

# Multi Commodity Exchange

**BUY**

INDUSTRY	EXCHANGES		
<b>CMP (as on 4 Feb 2015)</b>	<b>Rs 859</b>		
<b>Target Price</b>	<b>Rs 1,180</b>		
Nifty	8,724		
Sensex	28,883		
<b>KEY STOCK DATA</b>			
Bloomberg	MCX IN		
No. of Shares (mn)	51		
MCap (Rs bn) / (\$ mn)	44/709		
6m avg traded value (Rs mn)	634		
<b>STOCK PERFORMANCE (%)</b>			
<b>52 Week high / low</b>	<b>Rs 927/425</b>		
	3M	6M	12M
Absolute (%)	2.7	12.3	71.0
Relative (%)	(1.0)	0.1	28.1
<b>SHAREHOLDING PATTERN (%)</b>			
Promoters	-		
FIs & Local MFs	35.99		
FIIIs	20.29		
Public & Others	43.72		
<i>Source : BSE</i>			

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## Crouching tiger

*We initiate coverage on Multi Commodity Exchange of India (MCX), a world-class oligopoly which has weathered a 'promoter shock' and emerged with unscathed operations and business franchise. Our conviction is driven by the fact that the commodity exchanges business is at its infancy in India. MCX is thus poised for non-linear growth with progressive policy evolution.*

*MCX is a persistent leader among Indian commodity exchanges despite cyclically poor trading volumes in its key commodities. Post the recent rationalisation of fixed costs (lower software and service costs), the co is poised to derive operating leverage as volumes resurface. The recent business development drive will help. At 18x FY17E EPS (implying PEG ~0.4x), MCX's strong franchise and longer term growth prospects look attractively valued. We value MCX at 25x FY17E EPS arriving at a target price of Rs 1,180.*

- **Globally, commodity exchanges are profitable, capital light oligopolies that gain franchise as they grow.** We think MCX will be no different, given India's position as the third largest global economy in PPP terms.
- The commodity futures business is severely under-penetrated in India, especially when compared to the size of the corresponding physical markets in the country. **This is mostly because institutions have been barred from trading commodity futures in India.** The business may see non-linear growth (if, and) when the policy framework is corrected.

- **We see the CTT imposition in Jul-13 as a retrograde step worthy of reversal.** A historically socialist mindset has led to poor government perception of the commodity futures business. We think this may change as India's economic policy framework begins to lean towards the right in the foreseeable future.
- **MCX's business enjoys significant operating leverage** as gross margins are high (~90% during FY12-H1FY15). We believe that MCX can achieve revenue growth without almost any incremental IT investments while focusing on business development efforts. Incremental EBITDA margins over FY15-17 can be as high as 81%.
- **MCX has survived a triple shock (promoter change, CTT and cyclically low volumes) and actually emerged stronger.** It is aggressively launching new products, which bodes well in the context of the under-penetrated nature of its business.
- **Key risks :** (1) MCX continues to rely on the software platform of Financial Technologies India Limited, it's erstwhile troubled promoter. FTIL could slip on support if there is any adverse outcome of judicial probes that it faces (2) Regulatory risks (3) Competition.

### FINANCIAL SUMMARY (Standalone)

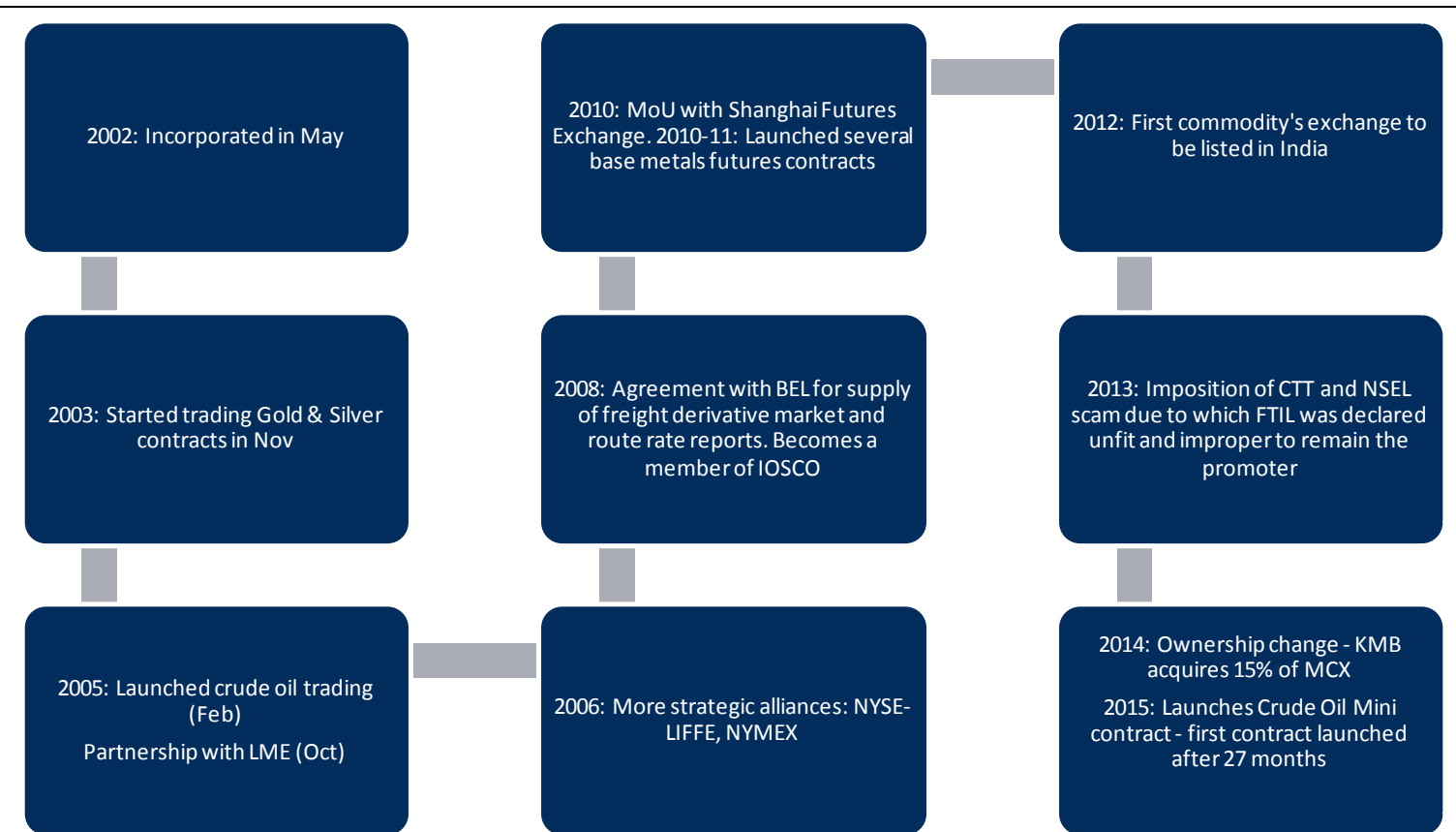
(Rs mn)	FY13	FY14	FY15E	FY16E	FY17E
Net Sales	4,992	3,197	2,079	3,123	4,167
EBITDA	3,152	1,457	726	1,607	2,490
PAT	2,986	1,528	1,167	1,742	2,430
EPS (Rs)	58.9	30.2	22.9	34.1	47.6
P/E (x)	14.3	27.8	36.7	24.6	17.6
P/BV (x)	3.7	3.7	4.0	3.8	3.5
RoE (%)	27.8	13.3	10.5	15.8	20.6

Source: Company, HDFC sec Inst Research

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## A brief history of MCX



Source: Company, HDFC sec Inst Research

**Trust restored as KMB is now MCX's largest shareholder**

**As per a share purchase agreement inked by FTIL and Kotak Mahindra Bank (KMB), the former sold 15% stake in MCX to KMB at a price of Rs 600/share.**

**This deal was completed on 29<sup>th</sup> September 2014 and FTIL also sold its remaining stake in MCX to institutional investors and has completely exiting the company (as a shareholder) by the end of Q2FY15.**

**KMB is MCX's largest shareholder and FTIL continues to be an IT vendor of the company.**

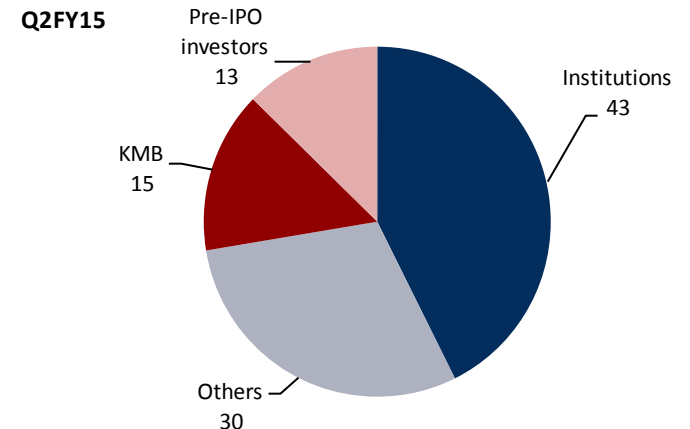
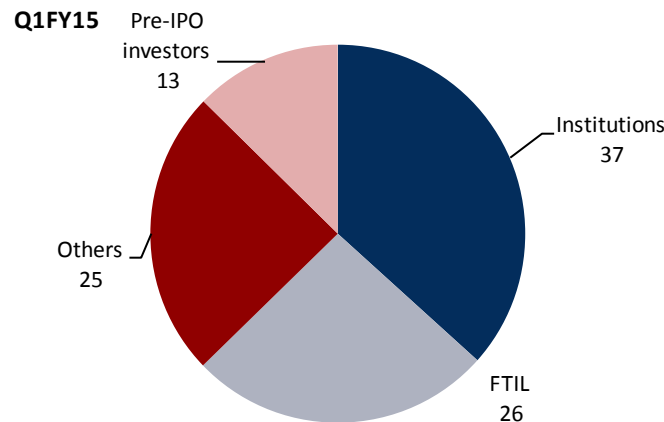
- MCX was incorporated in May 2002, by Financial Technologies (India) Private Limited (FTIL). The company commenced trading in November 2003 and saw non-promoter equity investments by several financial institutions:
  - 2004 – State Bank of India, Bank of India, Union Bank and Corporation Bank (no longer invested).
  - 2005 – HDFC Bank, NSE and NABARD. HDFC Bank is still a shareholder of MCX while NSE and NABARD have exited.
  - 2006-08 – Fidelity Funds, Citigroup Strategic Holdings Mauritius Limited, Merrill Lynch Holdings (Mauritius), GLG Financial Funds, Passport India Investment (Mauritius) Limited, ICICI Trusteeship Services Limited, ICICI Lombard General Insurance Company Limited, IL&FS Trust Company Limited, New Vernon Private Equity Limited, Kotak Mahindra Trusteeship Services Limited and Alexandra Mauritius Limited. These institutions are no longer invested in the company.

- FTIL is in the business of developing software and acting as a technical service provider in respect of automated electronic markets in the areas of finance and technology like foreign exchange, commodities, debts, treasuries, securities, banking and insurance. The promoters of FTIL are Jignesh P. Shah, Dewang Neralla and La-Fin Financial Services Private Limited.

**The NSEL crisis led to FTIL's exit as MCX's promoter**

The National Spot Exchange Limited (NSEL) is an FTIL promoted national level electronic institutional spot market in commodities such as Gold, Silver, Cotton, Urad, Copper, Zinc etc. Following the NSEL's Rs 55bn payment default (to investors), the Forward Markets Commission (FMC – the commodity futures market regulator), in Dec-13, held that FTIL was no longer 'fit and proper' to be a 2% (or higher) shareholder in MCX. Subsequently, FTIL exited MCX completely, offloading to Kotak Mahindra Bank and other institutional shareholders.

**MCX shareholding pattern : Kotak Mahindra Bank (KMB) is now the largest stakeholder owning 15% of the company**



Source: Company, HDFC sec Inst Research

**MCX witnessed significant management churn following the NSEL crisis faced by its erstwhile promoter**

## The second coming

**MCX bore the brunt of a triple whammy as (1) A commodities transaction tax was imposed in Jul-13 (2) Its promoter FTIL was deemed as 'unfit and improper' following the NSEL settlement crisis, and (3) Volatility, and hence trading volumes, fell sharply in its top five traded commodities. MCX saw 6 of its 9 top managers exiting the firm. We believe the co has weathered this storm admirably well, as operations never suffered a shutdown. Its franchise seems intact, and indeed enhanced in our view, post the change in shareholding.**

- As FTIL faced the NSEL payments default crisis, MCX witnessed significant senior management attrition (mostly involuntary). We note that barring three key

appointments (expected soon), the company has been able to find replacements for strategic roles such as CFO, business development, company secretary and compliance, market operations and research and strategy.

- The management changes have occurred under the watchful gaze of the FMC and lend trust and credibility to the company. Further, Mr. Praveen Singhal's (then, the deputy managing director of the company and now the joint managing director) hands-on involvement has also been critical in the transition as he's an industry veteran and has been with the company since 2009.

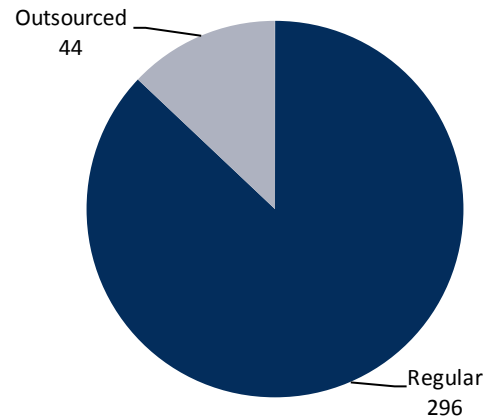
- Three key appointments are pending (1) MD and CEO (2) head – operations (3) head - technology
- The company has managed to complete other key appointments, viz. CFO, company secretary and compliance, business development, market operations, research and strategy.

### MCX : Snapshot of senior management changes

Position	Exiting personnel	Replaced by	Background
MD & CEO	Shreekant Javalgekar		Hiring in-progress
Company Secretary & Chief Compliance Officer	P Ramanathan	Ajay Puri	He has 35 years experience in handling Company Law, Corporate Finance, Legal Secretarial and Taxation functions. He was earlier working as President with Athorstone Capital.
CFO	Hemant Vastani	Sandeep Kumar Sarawgi	He was earlier working with the Mumbai branch of Antwerp Diamond Bank NV as Chief Finance and Risk Officer. He has over 22 years of experience primarily in finance, strategy, general management, etc.
Director, Business Development	Sumesh Parasrampuria	Chittaranjan Rege, Vice President, Product Knowledge Management Team	He has been working in the company's product knowledge management team since 2006
Director - Market Operations	Dipak D Shah	Ramalingam M - SVP, Marekt Operations	He has been with MCX since 8 years. He has over 24 years of experience in trading, risk management, securities and fund settlement
SVP, Head-Research and Strategy	Nilanjan Ghosh	Praveen D - VP, Research and Strategy	He has been with MCX since 2004, working in the research and planning function
Head-Technology			Hiring in-progress
Head-Market Operations			Hiring in-progress

Source: Company, Industry, HDFC sec Inst Research

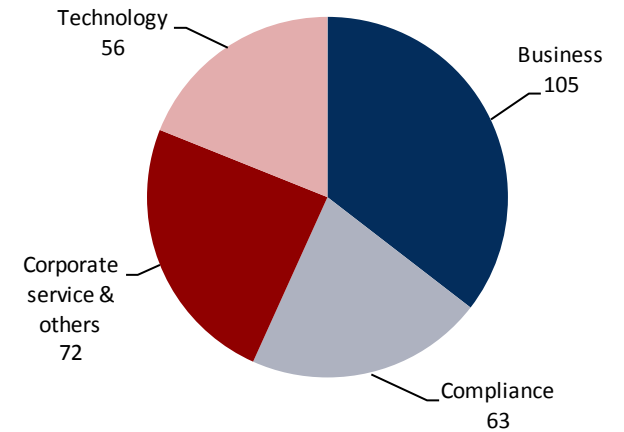
**MCX employee profile**



Source: Company, HDFC sec Inst Research

- Notwithstanding senior management attrition, the mid and junior management (~90% of workforce) didn't see heightened attrition (remaining steady at mid-teens). Thus, the company didn't face any operational challenges.

**MCX – employees by function**



Source: Company, HDFC sec Inst Research

- As of Jan-2015, MCX had 296 full-time and 44 outsourced employees. Over one-third of the employees are in business roles, viz. execution, business development etc, a fifth in compliance and technology each and the remaining in corporate services and other allied functions.

### **Fixed costs now favourably negotiated**

- *MCX has successfully renegotiated its software service contract deal with FTIL. The new terms entail a lower fixed charge, lesser revenue share, more favourable payment terms and a balanced exit clause*
- *Further, MCX has also rationalized other service contracts, which lacked economic rational and over-charging and were handled by related parties of FTIL*

### **Fixed costs : MCX has started cutting flab**

Following the exit of FITL as a shareholder, MCX favourably renegotiated its fixed costs. Following are some of the key changes:

- **New technology deal to lead to significant cost savings:** Software service charges (SSC), which accounted for 18.2% of FY14 operating income and 32% of FY14 operating cost has seen a major change (see table below).
- **Rationalisation of other service contracts:** While under FTIL control, several contracts of MCX were handled by related parties of the promoter. Below are a few instances :
  - National Bulk Handling Corporation (NBHC), which was a 100% subsidiary of FTIL, used to handle warehousing operations of MCX. As per

an independent third-party study (done by PWC) commissioned by MCX (in accordance with the FMC's directions), MCX's payouts to NBHC don't seem to be adequately substantiated by the nature/quantum of services rendered to MCX

- Further, the PWC study also says that several donations and professional charges have been made to other related entities of FTIL, which aren't in keeping with the services received by MCX.
- These contracts have either been rationalized or have been awarded to other entities, thereby resulting in lower fixed costs and other operating expenses.

### **MCX : Changes in software service contract**

	<b>Earlier</b>	<b>Now</b>	<b>Our view</b>
Fixed fee (Rs mn/mo)	Rs 20mn/month	Rs 15mn/month from Jul-14	Fixed fee reduced by 25%
Variable fee (% of trading revenue)	12.5% of trading revenue	10.3% of trading revenue from Jul-14	To boost EBITDA margins by 220bps
Payment terms	Payable annually in advance	Payable quarterly, after services are rendered	Payment terms more favourable to MCX
Duration of deal	99 years	10 years, wef Oct-12	
Exit clause	No	Provision for exit if service is rendered unsatisfactorily (MCX's discretion)	More flexibility for MCX

Source: Company, HDFC sec Inst Research

### Triple-whammy : the worst is over

- MCX faced a triple-whammy of (1) Imposition of commodities transaction tax (CTT), which increased exchange and statutory charges by nearly three times (see appendix) (2) Low volatility contributing to sagging volumes in the company's largest traded commodities (3) Its erstwhile was embroiled in legal battles pertaining to the NSEL payments crisis, and eventually had to exit as shareholder/manager. This

took a toll on operating performance, as shown below

- Average daily traded value (ADTV) declined from Rs 503bn in FY12 to Rs 190bn in H1FY15**, due to factors listed above. Revenue was also similarly impacted as pricing was unchanged.
- Considering that the company's operating expenses are largely fixed, EBITDA margin was severely hit. EBITDA declined by 66% YoY in H1FY15 while EBITDA margins declined 757bps during the same period.

### **MCX review : FY12-14**

Rs mn, year-end March	FY12	FY13	FY14	H1FY15
Turnover (Rs tn)	156	149	86	24
YoY growth (%)	58.5	(4.6)	(42.1)	(71.8)
ADTV (Rs bn/day)	503	488	278	190
YoY growth (%)	7.1	(3.0)	(43.0)	(31.8)
Transaction charges Rs/mn (single side)	16	16	18	18
<b>Operating income</b>	<b>5,451</b>	<b>5,240</b>	<b>3,407</b>	<b>1,064</b>
YoY growth (%)	43.4	(3.9)	(35.0)	(68.8)
Software service charge	752	782	622	202
YoY growth (%)	38.4	4.0	(20.5)	(67.5)
<i>% of operating income</i>	<i>13.8</i>	<i>14.9</i>	<i>18.2</i>	<i>19.0</i>
Employee cost	280	289	313	176
YoY growth (%)	5.9	3.4	8.3	(44.0)
<i>% of operating income</i>	<i>5.1</i>	<i>5.5</i>	<i>9.2</i>	<i>16.5</i>
Other operating expenses	905	1,017	1,014	392
YoY growth (%)	(6.1)	12.3	(0.2)	(61.4)
<i>% of operating income</i>	<i>16.6</i>	<i>19.4</i>	<i>29.8</i>	<i>36.8</i>
<b>Operating EBITDA</b>	<b>3,515</b>	<b>3,152</b>	<b>1,457</b>	<b>295</b>
YoY growth (%)	73.1	(10.3)	(53.8)	(79.8)
<i>EBITDA margin (%)</i>	<i>64.5</i>	<i>60.2</i>	<i>42.8</i>	<i>27.7</i>
YoY change (bps)	1108 bps	-432 bps	-1737 bps	-757 bps
<b>EBIT</b>	<b>4,102</b>	<b>4,051</b>	<b>2,096</b>	<b>673</b>
YoY growth (%)	67.1	(1.2)	(48.3)	(67.9)
<b>Net profit</b>	<b>3,004</b>	<b>2,986</b>	<b>1,528</b>	<b>528</b>
YoY growth (%)	73.8	(0.6)	(48.8)	(65.4)

Source: Company, HDFC sec Inst Research



### Commodity exchanges as enablers

- Educate growers, producers, buyers
- Setup price dissemination mechanisms
- Standardisation of product and creation of contract
- Market product to ensure participation of investors/arbitrageurs for market depth
- Calibrate contract in keeping with market/hedger needs
- Provide technology platform for smooth trading (**facilitating price discovery**), execution, clearing, settlement and deliveries while prudently managing risks

## Exchanges : A unique business model

*Commodity exchanges are unique businesses, which enable hedging in almost all the globally produced and traded commodities. Examples of globally traded commodities include gold, silver, crude oil, copper, wheat, corn etc. The primary role of a commodity exchange is to enable producers/consumers hedge away price risk, while investors/speculators take positions based on expectations of the future.*

*Commodity exchanges aren't mere utilities. They play a pivotal role in creating an ecosystem for market transparency. They provide a trading platform along with price discovery, timely information dissemination and robust risk management. Globally, exchanges are asset-light businesses earning 17-20% returns on equity. Further, the business is characterized with high operating leverage and non-linearity, as operating costs are largely fixed and manifold growth can be achieved with minimal infrastructure/manpower investments. Volumes beget more volumes, ergo commodity exchanges are also oligopolistic in nature and create strong entry barriers.*

### Not a mere utility

- Commodity exchanges play a pivotal role in allowing producers to hedge price risks. Further, they also promulgate market transparency and price discovery by ensuring real-time pricing data dissemination and provide a platform for hedgers, speculators and arbitrageurs.
- MCX has tied up with growers/producer/buyers associations. The company also regularly conducts training sessions to explain how hedging can help reduce risk.

- The company has setup price dissemination mechanisms at mandis and provides spot price information.
- The company has also developed a network of strategic alliances with global exchanges to enhance product offerings, viz. New York Mercantile Exchange (NYMEX) for crude oil, London Metal Exchange (LME) for non-ferrous contracts.
- MCX's presence in a product-line ensures a fungible and standardized contract of the physical commodity. This enables price-hedging in commodities where such activity was hitherto not possible, for example, mentha oil. This phenomenon is of immense business value to a consumer of mentha oil, say Emami.

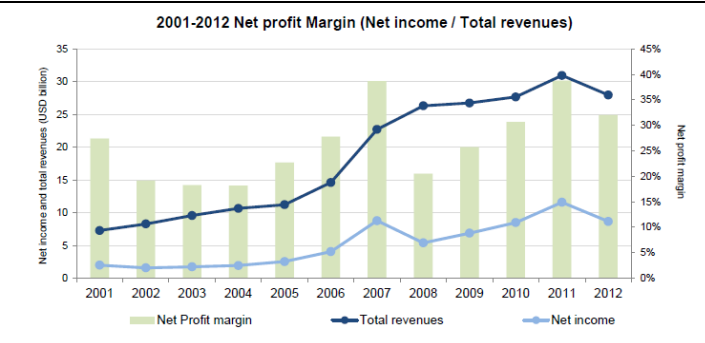
### About commodity exchanges

- Futures are used as a tool by producers to hedge price risk. Since, risk minimization is the prime objective, commodity exchanges typically have low delivery volumes (<1% of traded volume).
- However, deliveries are an important tool to ensure convergence of futures markets and spot markets so that distortions can be avoided in both markets.
- Futures are a tool for hedging at a low cost and enable commodity producers/consumers hedge away price risk at a fraction of the cost of the underlying produce/consumption.
- Globally, financial institutions also use commodity exchanges to hedge their investment risks arising out of commodity price movements. In India, banks and financial institutions are yet to be permitted as participants in commodity exchanges.

**Capital light, rich in cash flow**

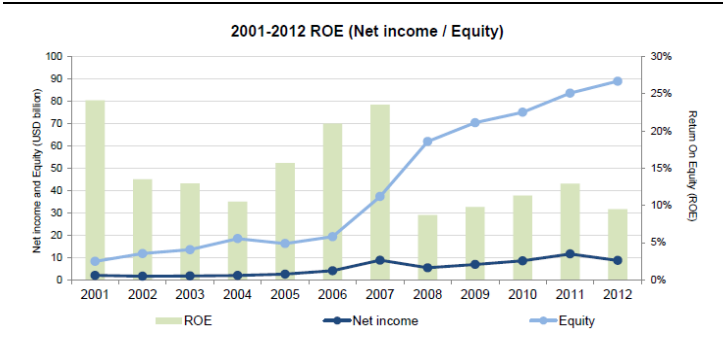
- The exchanges business is characterized by low capital requirements and in most instances is funded by equity. As per the world federation of exchanges (WFE), the average post-tax net profit margin of exchanges stood at 32% in 2012. Average post-tax net profit margin has ranged from 15-40% from 2001-12.

**Global exchanges : net profit margin**

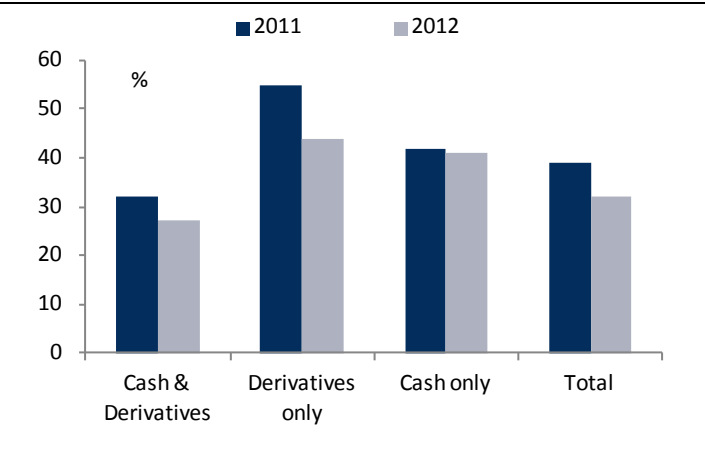


- WFE data also reveals that exchanges focusing only on derivatives (other exchanges in WFE’s dataset also have cash equities operations) make higher profit margins – 44% in 2012 against average global exchange profitability of 32% in the same period. Further, ROE of global exchanges stood at 9% in 2012.

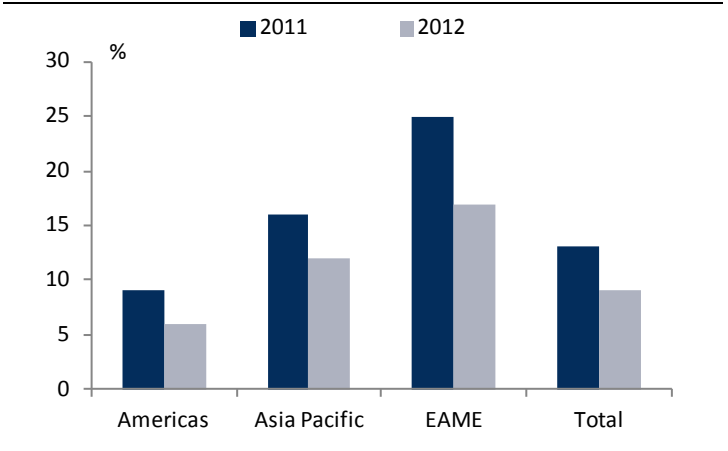
**Global exchanges : ROE time-series data**



**Global exchanges : profit margin by nature of exchange**



**Global exchanges : ROE by geography**



Source: World Federation of Exchanges – Cost and Revenue survey 2012, HDFC sec Inst Research

Source: World Federation of Exchanges – Cost and Revenue survey 2012, HDFC sec Inst Research

- ROE for global exchanges has ranged from 9-24% over 2001-12. Global ROEs were dragged down by American exchanges (6%) while Asia-Pacific (12%) and Europe, Middle-East and Africa (EMEA, 17%) exchanges pulled up the averages in 2012.
- The above data is for all exchanges (listed and unlisted), and is based on responses of WFE's 58 members. When we look at listed exchanges, the EBITDA margin of emerging market exchanges is 59-60%, marginally lower than the global average of 61-63%.
- The average ROE of listed exchanges is 21-22%, with developed markets having a marginally higher average ROE, viz. 22-23% compared to emerging markets, 17-20%.

**Profitability of listed exchanges**

	Country	M-Cap (US\$ mn)	EBITDA margin (%)		Net profit margin (%)		ROE (%)	
			1-yr fwd	2-yr fwd	1-yr fwd	2-yr fwd	1-yr fwd	2-yr fwd
<b>Emerging markets</b>								
MCX (HDFC Sec estimates)	India	709	48.1	56.0	52.0	54.6	15.9	20.7
<b>Bloomberg Consensus estimates</b>								
BM&FBovespa SA	Brazil	7,103	66.2	67.5	74.9	74.4	6.8	7.6
CETIP SA	Brazil	3,528	69.1	69.2	46.5	45.7	26.1	31.2
Bursa Malaysia Bhd	Malaysia	1,208	59.3	60.1	39.5	39.9	26.1	28.7
Bolsa Mexicana	Mexico	1,027	47.2	48.4	31.2	32.5	13.8	15.4
Multi Commodity Exchange	India	714	54.9	57.0	40.5	42.8	13.3	15.6
<b>EM average</b>			<b>59.4</b>	<b>60.4</b>	<b>46.5</b>	<b>47.1</b>	<b>17.2</b>	<b>19.7</b>
<b>Developed markets</b>								
CME Group	USA	29,282	66.9	68.4	38.6	39.9	5.7	6.1
Hong Kong Exchanges	Hong Kong	27,032	74.5	76.1	56.9	58.4	31.2	33.7
Intercontinental Exchange	USA	23,707	65.4	70.0	39.6	43.4	9.1	10.3
Deutsche Boerse	Germany	14,739	49.5	50.4	31.0	32.2	20.6	21.0
London Stock Exchange	UK	12,486	41.5	45.6	22.1	23.8	17.3	18.6
Nasdaq OMX	USA	7,681	49.0	50.3	25.3	26.0	8.6	9.3
Japan Exchange Group	Japan	6,653	60.8	61.3	33.1	33.9	14.9	14.3
Singapore Exchange	Singapore	6,215	61.0	62.5	46.5	48.0	39.1	41.4
ASX	Australia	5,869	76.9	77.2	58.1	58.4	11.1	11.5
CBOE Holdings	USA	5,539	59.3	60.0	32.2	32.8	72.5	70.4
Dubai Financial Market	Dubai	4,269	99.7	105.0	87.4	90.5	15.2	19.2
Bolsas y Mercados Espanoles	Spain	3,435	71.2	70.9	49.9	50.9	42.5	42.0
TMX Group	Canada	2,087	49.5	50.7	28.9	31.1	7.3	7.7
Warsaw Stock Exchange	Poland	501	53.6	54.2	38.3	40.1	17.5	17.8
Hellenic Exchanges	Greece	341	59.7	63.8	46.6	49.5	12.1	14.4
NZX Ltd	New Zealand	223	39.1	41.4	23.6	25.5	31.5	34.7
<b>Developed markets average</b>			<b>61.1</b>	<b>63.0</b>	<b>41.1</b>	<b>42.8</b>	<b>22.3</b>	<b>23.3</b>
<b>Global average</b>			<b>60.7</b>	<b>62.4</b>	<b>42.4</b>	<b>43.8</b>	<b>21.1</b>	<b>22.4</b>

Source: Bloomberg, HDFC sec Inst Research

Note: 1-yr refers to FY16/CY15 &amp; 2-yr FY17/CY16

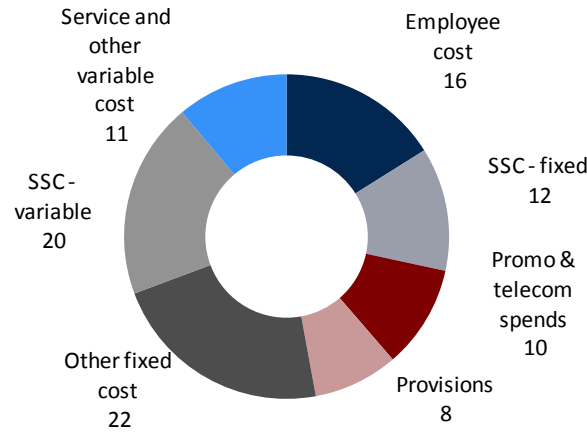
**How MCX compares with listed exchanges**

- Has higher profit margins than global peers
- Globally ROEs of exchanges range from ~6% to 70%
- There are six > \$10bn market-cap exchanges, which are market leaders in their respective geographies
- Even small regional exchanges, such as NZX, Bolsa Mercados are able to generate high ROEs, ranging from 35-42%
- Average ROEs of listed exchanges (22%) are higher than those affiliated to the World Federation of Exchanges (9%).

**Operating leverage**

- We observe that nearly 2/3<sup>rd</sup> of MCX’s FY14 operating cost was fixed, including fixed software contract charges, employee cost, promotional and telecom spends, provisions and other fixed costs. **This clearly indicates the scope for operating leverage in the business.**

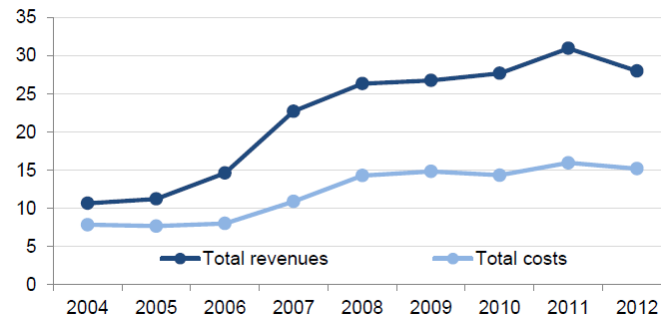
**MCX operating cost profile**



Source: Company, HDFC sec Inst Research

**Global exchanges : revenue and cost increases**

**2001-2012 Revenues & costs (USD billion)**



Source: Company, World Federation of Exchanges, HDFC sec Inst Research

- Further, global data for 2001-12 also indicates that the revenue of exchanges has grown at a much faster pace than operating costs indicating that the business has strong operating leverage potential.

**Non-linearity embedded in the business**

- The exchanges business has significant scope for non-linear growth arising from volume increases due to (1) greater volumes in existing product categories (2) product launches getting new hedging/trading clientele on the exchange.
- The former (viz. greater volumes from existing categories) is relatively easy to achieve in an under-penetrated market where there is very limited hedging behavior. Take the case of gold hedging, where, despite annual demand of ~900 tonnes in India (FY14), the cumulative open interest in the most active MCX gold contract is just ~10 tonnes.
- The constraints in the way of higher volumes and open interest are (1) absence of financial institutions/foreign investors, which is necessary for adequate liquidity (2) absence of long-term contracts to fulfill needs of large corporate clients, such as Titan. We believe that once the regulatory restrictions ease, MCX could potentially create appropriate contracts, invest in business development and achieve a step-jump in volumes. This could be an easy pathway to non-linear growth driven by increased adoption of existing products by a new set of clients.
- **The longer-term growth driver, where MCX can achieve a volume explosion is new product launches.** This is harder to achieve, as it involves creation of an ecosystem in a new commodity – standardization of contracts, educating the commodity’s producers/consumers about the importance of hedging, regulatory approvals for contracts, price dissemination mechanism etc.

**Operating leverage**

- A large part of costs are fixed. Hence, exchanges benefit disproportionately from increased revenue

**Significant non-linearity in business**

- An exchange already has technology platform, competent manpower and investing class
- Business development can result in new product launches, which can drive volumes

**Oligopolistic business**

- Volume-leadership is hard to compete against

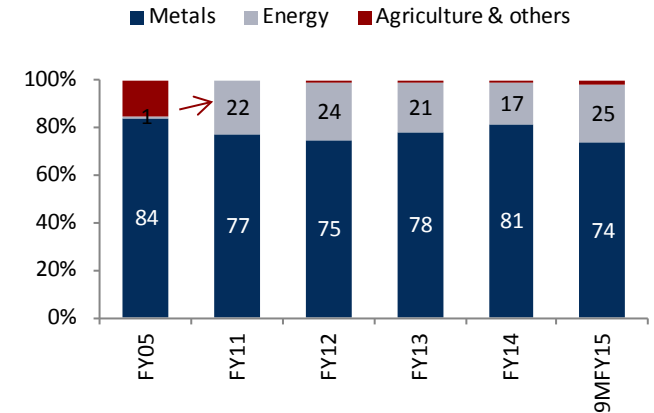
- MCX has made several attempts to foray into new commodity categories by launching base metal contracts, but has been fairly unsuccessful given regulatory constraints (resulting in poor market depth and absence of counterparties) and a free pricing environment of these commodities (most of these commodities are procured basis private long-term contracts). While it is very difficult to pinpoint the quantum and area of success of new product launches, we believe that a dominant exchange, which already has sticky participation from investors is best positioned to capitalize on new commodities. The upside from new commodity launches can be substantial, as new volumes rampup under a largely fixed cost structure, barring operational spends for research and business development in the new product.

**Self fulfilling oligopolies**

- Exchanges are businesses with strong network effects. We believe that there are several characteristics that embody the oligopolistic nature of the business :
- Volumes beget volumes and are the single most important determinant of business. MCX has an unshakeable market leadership in metals and energy, which it was able to retain despite facing the adverse fallout of the erstwhile promoter’s role in the NSEL crisis.
- This is evinced in the market share of MCX in metals and energy, which remained steady at 97-99.99%. The fall in overall market share of MCX is explained by reduced trading/hedging of these commodities, which we believe is a cyclical phenomenon.

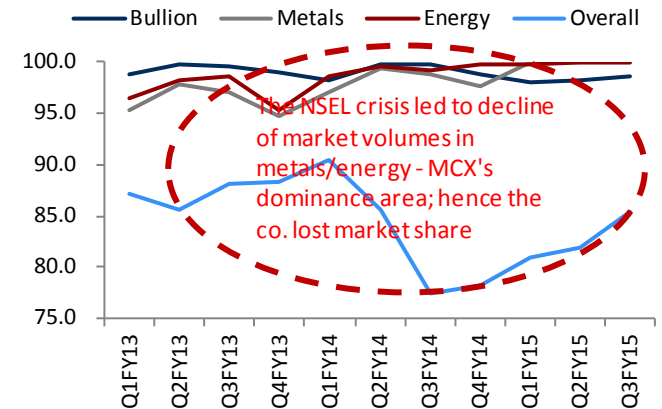
- Transaction costs are secondary – despite NCDEX charging 1/5th (refer to the Appendix for details) of what MCX charges in the non-agri segment, the former is unable to snare volumes from MCX.

**Composition of MCX’s trading**



Source: Company, Industry, HDFC sec Inst Research

**MCX remained unshakeable in metals and energy**



Source: Company, Industry, HDFC sec Inst Research

## MCX : Opportunity knocks

*The Indian commodity market is at a nascent stage, with hedging and trading occurring only in a few commodities. Available contracts are largely for commodities where the exchange participants are 'price takers' (benchmarked to prices 'discovered' at larger global exchanges) rather than 'price setters'.*

*Current regulations prevent participation of financial institutions and foreign institutional investors resulting in poor market liquidity. In our view, these factors present a great opportunity for MCX to expand the market and create an ecosystem for other commodities while aspiring for a price setting position in some of them. On the regulatory front, we believe that the restrictive environment has scope for significant improvement, which can trigger the long-term growth of*

*the industry. In existing products where MCX already offers contracts, there is scope for increased trading as (1) the company re-focuses on product development efforts (2) volatility returns in MCX's top traded commodities.*

### The India opportunity : significant scope for growth

- Potential for increased derivatives trading on account of large physical market
- Even in the case of MCX's top traded commodities, the company's records far lower transactions than global exchanges when benchmarked with the size of the respective domestic physical market.

### Derivative trading in key commodities compared to physical demand

	Unit	Country	Derivatives trading	Physical market size		Derivatives trading/physical market(x)	
				Domestic	Global	Domestic	Global
<b>Gold</b>							
COMEX	Tonnes	USA	147,093	210	4,957	700.4	29.7
SHFE	Tonnes	China	40,176	1,283	4,957	31.3	8.1
TOCOM	Tonnes	Japan	12,225	131	4,957	93.3	2.5
MCX	Tonnes	India	10,579	987	4,957	10.7	2.1
<b>Crude Oil</b>							
ICE	mn bbl	Europe	168,793	6,805	33,336	24.8	5.1
NYMEX (COMEX)	mn bbl	USA	179,382	6,894	33,336	26.0	5.4
MCX	mn bbl	India	3,956	1,360	33,336	2.9	0.1
<b>Silver</b>							
SHFE	Tonnes	China	5,161,362	8,163	33,624	632.3	153.5
COMEX	Tonnes	USA	2,251,109	5,485	33,624	410.4	66.9
MCX	Tonnes	India	212,248	3,114	33,624	68.2	6.3
<b>Copper</b>							
LME	mn tons	Europe	1,012.0	3.06	20.70	330.9	48.9
COMEX	mn tons	USA	321.0	1.72	20.70	187.0	15.5
SHFE	mn tons	China	194.0	8.87	20.70	21.9	9.4
MCX	mn tons	India	22.8	0.62	20.70	36.6	1.1

Source: Company, Industry, HDFC sec Inst Research

### Large physical market; but limited derivatives trading

- India has a large physical market in MCX's top traded commodities, viz. Gold, Silver, Crude Oil and Copper.
- Across these commodities, trading in MCX (which represents 98-99% of the commodity derivatives market) is miniscule in respect to global comparables

- Low derivatives trading to economy size underscores market potential. Gold (which is MCX's largest traded commodity by value, accounting for 24% of 9MFY15 trading) witnessed derivatives trading of 10,579 tonnes in 2013, which is a paltry 10.7x India's domestic market demand.
- In countries such as USA, China and Japan, the quantum of derivatives trading ranged from 31x (China) to 700x (USA). In crude, India's derivatives/physical market ratio is under an eighth of that for China and USA.
- These trends are visible even in copper and silver, indicating that there is substantial scope for increased trading in commodities which are traded on MCX.
- India's exchange traded (commodity) derivatives or ETD market is only 0.51x of nominal GDP. This compares poorly with large economies like China, EU and USA.

#### Derivatives trading vs nominal GDP

US\$ tn, unless mentioned (2013)	Nominal GDP	Exchange traded commodity derivatives	ETD/nominal GDP (x)
India	1.9	1.0	0.51
China	9.5	20.6	2.18
EU	12.8	30.0	2.35
USA	16.8	60.0	3.58

Source : Company, HDFC sec Inst Research

- This comparison doesn't account for the over the counter (OTC) market in the above countries. In India, OTC trading is known as 'Dabba trading,' an illegal activity, while it is legal in global markets, as these trades are settled on clearinghouses.

- As per industry sources, the Dabba trading market is estimated to be 3x the exchange traded commodity derivatives market. As per the Bank of International Settlements, global commodity futures exposure of the OTC market is estimated to be ~23x the size of ETD market. Thus, comparing ETD turnover to nominal GDP understates the quantum of the potential commodity futures market size for MCX.

#### Robust track record of innovation

- MCX faces significant regulatory constraints to grow its business. The Forward Contracts Regulation Act (FCRA), 1952, which governs India's commodity exchange business, bars financial institutions and foreign investors from participating in commodities trading. The Act also prevents exchanges from launching options and indices. This deters participation of large commodity consumers for hedging purposes on account of inadequate market depth.
- Despite these restrictions (and prior to the problems that the company's erstwhile promoters faced) the company was quite active in business development and launched new products in categories where it had already created a market. This was to increase the penetration of these products, encourage hedging from small and medium enterprises (SMEs) and thereby achieve higher volume through a broader investor base. We analyse the impact of small-ticket 'mini' products on the company's business.



**Product innovation: Launch of ‘mini’ contracts**

- MCX introduced small ticket mini contracts for Gold, Silver, Base Metals and Energy. These contracts supplement the initially introduced contracts by offering lower trading units and/or lower tick sizes. The contracts are designed on the lines of the e-mini contracts that the Chicago Mercantile Exchange (CME) has for commodity futures. We examined the case of ‘mini’ contracts for gold and silver.

**Specification of Gold contracts**

Contract	Trading unit	Quotation	Tick size (Rs)	Contract introduction
GOLD	1 kg	10gms	1/10gms	Nov-03
GOLDM	100gms	10gms	1/10gms	Jan-07
GOLDGUINEA	8gms	8gms	1/8gms	May-08
GOLDPETAL	1gm	1gm	1/1gm	Nov-11

**Specification of Silver contracts**

Contract	Trading unit	Quotation	Tick size (Re)	Contract introduction
SILVER	30kg	1 kg	1/kg	Nov-03
SILVERM	5kg	1 kg	1/kg	May-07
SILVERMIC	1kg	1 kg	1/kg	May-11
SILVER1000	1gm	1 gm	1/kg	Sep-12

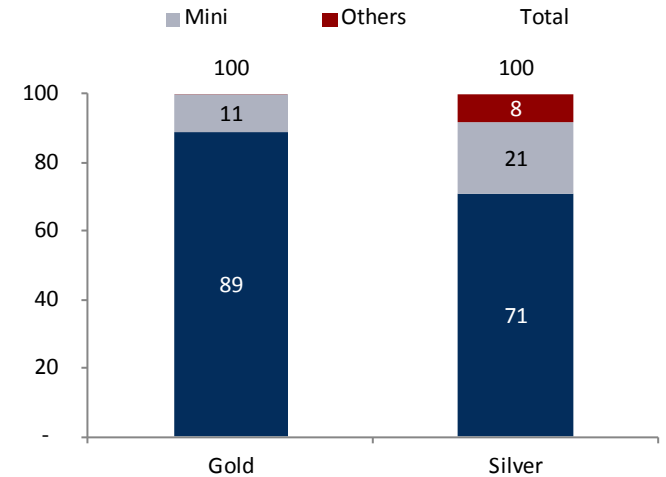
Source: Company, Industry, HDFC sec Inst Research

- It must be noted that the success of such small ticket products isn’t contingent on business development alone, but is also dependent on the transaction cost, volatility and alternate hedging options available for hedgers/investors.

**Mini contracts contribute meaningfully to trading**

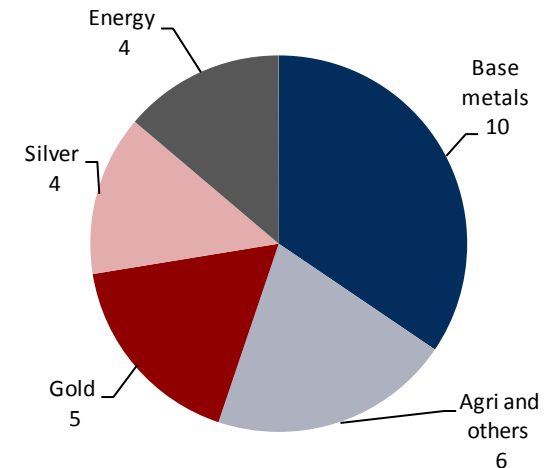
- Small contracts now contribute to ~21% and 13% of total volumes in Silver and Gold respectively.

**Composition of trading value : 2014**



Source: Company, Industry, HDFC sec Inst Research

**MCX : number of contracts by commodity**



Source: Company, Industry, HDFC sec Inst Research

### Case study : the launch and development of 'Mini' contracts

- In view of regulatory restrictions, viz. no institutional/foreign investor participation, MCX launched mini contracts to cater to the needs to SMEs and investors
- These contracts are designed on the lines of e-mini contracts of CME. However, the key difference is that exchange fees on MCX are on transaction value while the same on CME is on volume of trades

- For MCX, the 'mini' and other small contracts contributed to 11% of 2014 traded value of Gold contracts, while making up 29% of 'Silver' trading during the same period. MCX has leveraged its experience in market creation of the existing contracts and has been able to market the small contracts to new end-users (SMEs) as well as investors. This clearly shows that despite regulatory constraints, MCX has been able to grow the market for existing commodities through product innovations.
- India's tryst with small ticket products isn't comparable to CME's e-Mini products, as the Indian market levies exchange fee and brokerage on transaction value while CME does so on transaction volume, viz. number of contracts. Hence, e-Mini contracts, which witnessed a meager 0.1% of main contract trading volume for CME (in 2014) are not the right volume benchmark for MCX's market expansion potential in existing products.

### New launch : Crude Oil Mini Futures

- MCX launched Crude Oil Mini futures in Jan-15. This was the first contract that the company launched after a gap of 27 months.

#### Crude Oil contract details

Contract	Trading unit	Quotation	Tick size (Rs)	Contract introduction
CRUDEOIL	100 barrels	Rs/barrel	1	Feb-05
CRUDEOILM	10 barrels	Rs/barrel	1	Jan-15

Source: Company, HDFC sec Inst Research

- Within a week of launch, Crude Oil Mini witnessed over 5% of the trading recorded by the Crude Oil contract.
- As seen below, the volume appears to be incremental and is a strong indicator of the market growth opportunity in existing product categories. Further, the mini contract also helps in achieving more accurate hedges for smaller players on account of smaller trading units.

### Case study : launch of Crude Oil mini contracts

In Rs mn	Crude Mini		Crude Oil		Mini trading value - % of Crude Oil
	Trading value	% of total	Trading Value	% of total	
1-Jan-15	-	-	5,113	18.8	
2-Jan-15	-	-	60,400	25.4	
5-Jan-15	-	-	64,993	27.1	
6-Jan-15	3,349	1.3	72,540	28.1	4.62
7-Jan-15	4,714	1.9	85,251	33.8	5.53
8-Jan-15	3,363	1.5	51,261	23.1	6.56
9-Jan-15	3,461	1.7	51,763	25.2	6.69
12-Jan-15	2,988	1.5	47,072	23.7	6.35

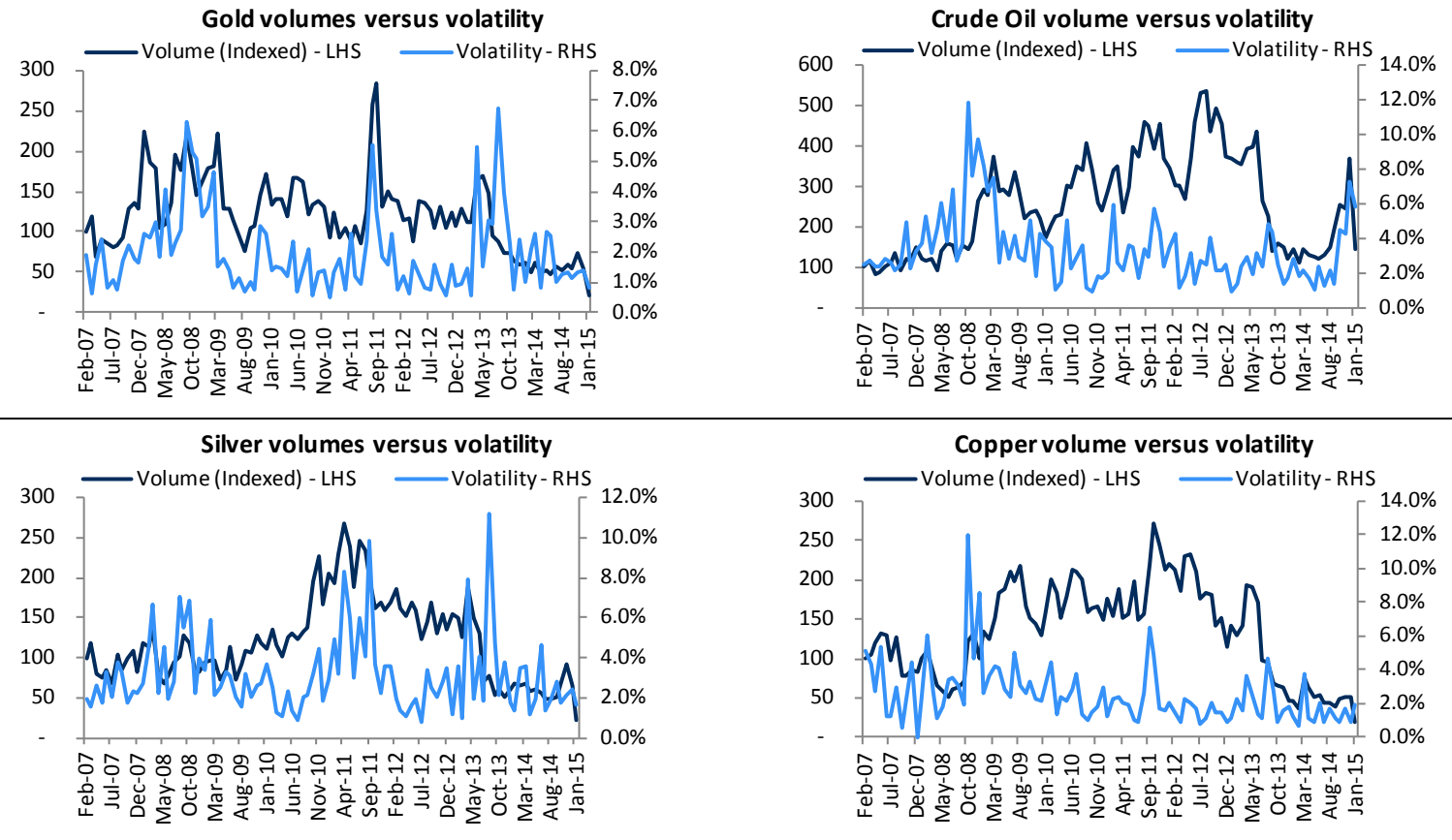
Source: Company, HDFC sec Inst Research

**Mean reversion = better volumes ?**

- Volatility is one of the key factors contributing to exchange volumes. This is in addition to other factors such as (1) transaction charges, where MCX and the Indian commodity business have witnessed a nearly three-fold increase due to the imposition of the CTT

(2) relative performance of other asset classes – the robustness of the equity markets has taken the sheen off commodities as an asset class and has resulted in weak volumes from investors.

**Low volatility a contributor to low volumes**



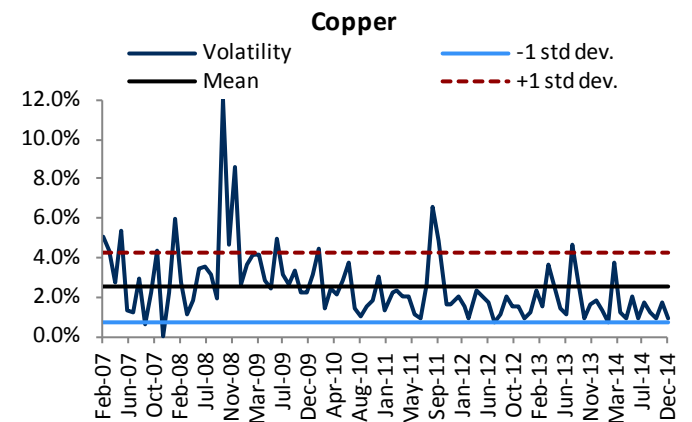
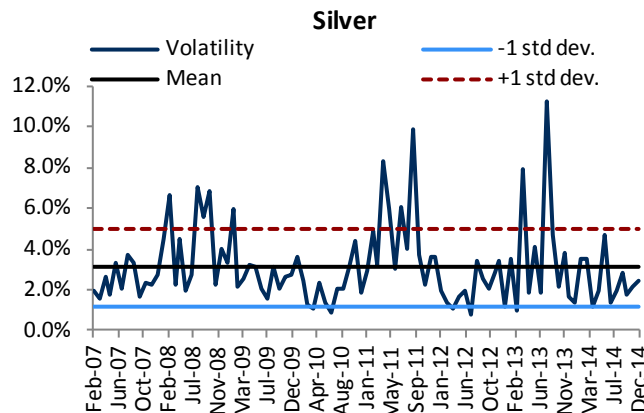
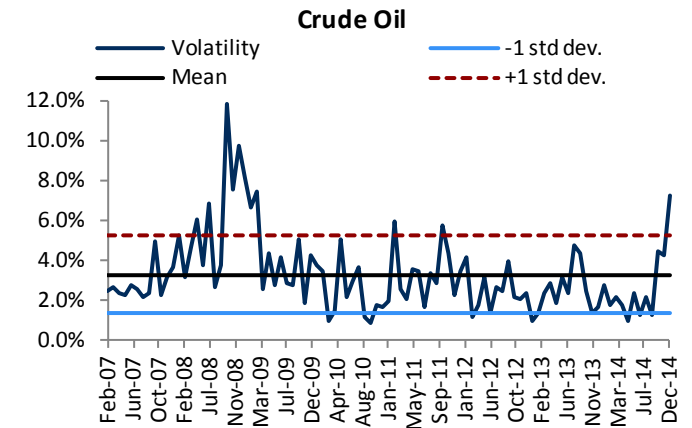
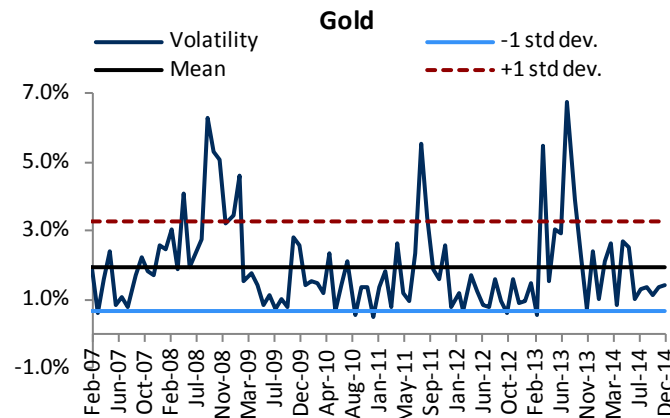
Source: Company, HDFC sec Inst Research | Note: We measure monthly rupee price volatility

Considering data since 2007 (95 months) we make the following observations regarding volatility in 9MFY15:

- Gold, Silver and Crude Oil volatility were in the third and fourth quartile (lowest) during 7 of the 9 observations. Volatility in crude oil and natural gas increased as oil and gas prices have corrected sharply in Q3FY15.
- Copper price volatility was in the lowest quartile for six of the nine months. Further, during two other months, copper volatility was in the third quartile.

- **Consequently, MCX has also witnessed sagging volumes during this period.** While volatility isn't the only factor influencing exchange traded value, it remains an important determinant.
- MCX simultaneously faces low volatility in Gold, Silver and Copper – touching nearly one standard deviation lower than mean monthly price volatility from Feb-07 till date. We believe that there could be a mean reversion in respect to volatility in the company's top traded commodity and this would result in higher exchange volumes.

**MCX faces muted volatility in Gold, Silver and Copper**



Source: Company, HDFC sec Inst Research

***We view the India's restrictive regulations as an opportunity for growth. Changes in the FCRA could positively impact trading volumes on account of the following factors***

- *Greater number of participants and increased market depth, if FIs and FIIs are allowed to participate*
- *An empowered FMC could curb 'Dabba trading,' some of which could shift to organized platforms*
- *New product launches – options and indices*

### **Oppressive regulation : an opportunity**

- India's commodity futures market continues to be governed by the Forward Contracts (Regulation) Act, 1952 (FCRA) and the Forward Contracts (Regulation) Rules, 1954 (FCRR). The commodity market regulator, FMC was formed in 1953, under the framework of

the FCRA. The finance ministry oversees the working of the FMC.

- Several possible regulatory changes have been in discussion since 2010. Here is a snapshot, along with the expected impact on MCX.

### **Regulatory opportunities for MCX**

<b>Regulatory change</b>	<b>Who needs to authorise?</b>	<b>Impact and our view</b>
Allowing financial institutions (FIs) and foreign investment (FIIs) participation in commodity trading	FIIs - Reserve Bank of India (RBI), Securities Exchange and Board of India (SEBI) Mutual Funds - SEBI Insurance cos - Insurance Regulatory and Development Authority (IRDA)	Can dramatically enhance market liquidity resulting in higher trading vols for MCX This could also pave the way for new product launches as counterparties emerge
Operational autonomy to regulators	Forward Markets Commission (FMC), which reports to Finance Ministry	Such a step will ease operational matters of running a commodities exchange An empowered FMC could curb the incidence of 'Dabba trading' (illegal off-market trades)
Allowing foreign exchanges to hold upto 15% stake in commodity exchanges	FMC, RBI	<b>Could result in interest from large global players - an opportunity as well as a threat</b>
Flexibility of product launches	FMC	Once the FMC is empowered, it could potentially empower commodity exchanges to <b>offer options and indices</b> , another volume / business driver Options could be attractive for SMEs/small investors. Indices can be shadow tracked as low-cost passive investment vehicles marketed as exchange traded funds, pulling in retail investors in a big way

Source: Company, Industry, HDFC sec Inst Research

## Key assumptions & prognosis

*Our base case factors recovery of ADTV (avg daily traded value) to ~85% of FY12 peak by FY17. Early signs of recovery are visible as Q3FY15 ADTV is up ~28% YoY to Rs 214bn. We aren't incorporating potential benefits from regulatory changes. We value MCX at 25x FY17E EPS while building in FY15-17E earnings CAGR of 44%. Key triggers for the company are (1) improving ADTV (2) easing of regulatory environment.*

### Only ~85% of FY12 ADTV by FY17

- We believe that MCX will see a recovery in average daily traded value (ADTV) – the key financial monitorable. We find that ADTV has already started stabilizing and Q3FY15 ADTV of Rs 214bn is up 11% QoQ/28% YoY.
- MCX had registered peak ADTV of Rs 503bn in FY12. While acknowledging the possibility of the FY12 volume including contributions from entities related to the erstwhile promoter (as per the PricewaterhouseCoopers audit report on the company), we still believe that the commodity exchange business has significant scope for growth as MCX restores its business focus.
- Thus, in our base case model we assume FY17 ADTV of Rs 435bn, which is ~85% of peak ADTV (FY12 data). We note that this ADTV assumption isn't contingent on successful forays of the company in any new commodity areas, which can pose upside risks for our assumptions.

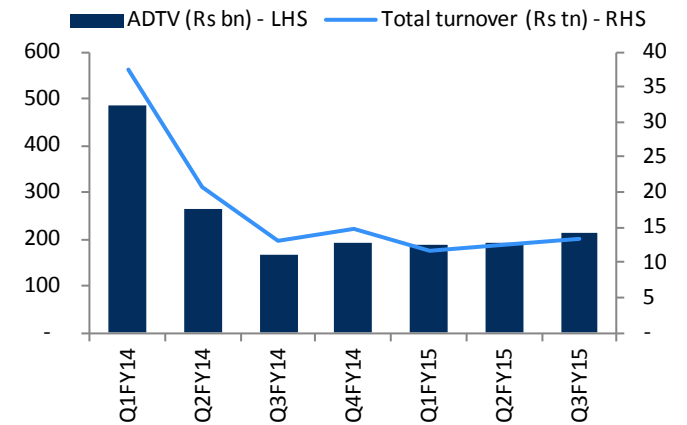
### ADTV

- Has already started stabilizing and is up 28% YoY for Q3FY15.
- Our base case assumption is a recovery of FY17 ADTV to ~85% of FY12 levels
- Till FY14, MCX used to have trading on Saturdays and even on Indian holidays when foreign markets were open. On FMC's instructions, the MCX now doesn't operate on Saturdays and Indian holidays. This reduces number of trading days from 305-310 historically to ~250 from FY15.

### Revenue analysis

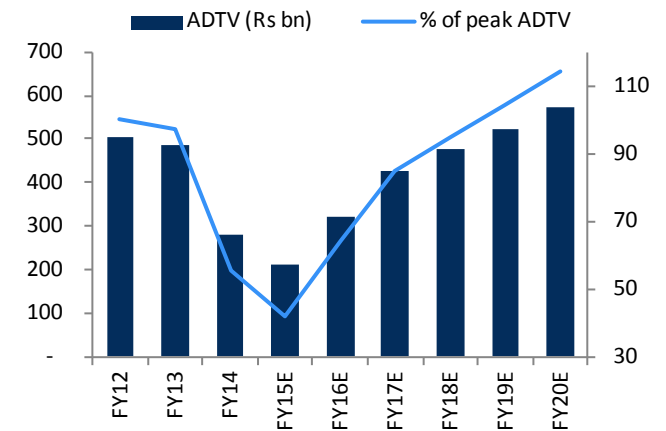
- Transaction fees will continue to remain the key driver contributing ~83% of FY15e operating income
- Data feed income could be a future focus area. This source contributes to a miniscule 1.7% of operating income (FY15e)

### MCX quarterly ADTV has stabilised



Source: Company, Industry, HDFC sec Inst Research

### And we expect FY17 ADTV to reach ~85% of FY12 levels



Source: Company, Industry, HDFC sec Inst Research

### Transaction fees : key growth driver

- As discussed above, transaction fee is likely to be the key revenue driver, which is dependent on trading value and realizations. Improving ADTV, as a result of renewed business focus is expected to drive revenue, **as we expect pricing (transaction fees) to remain steady at Rs 18/mn trade value (one-side).**

### MCX revenue drivers

Rs mn, year-end March	FY14	FY15E	FY16E	FY17E
India Commodity Market Turnover (Rs tn)	86	53	80	108
YoY growth (%)	(42.1)	(38.9)	52.6	35.1
Market share (%)	84.9	83.6	85.0	86.0
ADTV (Rs bn/day)	278	210	321	434
YoY growth (%)	(43.0)	(24.3)	52.6	35.1
Transaction charges Rs/0.1mn (single side)	1.8	1.8	1.8	1.8
<b>Operating income</b>	<b>3,407</b>	<b>2,287</b>	<b>3,368</b>	<b>4,465</b>
YoY growth (%)	(35.0)	(32.9)	47.3	32.6
Transaction fees	3,053	1,902	2,903	3,920
YoY growth (%)	(36.6)	(37.7)	52.6	35.1
% of operating income	89.6	83.2	86.2	87.8
Other operating income	353	385	466	544
YoY growth (%)	(16.6)	8.8	21.1	16.9
% of operating income	10.4	16.8	13.8	12.2

Source: Company, Industry, HDFC sec Inst Research

### Cost structure : expect robust operating leverage

- As discussed earlier, nearly 2/3rd of MCX's operating costs are fixed. MCX has favourably renegotiated its software service charge, which we expect to decline by 12% in FY16. This is the primary reason for a tepid 6.5% YoY increase in FY16 fixed cost.

### MCX cost model

Rs mn, year-end March	FY14	FY15E	FY16E	FY17E
<b>Fixed cost</b>	<b>1,351</b>	<b>1,255</b>	<b>1,337</b>	<b>1,440</b>
YoY growth (%)	4.4	(7.1)	6.5	7.7
% of operating income	39.7	54.9	39.7	32.2
Employee cost	313	362	412	464
YoY growth (%)	8.3	15.4	13.9	12.7
% of operating income	9.2	15.8	12.2	10.4
Software service charge - fixed	240	177	156	156
YoY growth (%)	-	(26.3)	(11.9)	-
% of operating income	7.0	7.7	4.6	3.5
Promotion and communication spends	200	214	235	259
YoY growth (%)	(2.9)	6.7	10.0	10.0
% of operating income	5.9	9.3	7.0	5.8
Provisions	165	50	55	58
YoY growth (%)	433.5	(69.6)	10.0	5.0
% of operating income	4.8	2.2	1.6	1.3
Other fixed cost	432	453	479	503
YoY growth (%)	(18.1)	4.7	5.8	5.0
% of operating income	12.7	19.8	14.2	11.3
<b>Variable cost</b>	<b>598</b>	<b>306</b>	<b>412</b>	<b>524</b>
YoY growth (%)	(24.6)	(48.9)	34.6	27.2
% of operating income	17.6	13.4	12.2	11.7
Software service charge - variable	382	212	299	404
YoY growth (%)	(29.6)	(44.4)	40.9	35.1
% of operating income	11.2	9.3	8.9	9.0
Other variable cost	217	94	113	120
YoY growth (%)	(13.8)	(56.8)	20.4	6.4
% of operating income	6.4	4.1	3.4	2.7
<b>Operating EBITDA</b>	<b>1,457</b>	<b>726</b>	<b>1,619</b>	<b>2,501</b>
YoY growth (%)	(53.8)	(50.2)	123.1	54.4
<b>EBITDA margin (%)</b>	<b>42.8</b>	<b>31.7</b>	<b>48.1</b>	<b>56.0</b>
YoY change (bps)	-1737	-1104	1634	794

Source: Company, Industry, HDFC sec Inst Research

## Valuation

- We expect MCX to show a robust 44% FY15-17 earnings CAGR driven by revenue growth of 41% CAGR during the same period. Considering the asset-light nature of the business, we expect RoE to nearly double to 20.4% in FY17. MCX currently trades at 25x

FY16 and 18x FY17 EPS. We believe that the company can sustain the multiples that it currently commands and hence we assign a target multiple of 25x FY17 EPS.

### Premium valuation to sustain

- We believe that MCX's premium valuations – 26x FY16E EPS – 35% premium to global peers, can sustain on account of the company's robust growth trajectory.
- We expect MCX's EPS to grow at 44% CAGR from FY15-17, versus 13%, which is the average EPS growth of listed peers
- MCX trades at a PEG of 0.4, comparing favourably to global exchanges, which trade at a PEG of 2.5

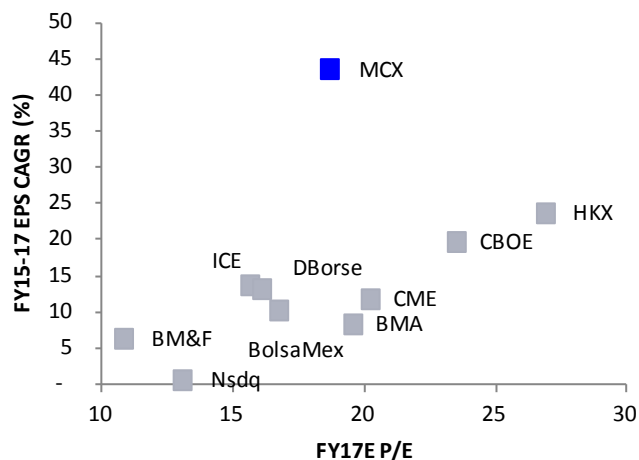
### Valuation – global exchanges

	Country	M-Cap (US\$ bn)	Forward P/E (x)		EPS growth (2-yr CAGR)	PEG (x)	Forward P/B (x)		EV/EBITDA (x)		ROE (%)	
			1-yr fwd	2-yr fwd			1-yr fwd	2-yr fwd	1-yr fwd	2-yr fwd	1-yr fwd	2-yr fwd
<b>Emerging markets</b>												
MCX (HDFC Sec estimates)	India	709	24.9	18.2	43.5	0.42	3.9	3.6	19.5	12.4	15.9	20.4
<b>Bloomberg Consensus estimates</b>												
BM&FBovespa SA	Brazil	7,103	11.8	10.8	6.3	1.70	0.9	0.9	11.7	10.4	6.8	7.6
CETIP SA	Brazil	3,528	17.3	15.8	11.4	1.39	5.4	4.7	11.8	10.6	26.1	31.2
Bursa Malaysia Bhd	Malaysia	1,208	21.2	19.5	8.3	2.34	6.5	5.6	10.3	9.4	26.1	28.7
Bolsa Mexicana	Mexico	1,027	18.7	16.7	10.2	1.63	2.8	2.6	11.2	10.2	13.8	15.4
Multi Commodity Exchange	India	714	25.7	20.7	29.7	0.70	3.8	3.3	14.0	11.5	13.3	15.6
<b>EM average</b>			<b>19.0</b>	<b>16.7</b>	<b>13.2</b>	<b>1.55</b>	<b>3.9</b>	<b>3.4</b>	<b>11.8</b>	<b>10.4</b>	<b>17.2</b>	<b>19.7</b>
<b>Developed markets</b>												
CME Group	USA	29,282	22.6	20.2	11.8	1.71	1.4	1.3	13.5	12.1	5.7	6.1
Hong Kong Exchanges	Hong Kong	27,032	30.7	26.8	23.7	1.13	10.2	9.1	0.9	0.8	31.2	33.7
Intercontinental Exchange	USA	23,707	18.2	15.6	13.7	1.14	1.9	1.7	12.1	10.7	9.1	10.3
Deutsche Boerse	Germany	14,739	17.8	16.0	13.2	1.22	3.9	3.4	12.0	11.0	20.6	21.0
London Stock Exchange	UK	12,486	21.6	20.6	9.9	2.09	328.6	332.1	11.0	10.3	17.3	18.6
Nasdaq OMX	USA	7,681	14.0	13.0	0.6	21.50	1.3	1.2	9.0	8.4	8.6	9.3
Japan Exchange Group	Japan	6,653	22.0	21.2	7.0	3.02	3.8	3.3	11.2	11.0	14.9	14.3
Singapore Exchange	Singapore	6,215	21.6	18.9	14.2	1.33	10.1	8.2	15.2	13.4	39.1	41.4
ASX	Australia	5,869	17.7	16.8	5.5	3.07	2.0	2.0	11.5	10.9	11.1	11.5
CBOE Holdings	USA	5,539	25.6	23.5	19.7	1.19	22.7	17.5	13.6	12.5	72.5	70.4
Dubai Financial Market	Dubai	4,269	15.1	11.8	28.9	0.41	1.9	1.7	11.6	8.9	15.2	19.2
Bolsas y Mercados Espanoles	Spain	3,435	17.1	16.5	12.6	1.31	7.1	7.0	10.8	10.6	42.5	42.0
TMX Group	Canada	2,087	12.0	10.6	17.1	0.62	0.9	0.9	9.0	8.3	7.3	7.7
Warsaw Stock Exchange	Poland	501	14.9	13.6	5.1	2.66	2.7	2.5	9.1	8.6	17.5	17.8
Hellenic Exchanges	Greece	341	12.7	10.4	5.0	2.08	1.6	1.6	4.2	3.5	12.1	14.4
NZX Ltd	New Zealand	223	18.2	16.0	10.2	1.57	5.7	6.3	10.6	9.5	31.5	34.7
<b>Developed markets average</b>			<b>18.9</b>	<b>17.0</b>	<b>12.4</b>	<b>2.88</b>	<b>25.3</b>	<b>25.0</b>	<b>10.3</b>	<b>9.4</b>	<b>22.3</b>	<b>23.3</b>
<b>Global average</b>			<b>18.9</b>	<b>16.9</b>	<b>12.6</b>	<b>2.56</b>	<b>20.2</b>	<b>19.9</b>	<b>10.7</b>	<b>9.6</b>	<b>21.1</b>	<b>22.4</b>

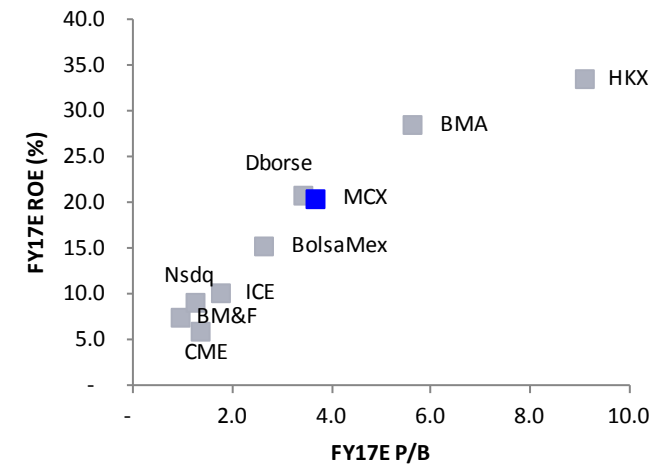
Source: Bloomberg, HDFC sec Inst Research Note: 1-yr refers to FY16/CY15 & 2-yr FY17/CY16



**PE (FY17E) versus EPS CAGR (FY15-17/CY14-16)**



**ROE versus Price to book ratio**



Source: Company, Industry, HDFC sec Inst Research

Abbreviations represent: BM&F - BM&FBovespa SA, BMA - Bursa Malaysia Bhd, BolsaMex - Bolsa Mexicana, CME – Chicago Mercantile Exchange Group, HKX - Hong Kong Exchanges, ICE - Intercontinental Exchange, Dborse - Deutsche Boerse, Nsdq - Nasdaq OMX, CBOE – Chicago Board Options Exchange

Source: Company, Industry, HDFC sec Inst Research

**MCX – Sensitivity of target price to ADTV assumptions**

Target price (Rs)	FY17e PE (x)						FY17e ADTV (Rs bn)
	1,178	20.0	22.0	25.0	28.0	30.0	
75%		824	907	1,030	1,154	1,236	377
80%		883	972	1,104	1,237	1,325	402
<b>FY17e ADTV (% of FY12 peak)</b>	<b>85%</b>	<b>943</b>	<b>1,037</b>	<b>1,178</b>	<b>1,320</b>	<b>1,414</b>	<b>428</b>
	90%	1,002	1,102	1,252	1,402	1,503	453
	95%	1,061	1,167	1,326	1,485	1,591	478

Source: Company, Industry, HDFC sec Inst Research

## Risks

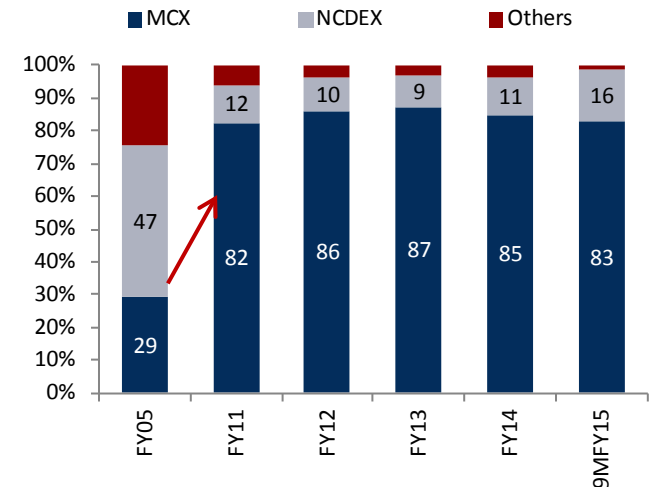
- MCX continues to rely on FTIL for its software support. FTIL faces judicial risk in the NSEL payments crisis, which could negatively impact its operations. While MCX has favourably renegotiated its software contract, we believe that it could face potential business disruptions in the event that FTIL’s operations are impacted.
- Competition** : MCX faces competition from National Commodities and Derivatives Exchange Limited (NCDEX). The company also faces challenges from new entrants, such as, the Bombay Stock Exchange (BSE), which has also announced its plans of setting up a commodity exchange.

Further, if regulatory restrictions are eased, foreign exchanges such as CME Group, Hong Kong Exchanges, Intercontinental Exchange etc, could setup shop in India. MCX’s market share has reduced from a high of 87% in FY13 to 83% in 9MFY15 on account of (1) imposition of CTT on non-agri commodities (which account for 98% of MCX’s turnover, versus <5% for NCDEX) (2) low volatility in MCX’s top traded commodities.

We believe that MCX will be able to weather competition on account of its first mover status and robust market share in the metals and energy segments.

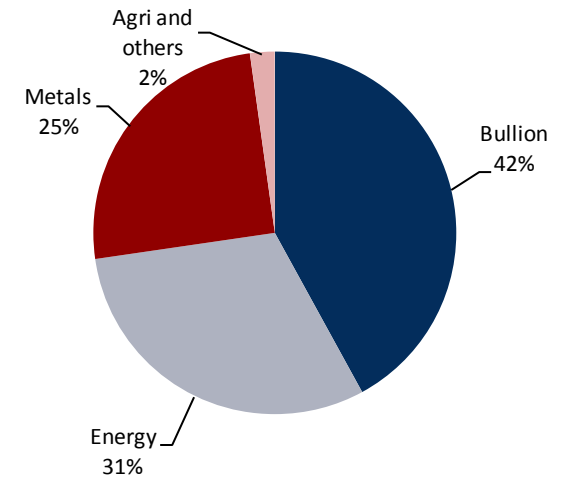
- Regulatory risks** – the commodity futures business is fraught with the risk of being ‘price distorting’ in nature. Thus, from time to time, agriculture (agri) futures on commodities such as guar, wheat etc. However, considering that agri futures comprise a miniscule ~2% of MCX’s traded value, we believe that this risk is minimal for MCX.

**Market share – India’s commodity business**



Source: Company, Industry, HDFC sec Inst Research

**Composition of MCX’s traded value (9MFY15)**



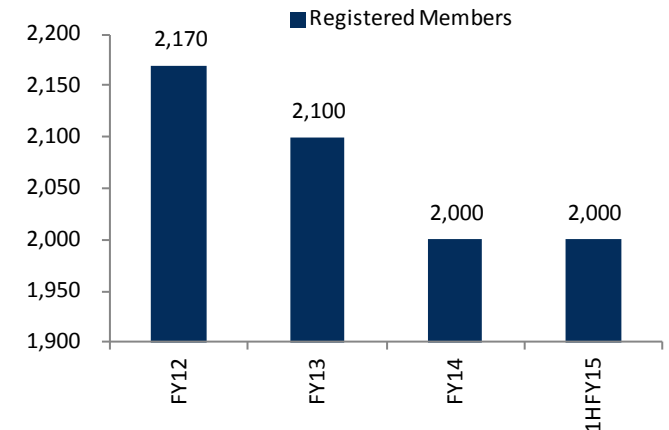
Source: Company, HDFC sec Inst Research

## Appendix

### About the company

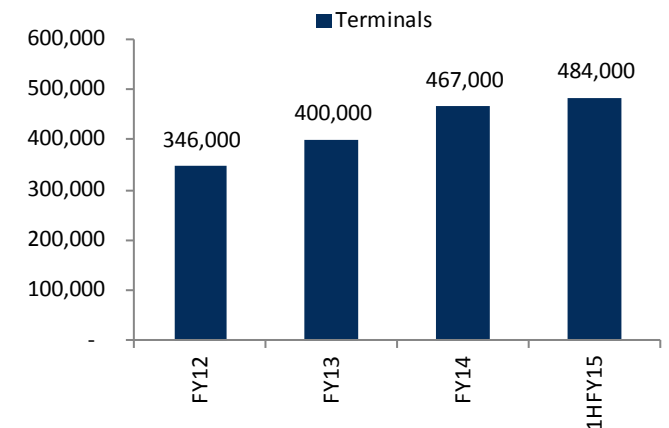
- Founded in 2003, MCX is India's largest commodity exchange. The company has 83% market share (9MFY15) of and is the undisputed market leader in metals and energy segments.
- Through its market development efforts, MCX singlehandedly expanded the market size of Indian commodity exchanges. The trading value of metals and energy increased by a staggering 33x and 1236x from FY05-FY14 while trading of agri and other commodities increased 4x during the period.
- MCX has consistently maintained dominant market leadership in metals and energy with a market share of over 95% in these categories. This clearly underscores the company's robust contribution in market creation efforts in these commodities.
- Even during the NSEL-crisis that the company's promoter faced, MCX's market share in metals and energy was unaffected. Between Q2FY14-Q4FY14, the company suffered a crisis of confidence as well as blow from the levy of CTT leading to reduced hedging/trading in the metals and energy segments. This led to the company's market share declining. However, ever since the company's management transition, volumes are gradually returning as average daily traded volume (ADTV) has recovered ~30%.
- MCX has registered members, which are entities authorized to trade on the exchange. Registered members reach end-users by setting up trading terminals.

### MCX – number of registered members



Source: Company, Industry, HDFC sec Inst Research

### MCX : terminals



Source: Company, HDFC sec Inst Research

### **Key management personnel – MCX**

#### **Parveen Kumar Singhal – Joint Managing Director**

- He has over 39 years of diverse corporate experience in financial services, banking/financial institutions, securities and commodities markets space. He has been associated with MCX since 2009, serving as senior vice-president and head of North (marketing and business development). Prior to this he was director with the FMC. In the past he has also worked with Delhi Stock Exchange as Executive Director and the Securities and Exchange Board of India (SEBI) as Division Chief.

#### **Ajay Puri – Company Secretary, Chief Compliance Officer & Head Investor Relations**

- Mr. Ajay Puri has been associated with MCX since a year, responsible for handling Compliance, Secretarial and Investor Relations functions. He has an extensive experience of 35 years in handling Company Law, Corporate Finance, Legal Secretarial and Taxation functions spanning varied sectors including Investment Banking, Manufacturing, Telecom, Hospitality and Regulatory. He was earlier working as President with Athorstone Capital. He has also held the position of Head (Listing) with Delhi Stock Exchange. He is a qualified company secretary and law graduate.

#### **Sandeep Kumar Sarawgi – Chief Financial Officer**

- Mr. Sarawgi has been associated with MCX for about 9 months as CFO. He was earlier working with the Mumbai branch of Antwerp Diamond Bank NV as Chief Finance and Risk Officer. He has over 22 years of experience primarily in finance, strategy, general management, etc. Other organisations that he has worked with include ICICI Bank, BSE Limited (formerly

Bombay Stock Exchange), E-City Ventures, Intelenet Global Services and IDBI Bank. He is rank holder in CA intermediate and final exams.

#### **PP. Kaladharan – Senior Vice President – Technology**

- He heads the technology function which includes technology and technical support. He joined MCX in February 2006 and was previously working with BSE for over 15 years. He holds a Post Graduate Diploma in computer science and also a master's degree in commerce from Agra University and a bachelor's degree in commerce from Delhi University.

#### **J. B. Ram – Senior Vice President – Membership and Inspection**

- He joined MCX in June 2010 and was previously working with Edelweiss Capital Limited (now known as Edelweiss Financial Services Limited) as senior vice president. He has also worked with companies like CDSL, Unit Trust of India and SEBI. He has experience of around 25 years. He holds a master's degree in business administration and a post graduate diploma in securities law. He is also a qualified chartered financial analyst, a qualified member of international investment analysts and certified financial risk manager from Global Association of Risk Professionals.

#### **Raghavendra Prasad – Senior Vice President – Legal**

- He joined MCX in 2009 and was previously working with RBI and was deputed to SEBI as Deputy Legal Advisor. He has over 22 years of experience in the field of law. He holds a post graduate degree, masters' degree and bachelors' degree in law and a bachelors' degree in commerce. He was also earlier associated with FTIL as a vice president legal.

**Ramalingam M – Senior Vice President – Market Operations**

- Mr. Ramalingam has been with MCX since 8 years. He has over 24 years of experience in trading, risk management, securities and fund settlement. Prior to joining MCX he was the CEO of ISE Securities & Services Ltd.. He has also worked with Investor Services of India Ltd. and TATA Registry Limited. He holds a B.SC. (Mathematics) degree from Mumbai University and a Masters in Financial Management degree from Narsee Monjee Institute of Management Studies, Mumbai University.

**Narendra Kumar Ahlawat – Senior Vice President – Market Operations**

- Mr. Narendra Ahlawat has been working with MCX since 10 months. He has over 27 years of experience in capital Market, Securities Industry and Project Financing with a focus on operations management, system development and six sigma quality improvements in trading, clearing and settlement, and risk management processes of an exchange.

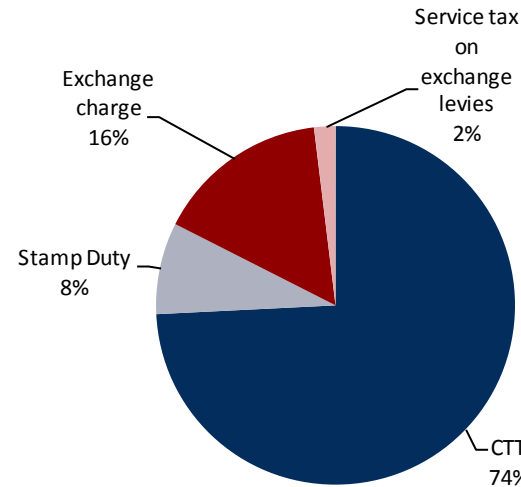
**Rajendra Gogate – Vice President – Human Resources**

- Mr. Gogate has been associated with MCX since 8 years. He used to earlier work with TATA Teleservices as General Manager(Facilities). He has over 29 years of experience in the field of General Administration, Facilities Management.

**How has CTT affected the cost of commodity trading?**

- Below, we present the composition of statutory charges and the impact that the commodities transaction tax (CTT) has had on the cost of transacting non-agri commodities.

**How CTT changes statutory charges**



Source: Company, HDFC sec Inst Research

**Increase in trading cost due to CTT**

Statutory transaction charges	%	Rs/mn After CTT	Rs/mn Before CTT
CTT (levied on sale)	0.0100	100	
Stamp Duty	0.0011	11	11
Exchange charge	0.0021	21	21
Service tax on exchange levies	0.0003	3	3
<b>Total cost (ex-brokerage)</b>		<b>135</b>	<b>35</b>
Brokerage (minimum)		100	100
<b>Total cost of trading</b>		<b>235</b>	<b>135</b>

Source: Company, HDFC sec Inst Research

- The schedule of exchange fees is as shown below for agri as well as non-agri contracts. The charges reflect the dominance of MCX in the non-agri space, where it is able to charge ~4-5x of what NCDEX charges. Similarly, NCDEX’s dominant position in agri commodity trading allows it to charge 4x of what MCX charges.

**Schedule of exchange fees – MCX versus NCDEX**

Charge in Rs per mn/- turnover	MCX		NCDEX	
	Avg. daily turnover (Rs mn)	Charge	Avg. daily turnover (Rs mn)	Charge
Non-agri commodities*	3,500	21.0	500	4.0
	> 3,500	14.0	> 500	3.0
Agri commodities	200	7.5	1,000	30.0
	> 200	5.0	> 1,000	20.0

Source: Company, Industry, HDFC sec Inst Research

\* For NCDEX - Crude Palm Oil, RBD Palmolein, Bajra are part of non-Agri commodities

Note: MCX and NCDEX levy exchange fees on Rs 100,000/- of turnover

**INCOME STATEMENT (Standalone)**

(Rs mn)	FY13	FY14	FY15E	FY16E	FY17E
<b>Net Sales</b>	<b>4,992</b>	<b>3,197</b>	<b>2,079</b>	<b>3,131</b>	<b>4,113</b>
<b>Growth (%)</b>	<b>(5.1)</b>	<b>(35.9)</b>	<b>(35.0)</b>	<b>50.6</b>	<b>31.3</b>
Software support charges	782	622	389	456	554
Employee Expenses	289	313	362	412	464
SG&A Expenses	206	200	214	235	259
Other Operating Expenses	810	814	597	647	681
<b>Operating Profits</b>	<b>2,904</b>	<b>1,248</b>	<b>518</b>	<b>1,381</b>	<b>2,154</b>
<b>Operating Profit Margin (%)</b>	<b>58.2</b>	<b>39.0</b>	<b>24.9</b>	<b>44.1</b>	<b>52.4</b>
Other Operating Income	248	209	208	245	297
<b>EBITDA</b>	<b>3,152</b>	<b>1,457</b>	<b>726</b>	<b>1,627</b>	<b>2,452</b>
<b>EBITDA (%)</b>	<b>60.2</b>	<b>42.8</b>	<b>31.7</b>	<b>48.2</b>	<b>55.6</b>
<b>EBITDA Growth (%)</b>	<b>(10.3)</b>	<b>(53.8)</b>	<b>(50.2)</b>	<b>124.1</b>	<b>50.7</b>
Other Income	1,207	993	1,046	992	1,078
Depreciation	307	343	273	277	282
<b>EBIT</b>	<b>4,052</b>	<b>2,107</b>	<b>1,498</b>	<b>2,341</b>	<b>3,248</b>
Interest	0	11	15	-	-
PBT	4,051	2,096	1,483	2,341	3,248
Tax	1,065	569	316	585	844
<b>PAT</b>	<b>2,986</b>	<b>1,528</b>	<b>1,167</b>	<b>1,756</b>	<b>2,403</b>
EO items (net of tax)	-	-	-	-	-
<b>APAT</b>	<b>2,986</b>	<b>1,528</b>	<b>1,167</b>	<b>1,756</b>	<b>2,403</b>
<b>APAT Growth (%)</b>	<b>(0.6)</b>	<b>(48.8)</b>	<b>(23.6)</b>	<b>50.4</b>	<b>36.9</b>

Source: Company, HDFC sec Inst Research

**BALANCE SHEET (Standalone)**

(Rs mn)	FY13	FY14	FY15E	FY16E	FY17E
<b>SOURCES OF FUNDS</b>					
Share Capital - Equity	510	510	510	510	510
Reserves	11,036	10,931	10,218	10,821	11,734
<b>Total shareholders' Funds</b>	<b>11,546</b>	<b>11,441</b>	<b>10,728</b>	<b>11,331</b>	<b>12,244</b>
Settlement guarantee fund	21	1,720	1,720	1,978	2,275
<b>Total Debt</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Deferred Taxes	196	152	152	152	152
Long Term Provisions & Others	373	298	298	298	298
<b>TOTAL SOURCES OF FUNDS</b>	<b>12,136</b>	<b>13,610</b>	<b>12,897</b>	<b>13,758</b>	<b>14,969</b>
<b>APPLICATION OF FUNDS</b>					
Net Block	2,044	1,735	1,662	1,634	1,653
Long-term investments	1,481	132	132	132	132
Other long-term assets	531	1,564	281	281	281
Cash & Equivalents	12,677	12,900	12,459	14,485	16,701
ST Loans & Advances, Others	1,125	1,084	822	916	1,023
<b>Total Current Assets</b>	<b>13,802</b>	<b>13,984</b>	<b>13,280</b>	<b>15,401</b>	<b>17,725</b>
Trading margin from members	4,324	2,585	1,617	2,474	3,286
Other Current Liabilities & Provns	1,398	1,221	811	1,186	1,536
<b>Total Current Liabilities</b>	<b>5,721</b>	<b>3,805</b>	<b>2,428</b>	<b>3,660</b>	<b>4,822</b>
<b>Net Current Assets</b>	<b>8,080</b>	<b>10,179</b>	<b>10,853</b>	<b>11,741</b>	<b>12,903</b>
<b>TOTAL APPLICATION OF FUNDS</b>	<b>12,136</b>	<b>13,610</b>	<b>12,927</b>	<b>13,788</b>	<b>14,969</b>

Source: Company, HDFC sec Inst Research

**CASH FLOW (Standalone)**

(Rs mn)	FY13	FY14	FY15E	FY16E	FY17E
<b>Reported PAT</b>	<b>2,986</b>	<b>1,528</b>	<b>1,167</b>	<b>1,756</b>	<b>2,403</b>
Non-operating & EO items	(1,114)	(779)	(1,046)	(992)	(1,078)
<b>PAT from Operations</b>	<b>1,872</b>	<b>748</b>	<b>121</b>	<b>764</b>	<b>1,326</b>
Interest expenses	0	11	15	-	-
Depreciation	307	343	273	277	282
Working Capital Change	(3,523)	(1,465)	(1,100)	1,137	1,025
<b>OPERATING CASH FLOW ( a )</b>	<b>529</b>	<b>385</b>	<b>(690)</b>	<b>2,179</b>	<b>2,633</b>
Capex	(462)	(59)	(200)	(250)	(300)
Free cash flow (FCF)	68	326	(890)	1,929	2,333
Investments	1,333	67	-	-	-
<b>INVESTING CASH FLOW ( b )</b>	<b>872</b>	<b>8</b>	<b>(200)</b>	<b>(250)</b>	<b>(300)</b>
Debt Issuance	-	-	-	-	-
Interest expenses	(0)	(0)	(15)	-	-
FCFE	1,401	393	(905)	1,929	2,333
Share capital Issuance	-	-	-	-	-
Dividend	(2,134)	(1,133)	(597)	(895)	(1,193)
<b>FINANCING CASH FLOW ( c )</b>	<b>(2,134)</b>	<b>(1,133)</b>	<b>(597)</b>	<b>(895)</b>	<b>(1,193)</b>
<b>NET CASH FLOW (a+b+c)</b>	<b>(733)</b>	<b>(740)</b>	<b>(1,487)</b>	<b>1,034</b>	<b>1,139</b>
Non-operating and EO items	576	519	1,046	992	1,078
Closing Cash & Equivalents	752	530	12,459	14,485	16,701

Source: Company, HDFC sec Inst Research

**KEY RATIOS (Standalone)**

	FY13	FY14	FY15E	FY16E	FY17E
<b>PROFITABILITY (%)</b>					
GPM	85.1	81.8	83.0	86.5	87.4
EBITDA Margin	60.2	42.8	31.7	48.2	55.6
APAT Margin	57.0	44.8	51.0	52.0	54.5
RoE	27.8	13.3	10.5	15.9	20.4
RoIC or Core RoCE	31.9	20.8	25.6	32.3	37.7
RoCE	16.7	8.8	7.7	10.1	12.1
<b>EFFICIENCY</b>					
Tax Rate (%)	25.2	29.3	21.3	25.0	26.0
Asset Turnover (x)	0.3	0.2	0.1	0.2	0.2
Debtors (days)	228	242	250	250	250
Payables (days)	102	139	145	140	135
Cash Conversion Cycle (days)	126	103	105	110	115
Debt/EBITDA (x)	(2.7)	(7.1)	(14.9)	(7.4)	(5.5)
Net D/E	(0.7)	(0.9)	(1.0)	(1.1)	(1.1)
Interest Coverage	13,069	198	NM	NM	NM
<b>PER SHARE DATA</b>					
EPS (Rs/sh)	58.9	30.2	22.9	34.4	47.1
CEPS (Rs/sh)	64.9	36.9	28.2	39.9	52.6
DPS (Rs/sh)	24.0	10.0	10.0	15.0	20.0
BV (Rs/sh)	226.4	224.3	210.4	222.2	240.1
<b>VALUATION</b>					
P/E	14.6	28.4	37.5	24.9	18.2
P/BV	3.8	3.8	4.1	3.9	3.6
EV/EBITDA	11.2	23.0	45.4	19.5	12.4
OCF/EV (%)	1.49	1.15	(2.09)	6.85	8.66
FCF/EV (%)	0.19	0.97	(2.70)	6.07	7.68
FCFE/mkt cap (%)	0.32	0.09	(0.21)	0.44	0.53
Dividend Yield (%)	2.79	1.16	1.16	1.75	2.33

Source: Company, HDFC sec Inst Research



**Disclosure:**  
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