



## Pure play on manganese ore prices

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# Summary

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## **MOIL – high quality asset and pure play on manganese ore prices**

- India's largest producer of manganese ore with 50% share in production, 20% in R&R
- Pricing power due to dominant position, high quality products and proximity to customers
- India has turned net importer of manganese ore since 2007, which has bridged the gap between realization and international prices
- Indian manganese ore demand will outstrip supply further led by strong crude steel production growth
- MOIL is a pure play on manganese ore prices because of lack of near term meaningful volume growth

## **Mn ore market in balance – Largest consumer dependent on consolidated suppliers**

- Global consumption Of Mn ore has grown at cagr of 4% over CY2000-09, while Chinese consumption has grown at 30%.
- China consumes 59% and produces 42% global ore production and has only 2% of R&R
- Chinese imports 1/3<sup>rd</sup> of ore produced in RoW due to its low grade of 18% (vs 42% in RoW)
- High level of consolidation among suppliers – 54% of supply is with 6 producers led by BHP-Billiton
- Africa and Ukraine have 87% of Reserves, but no significant supply growth in next 2 to 3 years
- Expect slight surplus and milder prices in CY11, but demand growth in CY12 will balance the market

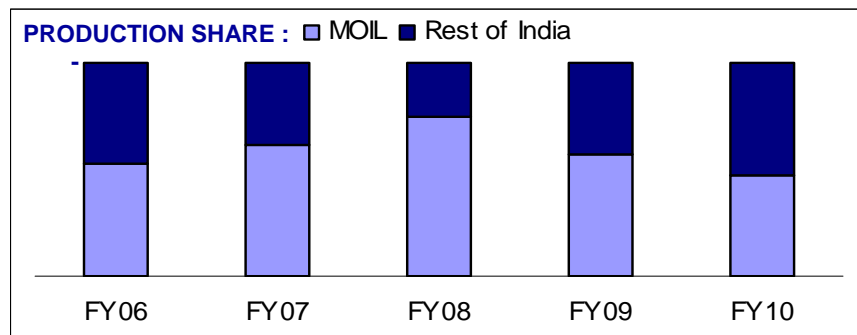
## **Buy with TP of Rs453**

- At Rs375, upper band of IPO price, stock will trade at FY12 EV/EBITDA of 4.5x, PE of 9.4x & P/BV of 2.3x. We value the stock at Rs453 based on 6xFY12 EV/EBITDA.

# India's largest, low cost Mn ore producer

## Key producers of Manganese Ore

Company	State	Production (000 tons)				
		FY06	FY07	FY08	FY09	FY10
MOIL	MH/MP	865	1,047	1,365	1,175	1,093
Sandur Mangane	Karnata	210	182	259	241	226
Rungta Mines	Orissa	7	14	- na -	- na -	- na -
Orissa Minerals	Orissa	30	27	82	32	17
Orissa Mining Cc	Orissa	21	103	134	- na -	- na -
OMM	Orissa				76	95
<b>INDIA Total</b>		<b>1,920</b>	<b>2,016</b>	<b>2,293</b>	<b>2,347</b>	<b>2,550</b>



## MOIL: Mineral reserves

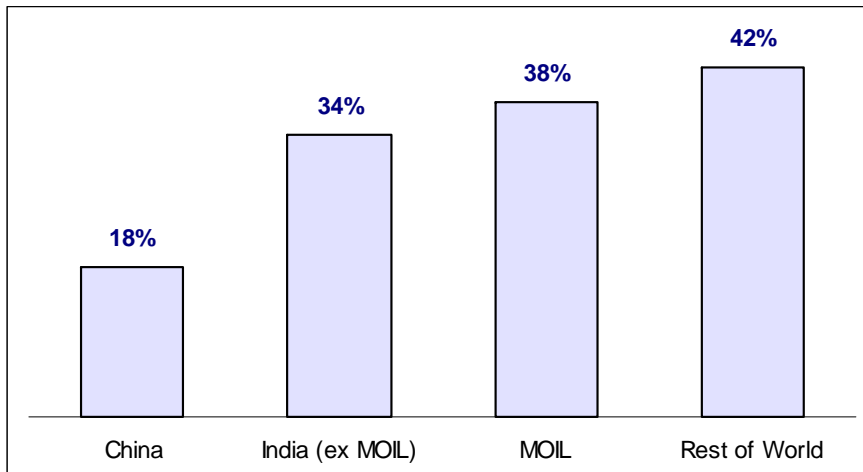
Mines	State	Mine Type	Grade (%)	Reserves (m tons)			Prod. n tons)	Cost of (Rs/ton)
				Proved	Prob.	Total		
Balaghat	MP	UG	40	6.9	2.1	9.0	0.30	2,355
Dongri Buzurg	MH	OC	42	3.0	0.0	3.0	0.28	1,188
Chikla	MH	UG	36	0.5	0.6	1.1	0.15	1,973
Tirodi	MP	OC	32	0.1	0.8	0.9	0.11	2,073
Kandri	MH	UG	38	0.4	0.0	0.4	0.07	2,576
Beldongri	MH	UG	30	0.2	0.0	0.2	0.03	2,509
Ukwa	MP	UG	38	1.4	1.4	2.8	0.05	3,940
Munsar	MH	UG	32	0.1	1.2	1.3	0.06	1,960
Gumgaon	MH	UG	36	1.6	0.0	1.6	0.04	3,077
Sitapatore/Sukli	MP	OC	30	0.0	0.0	0.0	0.00	
Dumps				1.4	0.0	1.4		
<b>Total</b>			<b>40</b>	<b>15.6</b>	<b>6.1</b>	<b>21.7</b>	<b>1.09</b>	<b>2,058</b>

Note: UG=Under ground; OC=Open cast; MH=Maharashtra; Prod.=FY10 production

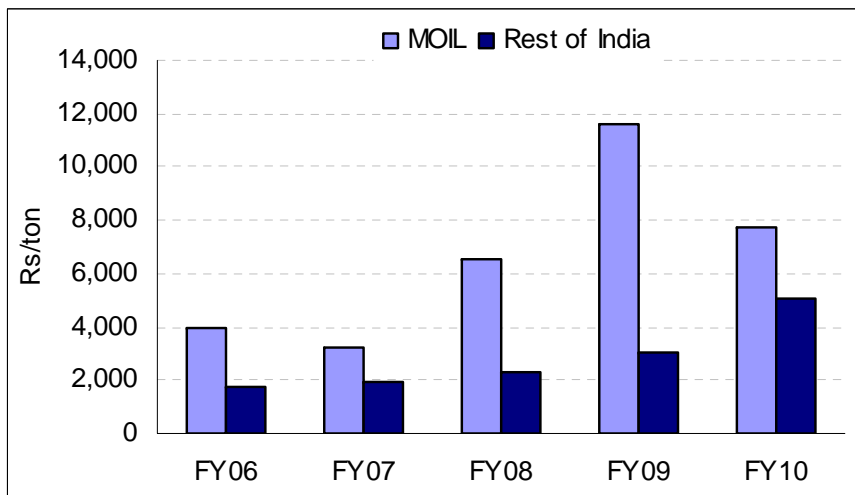
- MOIL is largest producer of Mn ore in India
- Accounts for 50% of countries ore production by Mn content
- Operates 7 underground and 3 open cast mines and has longest history of operation
- Low cost of production is ~US\$46/tons
- Balaghat and Dongri Buzurg mines contribute 50-60% of ore production.
- MOIL has reserves of 22m tons and resources of 69.5m tons, which is nearly 20% of the countries reserves and resources (R&R)
- Mn ore accounts for 90-95% of company's revenues
- Experienced and skilled pool of manpower
- Also, has small 10ktpa of High Carbon –Ferro Mn production
- 2 Wind farms have 20MW of capacity

# Pricing power in domestic market

## MOIL MN ORE GRADE IS BEST IN INDIA ...



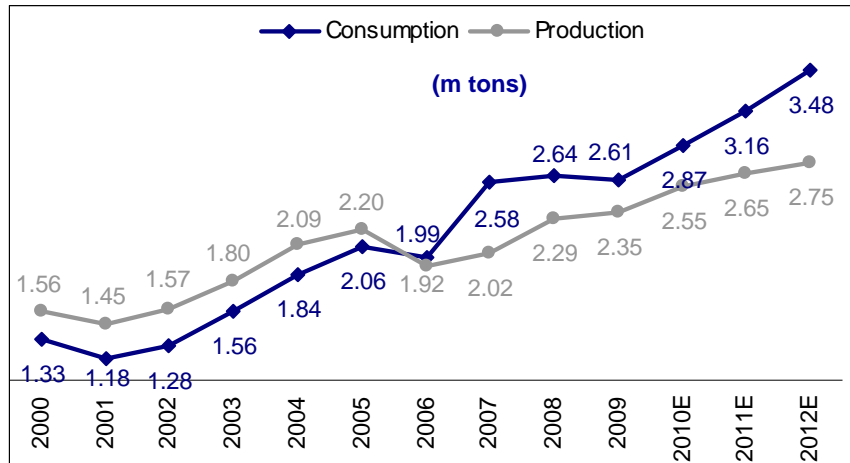
## ...COMMANDS PREMIUM OVER COMPETITION



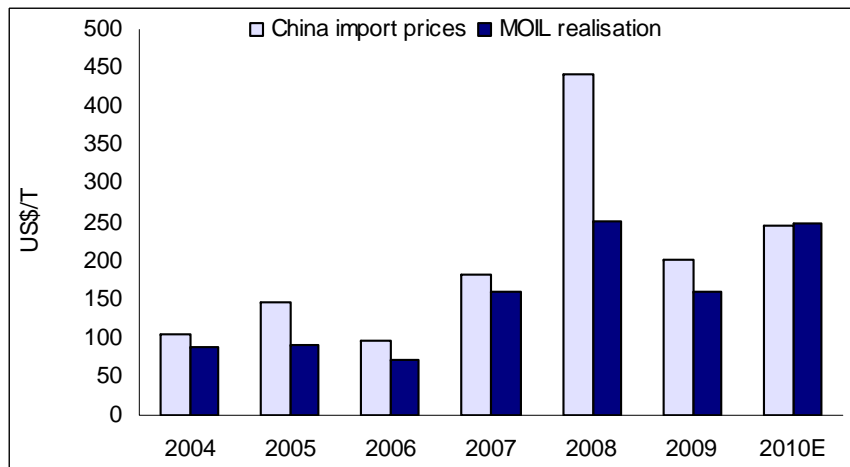
- MOIL has access to best quality Mn ore of India
- The average grade was 38% for MOIL vs 34% for rest of production in FY10.
- Average grade in the reserves is even higher at 40%
- Its products command premium over competition due to superior grade
- MOIL sells mostly on quarterly pricing due to its dominant position in Indian market and high quality of its ore
- Top 10 key customers account for 52% of ore sales
- SAIL is the single largest customer accounting for 22% of revenues
- Most of the customers are located in the central part of country, in proximity to its mines and away from ports, which allows MOIL to have significant protection against imports

# India's demand outstripping supply growth

## INDIA'S MN ORE DEMAND IS GROWING FASTER...



## ...MOIL'S REALIZATION CATCHING UP



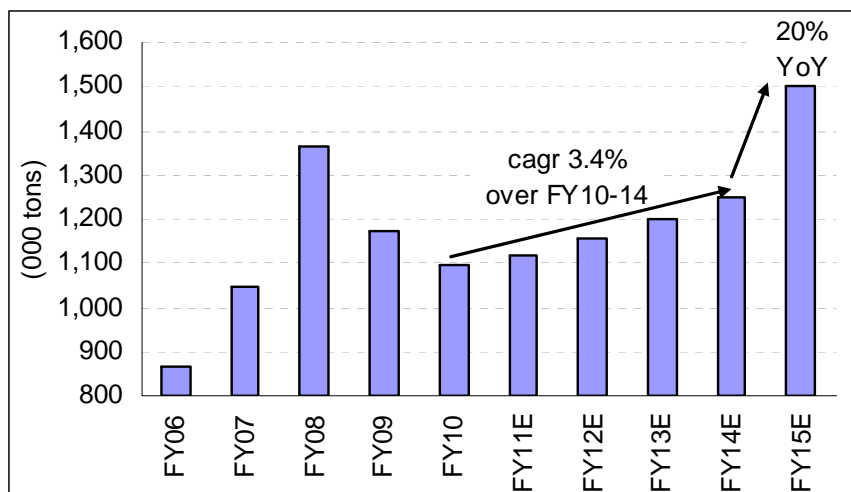
- India's demand for Mn ore has grown at cagr of 7.8% over CY2000-2009, which is likely to accelerate further at 10% over CY2009-12 driven by strong growth in steel production in the country
- Over next 2 to 3 years, Indian primary steel producers will add nearly 15-20m tons of production due to investments already Under progress
- However, the supply of Mn ore has grown at cagr of 4.6% only over CY2000-2009, which is likely to grow at slightly higher rate of 5.4% over CY2009-12
- This is likely to widen the gap between demand and supply
- As a result, MOIL will increasingly be able to price its ore based on import parity thereby pushing up average realization

# Pure play on manganese ore prices

## RS 14B CAPEX OVER FY11-FY16

Mines	Capex (Rs m)	Comm. by	Benefits
Balaghat	65	Oct-10	ROM production
Balaghat	190	Mar-15	will increase from
Balaghat	3,000	2016	340kt to 475kt
Gumgaon	167	Apr-11	60kt to 100kt
Munsar	252	Apr-14	30kt to 60kt
Ukwa	181	Apr-14	55kt to 100kt
Dongri Buzurg	1,800	Mar-14	350kt to 560kt
-	2,030	Mar-15	build up infrastructure
Bhilai	3,920	Sep-12	FM 31ktpa; SM 75ktpa
Vizag	2,062	Sep-12	FM 20ktpa; SM 37.5ktpa
<b>Total</b>	<b>13,667</b>		

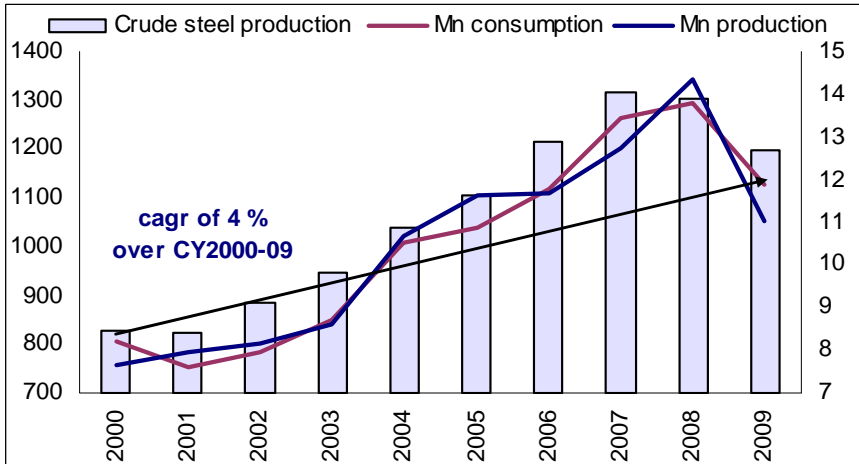
## MODERATE PRODUCTION GROWTH IN NEAR TERM



- MOIL is planning to invest Rs8b over next 5 years to increase the mine production by 40%
- Another Rs6b will be invested to set up 164,000tpa of Ferro-alloy plants in JV with SAIL and RINL to be executed in 2 years
- Gumgaon mine capacity will increase by 40,000tpa by April 2011 by sinking of vertical shaft, which will be only source of new production for 3 years
- Production growth will remain moderate at only 3.4% in near term over FY10-FY14
- Ukwa, Munsar and Dogri Buzurg will add further 285,000tpa of mine capacity by sinking of vertical shaft by April 2014
- Thus, production is expected to increase by 20% YoY in FY15
- Since the volume growth will be moderate over next 3-4 years, we believe the earnings will remain driven by price alone

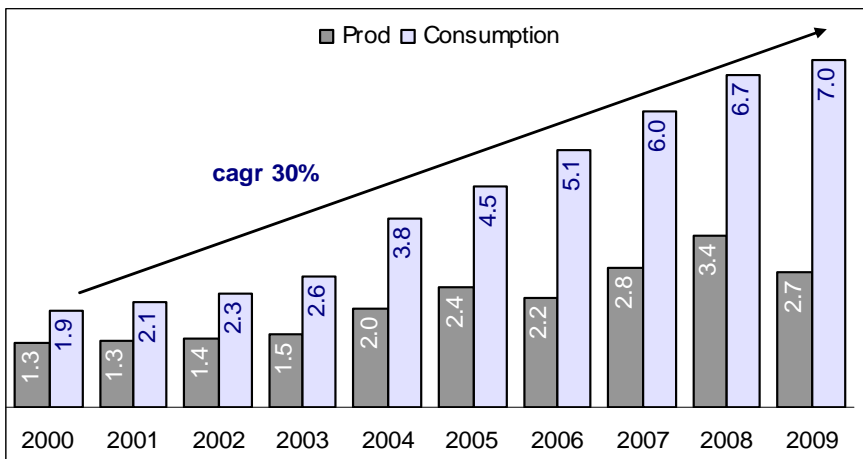
# Global demand – China is prime driver

Global Mn cons. (m tons) grew at 4%....

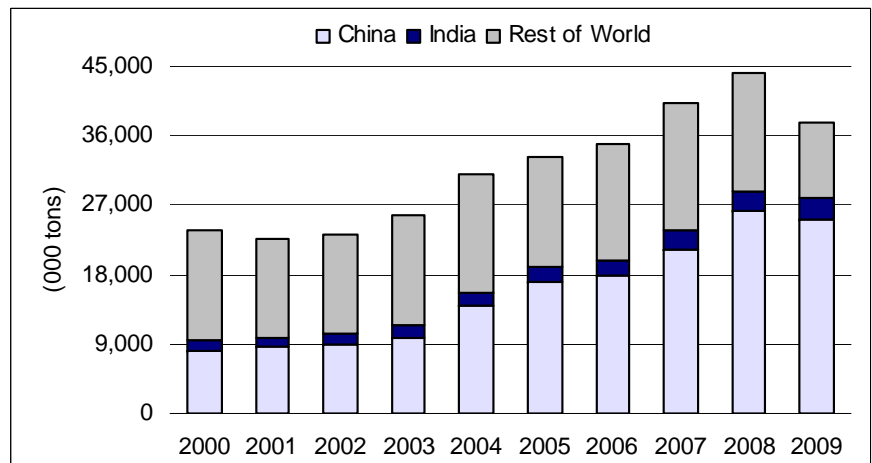


- Global demand of Mn ore (by content) increase at cagr of 4% over CY2000-09
- Driven primarily by very strong growth of 30% cagr in China over same period
- Despite financial crisis in CY2008, the consumption in China grew by 4%, while it declined sharply by 14% globally in CY2009
- China and India account for 2/3rd of the global manganese ore (wet) consumption

While Chinese consumption skyrocketed at 30%

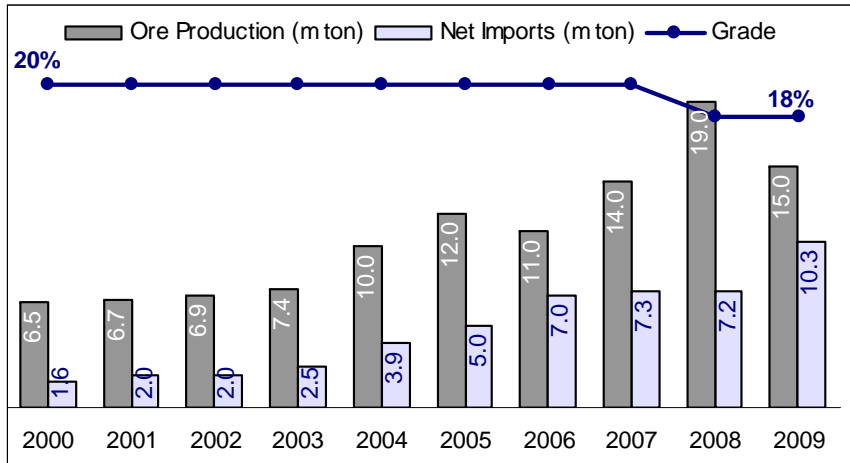


China and India = 2/3rd of global consumption

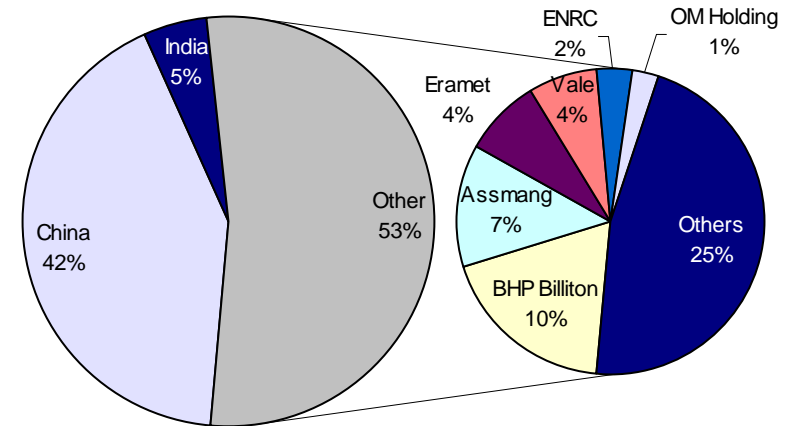


# China: dependent on consolidated suppliers

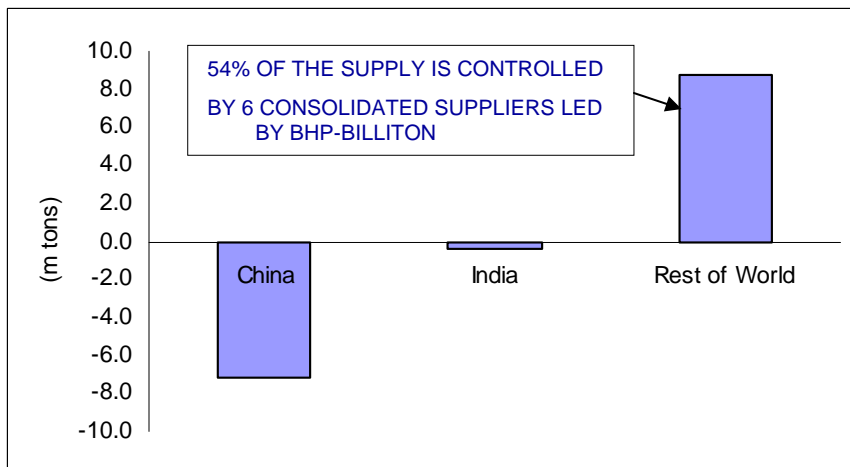
## IMPORTS RISING DUE TO FURTHER DETERIORATION OF LOW GRADE ORE



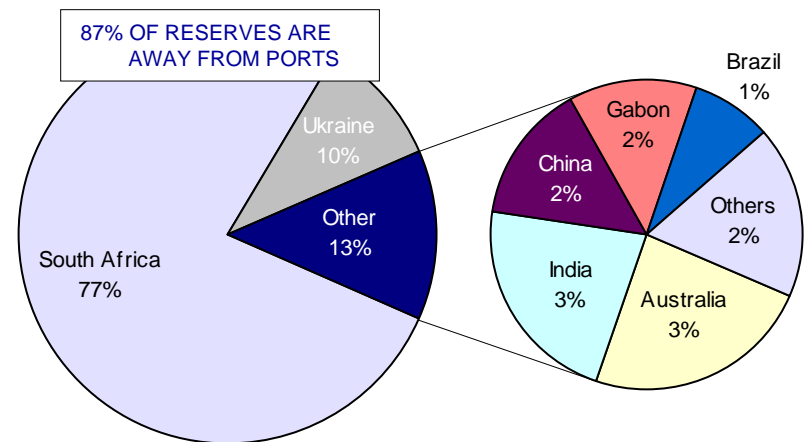
## CHINA PRODUCES 42% OF GLOBAL MN ORE...



## BOTH CHINA AND INDIA ARE IMPORTERS



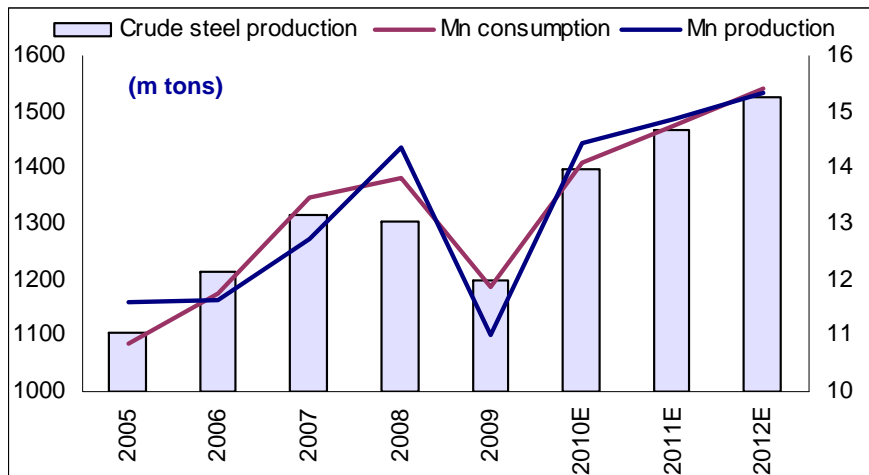
## ...BUT POSSES ONLY 2% OF GLOBAL RESERVES





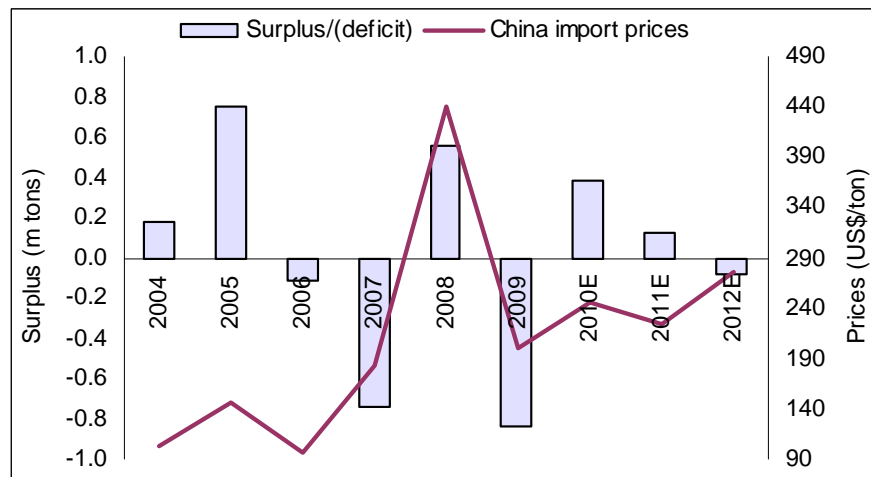
# Price outlook bullish – subdued in near term

## GLOBAL MN DEMAND WILL GROW AT 5%

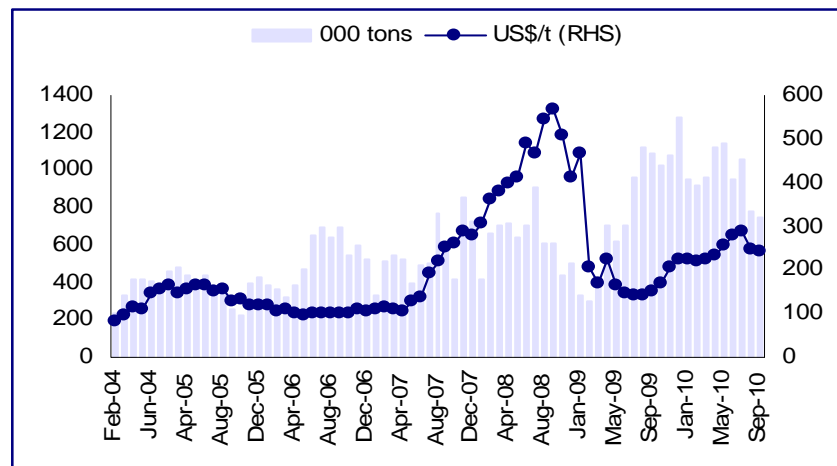


- We expect Mn demand to increase at cagr of 5% over CY2010-12 driven by crude steel production growth
- Supply growth will remain moderate at 3% due to underinvestment
- Due to sharp growth in Mn ore production during 1HCY10, We expect moderate surplus in CY10 and CY11, which will keep prices subdued in near term, though market is structurally bullish

## MN ORE MARKET IN BALANCE



## CHINA: MONTHLY IMPORTS AND SPOT PRICES



# Buy with TP of Rs453/share

## IPO DETAILS

No. of shares (m)	168
Public offering (%)	20
Mkt Cap (Rs b) at...	
...Rs375 on upper band	63
...Rs340 on lower band	57

## MOIL: VALUATION SUMMARY AT RS375/SHARE

YEAR	NET SALES	PAT	EPS	EPS	P/E	P/BV	ROE	ROCE	EV/	EV/	EV/
END	(RS M)	(RS M)	(RS)	GROWTH (%)	(X)	(X)	(%)	(%)	SALES	EBITDA	TON
3/08A	9,674	4,798	28.6	257.5	13.1	8.0	61.1	81.8	0.5	0.6	1.2
3/09A	12,818	6,638	39.5	38.3	9.5	4.9	51.3	66.0	-0.1	-0.2	-0.4
3/10A	9,631	4,678	27.8	-29.5	13.5	4.2	31.0	33.8	5.0	8.1	10.9
3/11E	13,982	7,503	44.7	60.4	8.4	2.9	35.0	41.9	3.1	4.3	10.3
3/12E	12,860	6,729	40.1	-10.3	9.4	2.3	25.0	28.6	3.0	4.5	9.6

- MOIL is a high quality asset located strategically in the central part of country, close of consumers, rich experience of operating manganese ore mines. India's demand growth will continue to outstrip supply growth, which augurs well for realization.
- Global ore production has responded to sharp rise in prices in 1HCY10. As a result, spot prices have already corrected by 17%. Though prices may remain subdued in near term, we believe market remains in balance as minor surpluses in CY10 and CY11 will get absorbed in CY12.
- On factoring prices of US\$225/ton (-10% YoY) for FY12, we estimate EPS of Rs40.1 for FY12. 10% change in price will result in EPS change of 12-13%. At upper band of Rs375, stock will trade at attractive FY12 EV/EBITDA of 4.5x, PE of 9.4x and P/BV of 2.3x. We recommend Buy with target price of Rs453/share based on EV/EBITDA of 6xFY12.

## RELATIVE VALUATIONS

	PRICE	CURRENCY	MKT CAP (US\$ B)	EPS		PE (x)		EV/EBITDA (x)		P/B (x)
				CY10	CY11	CY10	CY11	CY10	CY11	CY10
ERAMET	244	EUR	8.7	14.5	20.2	17.0	12.2	7.2	5.4	2.4
BHP-Billiton	43	AUD	223	3.6	4.1	11.7	10.3	6.3	5.6	4.8
Assore	17,200	ZAr	3.4	29.6	38.2	5.8	4.5	4.1	3.2	2.6
ENRC	904	GBp	18	1.6	2.0	9.2	7.3	5.9	4.8	2.2
MOIL*	375	INR	1.4	44.7	43.3	8.4	8.7	4.3	4.0	2.9

Source: Bloomberg and MOSL; \* CY10=FY11 and CY11=FY12

# MOIL: Financials

INCOME STATEMENT (CONSOLIDATED)							BALANCE SHEET						
(Rs million)							(Rs million)						
Y/E MARCH	2007	2008	2009	2010	2011E	2012E	Y/E MARCH	2007	2008	2009	2010	2011E	2012E
<b>Net sales</b>	<b>4,145</b>	<b>9,674</b>	<b>12,818</b>	<b>9,631</b>	<b>13,982</b>	<b>12,860</b>	Share Capital	280	280	280	1,680	1,680	1,680
<i>Change (%)</i>	25.5	133.4	32.5	-24.9	45.2	-8.0	Reserves	4,335	7,847	12,929	15,094	21,441	26,956
Total Expenses	2,331	2,732	3,736	3,658	3,928	4,227	<b>Share holders funds</b>	<b>4,615</b>	<b>8,127</b>	<b>13,209</b>	<b>16,774</b>	<b>23,121</b>	<b>28,636</b>
<b>EBITDA</b>	<b>1,814</b>	<b>6,942</b>	<b>9,082</b>	<b>5,972</b>	<b>10,054</b>	<b>8,632</b>	Loans						
<i>% of Net Sales</i>	43.8	71.8	70.9	62.0	71.9	67.1	Defferred tax liability (net)	108	168	185	128	128	128
EBITDA per ton	1,541	4,986	8,873	5,082	8,675	7,027	<b>Capital Employed</b>	<b>4,723</b>	<b>8,295</b>	<b>13,394</b>	<b>16,902</b>	<b>23,249</b>	<b>28,764</b>
Deprn. & Amortization	141	161	247	253	322	401	Gross Block	1,833	3,025	3,420	3,570	4,410	5,487
<b>EBIT</b>	<b>1,673</b>	<b>6,781</b>	<b>8,835</b>	<b>5,719</b>	<b>9,732</b>	<b>8,232</b>	Less: Accum. Deprn.	988	1,136	1,364	1,605	1,927	2,327
Net Interest	0	0					<b>Net Fixed Assets</b>	<b>845</b>	<b>1,889</b>	<b>2,056</b>	<b>1,965</b>	<b>2,483</b>	<b>3,160</b>
Other income	339	568	1,233	1,363	1,636	1,963	Capital WIP	411	86	155	222	722	1,222
<b>PBT before EO</b>	<b>2,012</b>	<b>7,349</b>	<b>10,068</b>	<b>7,082</b>	<b>11,368</b>	<b>10,195</b>	Investments	0	0	1	2	2	2
EO income							<b>Curr. Assets</b>	<b>4,285</b>	<b>8,230</b>	<b>14,486</b>	<b>17,428</b>	<b>23,214</b>	<b>27,398</b>
<b>PBT after EO</b>	<b>2,012</b>	<b>7,349</b>	<b>10,068</b>	<b>7,082</b>	<b>11,368</b>	<b>10,195</b>	Inventories	314	228	584	475	690	705
Tax	669	2,551	3,430	2,405	3,865	3,466	Sundry Debtors	500	1,589	611	857	1,532	1,233
<i>Rate (%)</i>	33.3	34.7	34.1	34.0	34.0	34.0	Cash and Bank	3,215	6,086	12,322	14,871	19,768	24,237
<b>Reported PAT</b>	<b>1,342</b>	<b>4,798</b>	<b>6,638</b>	<b>4,678</b>	<b>7,503</b>	<b>6,729</b>	Loans and Advances	257	328	970	1,224	1,224	1,224
Minority interests							<b>Curr. Liability &amp; Prov.</b>	<b>857</b>	<b>1,910</b>	<b>3,304</b>	<b>2,715</b>	<b>3,172</b>	<b>3,018</b>
Preference dividend							Sundry Creditors	763	1,036	1,867	1,459	1,915	1,762
<b>Adjusted PAT</b>	<b>1,342</b>	<b>4,798</b>	<b>6,638</b>	<b>4,678</b>	<b>7,503</b>	<b>6,729</b>	Other Liabilities & prov.	94	874	1,438	1,257	1,257	1,257
<i>Change (%)</i>	17.2	257.5	38.3	-29.5	60.4	-10.3	<b>Net Current Assets</b>	<b>3,429</b>	<b>6,320</b>	<b>11,182</b>	<b>14,713</b>	<b>20,042</b>	<b>24,380</b>
							<b>Application of Funds</b>	<b>4,723</b>	<b>8,295</b>	<b>13,394</b>	<b>16,902</b>	<b>23,249</b>	<b>28,764</b>

E: MOSL Estimates

# MOIL: Financials

RATIOS							CASHFLOW STATEMENT						(Rs million)
Y/E MARCH	2007	2008	2009	2010	2011E	2012E	Y/E MARCH	2007	2008	2009	2010	2011E	2012E
<b>Basic (Rs)</b>							Pre-tax profit	2,012	7,349	10,068	7,082	11,368	10,195
EPS	8.0	28.6	39.5	27.8	44.7	40.1	Depreciation	145	148	228	241	322	401
Cash EPS	8.8	29.5	41.0	29.4	46.6	42.4	(Inc)/Dec in Wkg. Cap.	433	-21	1,375	-982	-432	130
BV/Share	25.6	46.7	77.0	89.8	127.6	160.5	Tax paid	-604	-2,411	-3,412	-2,461	-3,865	-3,466
DPS	1.7	5.8	7.9	5.6	5.9	6.2	Other operating activities	-32	-198		-14		
Payout (%)	23.9	23.6	23.4	23.5	15.4	18.0	<b>CF from Op. Activity</b>	<b>1,954</b>	<b>4,867</b>	<b>8,257</b>	<b>3,866</b>	<b>7,393</b>	<b>7,259</b>
<b>Valuation (x) CMP@375</b>							(Inc)/Dec in FA + CWIP	-726	-866	-464	-218	-1,340	-1,577
P/E	46.9	13.1	9.5	13.5	8.4	9.4	(Pur)/Sale of Investments	0		-1	-1		
Cash P/E	42.5	12.7	9.2	12.8	8.1	8.8	<b>CF from Inv. Activity</b>	<b>-726</b>	<b>-866</b>	<b>-465</b>	<b>-219</b>	<b>-1,340</b>	<b>-1,577</b>
P/BV	14.7	8.0	4.9	4.2	2.9	2.3	Equity raised/(repaid)	127					
EV/Sales	1.8	0.5	-0.1	5.0	3.1	3.0	Debt raised/(repaid)						
EV/EBITDA	4.0	0.6	-0.2	8.1	4.3	4.5	Dividend (incl. tax)	-321	-1,130	-1,556	-1,099	-1,156	-1,214
Dividend Yield (%)	0.4	1.5	2.1	1.5	1.6	1.6	Other financing activities						
EV/ton	2	1	0	11	10	10	<b>CF from Fin. Activity</b>	<b>-194</b>	<b>-1,130</b>	<b>-1,556</b>	<b>-1,099</b>	<b>-1,156</b>	<b>-1,214</b>
<b>Return Ratios (%)</b>							<b>(Inc)/Dec in Cash</b>	<b>1,034</b>	<b>2,871</b>	<b>6,236</b>	<b>2,549</b>	<b>4,897</b>	<b>4,469</b>
EBITDA Margins	43.8	71.8	70.9	62.0	71.9	67.1	Add: opening Balance	2,181	3,215	6,086	12,322	14,871	19,768
Net Profit Margins	32.4	49.6	51.8	48.6	53.7	52.3	<b>Closing Balance</b>	<b>3,215</b>	<b>6,086</b>	<b>12,322</b>	<b>14,871</b>	<b>19,768</b>	<b>24,237</b>
RoE	31.2	61.1	51.3	31.0	35.0	25.0							
RoCE	35.4	81.8	66.0	33.8	41.9	28.6							
RoIC	158.1	319.4	964.1	316.5	352.9	249.2							
<b>Working Capital Ratios</b>													
Fixed Asset Turnover (x)	2.3	3.2	3.7	2.7	3.2	2.3							
Asset Turnover (x)	0.9	1.2	1.0	0.6	0.6	0.4							
Debtor (Days)	44	60	17	32	40	35							
Inventory (Days)	28	9	17	18	18	20							
Creditors (Days)	67	39	53	55	50	50							
<b>Growth (%)</b>													
Sales	25.5	133.4	32.5	-24.9	45.2	-8.0							
EBITDA	15.6	282.7	30.8	-34.2	68.3	-14.1							
PAT	17.2	257.5	38.3	-29.5	60.4	-10.3							
<b>Leverage Ratio (x)</b>													
Current Ratio	5.0	4.3	4.4	6.4	7.3	9.1							
Debt/Equity	-0.7	-0.8	-1.0	-1.0	-0.9	-0.9							



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