover. Average transaction yields have been declining steadily in recent years due to its progressively lower pricing on higher turnover achieved by individual members. Higher turnover in recent years have led to blended yields coming down steadily in the last few years. We believe this trend is likely to continue medium term, and we are building in a steady decline in transaction yields going ahead.





Source: Company Reports, Forward Markets Commission, CIRA estimates

Source: Company Reports, CIRA estimates

The initial high growth of membership fees for MCX (during FY05-07) has declined as the number of members has stabilized. As the incremental number of trading members added has declined over the last few years, membership fees as a source of revenues have also declined significantly. If regulations allow institutional participants to enter commodity exchanges, addition of new members is likely to increase and could add to revenues, though will likely be significantly lesser to its own historical proportions.

High operating margins

Exchanges remain high-margin businesses globally, in our view. For MCX, operating costs are substantially lower than comparable international exchanges, especially in technology upkeep and upgrade as well as employee costs. This is reflected in the high margins for the company. We see this as a driver of higher steady-state profitability vis-a-vis global exchanges, and a competitive advantage if there were to be direct competition from global exchanges.

Figure 23. MCX — EBITDA and EBITDA Margins (FY06-FY14E, Rsm, Percent)

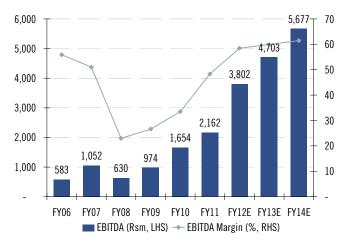
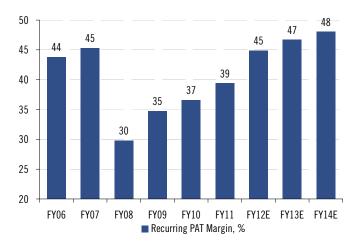


Figure 24. MCX — Recurring PAT Margins (FY06-FY14E, Percent)



Source: Company Reports, CIRA estimates

Source: Company Reports, CIRA estimates

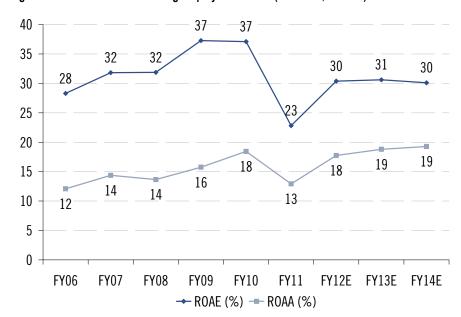
The EBTIDA margins increased to 59% in 9MFY12 from 23% in FY08. MCX's high operating leverage has also allowed recurring PAT margins of the company to improve significantly to 46% in 9MFY12 from 30% in FY08.

High leverage, high returns

Exchanges have significant operating leverage to volumes, and returns ratios should be high for MCX. MCX had 30% recurring ROAE in 9MFY12 and should likely rise with an increase in operating leverage typical of exchanges.

The ROEs have remained above 30% for FY07-12E





Source: Company Reports, CIRA estimates

Dividend payout likely to increase

MCX's historical dividend payout ratio has been significantly lower than its global peers at 15% in FY11. We believe the payout ratio is likely to increase over time and are building in a 30% payout going forward. The company has a board approved limit of 50% currently, but we believe the level could reach there only gradually.

Figure 26. MCX – Dividend Payout Ratio and Dividend Yield FY08-FY14E (Percent) 2.5% 30% 2.0% 25% 1.5% 20% 15% 1.0% 10% 0.5% 5% 0% 0.0% FY08 FY09 FY10 FY11 FY12E FY13E FY14E Dividend Payout Ratio (%, LHS) - - Dividend Yield (%, RHS)

Source: MCX, CIRA estimates

13 April 2012

Key valuation drivers should include market opportunity, growth potential, operating structures and efficiencies, regulatory environment and management and ownership pattern

P/E ratios would be the most appropriate valuation methodology

DCF-based methodologies likely inappropriate at current high growth stage of business development for MCX

Valuation

Key Drivers

We believe the key valuation drivers for exchanges globally include:

- Market opportunity: The high growth potential (which has materialized) in the financial services space in India and evidenced over the last decade in rapid turnover growth on Indian exchanges (across asset classes) will likely be a key driver of valuations as long as growth does not appear to be running out.
- Competitive intensity: All else being equal, a monopolistic player should be valued at a premium to competing exchanges in other markets. Competition can not only be within the same asset class, but also across asset classes within the same market. This could be one of the key factors to value Indian exchanges over the medium term, as there is significant competition between exchanges currently.
- Operating efficiency: Exchanges are typically high-margin businesses, with the key costs being expenditures on technology (upgrade and maintenance), administrative costs and employee compensation. Indian exchanges typically have lower cost structures than their global peers, especially on technology costs. Exchanges which have higher operating leverage and margins are likely to be valued higher than peers.
- Regulatory environment: One of the key factors in any market is the regulatory oversight for the industry. This is likely to be reflected in valuations, especially if there are any concerns on unfavorable changes likely to be made for exchanges.
- Ownership and management: The market is likely to differentiate on both these counts. Private ownership along with strong and credible management teams are likely to generate premium valuations relative to more average managements and those with public-sector ownership.

Methodologies

In a high-margin industry such as exchanges, we believe that the P/E ratio would be the most appropriate valuation methodology, as it factors in margins, cost structures, and growth potential, as well as the cyclicality of the business.

Alternatively a discounted cash flow method, EV/EBITDA or even P/BV approach can also be used to value exchanges. DCF or dividend discount models are often used to value exchanges. They tend to be relatively robust valuation methodologies for mature exchanges, given relatively stable and predictable cash flows, relatively high dividend payouts and usually limited capital expenditure.

We, however, do not believe this is appropriate for MCX at its current stage of development. This is because MCX is at a relatively early phase of its business cycle and evolution. Given its high growth rates, we believe long-term predictability and terminal growth rate expectations are difficult to forecast. We therefore use P/E-based valuation currently and see DCFs or DDMs as good and potentially preferred valuation methodology, but only later, when the business has matured.

Indian exchanges are not currently listed; international exchanges have a diversified product mix with commodities being a relatively smaller share of their revenues

Peer groups

In defining a peer group, we would rather compare MCX with other commodity exchanges rather than stock exchanges. However, there is a lack of pure commodity exchanges globally – CME and CBOT, while categorized as commodity exchanges, depend very heavily on interest rate futures as their main revenue driver, which is not available to MCX, being an exclusively commodities derivative exchange.

Also, we would compare MCX with the exchanges in developing countries – due to their higher growth – as exchanges in developed countries tend to be structurally more mature. We believe Asian exchanges, given higher growth rates, recent evolution and the apparently greater retail participation in trading, could be better benchmarks for MCX.

MCX: P/E-based target price of Rs1,580

We value MCX at Rs1,580 per share based on 22x 1-year forward P/E (currently trading at 18x P/E). We believe P/E ratio would be the most appropriate valuation methodology in a high-margin industry such as exchanges as it factors in the profitability, growth potential as well as the cyclicality of the business. Also, we are not including any potential value from sale of stakes in strategic investments in DGX, MCX-SX and clearing corporations.

Globally, exchanges in developed markets trade around 12-15x 1-year forward PE, while those in more developing markets trade around 25-30x. We believe MCX's strong growth potential, dominant market share and high returns call for high multiples, but valuation should also be tempered by a competitive industry structure (lack of a monopoly), mono-line business segment and relative concentration in trading turnover. We therefore benchmark MCX close to the middle of this range and believe it adequately factors in both opportunities and challenges.

Alternatively, we also look at MCX's valuations on EV/EBITDA – our target price implies a 13.5x FY13E multiple on this parameter.

Figure 27. Global Exchanges – Valuation Comparisons	Figure 27.	Global	Exchanges -	Valuation	Comparisons
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Company	Reuters code	CIRA Rating	Market cap	Price	P/E		P/B	P/B	ROE (%)	I	Div Yield (%)	
	0000	raang		12-Apr12	2012	2013	2012	2013	2012	2013	2012	2013
Americas												
CME Group Inc	CME.O	1	19,107	287.5	15.2	13.4	0.9	0.9	6%	6%	4.2%	4.8%
NYSE Euronext	NYX.N	2	7,169	27.8	10.7	9.6	1.0	1.0	10%	11%	4.3%	4.3%
The Nasdaq Stock Exchange	NDAQ.O	2	4,326	25.0	9.4	8.3	0.8	0.7	9%	9%	0.0%	0.0%
Europe												
Bolsas y Mercados Espanoles	BME.MC	3	2,039	18.5	10.5	11.0	3.7	3.9	34%	34%	10.7%	10.7%
Deutsche Boerse AG	DB1Gn.DE	2	12,682	49.3	10.5	9.9	3.7	2.2	36%	29%	4.9%	5.1%
Hellenic exchange Holding SA	EXCR.AT	2	259	3.0	23.8	17.5	1.4	1.4	11%	13%	3.2%	5.1%
JSE Limited	JSEJ.J	1	901	81.6	12.2	10.2	3.7	3.3	31%	33%	3.9%	4.7%
Asia												
ASX Ltd	ASX.AX	1	5,830	31.9	15.5	13.9	1.8	1.8	12%	13%	5.8%	6.5%
Bursa Malaysia	BMYS.KL	2	1,221	7.1	24.6	22.4	4.3	4.2	18%	19%	3.8%	4.2%
Hong Kong Exchanges & Clearing	0388.HK	1	17,944	129.0	24.8	20.7	14.0	12.5	59%	64%	3.6%	4.3%
MCX	MCEI.BO	1	1,263	1268.7	22.2	17.7	6.0	4.9	30%	31%	0.9%	1.6%
Singapore exchange	SGXL.SI	3	5,694	6.7	24.0	21.2	8.6	7.9	36%	39%	3.8%	4.3%
Source: Citi Investment Research and	Analysis, Bloomb	erg										

Risks

Key downside risks that could prevent the shares from reaching our target price include:

Cyclical business, speculative trading base

MCX's revenues are linked intricately to trading volumes, and any fall-off in volumes (or a slower-than-expected development of the market) could markedly impact revenue, profitability and expectations. A significant volume of trading in commodities is also speculative in nature. Effectively, the volatility of such business can be substantially higher than more institutionally backed markets. MCX also enjoys generally strong commodity prices currently.

Mono-line business, concentrated trading volumes

MCX trades only in commodity derivatives and therefore operates in a relatively smaller sub-segment as compared to most of its global peers. Also, turnover on the exchange is currently concentrated in few major commodities. Any disturbances in these segments can have a relatively larger impact on MCX as compared to peers.

Regulatory risks

A large number of the commodities that are traded fall under some form of government overview and oversight, and adverse changes in these could risk business volumes. In addition indices, intangibles and options need regulatory approval before being allowed to trade. Delays in approvals for these regulatory changes are possible, risking volume growth.

High competitive intensity

India is one of few markets with two large commodity exchanges. Competition could lead to loss of market share, price erosion, and could be a significant overhang on profitability.

Settlement and execution risks

Limited deliveries in most commodities (less than 1% of total volume traded), and in some cases such as crude where the spot market itself is limited, could result in execution risks.

Risk management

Average margins are in the 3-8% range. While adequate (and can have dynamic adjustments), the high level of speculative trading could create margin issues in the event of market disturbances.

Conflicts of interest; controlling shareholder and technology provider

MCX's controlling shareholder, Financial Technologies, is also its primary technology provider. This effectively suggests a strong operating relationship between the two, and could potentially lead to some inefficiencies, or conflicts of interest.

Industry Outlook

- Average daily turnover for Indian commodity exchanges was over US\$11bn (FY12) and has been strong (+42% CAGR over FY06-12); we expect some growth moderation near term as commodity prices are currently high.
- Medium term, we believe growth should remain healthy, key drivers being economic growth, rising need for corporate and institutional hedging, newer product introductions, entry of additional participants, deeper geographical penetration, development of benchmark spot markets.
- Trading volume growth tracking equity derivatives market growth commodities still 59% of stock derivatives, suggesting considerable opportunities for growth.
- Globally, futures and options exchanges are growing faster in Asia Pacific, and especially in commodities and currencies.

Commodity exchanges - background

Historical overview

India has historically had an active futures market, and was the world's second-largest futures market in the early 1900s. However, futures' trading was banned in the country in the 1960s and trading was reduced, and largely shifted to unregulated markets. This also led to a proliferation of small regional exchanges, largely commodity-specific. These exchanges continue to operate; there are currently 16 regional exchanges, though they are predominantly focused on single or few commodities with limited business or market volumes. These are also largely pit based, lack technology, and are generally member-owned exchanges.

New commodity exchanges established in 2003

On April 1, 2003, the Government of India decided to formally re-open the commodities futures market in India. The Forward Markets Commission ("FMC"), the governmental body vested with the power to regulate the commodities futures industry in India, invited bids to establish nationwide, electronic-based commodities futures exchanges in India. From among 24 applications, four proposed exchanges were short listed and four licenses to operate nationwide exchanges were granted.

MCX and NCDEX were established as nationwide commodity futures exchanges. MCX commenced operations in November 2003 and has grown considerably since its inception. MCX now offers 49 commodities for trading on its exchange. NCDEX commenced operations in December 2003 and likewise has grown significantly. Together, MCX and NCDEX held approximately 96.3% market share of India's commodities futures trading industry (11MFY12). Other national exchanges, National Multi Commodity Exchange ("NMCE"), Indian Commodity Exchange ("ICEX") and Ahmedabad Commodity Exchange ("ACE"), remain smaller players. ACE was recently converted from a regional exchange to a national exchange.

The market

The rapid growth in trading volumes since the launch of these exchanges reflects the large market for commodities trading, and we believe there remains significant potential for growth and development.

Active trading in commodity futures in early 1900s which was curbed in 1960s

Restarted in 2003 with the establishment of a new regulator (FMC) and five electronic, national exchanges

MCX and NCDEX dominate the market with a combined market share of 96%

Growth drivers are plenty and augur well for structural growth of the industry ... though there could be cyclicality

Regulatory, economic developments offer potential to take growth to a higher plane

Average daily turnover has increased over 42% CAGR in FY06-12 and 50%YoY in FY12 and is expected to continue strong growth, though growth rates should moderate

Growth drivers in place

We believe the fundamental drivers of commodity trading volumes are in place. These include:

- Economic growth in India: Strong 7%+ GDP growth over the last two years, broadening and expansion of industry classes and the need for hedging opportunities for businesses are prime drivers. The opening up of the economy, reduction in trade barriers and removal of market access restrictions are also increasing the sensitivity and exposure of the economy to global trends, increasing the need and opportunity to participate and hedge in commodity prices movements.
- Leveraged investing platform: We also believe the commodity exchanges offer a platform for leveraged investing and risk taking, in addition to hedging, akin to the stock exchanges. We believe this is already apparent given the relatively large retail participation, which we expect will only increase given easy access, spread of commodities available, transparent pricing and settlement capabilities, and the credibility of the exchanges.
- Development of benchmark spot market: Currently the national level spot markets are in the process of being developed, and we expect this to increasingly bolster volumes.
- Deeper penetration of the market with wider participation: We think transparency and easier access to commodity derivative trading should drive wider participation, while online access can increase penetration within the country.

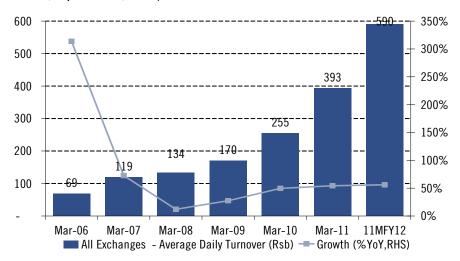
We also believe there are other regulatory and market developments expected over the near- to medium-term that could further fuel the already high growth. These include:

- Introduction of institutional investors such as mutual funds, banks and FII's: If the government were to permit mutual funds and FIIs to trade in commodities futures markets, we would expect meaningful institutional investor participation. That would further boost market trading volumes.
- Introduction of options: We expect the exchanges to be allowed to trade in options in line with most global exchanges. This should further bolster volumes globally, options account for about 20-25% of commodity futures volumes.
- Expansion of traded commodities: We believe commodity exchanges could be allowed to trade intangibles and indices such as commodity indices, freight indices etc. Globally, these products form a significant part of overall commodity derivatives volumes and will likely be a meaningful addition to industry turnover.

The Indian market; growing rapidly

India is witnessing rapid growth in volumes on its commodity exchanges. Average daily turnover for the industry has risen significantly over the last six years (over US\$11bn for 11MFY12) – with the markets turnover rising over 42% CAGR during FY06-12; growth accelerated to 50% yoy in FY12. Turnover growth in commodity derivatives has also been in sync with the growth of options and futures market in the equity segments, reflecting the surge in trading and market-related activities across India. While the growth rates are coming off low bases and should effectively moderate going forward, we believe the underlying momentum remains significant and consistent.

Figure 28. All Indian Commodity Exchanges — Average Daily Turnover and Growth (FY06 – 11MFY12, Rupees Billion, % YoY)



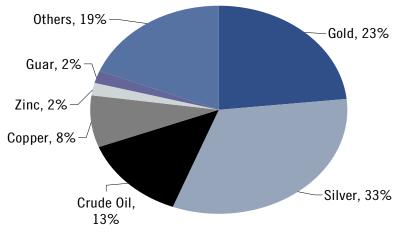
Source: Forward Markets Commission (FMC)

The commodities futures markets have yet, however, to witness large institutional or corporate activity, in part because of regulatory restrictions. This effectively means the bulk of trading volumes are retail and small-business driven.

Though the variety of commodities offered is large (49 for MCX and 33 for NCDEX in 9MFY12), trading volumes are concentrated in a few key commodities – gold, silver, copper and crude. Pulses, guar gum and guar seed form a significant portion of volumes on NCDEX. We expect a certain trading volume concentration to remain (primarily in gold, silver, copper and crude oil) given the volatility, international nature, and underlying real activity in these commodities. We do however expect the broader commodity groups – excluding crude, precious and ferrous metals – to gain in share.

Large no. of commodities traded, but volumes are concentrated in a few key segments

Figure 29. All Indian Commodity Exchanges - Major Commodities Traded, (11MFY12, Percent)



Source: MCX, NCDEX, FMC

Derivatives turnover has grown to 11x cash turnover on the NSE in 10 years since their launch

Growth and scale opportunity for commodity futures trading is likely to track growth of the equity F&O segment

Commodity derivatives - keeping pace with equity derivatives

India has witnessed a strong growth in the equity derivatives turnover on the NSE. Derivatives turnover (average daily turnover of Rs1,582bn in 11MFY12) has grown to 11x cash turnover on the NSE in the 10 years since launch. FII participation in the NSE derivatives market has boosted turnover growth in that section over the last few years, and FIIs currently contribute around 12-15% of the derivatives trading volumes on NSE as compared to 8-12% three years ago.

We believe the growth and scale opportunity for futures trading is in some measure reflected in the growth of the futures and options (F&O) in the equity markets. F&O is now a multiple of cash trading, and institutional participation has continued to rise. We foresee a similar growth profile for the commodity futures, given that its growth has historically tracked the equity F&O growth since introduction.

Figure 30. NSE F&O / NSE Cash Turnover (FY05 - 11MFY12, Percent)

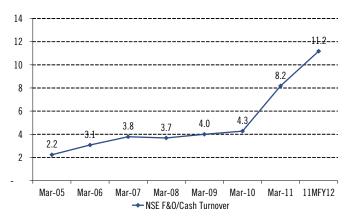
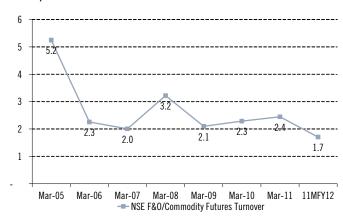


Figure 31. NSE F&O / Commodities Futures Turnover (FY05 – 11MFY12, Percent)



Source: NSE, FMC Source: NSE, FMC

Commodities derivatives volumes have been growing rapidly, and consistently – trading volumes across Indian exchanges have risen almost 20-fold between January 2005 and March 2012. After a dip in growth rates in FY08/FY09 (+11% and +29% respectively), turnover growth in the industry picked up smartly in FY10-FY12 (+52% CAGR). Overall commodity exchange turnover for the industry reached a peak of 60% of NSE (equity) derivative volumes in the current fiscal.

Strong growth overall, though growth rates have moderated recently Globally exchanges offer a diversified product mix with commodity futures a relatively smaller share of overall derivative volumes

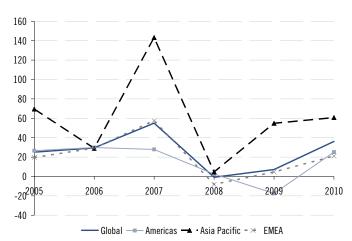
Global/US futures markets

Globally, most exchanges trading in derivatives are diversified in their product mix, offering interest rates, currencies, equities, indices and commodities to the trading members. The Indian markets are more defined however, as the commodities exchanges do not trade equities, FX or interest rate instruments.

Globally, commodity derivatives trading forms a relatively smaller portion of total F&O volumes – commodities formed 25% of the total futures contracts traded in 2010 as compared to 32% from stock futures, 22% from interest rates and 21% from currencies.

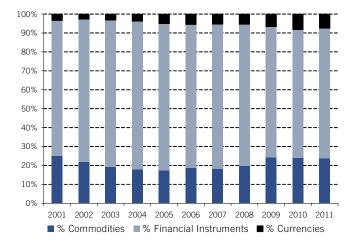
Overall futures volumes growth has picked up in 2010 after having been largely been stable over 2008-09. However, regionally there are significant differences, with Asia Pacific being the standout performer with continued high growth rates (+61% yoy in 2010) and the Americas and EMEA regions lagging in growth (25% and 21% respectively).

Figure 32. Regional Growth in Traded Futures Volumes (Percent)



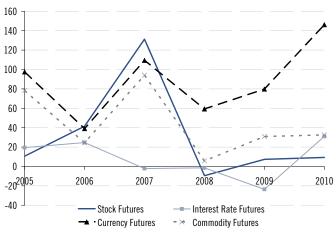
Source: World Federation of Exchanges

Figure 34. Futures Contracts Traded by Category — US Exchanges (2001-2011, Percent)



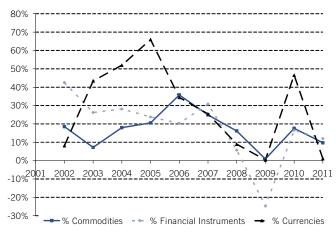
Source: Commodity Futures Trading Commission, World Federation of Exchanges

Figure 33. Segmental Growth in Global Traded Futures Volumes (Percent)



Source: World Federation of Exchanges

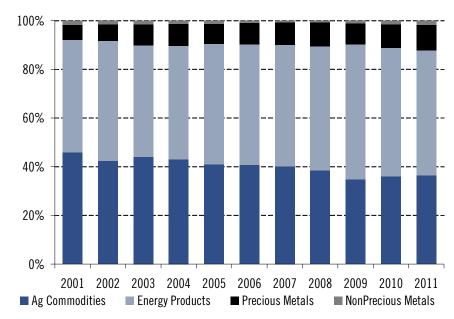
Figure 35. Growth Rates in Futures by Category — US Exchanges (2001-2011, Percent)



Source: Commodity Futures Trading Commission, World Federation of Exchanges

Within the US, growth in commodity derivatives trading volumes (13% CAGR) has significantly superseded the overall growth in derivative volumes (7% CAGR) over the last five years (2006-11). Within commodities, energy commodities derivatives are the largest segment with 51% share, agri commodities now have 36% share with precious metals having 11% and non-precious metals 2% share.

Figure 36. Commodity Futures Contracts Traded by Category — US Exchanges (2001-2011, Percent)



Source: Commodity Futures Trading Commission, World Federation of Exchanges

Only tangible commodity futures are currently allowed – intangibles and options are not traded

Products traded

Commodity exchanges in India currently trade only commodity futures – trading in options on commodity exchanges is not allowed by regulation. Indices and intangibles, including weather and freight, are still not defined as commodities as per the regulations, and therefore would require government clearance through amendment of the Forward Contracts (Regulation) Act, 1952 before trading could be allowed. Given the wide range of commodities traded, the contracts and specifications differ widely across commodities and the requirements of the associated trade. The largest volumes come from the near-month contracts; other contracts traded are subsequent 2m, 3m, 4m and alternate months – depending on the commodity and the volatility therein.

Regulation

The commodity futures market in India is regulated by the Forward Markets Commission (FMC) formed under the Department of Consumer Affairs, Ministry of Consumer Affairs Food & Public Distribution.

FMC regulates the following:

- National exchanges MCX, NCDEX, NMCE, ICE and ACE
- Regional exchanges 16, with a single or few commodities traded

Regulatory changes we expect in the medium term (and possibly sooner in some cases, though delay is always a risk) include:

Regulation could allow for intangibles to be traded; commodity indices, freight indices, etc, which could significantly broaden exchange-traded benchmarks. Regional exchanges are geographically limited in their reach and members and volumes are fast migrating to the

national exchanges

Entry into the markets is regulated, with FMC approval needed before setting up an exchange but it is difficult for newer exchanges to set up

Strong technology and risk management systems in place which are likely to limit systemic risks

- Regulation could allow for options trading in commodities.
- FIIs, MFs and banks may be allowed to participate in commodity exchanges, potentially increasing the depth of the market, which would be a positive for commodity volumes traded on the domestic exchanges.

Other exchanges

Apart from MCX, there are four other existing national exchanges. MCX has gained dominant market share in most of the frequently traded commodity segments and we believe it will be challenging for the others to gain rapid market share from MCX in the existing commodity segments.

Threats from other existing regional exchanges are limited, in our view, as most of them are small single-commodity exchanges. There are 16 such regional exchanges, most of which follow the "open outcry" system and do not have electronic trading capabilities. They are also geographically limited in their reach and members and volumes are fast migrating to the large national exchanges.

New players

It is possible for new applicants to seek approval to establish a new nationwide commodity derivatives exchange. In our view however, it is difficult for newer exchanges to set up given the significant barriers to entry. These barriers to entry include: a) Existing players have early-mover advantage over potential new entrants, with benefits of scale also in favor of the incumbents. b) The industry is highly competitive on pricing with low transaction charges, which we believe are unlikely to change. c) Entry into the markets is regulated, with FMC approval needed before setting up an exchange.

Risk management

The large Indian commodity exchanges typically have strong technology and risk management systems in place which we believe should limit systemic risks. Since inception, there have not been any significant problems. Members joining the exchanges have to fulfill certain minimum net worth criteria at all times. Margin systems are well controlled, and there appears only limited risk on this front, in our view.

Typically the initial margins are set at higher than the average daily volatility in the particular commodity. The exchanges have the power to call for additional margins from the members in the event of intra-day price volatility exceeding certain percentages of the initial margin. Moreover, exchanges do online monitoring of margin levels and mark-to-market loss is restricted to a certain percentage of total upfront margin paid. There are daily price limits to check the intra-day price volatility and circuit filters are defined daily based on market volatility. Additionally, the exchanges also have insurance on losses from members. The Settlement Guarantee Fund consisting of members' initial and additional margin deposits, is also insured.

Figure 37. Risk Management Systems at a Glance
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Standards
Minimum net worth criterion to be met at the time of joining and annual checks thereafter
Mark to market, t + 1 days
Varies with commodities, typically fixed at higher than the average daily volatility in the commodity
Can call additional margins from members depending on intra-day price volatility
On line monitoring of margin levels and margin alerts triggered when MTM loss exceeds certain percentages of the MTM limit.
Based on price volatility in the commodity and monitored online, exchange enforces FMC's circuit filter limits.
Each member is insured for losses
Comprises of Members initial and additional margins to be used by exchange if members fail to meet their obligations to the exchanges

Source: Company Reports

Delivery, execution and settlement systems for ascertaining payments, warehousing and quality have been tied up with alliances for warehousing (exchanges have their own accredited warehouses) and quality testing in place – limited physical settlements however suggest these have not been fully tested.

Competitive Positioning

- MCX has emerged as the dominant commodity exchange in India with an 86% market share, up from 45% in FY06.
- MCX dominates key commodity segments gold (97.1% share), silver (98.5%), copper (94.9%), crude (94.8%) for 9MFY12.
- Possibly lowest transaction charges globally domestic customers are price sensitive, and we expect exchanges to keep charges low.
- Globally, data quotation and clearing and related fees are large revenue contributors – currently miniscule in India and represent longer-term opportunities.

Dominant market positioning

MCX has emerged as the clear market leader in commodity derivative exchanges with an 86% market share in 11MFY12. The second-largest exchange, NCDEX, had 10% market share during this period, though volumes are volatile and market shares vary significantly across different commodities.

MCX dominates key commodity segments including gold (97.1% market share), silver (98.5%), crude (94.8%) and copper (94.9%), which are quite important for MCX, and where it has an early-mover advantage. Guar (over 92%), jeera (100%) and pepper are the important commodities traded on NCDEX. We expect the multiple national exchanges to compete aggressively for market share over the near and longer term. MCX being the largest incumbent should have a significant scale and early mover advantage over its peers.

MCX (86% market share in 11MFY11) is the dominant commodity derivative exchange in India

Market shares vary significantly across different commodities

Figure 38. Select Commodities — Market Shares (11MFY12, %)

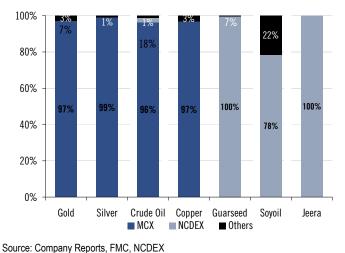
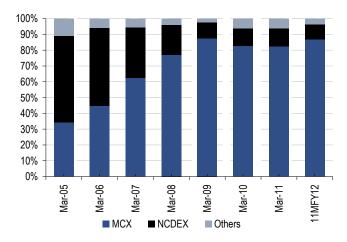


Figure 39. MCX and NCDEX Market Share (FY05 to 11MFY12, Percent)



Source: FMC, NCDEX

MCX has also become the fifth-largest commodity futures exchange globally, due to its rapid growth in the recent years. This is based on the total number of contracts traded on such exchanges globally.

Figure 40. Global Volume Rankings for Commodity Futures Exchanges (Jan-Jun 2011)

Rankings	Commodity Futures Exchange	Volumes (mn cts)
1	CME Group (includes CBOT & Nymex)	353
2	Zhengzhou Commodity Exchange	218
3	ICE Group (includes U.S., U.K. and Canadian Markets)	159
4	Shanghai Futures Exchange	129
5	Multi Commodity Exchange	128
Source: Compar	ny Reports	

Comparisons with NCDEX

MCX dominates volumes in energy and metals

MCX and NCDEX are the two largest commodity exchanges in India. MCX is stronger in the energy, precious and non-precious metals segments while NCDEX has higher market share in agri commodities. Distribution channels and reach are largely similar as both are national exchanges, and though technology access might be easier and early for MCX (whose promoter is a technology provider). Both have large and diversified product offerings, though volumes are concentrated in a few key commodities. MCX has private ownership (compared with institutional and more diversified ownership for NCDEX), which results in a more aggressive business approach.

Figure 41. Comparative Features of MCX and NCDEX on Key Parameters

Key Parameter	MCX	NCDEX						
Volumes	86% market share in 11MFY12, though starkly different in different commodities	10% market share in 11MFY12, though starkly different in different commodities						
Product Mix Offered	49 commodities – Gold, Silver, Copper and Crude are key	33 commodities - Soyoil and Guar are key						
Geography	National Exchange	National Exchange						
Distribution channels	Nationwide	Nationwide reach, growth similar to MCX						
Technology	Promoted by a technology company - easy and early access	Competitive and reliable						
Risk Management	Adequate	Adequate						
Ownership	Private ownership which could result in more aggressive approach	Institutional and diversified - could potentially slow down decision making						
Source: Citi Investme	Source: Citi Investment Research , FMC, MCX, NCDEX							

Revenue comparison with global players

Revenues will increasingly depend on transaction fees, as membership fees peak

Large global exchanges derive a significant portion of their revenues from clearing and transaction fees, and software and data services. Membership forms a miniscule part of the income stream. Sale of strategic investments formed a significant proportion of MCX's total income in FY08-10, our analysis is largely based on earnings excluding these investment-related gains. Between FY06-FY12, transaction fees remained the dominant source of income for MCX. We expect future revenues to remain dependent on transaction fees.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% CME - CY 2011 Hong Kong Exchange - CY MCX - FY12E 2011 ■ Clearing and Transaction fees ■ Data Quotation Fees ■ Investment Income Others ■ Sale of Strategic Investments ■ Membership Fees

Figure 42. Comparison of Revenue Profile for CME, HKEX and MCX (Percent)

Source: Company Reports, CME, HKEX

We also see two key differences between the Indian national exchanges and their global peers. These are:

- Globally, an increasing share of business and revenue is based on interest rate and financial derivatives; the Indian exchanges currently do not participate in these segments.
- Global exchanges still depend to an extent on non-electronic trading fees, and open-cry trading, even though these streams and businesses are diminishing in importance. The Indian exchanges are purely electronic; commissions are lower, but growth rates are substantially higher, and are likely to remain so, in our view.

Trading profile

Though there are a large number of commodities trading on the Indian national exchanges, the volumes are concentrated largely in gold, silver, copper, crude oil, pulses and guar. We expect the dominance of precious metals and global commodities to continue, given scale, international benchmarks and more active spot markets.

Volumes are concentrated largely in gold, silver, copper, crude oil, pulses and guar

Figure 43. Major Categories of Commodities Traded on MCX, (FY12, Percent)

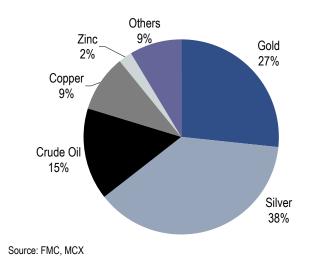
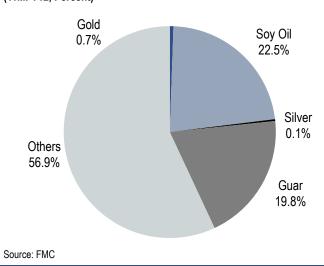


Figure 44. Major Categories of Commodities Traded on NCDEX, (11MFY12, Percent)



Domestic volumes are largely driven HNW and retail participants, unlike global exchanges where FIs form the bulk of trading activity Gold, silver, copper and crude oil are mainly traded on MCX, which has a dominant share of trading, whereas NCDEX has a large share in soy oil, pulses, guar gum and guar seed and other agri commodities. MCX has a relatively high concentration of trading volumes with over 90% of its FY12 turnover coming from five major commodities – gold (27%), silver (38%), crude oil (15%), copper (9%) and zinc (2%).

Trading in commodity derivatives is largely speculative; with less than 1% of trades being settled by way of delivery (Indian exchanges are similar to global settlement patterns). Commodities such as crude oil do not have a domestic basis for physical delivery; therefore cash settlement is done for these contracts. Volumes on domestic commodity exchanges are largely driven by high net worth individuals ("HNIs") and retail participants, unlike global exchanges where financial institutions ("FIs") are the major participants. We see trading volumes likely to remain significantly driven by speculative activity, especially near term as institutions are still not allowed to participate in trading on commodity derivative exchanges.

Competitive pricing

Commissions/transaction fees in the country have been generally low and financial markets have been no exception.

Pricing is competitive and low; we expect pressures on transaction charges to remain

There has already been a couple of rounds of price competition and this could remain a trend given the large growth opportunity, and as the exchanges (including the recently approved exchange) seek to monopolize market positions in the medium term. In a highly competitive market with all players looking to gain market share, the pressure on transaction charges will remain.

The industry started with low transaction charges in line with that of equity F&O markets, i.e., 0.2 bps of total value traded. However, there are also volume-linked discounts which could moderate blended rates. We would expect this rate structure to persist and could even come under some pressure if the new entrants seek to aggressively compete on pricing. The regulatory structure also allows for only a single transaction fee structure; hence product-based pricing is not possible.

Strategy

- Increase the number of commodities traded as well as boost volumes in existing low-volume commodities.
- Increase the membership of the exchange, working towards ensuring seamless entry of FIIs and other institutions to trade in commodity exchanges.
- Introduce new product categories intangibles, commodity indices and options (though regulations do not yet allow).
- Pursue international tie-ups for domain knowledge, product development and knowledge launch of new products in India.

MCX has a multi-pronged strategy to enhance its presence in the commodity derivatives trading segment; these plans are aimed at market expansion and market share gains. They include:

Increase the number of traded commodities

Even though there are a large number of commodities traded in domestic exchanges, most of the volumes are concentrated in a few select commodities. Introduction of every new commodity brings to the exchanges a new set of market participants. MCX is looking to expand the number of commodities offered for trading (from 49 as of Dec 31, 2011). In addition, management markets through promotions, seminars and other business development activities, with the intent of launching new commodities, penetrating new user markets, and raising volumes in other low-volume commodities. Management also has an ongoing program to launch new commodities, backed by significant research and user profile and demand studies.

Product expansion

Apart from an increase in the number of commodities in existing categories, MCX is also looking to introduce new categories such as intangibles, commodity indices and options in addition to commodity futures – when allowed by the regulations.

Currently the regulations do not permit the introduction of these new categories, as the legal definition of commodities does not include weather and freight derivatives, options and indices to be traded. As and if allowed, we expect these can increase volumes on the exchange. Options volumes are usually about 15-25% of futures volumes, globally.

Multi-pronged strategy - aimed at market expansion and market share gains...

MCX has an ongoing program to launch new commodities – backed by research

Options and intangibles are on the agenda (when allowed by regulations) in addition to expanding products in existing segments

Figure 45. Trading in Commodity Options as Percentage of Commodity Futures - Comparison

	2010	2009	2010	2009	2010	2009	
Exchange	Commodi	ty Options	Commod	ity Futures	Options As	As % of Futures	
	('000s	Contracts)	('000s	Contracts)	('00	Os Contracts)	
Americas	137,842	78,521	659,691	489,680	21	16	
BM&FBOVESPA	394	452	2,275	1,886	17	24	
CME Group	121,996	63,091	608,256	431,067	20	15	
ICE Futures Canada	1,002	86	4,204	3,483	24	2	
ICE Futures US	14,449	11,089	44,956	38,960	32	28	
Mercado a Término de Buenos Aires	-	3,803	-	14,284	NA	27	
Asia Pacific	93	5,832	306	3,538	30	165	
Australian SE	16	10	230	195	7	5	
TAIFEX	77	5,822	76	3,343	101	174	
Europe, Africa, Middle East	10,509	8,240	330,762	278,920	3	3	
Budapest SE	-	0.5	7	11	-	5	
Eurex	11.4	13.3	227	52			
ICE Futures Europe	623.0	952.1	210,402	160,157	0	1	
Johannesburg SE	303.9	266.7	1,835	1,642	17	16	
London Metal Exchange	7,026.0	5,467.0	104,158	106,457	7	5	
NYSE Liffe (European markets)	2,545.1	1,540.3	14,134	10,601	18	15	
Total	148,444	92,593	990,759	772,137	15	12	

Source: World Federation of Exchanges

Increase exchange membership

MCX had 2,153 members as of Dec 31, 2011. Unlike some other global exchanges, there is no restriction on number of members in a demutualized exchange, and while a large portion of MCX's earnings initially came from membership fees, these now form less than 1% of total revenues (9MFY12). MCX is looking to increase memberships through tie-ups and alliances with various industry and trade associations. Tie-ups with regional exchanges would serve a dual purpose of increasing the number of members and migration of volumes to MCX. Wider participation from corporates and increased geographical penetration also are on the agenda.

Entry of FIIs/institutions

Indian commodities markets still do not enjoy meaningful trading by institutions and FIIs – unlike global exchanges, their volumes are retail driven. MCX is actively seeking to engage institutions in discussions, and management has made investor education presentations and seminars regularly in the recent past to attract more investors/traders to commodity exchanges. Institutional investors are currently not allowed to participate in these exchanges. As in the case of NSE equity derivative markets, we believe that the entry of FIIs/institutions would lead to significant growth in volumes (12-15% of NSE F&O is traded by institutions).

International tie-ups

MCX has entered into tie-ups with international exchanges including the LME, NYMEX (CME Group) and NYSE LIFFE. These tie-ups are largely in the nature of knowledge-sharing and product development. Such tie-ups help MCX to acquire domain knowledge of commodities, structuring of products, and expertise in trading different products. The international exchanges gain an understanding of India's domestic markets and could launch joint products in the future, giving them access to the Indian markets.

Over 2,150 members and expanding through increased focus on corporates and geographical penetration

Entry of institutional investors (when permitted by regulations) would lead to significant growth in volumes

Large number of international tie-ups for knowledge sharing and product development We believe this strategy not only lends credibility and creates benchmarks, but also could provide a significant leg up for business, as and when the domestic market opens up to international players.

Figure 46. MCX — Select Alliance Partners

Alliance Partner	Remarks
New York Mercantile Exchange	Benchmark contracts for price settlement
London Metal Exchange	Benchmark contracts for price settlement - non ferrous metals
NYSE LIFFE	Benchmark contracts for price settlement- Robusta Coffee and White Sugar
Shanghai Futures Exchange	MOU to share knowledge and expertise for development of both exchanges
The Baltic Exchange Limited	Supply of data - market price indices on freight derivatives and route rate reports
Taiwan Futures Exchange	MOU to share information and best practices on product development, business and marketing initiatives, technology etc.
Dubai Gold and Commodity Exchange	FTIL and MCX helped to set up a gold and commodity exchange in Dubai and currently hold stakes in DGCX
Source: MCX Red Herring Pr	ospectus

Source: MCX Red Herring Prospectus

Development of spot market

Currently there is no domestic national spot market for commodities, although there are about 7,500 standalone Agriculture Produce Market Committees (APMC) in the country. These APMCs are district-level standalone mandis (a local physical wholesale market), are based on local prices, and are small and fragmented with virtually no integration across geographies.

MCX's parent FT is also developing an electronic spot market for commodities

FT has been developing an electronic spot market for commodities through a group company called National Spot Exchange Limited (NSEL). NSEL offers electronic trading on a spot basis, attempting to move spot markets to electronic form, and would provide better benchmarks for its futures trading platform. Apart from the benefits to the spot markets, it would offer secondary benefits to MCX.

Financial Statements

Figure 47. MCX – Profit and Loss Account (FY07-FY14E, Rupees Million)

	FY07	FY08	FY09	FY10	FY11	FY12E	FY13E	FY14E
Clearing and transaction fee	1,103	1,445	1,861	2,641	3,495	5,197	6,243	7,374
Membership fee	416	111	105	70	35	43	52	62
Subscription fee	39	95	136	136	135	141	149	156
Terminal Charges	32	25	22	27	24	25	26	27
Investment Income	309	396	596	456	542	828	1,071	1,278
Sale of Strategic Investments	-	462	728	1,369	-	-	-	-
Other Income	163	207	210	238	244	269	309	340
Total Revenues	2,063	2,742	3,658	4,937	4,476	6,503	7,849	9,237
Interest Expense	6	0	2	0	0	-	-	-
Depreciation	90	120	200	247	247	276	304	334
Employee Cost	162	305	254	218	264	291	334	368
Other Expenses	540	948	1,106	1,241	1,507	1,582	1,741	1,915
Total Expenses	798	1,374	1,562	1,706	2,018	2,149	2,379	2,617
EBITDA	1,052	630	974	1,654	2,162	3,802	4,703	5,677
Profit Before Tax	1,266	1,368	2,097	3,231	2,458	4,354	5,470	6,621
Tax	335	315	522	1,024	725	1,437	1,805	2,185
Other Adjustments	4	(16)	14	1	30	-	-	
Attributable Net Profits	935	1,037	1,588	2,208	1,763	2,917	3,665	4,436
Growth (%)	104	11	53	39	(20)	65	26	21
Less: Sale of Strategic Investments	-	462	728	1,369	-	-	-	-
Add: Tax on Sale of Strategic Investments	-	104.7	156.7	465.3	-	-	-	-
Recurring Net Profit	935	680	1,017	1,304	1,763	2,917	3,665	4,436
Growth (%)	104	(27)	50	28	35	65	26	21
Dividend	858	235	205	204	255	612	1,020	1,275

Source: Company Reports, Citi Investment Research and Analysis estimates. Note: data for FY07-08 are standalone, for FY09-FY14E are on consolidated basis

Figure 48. MCX - Common Size Profit and Loss Account (FY07-FY14E, Percent)

	FY07	FY08	FY09	FY10	FY11	FY12E	FY13E	FY14E
Clearing and transaction fee	53	53	51	53	78	80	80	80
Membership fee	20	4	3	1	1	1	1	1
Subscription fee	2	3	4	3	3	2	2	2
Terminal Charges	2	1	1	1	1	0	0	0
Investment Income	15	14	16	9	12	13	14	14
Sale of Strategic Investments	-	17	20	28	-	-	-	-
Other Income	8	8	6	5	5	4	4	4
Total Revenues	100	100	100	100	100	100	100	100
Interest Expense	0	0	0	0	0	-	-	-
Depreciation	4	4	5	5	6	4	4	4
Employee Cost	8	11	7	4	6	4	4	4
Other Expenses	26	35	30	25	34	24	22	21
Total Expenses	39	50	43	35	45	33	30	28
EBITDA	51	23	27	33	48	58	60	61
Profit Before Tax	61	50	57	65	55	67	70	72
Tax	16	11	14	21	16	22	23	24
Prior Period/ Other Adjustments	0	(1)	0	0	1	-	-	-
Attributable Net Profits	45	38	43	45	39	45	47	48
Recurring Net Profit	45	25	28	26	39	45	47	48

Source: Company Reports, Citi Investment Research and Analysis estimates. Note: data for FY07-08 are standalone, for FY09-FY14E are on consolidated basis

Figure 49. MCX - Balance Sheet (FY07-FY14E, Rupees Million)

	FY07	FY08	FY09	FY10	FY11	FY12E	FY13E	FY14E
Fixed Assets	1,294	1,472	2,089	1,928	1,953	2,188	2,450	2,744
Investments	3,167	5,249	4,698	6,170	8,237	9,885	11,862	14,234
Cash and Bank balances	1,890	1,047	4,059	2,701	3,312	4,051	4,792	5,622
Debtors	165	148	269	304	489	635	762	915
Loans and Advances	158	582	452	1,108	897	986	1,085	1,193
Other Current Assets	16	7	92	78	113	136	163	195
Total Current Assets	2,228	1,783	4,872	4,191	4,810	5,808	6,802	7,925
Total Assets	6,689	8,504	11,658	12,289	15,001	17,881	21,115	24,904
Share Capital	391	392	408	408	510	510	510	510
Share Application Money	-	-	0	-	-	-	-	-
Reserves and Surplus	2,528	3,195	4,528	6,560	7,979	10,207	12,724	15,726
Net Worth	2,919	3,587	4,937	6,968	8,488	10,717	13,234	16,236
Current Liabilities	3,701	4,825	6,366	4,914	6,045	6,649	7,314	8,046
Provisions	35	72	269	300	341	375	412	454
Other Liabilities	35	20	87	106	127	140	154	169
Debt	-	-	-	-	-	-	-	-
Total Liabilities	6,689	8,504	11,658	12,289	15,001	17,881	21,115	24,904

Source: Company Reports, Citi Investment Research and Analysis estimates. Note: data for FY07-08 are standalone, for FY09-FY14E are on consolidated basis

Figure 50. MCX - Common Size Balance Sheet (FY07-FY14E, Percent)

	FY07	FY08	FY09	FY10	FY11	FY12E	FY13E	FY14E
Fixed Assets	19	17	18	16	13	12	12	11
Investments	47	62	40	50	55	55	56	57
Cash and Bank balances	28	12	35	22	22	23	23	23
Debtors	2	2	2	2	3	4	4	4
Loans and Advances	2	7	4	9	6	6	5	5
Other Current Assets	0	0	1	1	1	1	1	1
Total Current Assets	33	21	42	34	32	32	32	32
Total Assets	100	100	100	100	100	100	100	100
Share Capital	6	5	3	3	3	3	2	2
Share Application Money	-	-	0	-	-	-	-	-
Reserves and Surplus	38	38	39	53	53	57	60	63
Net Worth	44	42	42	57	57	60	63	65
Current Liabilities	55	57	55	40	40	37	35	32
Provisions	1	1	2	2	2	2	2	2
Other Liabilities	1	0	1	1	1	1	1	1
Debt	-	-	-	-	-	-	-	-
Total Liabilities	100	100	100	100	100	100	100	100

Source: Company Reports, Citi Investment Research and Analysis estimates. Note: data for FY07-08 are standalone, for FY09-FY14E are on consolidated basis

Figure 51. MCX — Operating Parameters (FY07-FY14E)

	FY07	FY08	FY09	FY10	FY11	FY12E	FY13E	FY14E
No. of Members	1,762	1,869	2,037	2,070	2,119	2,169	2,219	2,269
Average volumes per day (Rsm)	74,714	102,828	148,964	209,523	320,568	511,380	643,312	797,477
Total Volumes (Rsbn)	22,937	31,260	45,881	63,695	98,415	155,971	196,210	243,230
Margin (bps)	0.240	0.231	0.203	0.207	0.178	0.167	0.159	0.152
Growth rate in overall volumes (%)	140	36	47	39	55	58	26	24

Source: Company Reports, Citi Investment Research and Analysis estimates. Note: data for FY07-08 are standalone, for FY09-FY14E are on consolidated basis

Figure 52	MCX -	Key Ratios	(FY07-FY14E)
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	FY07	FY08	FY09	FY10	FY11	FY12E	FY13E	FY14E
Profitability Ratios								
RoAE (%)	31.8	31.9	37.3	37.1	22.8	30.4	30.6	30.1
Recurring ROAE (%)	31.8	20.9	23.9	21.9	22.8	30.4	30.6	30.1
RoAA (%)	14.4	13.6	15.8	18.4	12.9	17.7	18.8	19.3
Recurring ROAA (%)	14.4	8.9	10.1	10.9	12.9	17.7	18.8	19.3
EBITDA Margins (%)	51.0	23.0	26.6	33.5	48.3	58.5	59.9	61.5
Pre-tax Margins (%)	61.3	49.9	57.3	65.4	54.9	66.9	69.7	71.7
Net Profit/Revenues (%)	45.3	37.8	43.4	44.7	39.4	44.9	46.7	48.0
Recurring PAT Margin (%)	45.3	29.8	34.7	36.6	39.4	44.9	46.7	48.0
Operating Ratios								
Employee Costs/Revenues (%)	7.8	11.1	7.0	4.4	5.9	4.5	4.3	4.0
Other Expenses/Total Revenues (%)	26.2	34.6	30.2	25.1	33.7	24.3	22.2	20.7
Total Expenses/ Total Revenues (%)	38.7	50.1	42.7	34.6	45.1	33.1	30.3	28.3
Interest Yield (%)	5.7	7.0	7.9	5.2	5.3	6.5	7.0	7.0
Effective Tax Rate (%)	26.5	23.2	26.7	30.0	29.5	33.0	33.0	33.0
Growth Rates								
Transaction Revenues	139.7	36.3	46.8	38.8	54.5	58.5	25.8	24.0
Membership Revenues	107.4	31.0	28.8	41.9	32.4	48.7	20.1	18.1
Total Revenues	56.1	(73.3)	(5.1)	(33.8)	(49.5)	22.4	20.0	20.0
Employee Costs	97.7	32.9	33.4	34.9	(9.3)	45.3	20.7	17.7
EBITDA	159.8	88.6	(16.7)	(14.5)	21.5	10.0	15.0	10.0
Net Profits	80.3	(40.1)	54.7	69.8	30.7	75.8	23.7	20.7
Recurring Net Profits	104.5	10.9	53.2	39.0	(20.2)	65.5	25.6	21.0

Source: Company Reports, Note: data for FY07-08 are standalone, for FY09-FY14E are on consolidated basis

Multi Commodity Exchange Ltd.

Company description

The Multi Commodity Exchange of India Ltd. ("MCX") is a de-mutualized commodities derivatives exchange. It was incorporated in 2002, began commercial operations starting in November 2003, and listed on the Bombay Stock Exchange on 8 March 2012. It provides a centralized, electronic-only and regulated marketplace for the trading of a broad and expanding range of commodity futures. The exchange operates on a pan-India basis through a geographically distributed member base. MCX is the largest commodity exchange in India (amongst five national exchanges) with over 85% market share.

Investment strategy

We rate MCX shares as Buy with a Rs1,580 target price based on 22x 1yr fwd PE. MCX is the dominant exchange (over 86% market share) for commodity derivatives trading in India. It has a highly scalable business, high returns and strong execution track record, and it looks well positioned to benefit from the industry's strong growth potential long-term.

We believe MCX management is a step ahead in innovation, product mix and business volumes, and should retain its potent mix of high returns and potentially high growth. Key reasons for our positive bias: a) Rise in market share to 86% (FY12) from 45% (FY06) despite increase in competitive intensity; b) Strong turnover growth (59% CAGR over FY06-12) even amid declining commodity prices; c) High profitability (EBITDA margins of 59% in 9MFY12) and profit growth (36% CAGR over FY06-12); and d) Cash surplus, with no debt/capex requirements in near future.

We believe key catalysts for the stock could be: a) Continued high turnover growth (we believe 20-25% growth sustainable without regulatory opening up); b) Hike in dividend payout; c) Regulatory changes allowing new products (options, indices, intangibles) and participants (FIIs, domestic institutions) – though timing is uncertain; and d) Potential value unlocking from strategic stakes in DGCX, MCX-SX (we assume nil value currently).

Valuation

We value MCX at Rs1,580 per share based on 22x 1-year forward P/E (currently trading at 18x P/E). We believe P/E ratio would be the most appropriate valuation methodology in a high-margin industry such as exchanges as it factors in the profitability, growth potential, and cyclicality of the business. Also, we are not including any potential value from sale of stakes in strategic investments in DGX, MCX-SX and clearing corporations.

Globally, exchanges in developed markets trade around 12-15x 1-year forward PE, while those in more developing markets trade around 25-30x. We believe MCX's strong growth potential, dominant market share and high returns call for high multiples, but valuation should also be tempered by a competitive industry structure (lack of a monopoly), mono-line business segment and relative concentration in trading turnover. We therefore benchmark MCX closer to the middle of this range and believe it adequately factors in both opportunities and challenges.

Alternatively, we also look at MCX's valuations on EV/EBITDA – our target price implies a 13.5x FY13E multiple on this parameter.

Risks

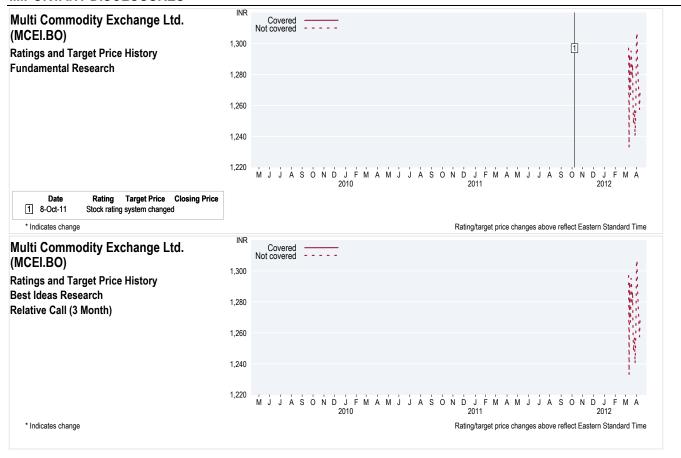
Key downside risks that could prevent the shares from reaching our target price include: a) Cyclical nature of its trading business, which can cause adverse impact on turnover and earnings, enhanced by the speculative nature of a significant volume of its trading; (b) generally strong commodity prices currently; (c) mono-line business with trading volume concentrated in a few major commodities; (d) adverse regulatory changes; (e) high competitive intensity, which can impact through lower market share and lower transaction yields going forward, (f) risk management or settlement issues, which can impair profitability for the exchange and (g) conflicts of interest with FT, its primary shareholder and also the primary technology provider.

Appendix A-1

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	12 IVIO	ntn Katıl	ng	Relative Rating		
Data current as of 31 Mar 2012	Buy	Hold	Sell	Buy	Hold	Sell
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