

### **Hindustan Zinc**

#### It's got the silver lining

June 30, 2011

#### Reco

Buy

CMP	Target Price
Rs 136	Rs 173
EPS change FY12E/13E (%)	NA
Target Price change (%)	NA
Nifty	5,647
Sensex	18,846

#### **Price Performance**

(%)	1M	3M	6M	12M
Absolute	(2)	(1)	2	40
Rel. to Nifty	(3)	2	10	32

Source: Bloomberg

### Relative Price Chart



Source: Bloomberg

#### Stock Details

Otock Details	
Sector	Metals & Mining
Bloomberg	HZ@IN
Equity Capital (Rs mn)	8451
Face Value(Rs)	2
No of shares o/s (mn)	4225
52 Week H/L	155/94
Market Cap (Rs bn/USD mn)	576/12,887
Daily Avg Volume (No of sh)	579591
Daily Avg Turnover (US\$mn)	1.8

#### Shareholding Pattern (%)

	Mar-11	Dec-10	Sep-10
Promoters	64.9	64.9	64.9
FII/NRI	1.5	1.7	1.7
Institutions	2.0	2.0	1.9
Private Corp	1.0	0.8	0.8
Public	30.7	30.5	30.7

Source: Capitaline

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- World's largest integrated zinc producer with mines, smelters and captive power. High grade reserve - resource base with 25 years mine-life assures sustainable growth
- First quartile unit cost of production at US\$808/ tonne in FY11 (which is about 50% of the global marginal cost of production) to help EBITDA margins remain well above 50%
- Current expansions to lead to significant contribution by the silver business to bottomline. Cash per share to increase to Rs 57 in FY13E
- We like its stable business with strong potential and attractive valuations, which should outplay short- term concerns; Initiate coverage with a target price of Rs 173; Buy

#### Fully integrated global leader with high R&R base

HZL has been consistently expanding its reserve and resource (R&R) base and delivering excellent performance. Worth noting is the increase in the R&R base to 313 mt from 146 mt within past eight years. With zinc-lead metal content of 34.7 million tones and silver metal content of about 885 mn oz (2,7500 tonnes), HZL's mines have a life of more than 25 years at current volumes. HZL has also demonstrated its execution capabilities. During FY02-11, its saleable metal (zinc and lead) production has increased from 204 ktpa to 770 ktpa (CAGR of 16%), which helped a revenue growth of 26% CAGR during the same period. EBITDA and PAT have grown at a CAGR of 50% and 61% respectively during the same period. Strong net cash of Rs 35/ share provides opportunity for inorganic growth.

#### Silver to add further lustre; lower costs to sustain strong margins

HZL produces silver as a by- product without any incremental costs. In FY11, the company has produced 179 tonnes of silver, which the management is confident of taking up to 350 tonne in FY12 and 500 tonne in FY13. As we expect prices to remain firm due to recovery in industrial demand and stronger investment demand, production ramp up will help silver to be a key growth driver for HZL. Also, being an efficient and integrated player, the unit cost productions at HZL continues to be in the first quartile on the global cost curve (both mining and integrated) giving it an edge over its global counterparts. For FY11, the unit cost of production for zinc (without royalty) was at US\$808 per tonne against the global marginal cost of production of about US\$1,700 per tonne. This has been a major strength for HZL and would help it remain significantly profitable with healthy margins even during commodity downturns. HZL's EBITDA margins have been robust in the range of 55-60%.

#### Attractive valuation; Buy with a target price of Rs 173

Being the largest integrated zinc- lead producer in the world with strong cash flows, low cost of production and presence in one of the fastest growing economies in the world, HZL deserves a premium in valuation multiple over its peers. However, looking at the volatility in metals prices with some pressure expected on zinc prices due to over supply situation, we value HZL at 6.5xFY13E EV/ EBITDA, which translates to a target price of Rs 173/ share providing an upside of 27%. We initiate our coverage on Hindustan Zinc with a BUY recommendation.

#### **Financial Snapshot**

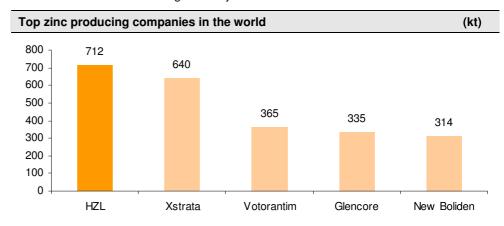
Rs Mn

YE-	Net	EBIT	DA		EPS	EPS	RoE		EV/	
Mar	Sales	(Core)	(%)	APAT	(Rs)	% chg	(%)	P/E	<b>EBITDA</b>	P/BV
FY10	80,170	46,701	58.3	40,414	9.6	48.2	22.3	14.2	9.8	3.2
FY11	100,393	56,228	56.0	49,217	11.6	21.3	21.7	11.7	7.6	2.6
FY12E	114,426	63,491	55.5	56,138	13.3	14.6	20.3	10.2	6.0	2.1
FY13E	133,108	75,566	56.8	66,972	15.8	19.3	19.8	8.6	4.4	1.7

#### **Investment Rationale**

#### World's largest integrated zinc producer

HZL has become the world's largest zinc manufacturing company with complete integration of mines, smelter and power generation. HZL's current zinc capacity of 8.79 lakh tonnes per annum (tpa) meets over 7% of the global zinc requirement. HZL produced 712 kt of refined in FY11 zinc in ahead of other global majors.



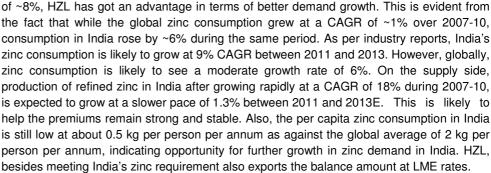
Source: Company, Industry, Emkay Research

Note: HZL's production is for FY11, for others the data is for CY10

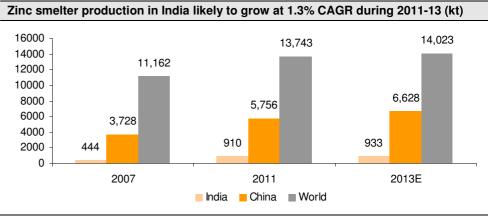
Current lead capacity in HZL is 0.85 lakh tpa. With the commissioning of another 1 lakh tpa lead smelter in Q2FY12 the total lead capacity will go up to 1.85 lakh tpa taking HZL's zinc - lead capacity to 1.064 mtpa.

#### India advantage to play for HZL

Being located in India, one of the fastest growing economies in the world with GDP growth of ~8%, HZL has got an advantage in terms of better demand growth. This is evident from

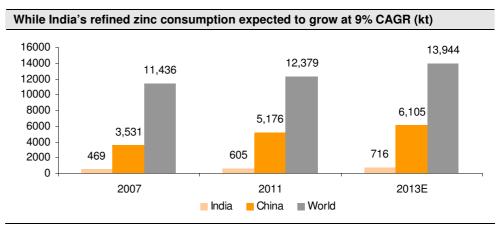


India's zinc consumption is likely to grow at 9% CAGR between 2011 and 2013



Source: Brook Hunt report April 2011, Emkay Research

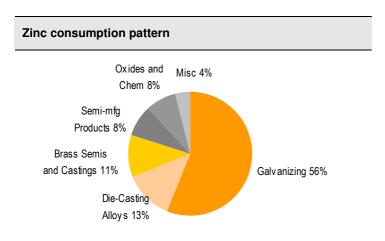
30 June 2011 2 **Emkay Research** 



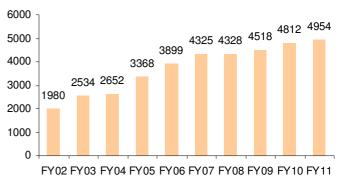
Source: Brook Hunt report April 2011, Emkay Research

#### Strong galvanized production growth rate should support zinc consumption

Zinc is primarily used in galvanized steel production. India's galvanized steel sheet has seen an impressive CAGR of 11% between FY02 and FY11. This has been helping zinc consumption also. We believe with upcoming steel capacities in India (about 15 mt capacity addition by FY14) and more and more focus towards value added products, galvanized steel production would continue to grow at a robust pace.



# India's GP/ GC sheet production has grown at 11% CAGR between FY02-11 (kt)

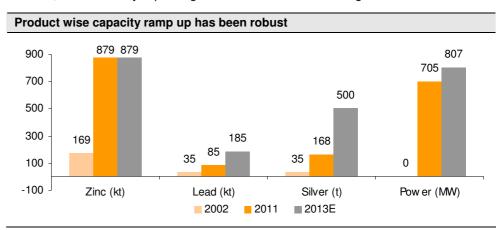


Source: Industry, Emkay Research

Source: CMIE, Emkay Research

#### Timely capacity addition catering to the demand growth

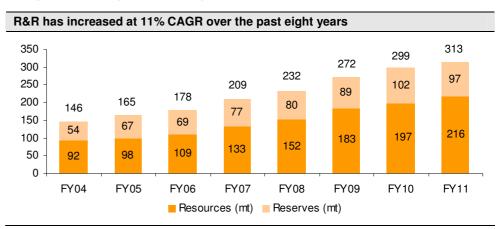
HZL has been able to rapidly ramp up its capacity to capitalize on the strong demand growth in India. Stake purchase of 65% by Sterlite Industries helped HZL in turning around its operational performance in terms of capacity additions, higher exploration and mining activities, self sufficiency in power generation and de-bottlenecking.



Source: Company, Emkay Research

#### Ever growing reserve and resources provide sufficient visibility

HZL's Reserves and Resources (R&R) have been increasing every year despite increased mining activities. Worth noting is the increase in the R&R base from 146 mt to 313 mt in the last eight years, suggesting an addition of 167 mt. With zinc—lead metal content of 34.7 million tonne and silver metal content of about 2,7500 tonne, HZL's mines have a life of more than 25 years at current volumes. Further, all the mines have the requisite statutory mining lease (ML) in place and are operational.



Source: Company, Emkay Research

#### Superior quality of mining assets

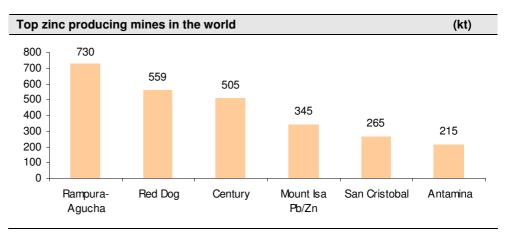
HZL has got high quality of mining assets. Rampura Agucha (RAM) is the only open pit mine and also the largest zinc mine in the world with very high grade of zinc content. Sindesar Khurd (SK) mine, which is rich in silver on the other hand, has been under expansionary phase and a new 1.5 mt mill is being ramped up that is likely to achieve its rated capacity in FY12. Other mines viz Dariba, Zawar and Kayar too have higher grade of zinc and lead contents. This compares excellently with any global mining asset, where the typical reserve resources are of sub grade. Currently Bamnia Kalam and Kayar mines are under the development phase and are not operational at present.

The reserve and resource of 313.2 mt contains 27.5 mt of zinc, 7.2 mt of lead and 27.5 kt of silver metal

#### Mine-wise R&R, grade, metal content as on 31st March' 2011

		Reserves			Resources							
Mines	Proved and Prob		nd Probab	le	Measured and Indicated				Inferred			
willes	mt		Grade		mt		Grade		mt		Grade	
	IIIt	Zn (%)	Pb (%)	Ag (g/t)	1111	Zn (%)	Pb (%)	Ag (g/t)		Zn (%)	Pb (%)	Ag (g/t)
Rampura	69.7	14.3	2.0	66.0	21.0	14.7	1.9	64.0	23.7	11.8	1.9	53.0
Dariba	9.1	6.8	1.8	78.0	7.9	7.3	2.2	96.0	32.5	7.8	2.1	87.0
Sindesar Khurd	10.1	4.9	2.8	158.0	17.1	5.7	3.7	216.0	40.8	4.9	3.1	161.0
Bamnia Kalam	-	1	-	-	1.7	5.3	1.8	-	3.4	5.0	3.8	114.0
Zawar	7.9	3.7	2.0	36.0	25.3	5.0	1.8	59.0	32.7	4.9	2.6	51.0
Kayar	_	-	-	_	6.3	10.8	1.5	32.0	4.3	9.8	1.8	36.0
Average grade	96.7	11.7	2.0	74.3	79.1	8.4	2.3	94.5	137.3	6.9	2.5	93.6

Source: Company, Emkay Research



Source: Company presentation, Industry, Emkay Research

Further all mines, major smelters and captive power plants are situated within a radius of 200 kms in the state of Rajasthan, giving it the benefit of a well established logistic network and synergy among mining and smelting operations.

#### Strong potential for future expansion projects

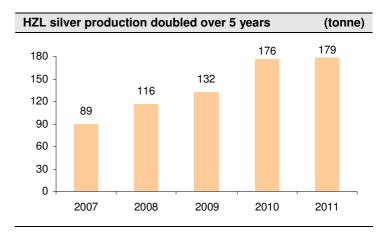
Further, HZL has 8 RPs (Reconnaissance Permits) covering an area of around 4,100 sq kms on which the company has started work. It has also applied for 14 RPs in 6 states covering an area of around 17,900 sq. kms. It may be noted, where a reconnaissance permit or prospecting license has been granted in respect of any land, the permit holder or the licensee has a preferential right for obtaining a prospecting license or mining lease, as the case may be, in respect of that land over any other person. This, we believe has great potential to add significant value to the company in terms of higher capacity, going forward. The management has been working for the permits and is also on the look out for good resources at right valuations.

#### Silver business- Key growth driver

HZL produces silver as a by- product of zinc and lead. The company, with the ramp up of its silver rich SK mine is determined to increase its silver production from 179 tpa in FY11 to 500 tpa (16 MoZ) starting FY13. This would help HZL become one of the top ten silver producers in the world.

Silver	D S.D	eumm	arv

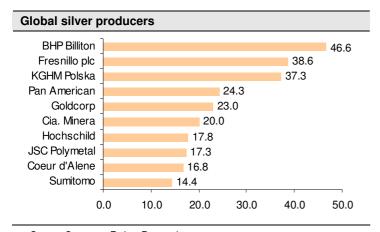
Mines	Million	Silver	Mine Capacity	MIC Ag
Willies	tonne	(PPM)	(MTPA)	(KT)
RAM	114.4	62.9	6.15	7.2
SK	67.9	174.4	1.5	11.8
Dariba	49.4	86.8	0.9	4.3
Zawar	65.9	52.3	1.2	3.4
Kayar*	10.6	33.6	-	0.4
Bamnia Kalam*	5.1	114.0	-	0.4
Total	313.2			27.5

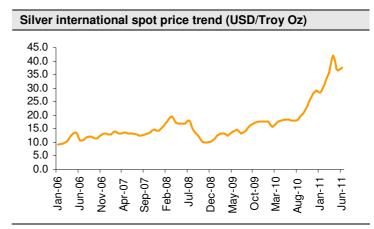


Source: Company, Emkay Research; \*not operational at present

Silver prices in recent times have gone up sharply outpacing even gold due to recovery in industrial demand, sharp jump in investment demand and also on weaker US Dollar. Though, silver prices are highly volatile currently at US\$35 per troy oz (cooled off from the 30 year high of US\$45/ troy oz during April 2011), we expect the overall price trend to remain firm, going forward.

Initiating Coverage

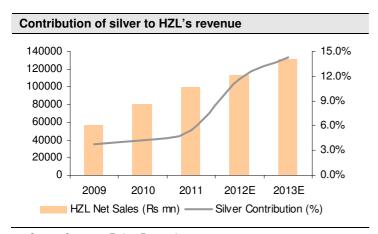




Source: Company, Emkay Research

#### Silver's contribution to EBITDA to improve to 25% in FY13

Since silver is a by-product, produced during smelting operations, it has no incremental cost of production. The revenue from silver business thus flows down almost completely to the EBITDA level excluding the refining costs, which is not very significant. Contribution of silver to the revenue and EBITDA has gone up from 1% and 1.4% in FY07 to 5% and 10% respectively in FY11. We expect silver's contribution to revenue and EBITDA to improve further to 14% and 25% respectively in FY13E.





Source: Company, Emkay Research

#### Sensitivity analysis

Our sensitivity analysis for EPS and price target shows that US\$100 (~4% of our base case) change in zinc LME would change EPS and price target by 2.8% and 2.3% respectively *ceteris paribas*. Understandably, lead has less impact on both EPS and price target, a US\$100 (~4% of our base case) fluctuation in lead LME changes our EPS and price target by 0.6% each. The exchange rate too has significant impact on our EPS and price target. Change of Rs 0.5 in exchange rate changes both our EPS and price target by ~1% each. In case of silver, changes in volume by 50 tonnes changes our EPS by ~2% while Rs 5000/ kg change in realizations have an impact of 1% on EPS.

#### EPS Sensitivity to zinc LME and exchange rate

Zinc			Exchange Rate (INR)						
EPS in INR		Pessi	mistic	Base	Optimistic				
		44	44.5	45	45.5	46			
	Pessimistic	2100	14.66	14.80	14.94	15.08	15.22		
Price	ressimistic	2200	15.11	15.25	15.40	15.54	15.69		
Zinc 7or	Base	2300	15.55	15.70	15.85	16.00	16.15		
ME Z	Pessimistic  (nustric Number   Properties    (nustric   Properties    (	2400	15.99	16.15	16.30	16.46	16.61		
		2500	16.44	16.60	16.76	16.92	17.08		

#### Price target sensitivity to zinc LME and exchange rate

	Zinc			Exchange Rate (INR)						
, T	Target Price in INR			imistic	Base	Base Optimisti				
'				44.5	45	45.5	46			
4	Pessimistic	2100	163	164	165	166	168			
Price	ressiiiisuc	2200	167	168	169	171	172			
Zinc Price \$/ Tonne)	Base	2300	171	172	173	175	176			
	Base Optimistic	2400	175	176	178	179	180			
		2500	179	180	182	183	185			

#### EPS Sensitivity to lead LME and exchange rate

Lead Exchange Rate (INR)							
EDC : IND		Pessi	Pessimistic		Optimistic		
	EPS in INR		44	44.5	45	45.5	46
Φ	% Pessimistic	2200	15.37	15.52	15.67	15.82	15.96
Pric	ressiiiisuc	2300	15.46	15.61	15.76	15.91	16.06
ead.	Base	2400	15.55	15.70	15.85	16.00	16.15
ME I	Pessimistic    Pessimistic	2500	15.64	15.79	15.94	16.09	16.24
		2600	15.73	15.88	16.03	16.18	16.34

#### Price target sensitivity to lead LME and exchange rate

Lead	Lead				Exchange Rate (INR)					
_	Target Price in INR			imistic	Base	Optim	nistic			
'				44.5	45	45.5	46			
Φ	Baradadada	2200	169	170	172	173	174			
Pric	Pessimistic	2300	170	171	173	174	175			
ME Lead Price (US\$/ Tonne)	Base	2400	171	172	173	175	176			
	Optimistic	2500	172	173	174	176	177			
-		2600	172	174	175	177	178			

Source: Emkay research

#### EPS Sensitivity to silver volume and realizations

Silver			Sales volume (tonne)						
EPS in INR			Pessi	mistic	Base	Optimistic			
			275	325	375	425	500		
	Pessimistic	40,000	14.84	15.10	15.36	15.62	16.01		
sus (	ressimistic	45,000	15.02	15.31	15.61	15.90	16.34		
satio s/ kg	Base	50,000	15.20	15.52	15.85	16.18	16.67		
Realisations (Rs/ kg) Optimis	Ontimiatio	55,000	15.38	15.74	16.10	16.45	16.99		
	Optimistic	60,000	15.56	15.95	16.34	16.73	17.32		

Source: Emkay research

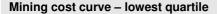
#### Price target Sensitivity to silver volumes and realizations

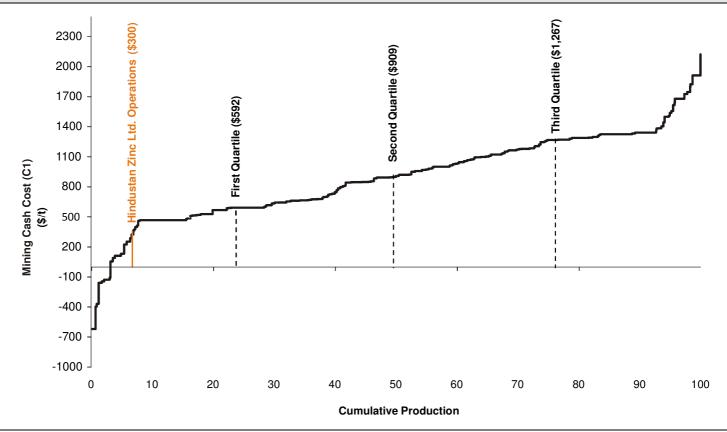
Silver			Sales volume (tonne)					
	Target Price in INR			mistic	Base	Optin	nistic	
				325	375	425	500	
	Pessimistic	40,000	164	167	169	171	175	
sus (	ressimistic	45,000	166	169	171	174	178	
satio s/kg	Base	50,000	168	171	173	176	181	
Realisations (Rs/ kg)	Optimistic	55,000	169	172	176	179	184	
	Opuinisuc	60,000	171	174	178	181	186	

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#### Lowest quartile unit cost of production to help protect margins

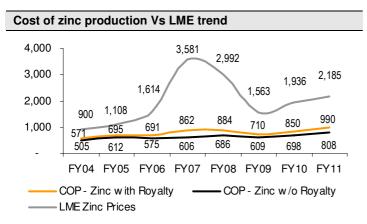
The unit cost of production at HZL continues to be in the first quartile on the global cost curve (both mining and integrated cost curve) giving it an edge over most of its counterparts across the globe. For FY11, the unit cost of production for zinc metal (without royalty) was at \$808 per tonne against the global marginal cost of production at about \$1700 per tonne. The reasons for its low cost of production have been low mining costs, close proximity of the smelters to the mines and full integration in terms of captive power requirement.



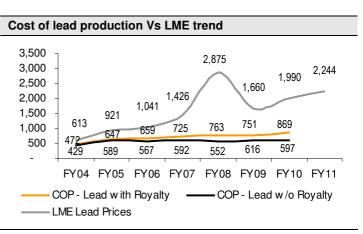


Source: Sterlite Corporate ppt, March 2011, ref Brook Hunt Q4 2011 report, Emkay Research

A low cost structure helps HZL to remain significantly immune to any possible sharp drop in LME prices. Thus, it is clear that HZL would continue to earn enviable margins even if LME prices drop towards US\$1700/ tonne (global marginal cost of production).



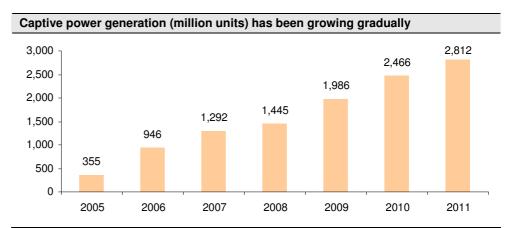
Source: Company, Bloomberg, Emkay Research



Source: Company, Bloomberg, Emkay Research

#### Captive power helps in cost saving of ~Rs 4,000/ tonne of refined metal

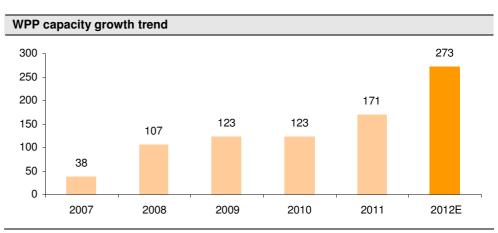
Zinc and lead production (mining and smelting) requires significant amount of power, which HZL largely meets through captive power. During FY10 and FY11, the CPPs generated 2,466 and 2,812 mn units of power at an average cost of Rs 2.45 and Rs 3.03 per unit. The grid costs during the same period were Rs 3.53 and Rs 4.13 per unit respectively. This enabled the company to save on power cost of Rs 2,663 mn and Rs 3,093 mn respectively. This translates to a saving of Rs 4,160 per tonne and Rs 4,016 per tonne during FY10 and FY11 respectively.



Source: Company, Emkay Research

#### Wind energy makes "green business" sense

HZL also has interests in the wind energy space. During FY09 and FY10, it had 123 MW WPP in its asset portfolio. Another 150MW was announced in early FY11 of which 48MW has already got commissioned in Q4FY11 taking the total WPP capacity to 171 MW. The balance 102 MW of new WPP is scheduled to get added during mid FY12. Post the expansion, the total generation capacity would increase to 273 MW. The entire funding for this project has been through internal accruals.



The WPP besides adding to HZL's bottomline also showcases its commitment towards green energy - sustainable development

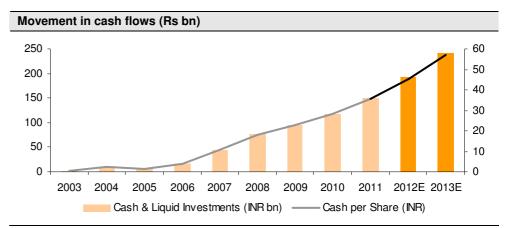
Source: Company, Emkay Research

The investment in WPP besides giving HZL cost and tax advantages, also serves to showcase themselves as an environment friendly company. Further, the 123 MW of WPP is registered under Clean Development Mechanism (CDM) projects with United Nations Framework Convention on Climate Change (UNFCCC) with a potential to generate 223,000 CERs per annum translating to Rs 2000 mn assuming €14/ CER. Another 150 MW WPP of which 50 MW is already commissioned with the remaining 100 MW to be commissioned in FY12 would seek additional CDM credits.

#### Strong balance sheet with net cash of Rs 35/ share

HZL has been virtually a debt free company. Along with this, strong volume growth and efficient and low cost of production have helped the company generate strong cash flows over the past eight years. At the end of FY11, the company had net cash and cash equivalents of Rs 150 bn or Rs 35/ share, which makes it well placed for inorganic growth whenever a suitable opportunity comes. We expect the company to have Rs 242 bn of cash at the end of FY13E, as a result of incremental cash generation of Rs ~90 bn, translating in cash/ share of Rs 57.

Strong cash in book provides an edge for both organic and inorganic growth



Source: Company, Emkay Research

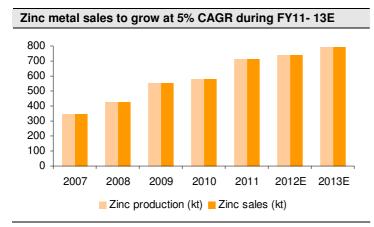
#### Excellent organization team to ensure future performance

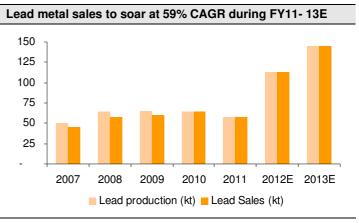
Management plays a major role behind any successful company. HZL has got dedicated and highly experienced men from the industry and young professionals. The proof of HZL's management efficiency is evident from its remarkable turnaround and consistent robust performance. HZL's rapid expansion of projects in record time at global benchmark costs, achieving prompt ramp-up and operational excellence have few comparables. The inclusion of two nominations from the Govt of India to the HZL Board also serves as a strength, as the mining business is subject to various regulatory approvals and consents. This gives us the confidence on the management in its future course of action and makes a strong case for strong operational performance, going ahead.

#### Financial overview

#### Zinc and Lead volume ramp to be fully visible in FY13E

HZL has been ramping up its capacities rapidly for the past 8 years. Supported by good domestic demand and overall strength in the global demand, HZL's zinc sales volume has grown at CAGR of 20% between FY07 to FY11, as zinc capacity grew from 411 kt to 879 kt during the same period. We expect zinc sales to grow at a CAGR of 5% between FY11 to FY13E with no fresh capacity addition. Lead metal however, after growing at a modest 6% CAGR during FY07 to FY11 is likely to grow by 59% CAGR during FY11 and FY13E primarily due to addition of 100 ktpa capacity at Rajapura Dariba.





Source: Company, Emkay Research

Source: Company, Emkay Research

#### Key assumptions for FY12E and FY13E

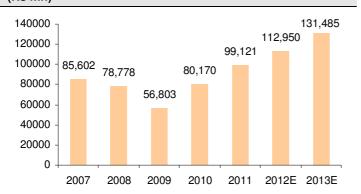
Parameters	FY12E	FY13E
Sales volume (tonne)		
Zinc	742,755	791,100
Lead	113,388	144,750
Silver	275	375
Realization (Rs/ tonne)		
Zinc	105,750	110,250
Lead	117,000	119,250
Silver	47,500	50,000
LME (US\$/ tonne)		
Zinc	2,200	2,300
Lead	2,350	2,400
Exchange rate (USD/INR)	45	45

#### Sales likely to grow at a 16% CAGR during FY11-13E

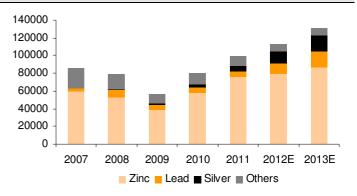
Supported by strong volume growth and overall improvement in LME, HZL has seen a strong revenue growth of 26% CAGR between FY02-11. With full capacity ramp up during FY13 and higher contribution from silver business, we expect its revenue to clock a CAGR of 15% over FY11-13E period. This is despite our assumption of stable price movement of zinc and lead through FY13E. We however expect some recovery during H2FY13E due to better global demand supply scenario of zinc.

Initiating Coverage

### Revenue to grow at 15% CAGR during FY11 to FY13E (Rs mn)



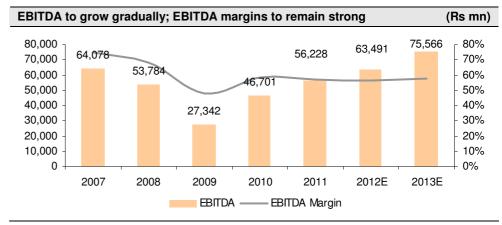
### Revenue contribution to improve across product categories (Rs mn)



Source: Company, Emkay Research Source: Company, Emkay Research

#### EBITDA to grow at a better rate (CAGR 16%) during the same period...

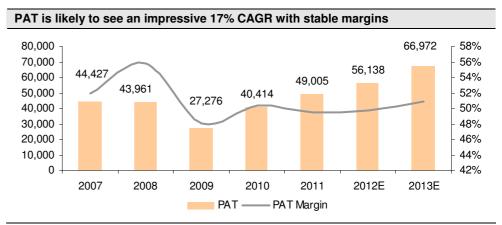
Higher contribution from silver would enable better growth in EBITDA at a CAGR of 16% for the FY11-13E period. HZL has witnessed strong EBITDA growth of 50% CAGR during FY02-11. Its margins have been robust due to its low cost operations. From ~11% in FY02, EBITDA margins rose to 75% in FY07 and has been hovering in the range of 50-60% since then, which we believe, is quite enviable for its peers with 15-40% margins. Despite some cost escalation, we feel the company will be able to maintain its margins, going forward.



Source: Company, Emkay Research

#### Strong EBITDA to help bottomline growth of 17% CAGR during FY11- FY13E

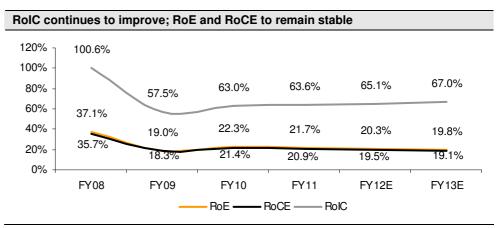
Higher EBITDA growth would add directly to the bottomline, as HZL is virtually a debt free company. This is evident from the fact that the company's PAT grew by 61% CAGR between FY02 and FY11. It is likely to grow by 17% during FY11-13E. This moderation in CAGR can be attributed to the higher base effect.



Source: Company, Emkay Research

#### RoIC likely to improve 340 bps to 67% in FY13E

RoIC of HZL, has been robust above 60% and is likely to go up towards 68% in FY13E showing an improvement of 340 bps over FY11. HZL has been generating strong cash flows for the past five years on the back of robust profitability due to timely capacity addition and steady improvement in LME prices. The company has cash and investments of Rs 150 bn in its books as on 31<sup>st</sup> March 2011. This huge cash in its books has however, kept the RoE and RoCE muted in the range of 20%. Due to zero debt, both RoE and RoCE have been almost same. We expect both these ratios to continue to remain in the range of 20% for the next couple of years unless there is some alternate deployment of the cash, which is currently parked in mutual funds and fixed deposits.



Source: Company, Emkay Research

#### **Valuation**

Hindustan Zinc has become the world's largest integrated zinc producer with a capacity of 879 ktpa. With the commissioning of 100 ktpa lead smelter at Dariba during Q2FY12 the total zinc- lead capacity would be 1064 ktpa. Post its takeover by Vedanta Resources through Sterlite Industries in 2002, the company has demonstrated its ability to ramp up its business at a remarkably fast pace. As mentioned earlier, HZL has best in class assets, efficient management and enjoys low cost of production. The company has already observed revenue, EBITDA and PAT CAGR of 26%, 50% and 61% respectively between FY02-11. Despite higher base effect, revenue, EBITDA and PAT are still expected to grow at an impressive CAGR of 15%, 16% and 17% respectively between FY11-13E.

We believe alongwith the full capacity of zinc and lead, higher contribution from silver would be the major profitability driver for the company, going forward. Silver is produced as a byproduct along with zinc and lead without any incremental costs, thus contributing directly to the EBITDA level of the company. This certainly would add further value to the company. Globally, silver producing companies claim higher valuations compared to their peers in pure zinc and lead business. Currently, on an average, these companies are trading at 11.6x and 10.2x FY12E and FY13E EV/ EBITDA respectively.

HZL has been generating strong EBITDA on a consistent basis, which is indicative of its efficient operations and low cost of production. At the same time, the company has managed to remain debt free despite significant capacity additions and consistent exploration activities. Though, one can argue that the huge cash could have been used in alternate ways, we believe the company would do so once a suitable opportunity arises. Here it should be again mentioned that HZL has already got 8 RPs and applied for another 14 RPs in different states in India. Thus, to capture the operational excellence and balance sheet strength, we value HZL on EV/ EBITDA basis, factoring in cash and investments at the book value.

#### Valuation looks attractive; Initiate coverage with a Buy, Target- Rs 173/share

At the CMP of Rs 136 the company trades at 6xFY12E and 4.4xFY13E EV/EBITDA. Also, on PE basis, HZL discounts its FY12E and FY13E EPS by 10.2x and 8.6x respectively. Major global peers on an average basis are trading at 7.2xFY13 (CY12) EPS and 4.1xFY13 (CY12) EV/EBITDA. Being the largest integrated zinc-lead producer in the world with strong cash flows, low cost of production and presence in one of the fastest growing countries in the world HZL deserves premium valuations over its peers. However, looking at the volatility in metal prices with some pressure expected on zinc prices due to over supply situation, we value HZL at 6.5xFY13E EV/EBITDA, which translates to a target price of Rs 173/ share providing an upside of 27%. We initiate our coverage on Hindustan Zinc with a **BUY** recommendation.

#### EV/ EBITDA valuation table

	(Rs mn)
FY13E EBITDA	75565.7
Exp EV/EBITDA Multiple (x)	6.5
Expected EV	491177.1
Add Cash+Investments	241683.5
Less Debt	3.9
Mkt Cap Expected	732856.7
Fair Value	732856.7
No. of Shares (mn)	4225.3
Fair Value (Rs)	173

On an average, pure silver companies globally are trading at 11.6x and 10.2x FY12E and FY13E EV/ EBITDA respectively

HZL has virtually no competitor in India.

The global peers (diversified zinclead majors) are trading at 4.7x and 4.1x FY12E and FY13E EV/ EBITDA respectively

Initiating Coverage

Hindustan Zind

#### Global peers: Zinc-Lead producers

Company	Market cap	PE		EV/ E	EV/ EBITDA		P/ BV		ROE	
	(US\$ mn)	CY11/FY12	CY12/ FY13							
Xstrata Plc	62444	8.1	7.4	5.0	4.6	1.3	1.1	17.7	17.3	
Boliden AB	4771	7.2	6.6	4.3	4.0	1.4	1.2	20.7	19.5	
Nyrstar	2412	9.0	5.9	5.5	4.0	1.1	0.9	15.6	22.5	
OZ Minerals Ltd	4375	9.9	8.9	4.0	3.6	1.5	1.3	12.8	13.5	
Average		8.5	7.2	4.7	4.1	1.3	1.1	16.7	18.2	

Source: Bloomberg, Emkay Research

#### Global peers: Silver producers

Company	Market cap	PE		EV/ EBITDA		P/ BV		ROE	
	(US\$ mn)	CY11/FY12	CY12/ FY13	CY11/FY12	CY12/ FY13	CY11/FY12	CY12/ FY13	CY11/FY12	CY12/ FY13
Fresnillo Plc	16259	17.8	16.2	10.2	9.1	8.2	5.8	42.3	37.4
Silver Wheaton Corp	114576	15.7	15.4	14.4	14.7	3.9	3.3	22.5	20.1
Silver Standard Res.	2026	32.3	20.6	14.3	10.5	1.9	1.9	16.3	9.8
Silvercorp Metals Inc	1570	13.8	11.3	7.7	6.7	3.1	2.6	17.9	16.8
Average		19.9	15.9	11.6	10.2	4.3	3.4	24.7	21.0

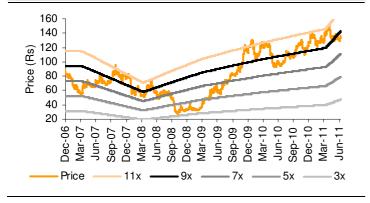
Source: Bloomberg, Emkay Research

#### **Domestic peers: Metals and Mining companies**

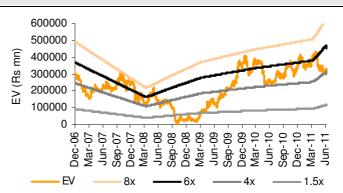
Company	Market cap	F	PΕ	EV/ EI	BITDA	<b>P</b> /	BV	ROE	
Company	(INR bn)	FY12E	FY13E	FY12E	FY13E	FY12E	FY13E	FY12E	FY13E
Sterlite Ind	565	8.3	7.3	3.3	2.0	1.3	1.1	16.7	16.5
Hindalco*	347	8.3	8.2	5.7	5.0	1.1	0.9	13.2	11.7
Tata Steel	584	6.9	5.3	4.9	3.9	1.1	0.8	17.3	18.8
JSW Steel	197	11.7	9.6	7.3	6.4	1.4	1.3	11.7	13.7
SAIL*	568	7.6	5.4	4.0	2.7	1.1	0.8	16.0	17.6
JSPL*	609	10.6	8.5	7.3	6.0	2.5	1.9	26.3	24.7
Sesa Goa	245	31.6	27.2	5.7	5.0	3.5	2.3	23.0	22.2
Average		12.1	10.2	5.5	4.4	1.7	1.3	17.7	17.9

Source: BSE, Bloomberg, Emkay Estimates; \* Bloomberg consensus

## HZL has been trading between a PE band of 7x- 11x 1 year forward EPS

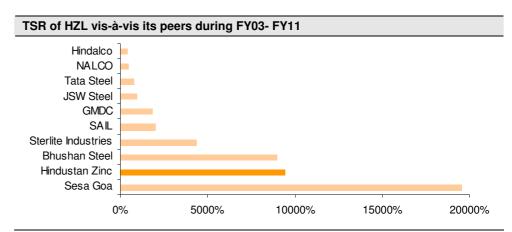


### HZL has been trading between 4x- 7x 1 year forward EV/ EBITDA

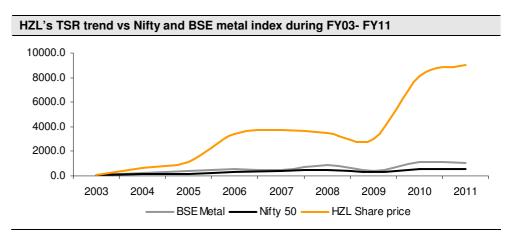


#### Market out-performer

HZL has been one of the market outperformers when it comes to value creation for shareholders. The TSR (total shareholder return) of HZL stock during the last 8 years has been astonishingly high at 9430% against 1027% for BSE metal index. The performance has been consistent with HZL outperforming the Sensex in 6 of the 8 years.



Source: Capitalline, Emkay research



Source: Company, Emkay Research

#### **Risks and Concerns**

#### Volatile prices

While higher zinc, lead and silver prices would directly aid topline and improve profitability, sharp downfall in prices poses a threat to the earnings of the company. So far in Q1FY12 the average zinc LME has been US\$2250/ tonne, while for lead, it has been US\$2550/ tonne against their Q4FY11 average of US\$2390/ tonne and US\$2600/ tonne respectively. At present zinc globally being surplus in terms of availability and demand might see some near- term headwind in price movements. However, with the cost of production being in the lowest quartile of the global cost curve, the company would still earn decent margins despite a fall in LME and correction in silver prices. Nevertheless, continuous weakness in prices would call for a de-rating of the sector as a whole and that applies to HZL also.

#### **Exchange rate**

As all the three metals viz zinc, lead and silver are denominated in USD and are widely traded across the world, they all are subject to the risk associated with the USD/ INR exchange rate. Any strong appreciation in INR would reduce the price realizations in India and would also reduce profitability in export consignments. One rupee appreciation in INR reduces EPS by 1.8%

#### Taxes & royalties

Mining businesses in India are subject to several taxes and duties. Currently, HZL enjoys EOU benefits, which actually helps the company in saving taxes to some extent. The company also has been a beneficiary of the DEPB scheme to the tune of 5%. However, since the government is considering a withdrawal of that scheme, this benefit, though very small would not be there. On the other hand, at present the royalty rates in zinc, lead and silver have been 8.4%, 12.7% and 7.2% respectively and any hike in these rates would have a negative impact on the margins and thereby, on the profitability of the company.

#### Sustainability - Exploration, costs

Though HZL has set an example of successful exploration at a remarkably fast pace, sustaining the same going forward could be a challenge due to recent problems arising with regard to land acquisitions and environmental clearances. Also, rising fuel costs and commodity prices may pose a threat to the company in managing its cost of production levels in future.

#### **Industry brief**

#### Global economic recovery becoming self-sustaining

The global economic recovery is starting to show some evidence of becoming self-sustaining with unemployment in the US and Euro Zone beginning to fall. The global zinc production currently at 12 million tonnes is slated to grow at the rate of 6.0 to 6.5% annually over the next three years.

After rebounding by 14.8% to 11.6Mt in CY 2010, global zinc consumption is forecast to grow by 741kt (6.4%) in 2011 to 12.4Mt. During the same period, zinc consumption in India is expected to grow at 8.0-9.0% per annum

#### Geography wise mine and smelter production and consumption of zinc

	2007	2008	2009	2010	2011	2012E	2013E		CAGR	
	2007	2006	2009	2010	2011	2012E	2013E	2007-13	2007-10	2010-13
Zinc Mine Production (k	t)									
India	539	626	671	749	853	920	927	9.5%	11.6%	7.4%
China	3,153	3,089	3,176	3,700	3,812	3,929	3,966	3.9%	5.5%	2.3%
Rest of Asia	810	835	818	918	1,044	1,203	1,217	7.0%	4.3%	9.9%
Africa	301	289	295	308	302	350	391	4.5%	0.8%	8.3%
Oceania	1,410	1,508	1,316	1,483	1,560	1,608	1,672	2.9%	1.7%	4.1%
Americas	3,683	4,093	3,989	4,018	4,340	4,439	4,352	2.8%	2.9%	2.7%
Europe	1,037	1,035	977	983	1,137	1,281	1,311	4.0%	-1.8%	10.1%
Total	10,933	11,475	11,242	12,159	13,048	13,730	13,836	4.0%	3.6%	4.4%
Zinc Smelter Production	n (kt)									
India	444	595	646	727	933	933	933	13.2%	17.9%	8.7%
China	3,728	3,905	4,246	5,058	5,831	6,346	6,628	10.1%	10.7%	9.4%
Rest of Asia	1,893	1,973	1,814	1,928	1,867	2,226	2,276	3.1%	0.6%	5.7%
Africa	287	268	279	275	285	285	285	-0.1%	-1.4%	1.2%
Oceania	501	498	525	502	521	521	521	0.7%	0.1%	1.2%
Americas	1,835	1,804	1,647	1,812	1,882	1,962	1,962	1.1%	-0.4%	2.7%
Europe	2,474	2,447	2,023	2,345	2,439	2,468	2,503	0.2%	-1.8%	2.2%
Total	11,162	11,490	11,180	12,647	13,758	14,741	15,108	5.2%	4.3%	6.1%
Zinc Consumption (kt)										
India	469	479	495	561	605	656	718	7.4%	6.2%	8.6%
China	3,531	3,795	4,100	4,705	5,176	5,627	6,105	9.6%	10.0%	9.1%
Rest of Asia	2,173	2,075	1,693	2,016	2,093	2,220	2,314	1.1%	-2.5%	4.7%
Africa	198	180	153	165	173	177	188	-0.9%	-5.9%	4.4%
Oceania	285	284	217	223	226	236	240	-2.8%	-7.9%	2.5%
Americas	1,950	1,802	1,556	1,689	1,769	1,841	1,920	-0.3%	-4.7%	4.4%
Europe	2,831	2,581	1,924	2,279	2,337	2,402	2,462	-2.3%	-7.0%	2.6%
Total	11,437	11,196	10,138	11,638	12,379	13,159	13,947	3.4%	0.6%	6.2%

Source: Industry, Emkay research. The above numbers are for calendar years

#### Increased interests in the sector – specifically mining assets

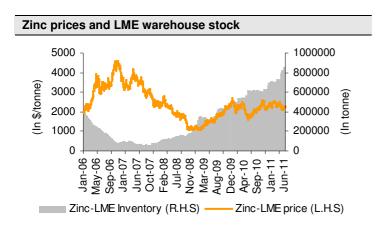
Global majors are seeing value at current prices – Glencore has announced its intention to raise \$9-11 Bn essentially for increasing its ownership of JSC Kazzinc from 50.7% to 93% for \$3.2Bn and funding Glencore's capital expenditure for three years including expansion projects. Similarly, Xstrata announced (on 2 June 2011) that it is entering into a binding agreement with Sabina Gold and Silver Corporation to purchase the Hackett River and Wishbone exploration properties in North Canada, which has a resource base of circa 60 million tonnes of ore containing zinc, silver, copper, lead and gold, with approximately 5.2 million tonnes of zinc equivalent.

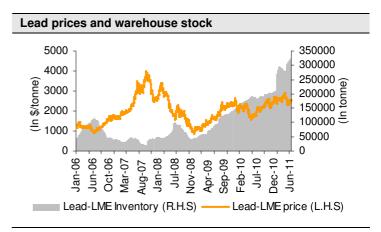
As mentioned earlier, HZL though having a reserve base of 25 years is currently working on Reconnaissance Permits across various Indian states and is continuously on the lookout for additional resources.

#### Zinc and lead prices may witness short- term volatility

Zinc LME prices have been quite volatile during the last couple of quarters. For 2010-11 the zinc LME averaged \$2,187 by hitting a minimum of \$1,704 on 18<sup>th</sup> June 2010 and a maximum of \$2,545 on 21<sup>st</sup> Feb 2011. The zinc average LME during April & May 2011 was at \$2,372 and \$2,160 respectively. Similarly, the lead average LMEs were at \$2,741 and \$2,420 respectively.

The relative weakness of the zinc price seems to suggest that the metal's poor fundamentals and increasing stocks at the LME are making it relatively less attractive than the other base metals. LME stocks have climbed from just under 700kt at the end of 2010 to 812kt currently at the LME warehouses. However, appetite for imports of the refined metal has not diminished in China (imports have shown an increase) despite higher inventories of refined zinc in China.



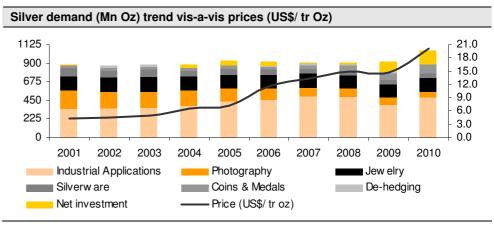


Source: Bloomberg, Emkay Research

The current LME prices are 20% - 25% above the marginal cost of production, which has been the long term scenario. During the last decade, LME prices moved up from sub US\$1000 during 2004 to a peak of US\$4600 during late 2006. With the global financial crises LME zinc along with other commodities fell sharply and made a bottom of US\$1000 in late 2008. With the help of easy monetary policies taken by most of the countries, prices have started moving up again and remained in the broad range of US\$2000 to US\$2500. The lead prices over the last 4 years have broadly been moving in tandem with the zinc prices.

#### Silver prices have risen sharply with high volatility

Silver prices have seen phenomenal rise during the past one year outpacing its superior counterpart, gold on revival in industrial demand, growing investment demand and gradual devaluation in US Dollar against major currencies. High liquidity due to several measures taken by the developed countries to stabilize economic activities viz quantitative easing (QE) etc. played a major role in surge in all commodity prices, including silver.



Source: The Silver Institute, Emkay Research

#### Silver demand is likely to remain firm

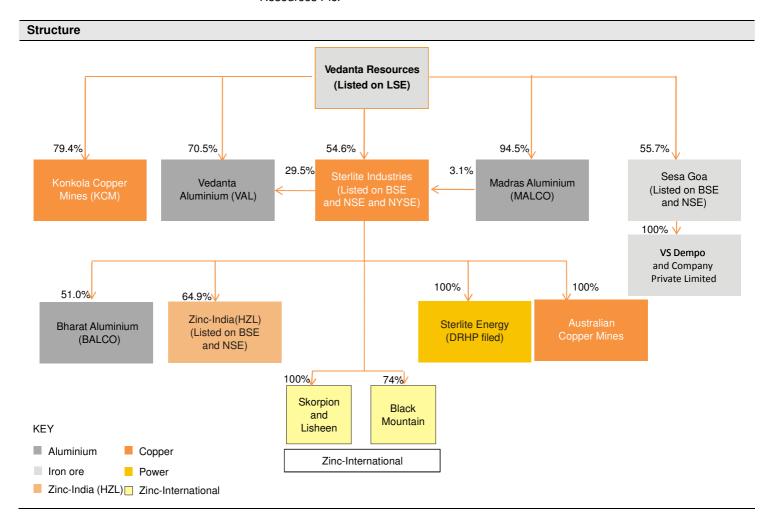
Globally, silver consumption during CY2010 was 1,056 million ounce (33,000 tonnes) of which about 735 million ounce was met through primary mine production, 215 mn oz through silver scrap recycling and balance through government sale and producer hedging. The consumption during 2010 was essentially in industrial application (487 million ounce), silver ware and jewellery (217 million ounce). Following gold investment demand in silver also has been witnessing good appreciation off late, which is evident from a 48% YoY jump in net implied investment to 178 mn oz. Silver being primarily an industrial metal would continue to benefit from the global recovery, while, as a precious metal it also offers an attractive investment opportunity to individuals as well as institutions.

India is the world's second largest consumer of silver (as per 2010 data), while in silver production it ranks 15. During 2010 the silver consumption as per industry reports was 90 million ounce (2800 tonnes) and is expected to grow robustly at about 30%.

#### Company background

Hindustan Zinc Limited was incorporated from the erstwhile Metal Corporation of India in January 1966 as a Public Sector Undertaking. In April 2002, Sterlite Industries India Limited (through Sterlite Opportunities and Ventures Limited (SOVL), acquired 26% stake in HZL including management control followed by additional 20% of shares from public through an open offer. In August 2003, they acquired additional shares to the extent of 18.92% of the paid up capital from GOI through exercise of "call option". With the above additional acquisition, current promoters' stake in the company has gone up to 64.92%. Thus GOI's stake in the company now stands at 29.54%.

Sterlite Industries India Ltd, which is the parent (holding) company of Hindustan Zinc Limited, is listed on the NYSE and a subsidiary of the London listed FTSE 100 Vedanta Resources Plc.



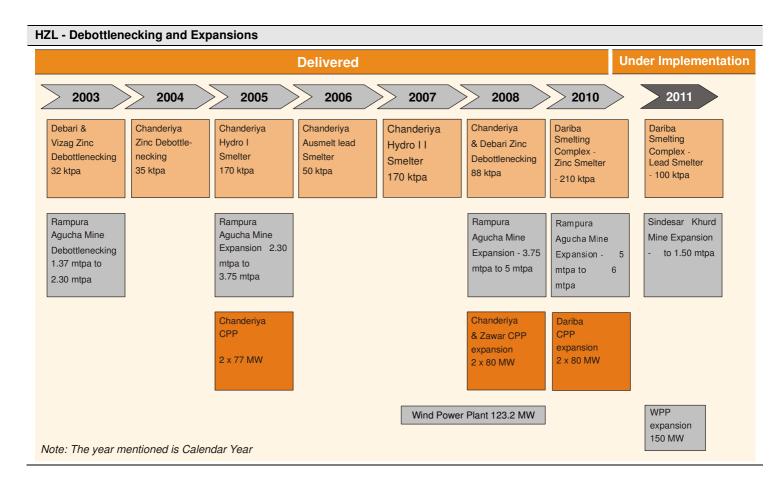
With 64.9 % of HZL being held by Sterlite Industries & another 29.5% held by the Government of India, the current free float in the stock is only about 5.6%.

#### **HZL** transformation

Since HZL became part of the Sterlite Industries (Vedanta Resources) during 2002, its zinclead production volumes have grown 4 times (from 204 kt in FY02 to 770 kt in FY11), revenue 8.5 times (from Rs 11.6 bn to Rs 99.1 bn) and EBITDA 28 times (from Rs 2bn to Rs 56bn).

The same has been possible essentially because of the promoters' vision, excellent management team and a dedicated workforce across all sites. Over the years HZL developed, empowered SBU (Strategic Business Units) concept, rationalized manpower (from about 8000 persons in 2002 to 7000 today), improved procurement philosophy (Total Cost of Ownership Concept) and always had continued focus on operational excellence.

Worth mentioning is the focus maintained and success obtained in initial debottlenecking of asset and subsequent brown field expansions at their major sites.



During the last eight years HZL always had a vision of being the lowest cost producer and maintaining market leadership. Today it is the largest integrated zinc-lead producer in the world with operating cost in the lowest quartile of the global cost curve

#### **HZL** operations- A snapshot

Current mining operations	Current mining operations									
Mines	Reserves (mt)	Resources (mt)	Average	Grade	Capacity (mtpa)	FY11 Production (tonnes)				
	neserves (iiit)	nesources (int)	Zinc %	Lead %	Capacity (intpa)					
Rampura	69.71	44.65	14.28	1.96	6.15	6,149,165				
Sindesar Khurd	10.10	57.84	4.93	2.78	1.50	654,050				
Dariba	9.05	40.34	6.80	1.77	0.90	496,234				
Zawar	7.87	57.99	3.66	2.03	1.20	240,550				
TOTAL	96.73	200.82			9.75	7,539,999				

Source: Company Annual Report 2011

#### Smelting operations (tonnes)

	Pro	duction C	apacity	Actual Production in FY11			
	Zinc	Lead	Silver	Zinc	Lead	Silver	
Chanderiya	525,000	85,000	168	424,418	63,192	179	
Debari	88,000			84,839			
Vizag	56,000			38,663			
Dariba	210,000			164,551			
Total	879,000	85,000	168	712,471	63,192	179	

#### Power plants (MW)

	Coal Power	DG Set	Waste Heat	Wind Power	Total
Chanderiya	234.0	14.8	13.7		262.5
Dariba	160.0		4.3		164.3
Zawar	80.0	6.0			86.0
Debari		14.8	6.5	,	21.3
Samana				88.8	88.8
Gadag				34.4	34.4
Mokal				35.7	35.7
Gopalpura				12.0	12.0
Total	474.0	35.6	24.5	170.9	705.0

Source: Company Annual Report 2011

#### HZL organization / management profile

The HZL Board today comprises of Mr. Agnivesh Agarwal (Chairman), Mr. Akhilesh Joshi (COO and fulltime Director), Mr. Navin Agarwal (Director), Mr. A.R. Narayanaswamy (Independent Director), Mr. RK Malhotra (Director – Govt Nominee) and Ms. Anjali Anand Srivastava (Director – Govt Nominee).

The 7000 odd dedicated employees at HZL are a good blend of highly experienced men from the industry and young professionals.

Initiating Coverage

#### **Financials**

#### **Income Statement**

#### FY10 FY11 FY12E Y/E, Mar (Rs. mn) FY13E **Net Sales** 80,170 100,393 114,426 133,108 Growth (%) 41.1 25.2 14.0 16.3 **Expenditure** (33469)(44165)(50934)(57543)Mining & manufacturing cost (25740)(31351)(36251)(40450)**Employee Cost** (4574)(5108)(6212)(7232)Selling & distribution cost (3156)(7706)(8471)(9861)**EBITDA** 46,701 56,228 63,491 75,566 Growth (%) 70.8 20.4 12.9 19.0 EBITDA margin (%) 58.3 56.0 55.5 56.8 -3342.5 -4747.4 -5425.1 -6145.1 Depreciation **EBIT** 43,358 51,481 58,066 69,421 EBIT margin (%) 51.3 *50.7* 52.2 54.1 Other Income 7222 8521 12300 14488 Interest expenses -439 -194 -194 -194 **PBT** 50,141 59,807 70,172 83,715 Tax -14034 -9727 -10591 -16743 Effective tax rate (%) 19.4 17.7 20.0 20.0 **Adjusted PAT** 40,414 49,217 56,138 66,972 (Profit)/loss from JV's/Ass/MI Adjusted PAT after MI 40,414 49,217 56,138 66,972 Growth (%) 48.2 21.8 14.1 19.3 Net Margin (%) 14.1 14.3 15.1 15.1 E/O items 0 -211.6 0 0 40,414 Reported PAT 49,005 56,138 66,972 Growth (%) 48.2 21.3 14.6 19.3

#### **Balance Sheet**

Dalatice Stieet				
Y/E, Mar (Rs. mn)	FY10	FY11	FY12E	FY13E
Equity share capital	4225	8451	8451	8451
Reserves & surplus	177,014	216,881	268,075	330,104
Net worth	181,240	225,332	276,526	338,554
Minority Interest	0	0	0	0
Secured Loans	0	0	0	0
Unsecured Loans	605	4	4	4
Loan Funds	605	4	4	4
Net deferred tax liability	7112.3	9447	10850.4	12524.7
Total Liabilities	188,957	234,783	287,380	351,083
Gross Block	82,407	98,023	113,023	128,023
Less: Depreciation	-20,766	-25,481	-30,906	-37,051
Net block	61,641	72,542	82,117	90,972
Capital work in progress	11130	8752	13752	18752
Investment	109,492	93,346	113,346	138,346
Current Assets	19,953	75,889	96,251	122,536
Inventories	4,587	9,948	9,376	10,193
Sundry debtors	1,518	2,089	2,166	2,522
Cash & bank balance	9,275	56,329	79,138	103,338
Loans & advances	4,572	7,523	5,570	6,484
Other current assets	0	0	0	0
Current lia & Prov	13,258	15,747	18,085	19,523
Current liabilities	9,863	10,076	12,415	13,853
Provisions	3,395	5,671	5,671	5,671
Net current assets	6,695	60,143	78,165	103,013
Total Assets	188,957	234,783	287,380	351,083

#### **Cash Flow**

Y/E, Mar (Rs. mn)	FY10	FY11	FY12E	FY13E
PBT (Ex-Other income)	50,141	51,287	57,872	69,227
Depreciation	-3,343	-4,747	-5,425	-6,145
Interest	-439	-194	-194	-194
Other Non-Cash items	1,492	9,652	23,344	26,972
Chg in working cap	767	-2,116	4,787	-648
Tax paid	-7,846	-11,163	-12,631	-15,069
Operating Cashflow	40,772	42,719	67,753	74,143
Capital expenditure	23,897	13,239	20,000	20,000
Free Cash Flow	64,670	55,959	87,753	94,143
Other income	-17,597	-10,732	-20,000	-20,000
Investments	-39,218	18,700	-20,000	-25,000
Investing Cashflow	-56,815	7,968	-40,000	-45,000
<b>Equity Capital Raised</b>	0	0	0	0
Loans Taken / (Repaid)	433	-601	0	0
Interest Paid	439	194	194	194
Others	-1,977	-2,956	-5,138	-5,138
Financing Cashflow	-1,874	-3,633	-4,944	-4,944
Net chg in cash	-17,916	47,054	22,809	24,199
Opening cash position	27,192	9,275	56,329	79,138
Closing cash position	9,275	56,329	79,138	103,338

#### **Key Ratios**

Y/E, Mar	FY10	FY11	FY12E	FY13E
Profitability (%)				
EBITDA Margin	58.3	56.0	55.5	56.8
Net Margin	50.4	48.8	49.1	50.3
ROCE	21.4	20.9	19.5	19.1
ROE	22.3	21.7	20.3	19.8
RoIC	63.0	63.6	65.1	67.0
Per Share Data (Rs)				
EPS	9.6	11.6	13.3	15.8
CEPS	10.4	12.7	14.6	17.3
BVPS	42.9	53.3	65.4	80.1
DPS	0.6	1.0	1.0	1.0
Valuations (x)				
PER	14.2	11.7	10.2	8.6
P/CEPS	13.1	10.7	9.3	7.9
P/BV	3.2	2.6	2.1	1.7
EV / EBITDA	9.8	7.6	6.0	4.4
EV/ sales	5.7	4.2	3.3	2.5
Gearing Ratio (x)				
Net Debt/ Equity	0.00	0.00	0.00	0.00
Net Debt/EBIDTA	0.01	0.00	0.00	0.00

#### **Emkay Rating Distribution**

BUY ACCUMULATE HOLD REDUCE SELL Expected total return (%) (stock price appreciation and dividend yield) of over 25% within the next 12-18 months. Expected total return (%) (stock price appreciation and dividend yield) of over 10% within the next 12-18 months. Expected total return (%) (stock price appreciation and dividend yield) of upto 10% within the next 12-18 months. Expected total return (%) (stock price depreciation) of upto (-)10% within the next 12-18 months. The stock is believed to under perform the broad market indices or its related universe within the next 12-18 months.

#### Emkay Global Financial Services Ltd.

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