

Vedanta

Estimate change
TP change
Rating change

Motilal Oswal values your support in the Asiamoney Brokers Poll 2022 for India Research, Sales, Corporate Access and Trading team. We request your ballot.



Bloomberg	VEDL IN
Equity Shares (m)	3,717
M.Cap.(INRb)/(USDb)	912.6 / 11.4
52-Week Range (INR)	441 / 206
1, 6, 12 Rel. Per (%)	-2/-24/-18
12M Avg Val (INR M)	5767
Free float (%)	30.3

Financials & Valuations (INR b)

Y/E March	2022	2023E	2024E
Sales	1,327	1,376	1,419
Attr. EBITDA	448	372	413
EBITDA margin	33.8	27.1	29.1
NP	174	154	168
Adj. EPS (INR)	46.7	41.4	45.2
EPS Gr(%)	80.2	-11.3	9.3
BV/Sh. (INR)	176	180	191
Ratios			
Net D:E	0.3	0.6	0.6
RoE (%)	27.2	23.3	24.4
RoCE (%)	27.7	22.5	24.3
Payout (%)	70.1	122.1	111.7
Valuations			
P/E (x)	5.3	5.9	5.4
P/BV	1.4	1.4	1.3
EV/EBITDA (x)	3.2	4.6	4.2
Div. Yield (%)	11.1	17.2	17.2

^{*}Attributable EBITDA

Shareholding pattern (%)

As On	Jun-22	Mar-22	Jun-21
Promoter	69.7	69.7	65.2
DII	11.6	11.6	10.6
FII	8.9	9.6	10.6
Others	9.8	9.1	13.6

FII Includes depository receipts

CMP: INR246 TP: INR260 (+6%) Neutral

Result below estimates; coal costs dent EBITDA

FSA linkage coal reduces in 1Q leading to higher costs in Aluminum business

- Vedanta (VEDL) reported the highest ever first quarter EBITDA but missed our estimates by 11%. Consolidated revenue grew 36% YoY but declined 3% QoQ to INR386b in 1QFY23. Consolidated EBITDA stood at INR102b, flat YoY but down 25% QoQ. Attributable PAT (Post-MI) was flat YoY but down 29% QoQ to INR42b. While revenue was 5% above our estimate, EBITDA and PAT were 11% and 3% lower than our estimates, respectively.
- LME prices remained the driving factor for profitability in the quarter. On a YoY basis, average LME prices in 1QFY23 for zinc/lead/aluminum were higher by 34%/4%/20%, respectively. Brent was up 65% YoY during the same period. The company has hedged 28% zinc, 34% aluminum, and 33% oil (gross basis) at more than USD4,100/t, USD3,600/t, and USD100/bbl, respectively for 2QFY23, which is an attractive rate in current environment
- Sales volumes of zinc/lead/silver/aluminum/power rose 10%/10%/11%/4%/32%, respectively, while steel sales volume decreased 13% YoY in 1QFY23. Profitability of the Aluminum business slipped as linkage coal declined to 22% QoQ from 63% in 4QFY22.
- Net debt increased to INR268b from INR210b at end-Mar'22. The net debt ex-HZL grew INR92b QoQ to INR482b (it was INR389b at end-Mar'22)
- The company declared strong result amid a challenging environment, though the aluminum business disappointed after a stellar 4QFY22. However, the current slowdown in China clouds the outlook for commodity. We believe the stock is fully valued in the current environment. Reiterate Neutral with an SoTP-based revised TP of INR260 (v/s 225 earlier). Lowering of input costs in the near term, namely coal costs, will likely support profitability.

O&G continues to disappoint, Aluminum/Steel are misses led by coal costs

- Aluminum EBITDA at INR23b (down 40% YoY and 57% QoQ) was 28% below our estimate of INR31b. The CoP for aluminum was up 22% QoQ as higher coal cost eroded profitability. COAL's e-auction prices continue to remain elevated in 2QFY23 as well. We believe VEDL's power cost will remain high in 2Q but start dropping from 3Q onwards with: a) reduction in COAL's prices, and b) opening of own captive coal mine especially Jamkhani, which the management expects to open in 2QFY23.
- Oil and Gas business continues to disappoint as the natural decline in the oil fields are only partly compensated with infill. The management remains optimistic on the oil and gas business despite natural decline in the oil fields and imposition of special additional excise duty (SAED) of USD40/bbl initially (later revised down to USD30/bb) by the government. The windfall gain tax in addition to a declining output from the oil wells will continue to pose a challenge to the company.

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Vedanta

Steel profitability was adversely impacted by: a) the imposition of export tax leading to sudden drop in steel prices and consequently EBITDA, coupled with higher coking coal costs in the quarter and lower sales. The company took a shutdown in the quarter to increase capacity by 0.2mt as the sales dropped 13% QoQ.

Valuation and view

- We have reduced our FY23 EBITDA/PAT estimates by 9%/7% led by moderation in our key LME assumptions (refer Exhibit 7), reducing our metal price assumptions for zinc, lead, aluminum, and copper. We also lower our oil production estimates by 15% for FY23, further keeping the remaining volumes largely unchanged (barring copper volumes that are raised by 8%). Aluminum became the largest contributor to the consolidated EBITDA briefly in 4QFY22, but it was relegated back to second spot as zinc business retook its share contributing about 50% to the consolidated EBITDA.
- The outlook on commodities remains soft as China continues to battle Covid and lockdowns remain a regular feature for the country. There are no visible signs of the administration giving up the zero-tolerance policy on Covid and neither there are any signs of any meaningful stimulus by the government to kick start the slowing economy. The USD220b stimulus largely preponed funding due from Jan'23 to now, essentially borrowing funds from next year, which we believe is insufficient to propel the economy.
- However, we note two important factors which can probably stall further down tick in the commodities. Fear of recession in the US, after second consecutive negative print for the GDP growth rate, will likely put a delay or slowdown the quantitative tightening (QT) that has been announced by the US Fed. Secondly, we believe with Presidential elections coming up in China, there could be a bout of stimulus that can stem the slide in the commodity prices.
- The outlook for the profitability for VEDL can improve significantly if its coal availability from the FSA improves over the next few quarters. Management has also highlighted that it is planning to open three coal mines over the next two years, which will reduce coal costs by two-thirds from current levels. The first mine, Jamkhani, is likely to be opened next month. We await ramp up of the mine to ascertain how it will improve profitability of the aluminum division.
- We have raised the EBITDA multiple for the aluminum business factoring its volume growth and cost reduction initiatives, namely captive thermal coal mines. The stock trades at 4.6x our FY23E EV/EBITDA, which is below its last 10-year average multiple of 5.2x. Reiterate Neutral with an SoTP-based revised TP of INR260 (v/s 225 earlier).

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Quarterly Performance (Consolidated)	INR b
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Y/E March	FY22					FY2	3E		FY22	FY23E	FY23	vs Est.
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE			1QE	%
Net Sales	284.1	304.0	341.0	398.2	386.2	319.3	330.7	339.3	1,327.3	1,375.6	368.7	4.7
Change (YoY %)	77.9	44.0	50.0	41.2	35.9	5.0	-3.0	-14.8	50.8	3.6	29.8	
Change (QoQ %)	0.7	7.0	12.2	16.8	-3.0	-17.3	3.6	2.6			-7.4	
Total Expenditure	184	200	233	262	284	237	238	244	879	1,003	256	11
EBITDA	100.2	103.6	108.1	136.3	102.0	82.3	92.7	95.4	448.2	372.3	112.6	-9.4
Change (YoY %)	150.9	58.7	39.4	50.9	1.8	-20.6	-14.2	-30.0	64.1	-16.9		
Change (QoQ %)	10.9	3.4	4.3	26.1	-25.2	-19.3	12.7	2.9	0.0			
As % of Net Sales	35.3	34.1	31.7	34.2	26.4	25.8	28.0	28.1	33.8	27.1	0.0	
Finance cost	11.8	10.7	12.2	13.3	12.1	11.5	11.2	12.9	48.0	47.7	12.7	-4.8
DD&A	21.2	21.2	22.7	23.8	24.6	24.3	23.9	20.5	89.0	93.3	23.4	5.2
Other Income	7.4	6.7	5.8	6.1	7.3	6.2	6.4	5.8	26.0	25.7	6.2	18.7
PBT (before EO item)	74.5	78.5	79.0	105.3	72.6	52.7	63.9	67.8	337.3	257.1	82.6	-12.1
EO exp. (income)	2.8	0.5	1.1	3.4	0.0	0.0	0.0	0.0	7.7	0.0	0.0	
PBT (after EO item)	71.7	78.1	77.9	102.0	72.6	52.7	63.9	67.8	329.6	257.1	82.6	-12.1
Total Tax	19.2	19.9	24.4	29.1	16.7	15.8	19.2	20.3	92.6	72.0	24.8	-32.7
% Tax	26.7	25.5	31.3	28.5	23.0	30.0	30.0	30.0	28.1	28.0	0.0	
Reported PAT	52.5	58.1	53.5	72.9	55.9	36.9	44.8	47.4	237.1	185.1	57.8	-3.3
Profit from Asso.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Minority interest	10.6	12.0	11.9	14.6	11.7	8.4	8.9	2.1	49.1	31.1	11.1	
Adjusted PAT	44.8	46.6	42.7	61.6	44.2	28.5	35.9	45.3	188	154	46.7	-5.4
Change (YoY %)	349.9	119.9	41.2	89.9	-1.3	-38.8	-16.0	-26.5	103.2	-21.3	4.4	
Change (YoY %)	37.9	4.1	-8.4	44.4	-28.3	-35.5	25.8	26.3			-0.2	

Source: Company, MOFSL

Exhibit 1: EBITDA, by business - INR b

Y/E March		FY2	2			FY23	BE		FY22	FY23E	FY23	vs Est.
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE			1QE	%
EBITDA	100.2	103.6	108.1	136.3	102.0	82.3	92.7	95.4	448.2	372.3	112.6	-9.4
Copper	-1.1	-0.4	0.1	0.2	-0.1	0.2	0.2	0.2	-1.2	0.3	0.2	NA
Aluminum	37.3	46.5	37.5	52.2	22.5	19.6	23.9	24.6	173.4	90.6	31.5	-28.4
Iron ore	7.6	5.6	4.1	5.5	3.6	0.6	1.1	1.6	22.8	6.9	1.9	93.5
Power	3.5	2.6	2.8	1.9	0.8	2.8	2.8	2.7	10.8	9.1	2.4	-66.5
Zinc-India	35.6	33.4	43.7	49.6	51.4	36.7	40.6	42.5	162.3	171.2	50.0	2.8
Zinc-Int	4.0	3.0	3.7	4.7	5.9	3.3	4.0	4.2	15.3	17.4	5.1	16.5
Oil & Gas	10.6	13.8	14.9	20.5	20.8	22.0	19.9	18.4	59.9	81.1	21.8	-4.4
Steel	2.2	0.7	1.7	2.4	0.9	-2.3	0.8	1.7	7.0	1.1	0.3	177.0
Others	0.4	-1.6	-0.4	-0.6	-3.9	-0.5	-0.5	-0.5	-2.1	-5.4	-0.5	NA
Change (YoY %)	150.9	58.7	39.4	50.9	1.8	-20.6	-14.2	-30.0	64.1	-16.9	12.4	
Change (QoQ %)	10.9	3.4	4.3	26.1	-25.2	-19.3	12.7	2.9			-17.4	
As % of Net Sales	35.3	34.1	31.7	34.2	26.4	25.8	28.0	28.1	33.8	27.1	30.5	



Conference call takeaways

Commodity hedging and hedging gains:

- During 1QFY23, around 20% volume for aluminum was hedged USD3500/t.
- For 2QFY23, 28% of aluminum volume has been hedged at USD3,630/t.
- About 34% of zinc volume is hedged at USD4000/t for 2QFY23
- Around 33% of total Oil and Gas volume, translating to 16% in terms of working interest has been hedged at USD100/bbl for 2QFY23.
- Realized gain in hedges is INR7.64b in 1QFY23
- Unrealized gain for 2Q and 3Q is about 3x of realized gain
- Most of the hedges will unwind in 2QFY23 and a small part will unwind in 3QFY23.

Aluminum Cost of Production (CoP)

- Currently the cost of production is slightly higher than the LME aluminum price.
 However, there are no plans to moderate production despite rising cost. Costs are high in the quarter due to high power, alumina costs.
- Power cost has corrected by USD150-200/t with higher linkage coal and alumina costs by USD300-400/t due to fall in LME prices and further reduction is likely in processing costs which will make aluminum business profitable at the current LME prices also.
- Total coal requirement in 1QFY23 was 4.9mt of which 22% is linkage coal balance being largely e-auction. In 2QFY23, linkage will be around 36% and balance will be e-auction
- Since it is profitable at current LME prices, Vedanta is ramping up line the 6th pot line of aluminum also as part of its expansion plans

Zinc India – results inline

- Hindustan Zinc (HZ)'s revenue was in line at INR94b (up 44% YoY and 7% QoQ) in 1QFY23, led by higher LME prices but partly offset by flat lead prices, repeating the trend of 4QFY22.
- EBITDA stood in line at INR51b (up 44% YoY and 4% QoQ). Power and fuel costs were at INR9b, up 15% QoQ, led by higher coal prices as FSA materialization was only 8% during the quarter and the company continued to import the balance coal from Australia and Indonesia.
- HZ's PAT grew 46% YoY and 6% QoQ to INR31b, in line with our estimate of INR32b, as lower-than-estimated other income was offset by lower-thanestimated finance cost.
- The company used about 50% of the hedges for FY23 during 1QFY23 and the balance is likely to be exhausted in 2QFY23E. The effective realization for 2HFY23E is likely to be lower as zinc prices have also corrected sharply.
- The management reiterated its FY23 production guidance:
- ➤ Mined metal production to be marginally higher at 1,050-1,075kt
- Silver production to be at 700-725t (v/s 647t in FY22)
- However, it also reiterated the cost of production (ex-royalty) guidance at USD1,125-1,175/t range (v/s USD1,264/t in 1QFY23). This implies about 13% lower cost of production for the remaining of FY23. Given the steep cost of coal, which has not reduced meaningfully in the near term, we believe the guidance on cost of production could be raised in the subsequent quarters.

Oil & gas business - investments to continue

- Investment in oil and gas business evaluated with oil at USD50/bbl and IRR of 20% and current windfall tax does not impact the target ROI as per the management.
- From 1st Jul'22, the GOI has started the levy of special additional excise duty (SAED) on crude oil which started at USD40/bbl and subsequently reduced to USD30/bbl w.e.f. 20th Jul'22 and will be revised every fortnight. The management has not made any change in the carrying value of the oil assets post levy of the SAED, assuming the recoverable value of the assets will not undergo a material change despite levy of SAED.

The management is in dialogue with the government to impress on the argument that the windfall tax is embedded in production sharing contract (PSC) already.

Investment in Semi-conductor business:

 Currently, the company is engaging with various state governments for tax concession for evaluating final location for the project.

Divestment

- **HZL:** Vedanta cannot acquire more than 5% in any year. If government requests the company to participate in the acquisition beyond the legal limit, the company will consider the same.
- **BALCO:** No plans on Balco stake acquisition from the government nor there is any plan for divestment by the government.
- **BPCL:** The government is re-thinking on the same. The company will look at it at the appropriate time.

Debt maturity profile parent - VRL

- USD1.5b debt reduction has been achieved at parent level in YTD FY23. VRL is on track to achieve deleveraging of USD4b in the next 3 yrs.
- For FY23, total debt that falls due is US3.7 including interest cost and intercorporate loan of ~USD1b, implying about USD2.8b of external debt. Around USD2b is due in 1HFY23 and balance USD0.8b in 2HFY23. VRL has received about USD1.5 from the 2 interim dividends received from Vedanta limited. About USD200m has been received from brand fee and loans from banks like SBI for refinancing. This makes up around USD2.1-2.2b covering the liability until Nov-Dec.
- Balance amount will also be easily re-financed or repaid depending upon the situation.

Share pledge at Vedanta and HZL

Vedanta shares are not encumbered or pledged but an NDU (Non-disposal undertaking) has been provided to the banks by the promoters which are being reflected as pledges. About 14.9% HZL shares had been pledged by VED, which is now reduced to 5.77% after refinancing of the debt.

Royalty / Brand Fee to the promoters

FY22 royalty paid was USD200m and in FY23 it is likely to be USD250-275m.
 There is no change in royalty payment agreement with the promoter entity.

Captive coal mines to drive cost reduction in aluminum business

- The company has won 3 thermal coal blocks Jamkhani, Radhikpur West and Kurloi North.
- The mining EC for these three mines is 2.6mt, 6mt and 8mt respectively.
- The management expects to start Jamkhani mines in Aug'22, Radhikapur West in 3QFY23 and Kurloi North in 3QFY24

■ The overall cost of energy for these mines at peak output will be in the range of INR0.57-58p/GCV. This compares to the current cost of energy at INR1.9/GCV (and INR1.18/GCV in 4QFY22)

 Costs of coal for the Jamkhani mines is 80-81p/gcv, 50-55p/gcv at Radhikapur and 45-50p/gcv at Kurloi mines. Weighted average cost of these mines 60-65p/gcv

Debt at VEDL

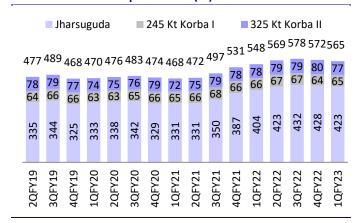
- Maturity profile of debt increased to four years and borrowing costs have further reduced to 7.6%.
- Net debt increased from INR210b at the end of Mar'22 to INR268b. Ex Hindustan Zinc, net debt increased by INR92b QoQ to INR482b (it was INR389b at the end of Mar'22).
- The higher debt is largely on account of working capital requirements in the quarter.

Oil & Gas – EBITDA growth driven by Brent, volumes disappoints again

- 1Q gross production stood at 148kboepd (down 4% QoQ) after being down 3% QoQ in 4Q as well.
- Despite continuous assurances by the management, the production continues to decline.
- Opex continues to rise due to the declining nature of the fields. During the quarter, opex increased to USD13/bbl in 4Q vs USD12.4/bbl in 4Q and USD10.3 in 3Q, largely due to the higher cost of polymer injections.

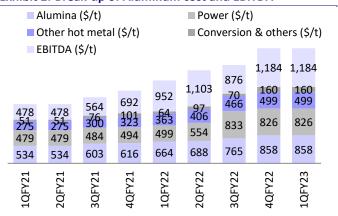
Story in charts

Exhibit 1: Aluminum production (kt)



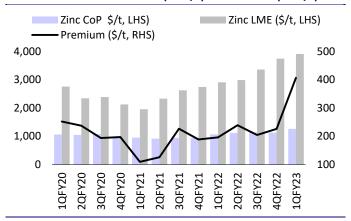
Source: Company, MOFSL

Exhibit 2: Break-up of Aluminum cost and EBITDA



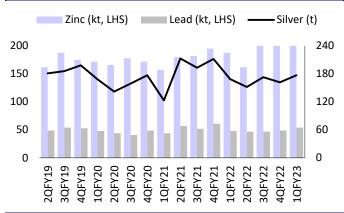
Source: Company, MOFSL

Exhibit 3: Zinc LME and CoP (USD/t) vs Premium (USD/t)



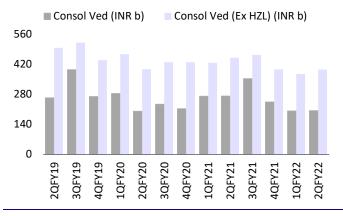
Source: MOFSL, Company

Exhibit 4: Zinc India volumes (kt)



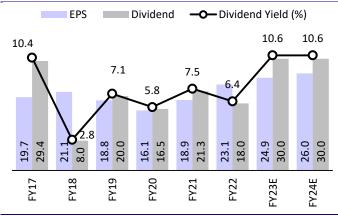
Source: MOFSL, Company

Exhibit 5: Net debt at Vedanta Consol and ex-HZL (INR b)



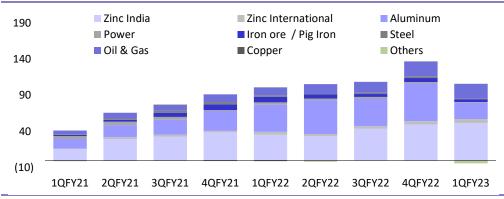
Source: Company, MOFSL

Exhibit 6: Dividend per share



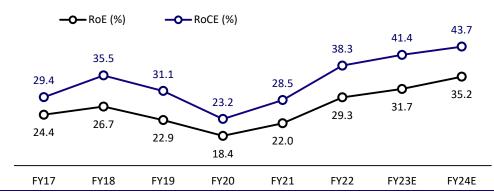
Source: Company, MOFSL

Exhibit 7: EBITDA breakdown by division (INR b)



Source: MOFSL, Company

Exhibit 8: ROE and RoCE likely to improve over FY22-24 drive by volume increase



Source: Company, MOFSL

Exhibit 9: Entity wise debt and cash movement (INR b)

Vedanta Limited INR b Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO " TSPL " ESL " Vedanta Star " Others " Consolidated Vedanta INR b Cash and LI Vedanta Limited INRb Cairn India Holdings Ltd " Zinc International " Zinc International " BALCO " TSPL "	399 - - 4 45 89	380 12 - 4	366 32 30	389 37	332	328	338	322	278	305	338	267	
Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO " TSPL " ESL " Vedanta Star " Others " Consolidated Vedanta INR b Cash and LI Vedanta Limited INRb Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "	- - 4 45	12 -	32			328	338	322	278	205	220	267	
Zinc India " Zinc International " BALCO " TSPL " ESL " Vedanta Star " Others " Consolidated Vedanta INR b Cash and LI Vedanta Limited INRb Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "	- 4 45	-		37			550	322	2/0	303	330	367	452
Zinc International " BALCO " TSPL " ESL " Vedanta Star " Others " Consolidated Vedanta INR b Cash and LI Vedanta Limited INRb Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "	4 45		30		37	36	28	28	28	28	28	16	16
BALCO " TSPL " ESL " Vedanta Star " Others " Consolidated Vedanta INR b Cash and LI Vedanta Limited INRb Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "	45	4		6	50	98	100	72	67	46	100	28	28
TSPL " ESL " Vedanta Star " Others " Consolidated Vedanta INR b Cash and LI Vedanta Limited INRb Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "			4	4	4	3	3	2	2	1	3	0	-
ESL " Vedanta Star " Others " Consolidated Vedanta INR b Cash and LI Vedanta Limited INRb Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "	89	44	42	46	44	39	36	33	28	20	36	11	10
Vedanta Star " Others " Consolidated Vedanta INR b Cash and LI Vedanta Limited INRb Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "		65	63	61	72	78	74	72	73	73	74	70	70
Others " Consolidated Vedanta INR b Cash and LI Vedanta Limited INRb Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "	-	-	-	-	-	-	-	-	-	-	-	27	26
Consolidated Vedanta INR b Cash and LI Vedanta Limited INRb Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "	34	34	34	-	-	-	-	-	-	-	-	-	-
Cash and LI Vedanta Limited INRb Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "	20	20	16	49	47	46	44	42	41	38	44	11	10
Vedanta Limited INRb Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "	592	559	586	592	586	628	624	570	516	510	624	531	611
Vedanta Limited INRb Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "													
Cairn India Holdings Ltd " Zinc India " Zinc International " BALCO "													
Zinc India " Zinc International " BALCO "	41	72	38	50	41	20	30	59	22	17	30	71	49
Zinc International "BALCO "	62	52	69	78	54	46	11	14	20	21	11	14	29
BALCO "	183	197	225	223	205	277	211	223	239	237	211	208	243
BALCO	7	8	4	6	3	3	4	5	5	5	4	6	8
TSPL "	0	2	0	4	6	4	7	11	17	16	7	7	4
	1	13	2	1	1	2	1	5	2	4	1	1	0
ESL "	-	-	-	-	-	-	-	-	-	-	-	-	3
Vedanta Star "	0	0	0	-	-	-	-	-	-	-	-	9	-
Others "	13	15	13	18	6	4	7	10	8	7	7	6	8
Consolidated Vedanta INR b	308	358	352	379	315	356	271	326	313	307	271	321	343
Net Debt													
Vedanta Limited INR b	358	308	328	339	292	308	308	263	255	288	308	296	403
Cairn India Holdings Ltd "	-62	-40	-37	-41	-17	-10	17	14	8	7	17	2	-13
Zinc India "	-183	-197	-195	-216	-155	-179	-110	-151	-172	-191	-110	-180	-214
Zinc International "	-3	-4	0	-1	1	0	-1	-2	-3	-3	-1	-6	-8
BALCO "	45	42	42	42	38	35	29	21	11	3	29	4	7
TSPL "	88	52	61	60	71	76	73	67	71	69	73	69	69
ESL "	-	-	-	-	-	-	-	-	-	-	-	27	23
Vedanta Star "	33	34	34	-	-	-	-	-	-	-	-	-9	-
Others "	7	5	3	31	41	41	38	32	32	31	38	5	2
Consol Ved INR b	284	201	234	213	271	272	354	244	203	204	354	210	268
Consol Ved (Ex HZL) INR b	467	397	429	429	426	450	464	395	375	395	464	389	482

Source: MOFSL, Company

Exhibit 10: Aluminum business summary - INR m

Y/E March		FY	22			FY	23E		FY22	FY23E		vs Est.
	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE	_		1QE	%
Aluminum (USD/t)	2,395	2,648	2,765	3,254	2,875	2,476	2,480	2,486	2,774	2,579	2,882	0
Alumina (USD/t)	277	316	428	406	377	310	310	311	357	327	377	0
USD/INR	73.8	74.1	74.8	75.3	77.1	77.5	78.0	78.0	74.5	77.7	77.1	0
Revenue	1,02,630	1,21,190	1,30,240	1,54,750	1,46,440	1,21,184	1,24,016	1,26,203	5,08,810	5,17,843	1,36,878	7
Production (kt) ex trial	548	569	578	572	565	574	583	591	2,269	2,313	565	0
Jharsuguda	404	423	432	428	423	431	440	449	1,687	1,743	423	0
Balco	144	146	146	144	142	143	143	143	582	570	142	0
Sales (kt) incl. trial	534	569	573	586	556	574	583	591	2,269	2,304	565	-2
NSR (USD/t)	2,538	2,874	3,012	3,593	3,362	2,724	2,729	2,736	3,010	2,883	3,142	7
Premium over LME (%)	6.0	8.5	9.0	10.4	16.9	10.0	10.0	10.1	8.5	11.8	9.0	87.5
EBITDA	37,250	46,470	37,470	52,180	22,510	19,646	23,894	24,600	1,73,370	90,650	31,454	-28
EBITDA/t	945	1,102	874	1,183	525	442	526	533	1,026	507	722	-27

Exhibit 11: Oil & Gas - INR m

Y/E March		FY2	2			FY2	3E		FY22	FY23E		vs Est.
	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE	_		1QE	%
Brent crude - USD/bbl	68.6	73.0	80.0	97.8	113.9	109.3	92.9	83.6	80.2	100.2	115.0	-1.0
Gross volumes - kbpd	165	165	159	154	148	148	147	147	167	148	148	0.0
Rajasthan	139.8	141.8	136.8	132.4	127.8	127.6	127.3	127.0	143.5	127.4	127.8	0.0
Ravva	14.7	14.3	14.5	13.2	11.0	11.0	10.9	10.9	14.3	11.0	11.0	0.0
Cambay	10.4	9.3	7.9	8.1	9.2	9.2	9.2	9.2	8.9	9.2	9.2	0.0
Working interest - kbpd	105.9	106.7	102.7	99.5	96.2	96.0	95.8	95.7	107.8	95.9	96.2	0.0
Raj. realn USD/bbl	63.9	65.4	71.2	86.1	88.1	91.8	78.0	70.2	71.0	82.0	88.8	-0.9
Dis. to Brent - %	4.0	4.0	4.0	4.0	15.0	7.0	7.0	7.0	5.0	7.0	15.0	0.0
Revenue - INR m	24,850	18,920	31,130	39,400	40,830	40,605	36,698	33,794	1,24,300	1,51,926	39,632	3.0
EBITDA - INR m	10,640	13,840	14,920	20,520	20,810	21,982	19,872	18,406	59,920	81,069	21,766	-4.4

Source: MOFSL

Exhibit 12: Iron Ore - INR m

Y/E March		FY2	2			FY23	E		FY22	FY23E		vs Est.
	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE			1QE	%
Sales Qty ('000 dmt)	1,700	1,300	1,500	2,300	1,260	1,725	1,725	1,725	6,800	6,435	1,610.0	-21.7
Goa	400	100	50	500	350	350	350	350	1,100	1,400	350.0	0.0
Karnataka	1,300	1,200	1,450	1,700	910	1,375	1,375	1,375	5,700	5,035	1,260.0	-27.8
Pig iron	196	207	200	187	103	200	200	200	790	703	189.0	-45.5
Net Sales	15,760	14,920	14,160	18,660	13,670	6,013	6,801	8,264	63,500	34,748	8,811.3	55.1
EBITDA	7,620	5,590	4,100	5,490	3,630	614	1,094	1,564	22,800	6,902	1,876.2	93.5

Source: MOFSL

Exhibit 13: Power - INR m

Y/E March		FY2	2			FY2	3E		FY22	FY23E		vs Est.
	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE			1QE	%
Sales (m kwh)	2,716	2,904	3,448	2,803	3,577	3,132	3,278	3,419	11,871	13,406	3,577.0	0.0
S/A Jha. 600 MW (Jharsuguda)	545	760	755	0	837	500	500	500	2,060	2,337	837.0	0.0
Subs	2,171	2,144	2,693	2,803	2,740	2,632	2,778	2,919	9,811	11,069	2,740.0	0.0
Balco 600MW	409	199	279	251	0	199	279	251	1,139	729	0.0	NA
HZL Wind Power	134	155	59	66	150	157	60	67	414	433	150.0	0.0
TSPL	1,628	1,790	2,355	2,486	2,590	2,277	2,439	2,602	8,258	9,907	2,590.0	0.0
TSPL PAF (%)	59	60	92	93	76	76	76	76	76	76	75.7	0.0
Revenue	12,250	12,760	16,380	16,870	16,930	15,726	16,527	17,307	58,260	66,490	17,162.5	-1.4
Standalone	1,450	2,060	2,100	2,260	2,320	1,250	1,250	1,250	5,150	6,070	2,092.5	10.9
(INR/kwh)	2.7	2.7	2.8	0.0	2.8	2.5	2.5	2.5	2.5	2.6	2.5	10.9
EBITDA	3,460	2,640	2,830	1,890	810	2,794	2,760	2,718	10,820	9,081	2,414.9	-66.5

Source: MOFSL

Exhibit 14: Operational Performance: Zinc India – INR m

Y/E March		FY	22			FY2	3E		FY22	FY23E	FY23	vs Est.
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE			1QE	%
Mine prodn. (kt)	221	249	252	295	252	243	260	268	1,017	1,023	252	0.0
Sales												
Zinc refined (kt)	187	164	212	214	206	184	199	205	777	793	206	0.0
Lead refined (kt)	49	47	47	49	54	52	56	57	192	219	54	0.0
Silver (tonnes)	160	152	173	162	177	166	178	183	647	704	174	1.5
LME/Realizations												
Zinc LME (USD/t)	2,913	2,991	3,364	3,754	3,915	3,200	3,400	3,400	3,257	3,479	3,945	-0.8
Premium (USD/t)	196	240	205	226	407	400	225	225	250	320	225	81.0
Zinc Realization (USD/t)	3,109	3,231	3,569	3,980	4,322	3,600	3,625	3,625	3,507	3,799	4,170	3.7
Lead LME (USD/t)	2,123	2,341	2,331	2,335	2,199	2,115	1,951	1,947	2,285	2,053	2,203	-0.2
Premium (USD/t)	161	200	226	213	174	200	200	200	197	185	200	-13.0
Lead Realization (USD/t)	2,284	2,541	2,557	2,548	2,373	2,315	2,151	2,147	2,482	2,238	2,403	-1.2
Silver LME (INR/t)	69,700	64,950	62,755	63,667	61,464	57,408	58,274	58,879	65,268	59,027	61,545	-0.1
Premium (INR/t)	-575	-279	-269	283	1,110	0	0	0	0	0	0	na
Silver Realization (INR/t)	69,125	64,671	62,486	63,951	62,574	57,408	58,274	58,879	65,268	59,027	61,545	1.7

Source: MOFSL

Exhibit 15: Operational Performance: Zinc India – INR m

Y/E March		FY	22			FY2	:3E		FY22	FY23E	FY23	vs Est.
	1Q	2Q	3Q	4Q	1Q	2QE	3QE	4QE	_'		1QE	%
Mine prodn. (kt)	221	249	252	295	252	243	260	268	1,017	1,023	252	0.0
Sales												
Zinc refined (kt)	187	164	212	214	206	184	199	205	777	793	206	0.0
Lead refined (kt)	49	47	47	49	54	52	56	57	192	219	54	0.0
Silver (tonnes)	160	152	173	162	177	166	178	183	647	704	174	1.5
LME/Realizations												
Zinc LME (USD/t)	2,913	2,991	3,364	3,754	3,915	3,200	3,400	3,400	3,257	3,479	3,945	-0.8
Premium (USD/t)	196	240	205	226	407	400	225	225	250	320	225	81.0
Zinc Realization (USD/t)	3,109	3,231	3,569	3,980	4,322	3,600	3,625	3,625	3,507	3,799	4,170	3.7
Lead LME (USD/t)	2,123	2,341	2,331	2,335	2,199	2,115	1,951	1,947	2,285	2,053	2,203	-0.2
Premium (USD/t)	161	200	226	213	174	200	200	200	197	185	200	-13.0
Lead Realization (USD/t)	2,284	2,541	2,557	2,548	2,373	2,315	2,151	2,147	2,482	2,238	2,403	-1.2
Silver LME (INR/t)	69,700	64,950	62,755	63,667	61,464	57,408	58,274	58,879	65,268	59,027	61,545	-0.1
Premium (INR/t)	-575	-279	-269	283	1,110	0	0	0	0	0	0	na
Silver Realization (INR/t)	69,125	64,671	62,486	63,951	62,574	57,408	58,274	58,879	65,268	59,027	61,545	1.7

Source: MOFSL

Exhibit 16: Change in assumptions and key financials

	Units		FY23E		FY24E				
		New	Old	% change	New	Old	% change		
Prices									
Copper	\$/t	8,686	9,625	-10%	8,500	9,045	-6%		
Aluminum	II .	2,579	2,654	-3%	2,400	2,399	0%		
Alumina	II .	327	358	-9%	300	300	0%		
Zinc	II .	3,479	3,685	-6%	3,295	3,295	0%		
Lead	II .	2,053	2,103	-2%	1,906	1,906	0%		
Silver	INR/kg	59,027	58,853	0%	58,855	58,855	0%		
Iron ore	\$/t	100	100	0%	105	105	0%		
Steel - ASP	II .	679	565	20%	650	596	9%		
Brent	\$/bbl	100.2	100.2	0%	90.0	90.0	0%		
USD/INR		77.7	77.7	0%	77.0	77.0	0%		
Sales volume									
Copper	kt	135	125	8%	135	125	8%		
Aluminum Division	II .	2,304	2,299	0%	2,538	2,342	8%		
Hindustan Zinc									
- Zinc	II .	793	781	2%	879	879	0%		
- Lead	II .	219	219	0%	260	260	0%		
- Silver	tonnes	704	702	0%	781	833	-6%		
Zinc International	kt	260	256	2%	391	340	15%		
Iron ore	kt	6,435	5,500	17%	6,900	5,500	25%		
Steel	kt	1,275	1,273	0%	1,950	1,400	39%		
Oil	Kboepd	148	174	-15%	146	169	-13%		
EBITDA/t									
- Hindustan Zinc	\$/t	2,178	2,250	-3%	2,041	2,083	-2%		
- Aluminum	II .	507	651	-22%	583	572	2%		
- Steel	II .	11	-17	-169%	42	9	352%		
- Zinc International	II .	862	1,062	-19%	844	898	-6%		
Change in consolidated Fin	ancials								
Revenue	INR b	1,376	1,354	2%	1,419	1,322	7%		
EBITDA	II .	372	410	-9%	413	403	3%		
Adj PAT	II .	154	166	-7%	168	153	10%		
EPS	INR/sh	41.4	44.7	-7%	45.2	41.1	10%		

Exhibit 17: SoTP valuation

(INR b)		EBITDA	EV	EV	Per		
	FY21E	FY22E	FY23E	EBITDA (x)	FY23E	Share	
VEDL (ex HZL)							
Copper	-2	-1	0	4.0	1	0	
Aluminum	78	173	91	5.0	453	122	
Iron ore	18	23	7	4.0	28	7	
Steel	9	7	1	4.0	4	1	
Power(TSPL)	8	8	7	DCF	48	13	
Power(other)	6	3	2	4.0	7	2	
Zinc-Int	8	15	17	4.0	70	19	
Oil & Gas	32	60	81	5.0	405	109	
Sub. Tot.	157	288	207	4.9	1,016	273	
Less: Net Debt					583	157	
Equity Value					433	116	
Hind. Zinc							
HZL	117	162	171	5.0	856	203	
Add: Net Cash					176	42	
Equity Value					1,032	244	
INR/share (HZL)					245		
VEDL					INR b	INR/sh	
HZL@64.9% (20% Hold Co. discount)					536	144	
VEDL (ex HZL)					433	116	
Equity value					969	260	
Shares outstanding (b)					3.7		
Target price (INR/sh)					260		

Exhibit 18: P/B ratio is at below historical average...

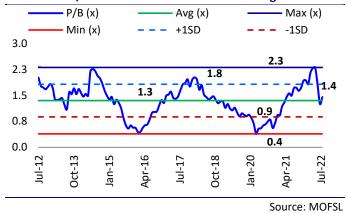


Exhibit 19: ...so is EV/EITDA ratio

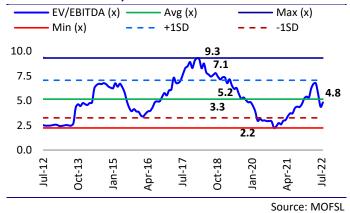


Exhibit 20: Global comparable valuation

	M-Cap		P/E (x)		EV	//EBITDA	(x)		P/B (x)			RoE (%)	
Company	USD m	CY20/ FY21	CY21/ FY22	CY22/ FY23	CY20/ FY21	CY21/ FY22	CY22/ FY23	CY20/ FY21	CY21/ FY22	CY22/ FY23	CY20/ FY21	CY21/ FY22	CY22/ FY23
Vedanta*	11,468	5.3	6.4	6.2	3.2	4.7	4.5	1.4	1.4	1.3	27.2	21.7	22.0
ВНР	1,35,675	6.3	8.3	10.5	3.5	4.3	5.1	2.6	2.6	2.6	41.2	33.9	25.9
Rio	99,004	5.9	7.3	8.4	3.5	4.2	4.5	1.8	1.7	1.5	30.4	22.6	17.8
Glencore	71,690	3.9	5.9	7.6	2.6	3.4	3.9	1.5	1.4	1.4	41.8	25.4	20.2
Anglo	42,458	5.9	6.9	7.6	3.1	3.4	3.7	1.4	1.2	1.1	25.0	18.3	14.3
South 32	12,236	4.8	5.7	6.5	2.7	2.8	3.0	1.2	1.0	1.0	26.3	20.5	16.1

Source: MOFSL, Bloomberg. (*) denotes MOFSL estimates

Financials and valuations - Consolidated

Income Statement (Consolidated)								(INR b)
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Net Sales	722	919	920	832	880	1,327	1,376	1,419
Total Expenses	509	667	689	638	607	879	1,003	1,006
EBITDA	213	252	231	194	273	448	372	413
EBITDA attribute	176	203	189	160	219	368	303	334
DDA	63	63	82	91	76	89	93	100
EBIT	150	189	149	103	197	359	279	313
Finance cost	59	58	57	50	52	48	48	46
Other income	46	36	40	25	34	26	26	19
PBT	138	167	132	79	179	337	257	286
Tax	38	57	39	-31	22	93	72	80
Rate (%)	27.4	34.4	29.2	-39.5	12.2	27.4	28.0	28.0
PAT	100	109	94	110	157	245	185	206
EO expense (Income)	1	-8	-3	157	-1	8	0	0
PAT (after EO)	99	118	97	-47	158	237	185	206
Attrib. PAT (after MI & asso)	56	76	69	33	96	174	154	168
Change (YoY %)	-73.8	34.7	-9.0	-52.7	195.3	80.2	-11.3	9.3
Balance Sheet (Consolidated)								(INR b)
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Share Capital	4	4	4	4	4	4	4	4
Reserves	601	631	619	543	619	650	666	708
Net Worth	605	635	623	546	623	654	669	712
Total Loans	906	725	835	757	686	534	525	503
Deferred Tax Liability	-54	-9	10	-40	-36	-7	1	10
Capital Employed	1,597	1,511	1,621	1,435	1,423	1,355	1,355	1,378
Gross Block	1,641	1,810	2,176	2,182	2,281	2,392	2,525	2,661
Less: Accum. Depn.	775	848	1,185	1,276	1,352	1,441	1,534	1,635
Net Fixed Assets	866	962	991	907	929	951	990	1,027
Capital WIP	177	161	222	168	139	142	193	243
Investments	1	2	49	1	2	2	2	2
WC. Assets	872	674	723	691	729	840	660	600
Inventory	96	120	132	113	99	143	170	175
Account Receivables	34	53	77	58	66	82	106	109
Cash and Bank Balance	610	338	365	372	331	327	119	73
Loans and advances	131	163	149	148	232	288	266	244
WC. Liability & Prov.	319	287	365	333	375	580	489	493
Trade payables	71	84	92	80	79	215	124	128
Provisions & Others	248	203	273	252	296	365	365	365
Net WC. Assets Appl. of Funds	553	386	358	359	354	260	171	107
	1,597	1,511	1,621	1,435	1,423	1,355	1,355	1,378

Financials and valuations – Consolidated

Ratios								
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Basic (INR)								
EPS	15.1	20.4	18.5	8.8	25.9	46.7	41.4	45.2
Cash EPS	32.1	37.3	40.6	33.2	46.4	70.6	66.5	72.2
BV/Share	162.7	170.7	167.5	146.9	167.4	175.8	179.9	191.4
DPS	19.5	21.2	18.9	3.9	9.5	27.3	42.1	42.1
Div Payout (%)	154.2	124.9	122.0	53.4	44.0	70.1	122.1	111.7
Valuation (x)								
P/E	16.2	12.0	13.2	28.0	9.5	5.3	5.9	5.4
Cash P/E	7.7	6.6	6.1	7.4	5.3	3.5	3.7	3.4
P/BV (inclgoodwill)	1.5	1.4	1.5	1.7	1.5	1.4	1.4	1.3
EV/Sales	1.8	1.5	1.6	1.7	1.5	0.9	1.0	1.0
EV/EBITDA	7.4	6.8	7.6	8.6	6.0	3.2	4.6	4.2
Dividend Yield (%)	7.9	8.6	7.7	1.6	3.9	11.1	17.2	17.2
Return Ratios (%)	7.3	0.0	7.7	1.0	3.3	11.1	17.2	17.2
EBITDA Margins	29.5	27.4	25.1	23.3	31.0	33.8	27.1	29.1
Net Profit Margins	7.8	8.3	7.5	3.9	10.9	13.1	11.2	11.9
RoE	9.7	12.2	11.0	5.6	16.5	27.2	23.3	24.4
RoCE (pre-tax)	12.4	14.5	12.1	8.4	16.2	27.2	22.5	24.4
RolC (pre-tax)	15.2	17.5	12.1	8.9	18.3	33.9	24.6	24.5
	15.2	17.5	12.5	0.9	10.5	33.9	24.0	24.0
Working Capital Ratios	0.0	1.0	0.0	0.0	1.0	1.4	1.4	1.4
Fixed Asset Turnover (x)	0.9	1.0	0.9	0.9	1.0	1.4	1.4	1.4
Receivable (Days)	17	21	30	25	28	28	28	28
Inventory (Days)	49	48	52	50	41	45	45	45
Trade payable (Days)	36	33	37	35	33	33	33	33
Leverage Ratio (x)								
Current Ratio								
Interest Cover Ratio	2.7	2.3	2.0	2.1	1.9	1.4	1.3	1.2
Net Debt/EBITDA	3.4	3.9	3.3	2.6	4.4	8.0	6.4	7.2
Net Debt/Equity	1.4	1.5	2.0	2.0	1.3	0.5	1.1	1.0
Cash Flow Statement							II .	NR billion
Y/E March	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
EBITDA	213	252	231	194	273	448	372	413
Non cash exp. (income)	2	7	11	20	1	33	0	0
(Inc)/Dec in Wkg. Cap.	-7	-30	-8	-5	33	78	-141	-5
Tax paid	-20	-32	-26	-11	-21	-57	-64	-71
CF from Op. Activity	187	197	208	198	286	502	167	337
(Inc)/Dec in FA + CWIP	-55	-74	-89	-77	-69	-128	-183	-186
Free Cash Flow	132	124	119	121	217	373	-16	151
(Pur)/Sale of Investments	27	14	42	42	6	0	0	0
Interest & Dividend Income	11	14	9	8	20	26	26	19
Investment in subsidiaries	-30	-9	-69	-5	0	0	0	0
Others	0	0	0	0	0	15	22	22
CF from Inv. Activity	-47	-55	-107	-31	-43	-87	-135	-144
Equity raised/(repaid)	-1	-2	-1	-1	0	0	0	0
Debt raised/(repaid)	91	-190	106	-92	-139	-20	-20	-20
Dividend (incl. tax)	-129	-168	-118	-14	-91	-128	-172	-172
Interest paid	-62	-57	-60	-53	-53	-48	-48	-46
Others	0	1	-1	0	1	0	0	0
CF from Fin. Activity	- 101	-415	-74	- 161	-283	-196	- 240	-239
(Inc)/Dec in Cash	40	-415	28	-101	-265 -40	218	-240	-239
Add: Opening Balance	570	610	338	365	372	331	550	341
	610	338	338 365	365 372	372 331	550	341	295
Closing Balance	010	330	303	3/2	221	330	341	233

Explanation of Investment Rating					
Investment Rating	Expected return (over 12-month)				
BUY	>=15%				
SELL	< - 10%				
NEUTRAL	< - 10 % to 15%				
UNDER REVIEW	Rating may undergo a change				
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation				

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