

# **METALS & MINING**

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## Read-across from production results of iron ore majors

 Iron ore shipment recovery will mean range-bound iron ore pricing in H2CY24, despite weaker production recovery so far Kirtan Mehta, CFA research@bobcaps.in

- BHP's guidance of flat coking coal production growth over Jul'24-Jun'25 could mean slower easing of coking coal price ahead
- We have a neutral outlook on Indian ferrous majors in our coverage given the need for structural resolution of China's surplus in steel

**Seaborne iron ore shipments recovered in Q2CY24...:** Shipments for the three iron ore majors – BHP, Vale, Rio Tinto – recovered better than production, clocking 5.6% YoY growth in Q2CY24 and 5.0% growth in H1CY24.

... and are set to improve further seasonally in H2CY24: Reiteration of guidance by the three majors confirm a seasonal improvement in global seaborne supply ahead in the H2. However, their guidance do not yet suggest material YoY growth, with Rio Tinto's guidance implying only modest growth and Vale's implying a modest decline in H2 at the higher end of the guidance.

**Higher use of lower quality iron ore – sign of weaker steel demand:** Usage of lower-quality fines and pellets increased 56% YoY and 192% YoY, respectively, during H1CY24. Their share in collective sales mix increased to 12.3% (from 8.2% in H1CY23) for fines and to 9.4% (from 3.4%) for pellets. Higher use of low-quality iron ore by steel mills imply lower focus on productivity and weaker steel demand so far.

**Iron ore production recovery slow:** Higher proportion of low quality SP10 in Rio Tinto's sales mix and higher reliance on third-party purchases by Vale imply that improvement in availability of high-quality iron is limited. However, this is less of an issue while global steel demand recovery is slow.

Coking coal production growth slower than prior expectation: BHP's Australian coking coal production recovery is running slower than our prior expectation with BHP shifting focus on improving supply chain stability. BHP's guidance for FY25 (ending Jun'25) suggests only flat production ahead. With BHP accounting for more than 10% of seaborne supply, this will weigh on coking coal price ahead.

**Read-across for Indian ferrous coverage:** Seasonal recovery in iron ore supply means that iron ore price will remain range bound ahead, which is supportive of our current forecasts of US\$101/t for FY25 and US\$95/t for FY26. Slower recovery in Australian coal production means an upside risk to our coking coal price forecast of US\$248/t in FY25 and US\$225/t in FY26.





# Read-across from production results of global majors

We summarise read-across for steel raw materials from Apr-Jun'24 production releases of Australian iron ore majors BHP and Rio Tinto, and Brazilian iron ore major Vale.

# Iron ore shipments recovered in Q2CY24

## Iron ore production showed limited improvement

While seaborne iron ore production for the three majors rose 1.7% YoY in Q2CY24 and 2% in H1CY24, the improvement was primarily driven by BHP as well as increase in third-party purchases by Vale. While Rio Tinto's production declined by 2% both in Q2CY24 and H1CY24, Vale's own production was up just 0.1% in Q2CY24 and 1.3% in H1CY24.

Fig 1 - Iron ore production

(mt)	Q1CY23	Q2CY23	Q3CY23	Q4CY23	Q1CY24	Q2CY24	YoY (%)	QoQ (%)	H1CY23	H2CY23	H1CY24	YoY (%)
Australia (100% basis)												
Rio Tinto	79.3	81.3	83.5	87.5	77.9	79.5	(2.2)	2.0	160.5	171.0	157.4	(1.9)
BHP	66.2	72.7	69.4	72.7	68.1	76.8	5.6	12.7	138.9	142.1	144.9	4.3
Australia subtotal	145.5	154.0	152.9	160.2	146.1	156.3	1.5	7.0	299.4	313.1	302.3	1.0
Brazil												
Vale	63.3	73.2	79.1	81.6	65.0	73.3	0.1	12.7	136.5	160.7	138.3	1.3
Vale's 3rd party purchases	3.3	5.7	7.2	7.8	5.8	7.3	27.8	25.9	9.0	15.0	13.1	45.8
Brazil subtotal	66.6	78.9	86.2	89.4	70.8	80.6	2.1	13.8	145.5	175.6	151.4	4.1
Seaborne proxy- 3 majors	212.1	232.9	239.2	249.6	216.9	236.9	1.7	9.2	444.9	488.7	453.7	2.0

Source: Company, BOBCAPS Research

## Iron ore shipments recovery was better than production

Shipments recovered better than production, clocking 5.6% YoY growth in Q2CY24 and 5.0% growth in H1CY24. Vale's shipment improved the most among the three majors. While BHP's recovery was in line with production, Rio Tinto shipments recovered particularly in Q2 and was largely supported by higher sales of lower quality SP10 fines.

Fig 2 - Sales: Iron ore fines and pellets

(mt)	Q1CY23	Q2CY23	Q3CY23	Q4CY23	Q1CY24	Q2CY24	YoY (%)	QoQ (%)	H1CY23	H2CY23	H1CY24	YoY (%)
Australia (100% basis)												
Rio Tinto	82.5	79.1	83.9	86.3	78.0	80.3	1.5	2.9	161.7	170.1	158.3	(2.1)
BHP	66.6	71.2	71.7	70.3	69.8	75.9	6.6	8.8	137.8	142.1	145.7	5.8
Australia subtotal	149.1	150.3	155.6	156.6	147.8	156.2	3.9	5.7	299.4	312.2	304.0	1.5
Brazil												
Vale	55.7	74.4	80.6	90.3	63.8	79.8	7.3	25.0	130.0	170.9	143.6	10.4
Vale's 3rd party purchases	3.5	5.6	6.6	7.8	5.6	7.1	27.8	26.1	9.1	14.5	12.8	40.1
Brazil subtotal	59.2	79.9	87.2	98.1	69.5	86.9	8.7	25.1	139.1	185.3	156.4	12.4
Seaborne proxy- 3 majors	208.3	230.2	242.8	254.7	217.3	243.1	5.6	11.9	438.6	497.6	460.4	5.0

Source: Company, BOBCAPS Research



## Higher use of low-quality fines and pellets indicate weaker steel demand

Sales of lower quality fines at 40mt were up 56% YoY in H1CY24 and its share as a proportion of sales of the three majors increased from 8.2% in H1CY23 to 12.3% in H1CY24.

Fig 3 - Sales: Iron ore fines

53.3							•				
53.3											
53.3											
55.5	50.9	49.8	49.2	46.3	48.5	(4.7)	4.9	104.2	99.0	94.8	(9.1)
6.8	6.6	9.7	12.2	9.2	8.3	25.1	(10.3)	13.4	21.9	17.5	30.1
60.1	57.5	59.5	61.4	55.5	56.8	(1.3)	2.4	117.7	120.9	112.3	(4.6)
41.2	42.9	43.2	43.4	42.7	47.1	9.7	10.2	84.1	86.6	89.8	6.7
101.3	100.4	102.7	104.9	98.2	103.9	3.4	5.8	201.8	207.6	202.0	0.1
40.3	56.9	NA	69.2	44.2	54.7	0.0	23.8	97.2	NA	98.9	1.8
5.5	6.4	NA	8.6	8.3	13.8	0.1	65.0	12.0	NA	22.1	84.9
45.9	63.3	69.7	77.9	52.5	68.5	8.2	30.4	109.2	147.6	121.1	10.9
147.2	163.8	172.4	182.8	150.7	172.4	5.3	14.4	311.0	355.2	323.1	3.9
12.4	13.0	NA	20.9	17.6	22.0	69.1	25.5	25.4	NA	39.6	55.9
8.4	8.0	NA	11.4	11.7	12.8	-	-	8.2	NA	12.3	-
	60.1 41.2 101.3 40.3 5.5 45.9 147.2	6.8 6.6 60.1 57.5 41.2 42.9 101.3 100.4 40.3 56.9 5.5 6.4 45.9 63.3 147.2 163.8 12.4 13.0 8.4 8.0	6.8 6.6 9.7 60.1 57.5 59.5 41.2 42.9 43.2 101.3 100.4 102.7  40.3 56.9 NA 5.5 6.4 NA 45.9 63.3 69.7 147.2 163.8 172.4 12.4 13.0 NA 8.4 8.0 NA	6.8       6.6       9.7       12.2         60.1       57.5       59.5       61.4         41.2       42.9       43.2       43.4         101.3       100.4       102.7       104.9         40.3       56.9       NA       69.2         5.5       6.4       NA       8.6         45.9       63.3       69.7       77.9         147.2       163.8       172.4       182.8         12.4       13.0       NA       20.9         8.4       8.0       NA       11.4	6.8       6.6       9.7       12.2       9.2         60.1       57.5       59.5       61.4       55.5         41.2       42.9       43.2       43.4       42.7         101.3       100.4       102.7       104.9       98.2         40.3       56.9       NA       69.2       44.2         5.5       6.4       NA       8.6       8.3         45.9       63.3       69.7       77.9       52.5         147.2       163.8       172.4       182.8       150.7         12.4       13.0       NA       20.9       17.6         8.4       8.0       NA       11.4       11.7	6.8       6.6       9.7       12.2       9.2       8.3         60.1       57.5       59.5       61.4       55.5       56.8         41.2       42.9       43.2       43.4       42.7       47.1         101.3       100.4       102.7       104.9       98.2       103.9         40.3       56.9       NA       69.2       44.2       54.7         5.5       6.4       NA       8.6       8.3       13.8         45.9       63.3       69.7       77.9       52.5       68.5         147.2       163.8       172.4       182.8       150.7       172.4         12.4       13.0       NA       20.9       17.6       22.0         8.4       8.0       NA       11.4       11.7       12.8	6.8       6.6       9.7       12.2       9.2       8.3       25.1         60.1       57.5       59.5       61.4       55.5       56.8       (1.3)         41.2       42.9       43.2       43.4       42.7       47.1       9.7         101.3       100.4       102.7       104.9       98.2       103.9       3.4         40.3       56.9       NA       69.2       44.2       54.7       0.0         5.5       6.4       NA       8.6       8.3       13.8       0.1         45.9       63.3       69.7       77.9       52.5       68.5       8.2         147.2       163.8       172.4       182.8       150.7       172.4       5.3         12.4       13.0       NA       20.9       17.6       22.0       69.1         8.4       8.0       NA       11.4       11.7       12.8       -	6.8       6.6       9.7       12.2       9.2       8.3       25.1       (10.3)         60.1       57.5       59.5       61.4       55.5       56.8       (1.3)       2.4         41.2       42.9       43.2       43.4       42.7       47.1       9.7       10.2         101.3       100.4       102.7       104.9       98.2       103.9       3.4       5.8         40.3       56.9       NA       69.2       44.2       54.7       0.0       23.8         5.5       6.4       NA       8.6       8.3       13.8       0.1       65.0         45.9       63.3       69.7       77.9       52.5       68.5       8.2       30.4         147.2       163.8       172.4       182.8       150.7       172.4       5.3       14.4         12.4       13.0       NA       20.9       17.6       22.0       69.1       25.5         8.4       8.0       NA       11.4       11.7       12.8       -       -       -	6.8       6.6       9.7       12.2       9.2       8.3       25.1       (10.3)       13.4         60.1       57.5       59.5       61.4       55.5       56.8       (1.3)       2.4       117.7         41.2       42.9       43.2       43.4       42.7       47.1       9.7       10.2       84.1         101.3       100.4       102.7       104.9       98.2       103.9       3.4       5.8       201.8         40.3       56.9       NA       69.2       44.2       54.7       0.0       23.8       97.2         5.5       6.4       NA       8.6       8.3       13.8       0.1       65.0       12.0         45.9       63.3       69.7       77.9       52.5       68.5       8.2       30.4       109.2         147.2       163.8       172.4       182.8       150.7       172.4       5.3       14.4       311.0         12.4       13.0       NA       20.9       17.6       22.0       69.1       25.5       25.4	6.8       6.6       9.7       12.2       9.2       8.3       25.1       (10.3)       13.4       21.9         60.1       57.5       59.5       61.4       55.5       56.8       (1.3)       2.4       117.7       120.9         41.2       42.9       43.2       43.4       42.7       47.1       9.7       10.2       84.1       86.6         101.3       100.4       102.7       104.9       98.2       103.9       3.4       5.8       201.8       207.6         40.3       56.9       NA       69.2       44.2       54.7       0.0       23.8       97.2       NA         5.5       6.4       NA       8.6       8.3       13.8       0.1       65.0       12.0       NA         45.9       63.3       69.7       77.9       52.5       68.5       8.2       30.4       109.2       147.6         147.2       163.8       172.4       182.8       150.7       172.4       5.3       14.4       311.0       355.2         12.4       13.0       NA       20.9       17.6       22.0       69.1       25.5       25.4       NA	6.8       6.6       9.7       12.2       9.2       8.3       25.1       (10.3)       13.4       21.9       17.5         60.1       57.5       59.5       61.4       55.5       56.8       (1.3)       2.4       117.7       120.9       112.3         41.2       42.9       43.2       43.4       42.7       47.1       9.7       10.2       84.1       86.6       89.8         101.3       100.4       102.7       104.9       98.2       103.9       3.4       5.8       201.8       207.6       202.0         40.3       56.9       NA       69.2       44.2       54.7       0.0       23.8       97.2       NA       98.9         5.5       6.4       NA       8.6       8.3       13.8       0.1       65.0       12.0       NA       22.1         45.9       63.3       69.7       77.9       52.5       68.5       8.2       30.4       109.2       147.6       121.1         147.2       163.8       172.4       182.8       150.7       172.4       5.3       14.4       311.0       355.2       323.1         12.4       13.0       NA       20.9       17.6       22.0

Source: Company, BOBCAPS Research, NA: Not available

Sales of lower quality pellets at 10mt was up 192% YoY in H1CY24 and its share as a proportion of sales of the three majors increased from 3.4% in H1CY23 to 9.4% in H1CY24.

Fig 4 - Sales: Iron ore lumps

(mt)	Q1CY23	Q2CY23	Q3CY23	Q4CY23	Q1CY24	Q2CY24	YoY (%)	QoQ (%)	H1CY23	H2CY23	H1CY24	YoY (%)
Australia												
Rio Tinto												
i) Lumps excl SP10	20.7	19.9	20.2	20.2	17.9	18.4	(7.9)	2.3	40.6	40.4	36.3	(10.7)
ii) Lumps SP10	1.7	1.7	4.2	4.6	4.6	5.1	211.1	11.5	3.3	8.8	9.8	192.2
Rio Tinto subtotal	22.4	21.6	24.4	24.8	22.6	23.5	8.9	4.2	44.0	49.2	46.1	4.7
BHP (own share)	18.0	20.0	21.0	19.2	19.2	20.3	1.2	5.7	38.0	40.1	39.4	3.7
Australia subtotal	40.4	41.6	45.4	44.0	41.7	43.8	5.2	4.9	82.0	89.4	85.5	4.2
Brazil- Vale incl 3rd party	8.1	8.8	8.6	10.3	9.2	8.9	0.6	(3.9)	16.9	18.9	18.1	6.8
Seaborne proxy - 3 majors	48.6	50.4	54.0	54.3	51.0	52.6	4.4	3.3	99.0	108.3	103.6	4.7
Sales of lower quality lumps	1.7	1.7	4.2	4.6	4.6	5.1	211.1	11.5	3.3	8.8	9.8	192.2
As proportion of sales mix	3.5	3.3	7.7	8.5	9.1	9.8	-	-	3.4	8.1	9.4	-

Source: Company, BOBCAPS Research



# Iron ore shipments to improve seasonally in H2CY24

With the Australian and Brazilian monsoon season behind us, iron ore supply on seaborne markets is set to improve seasonally in H2CY24 and is confirmed by guidance of the three majors. However, the guidance does not yet suggest material YoY growth with Rio Tinto's guidance implying only modest growth in H2 at the higher end of the guidance, and Vale's implying a modest decline at the higher end of the guidance.

Fig 5 - Annual guidance

		CY23				Jul'24-Jun'25-				
(mt)	H1	H2	Annual	H1	H2		Annual		FY	
					Lower	Upper	Lower	Upper	Lower	Upper
Rio shipments	161.7	170.1	331.8	158.3	164.7	179.7	323.0	338.0	-	-
BHP production	138.9	142.1	281.0	144.9	NA	NA	NA	NA	282	294
Vale production incl 3rd party purchases	145.5	175.6	321.2	151.4	158.6	168.6	310.0	320.0	-	-

Source: Company, BOBCAPS Research

# Coking coal production growth slower than prior expectation

For continuing operations, BHP's coking coal production recovered 10% QoQ in Q2 benefitting from the end of the monsoon and improved truck productivity. However, production was still down 23% YoY in Q2CY24 and 19% YoY in H1CY24 as BHP has been focusing on increasing stripping to improve stability of supply chain and reestablish raw coal inventories at mines.

Fig 6 - BHP coking coal production

(::)	•		000/00	0.40\/00	0400/04	0001/04	V-V (0/)	0 - 0 (0/)	11400/00	11001/00	1140004	V-V (0/)
(mt)	Q1CY23	Q2CY23	Q3CY23	Q4CY23	Q1CY24	Q2CY24	YoY (%)	QoQ (%)	H1CY23	H2CY23	H1CY24	YoY (%)
Continuing production												
Goonyella	4.4	4.7	1.7	3.5	3.6	4.1	(12.8)	12.2	9.1	5.1	7.7	(14.6)
Peak Downs	2.5	2.8	2.2	1.7	2.0	2.5	(13.1)	22.3	5.4	3.9	4.5	(15.9)
Saraji	2.0	2.7	2.0	1.4	1.5	1.6	(38.4)	7.6	4.7	3.4	3.2	(32.4)
Caval Ridge	1.5	2.5	1.6	1.6	1.7	1.6	(37.8)	(7.6)	4.1	3.2	3.3	(19.8)
Subtotal	10.4	12.7	7.5	8.2	8.9	9.8	(23.1)	10.0	23.1	15.7	18.7	(19.4)
Divested production												
Blackwater	2.2	3.0	2.6	2.4	2.1	0.1	(98.3)	(97.7)	5.2	5.0	2.2	(58.1)
Daunia	1.2	1.2	1.1	0.9	1.0	0.0	(97.9)	(97.5)	2.4	2.0	1.1	(56.1)
Subtotal	3.4	4.2	3.7	3.2	3.2	0.1	(98.2)	(97.6)	7.7	6.9	3.3	(57.5)
Total coking coal production	13.9	17.0	11.2	11.4	12.1	9.8	(41.9)	(18.4)	30.8	22.6	21.9	(28.9)

Source: Company, BOBCAPS Research

BHP's guidance for Jul'24-Jun'25 (FY25) does not suggest a material improvement in coking coal production with BHP planning to focus on improving supply chain stability. While BHP aims to improve production to 43-45mt over the next five years, the recovery is likely to be after the operations reach sustainable inventory level and stripping ratio normalises.

Fig 7 - BHP's coking coal production guidance

(mt)		Half year period	Financial year			
	Jan-Jun'23	Jul-Dec'23	Jan-Jun'24	Jul'23-Jun'24	Jun'24-Jul-25	
Continuing production	23.1	15.7	18.7	34.4	33-36	

Source: Company, BOBCAPS Research



# Other pointers

## Rio Tinto is progressing on medium-term iron ore supply:

- Western Range mine construction is 70% complete which is targeting first ore in CY25. However, this is a mine replacement project, which will help sustain Pilbara Blend production from the existing Paraburdoo mining hub.
- The Simandou high-grade iron ore project in Guinea is advancing well, targeting first ore production from Simfer mine in CY25 and ramp-up to 60mtpa in 30 months thereafter.

Vale's increase in iron ore production was mainly driven by increase in Southern system: H1CY24 production at 151.4mt was up 4% YoY, driven by Southern system (35.2mt up 21% YoY). Northern system was stable (-0.6% YoY) supported by growth in S11D. Within Southern system, Vargem Grande production at 20.7mt was up 19% YoY and Paraopeba at 14.5mt was up 23% YoY.

**Coking coal realisation:** BHP indicated that hard coking coal realisation was down 16% QoQ to US\$246/t in Apr-Jun'24, whereas weak coking coal realisation decreased 23% QoQ to US\$161.7/t.

**China still recovering:** Rio Tinto acknowledged recovery in manufacturing (we have been highlighting success from upgrading incentives earlier this year) but highlighted that China's housing destock policy had not yielded results yet.



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