

# Commodities Strategy Report

Iron Ore & Steel Sector - Initiation of Coverage

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## Summary

The iron ore & steel sector has been severely impacted across the World, but China who have emerged from the COVID-19 pandemic with a astonish positive growth. Developed economies suffered the most driven by long-lasting lockdowns that triggered impressive drops in manufacture sector causing massive bullwhip effect in the whole supply chain for the iron and steel sector.

### 1. Steel:

- Global steel production dropped 0.9% Y-o-Y in 2020 reaching 1,864.0 million tonnes (Mt).
- China was one of the few countries who has positive steel production growth in 2020 that reached 1,053.0 Mt, up by 5.2% Y-o-Y and breaking the mythic barrier of 1.0 bnt mark and once again we can say that in iron ore & steel sector is **all about China!**
- The EU produced 138.8 Mt of crude steel in 2020, a decrease of 11.8% compared to 2019.
- Brazil produced 31.0 Mt in 2020, down by 4.9% compared to 2019.

### 2. Iron Ore:

- In 2020, global iron ore demand achieved 2,087Mt or 1.5% Y-o-Y drop comparing to 2019.
- China was only the one of the few countries with positive iron ore demand growth in 2020, 9.6% Y-o-Y or additional demand of 124.Mt, which is another typical Japanese demand in good old times.
- In order to fulfil this massive demand growth in 2020, China has imported 1,170Mt and the balance 250Mt required to produce annual pig iron was supplied internally from iron ore concentrates.
- Iron ore prices jumped more than 68% in 2020 driven by strong Chinese demand and shortages of supply from Brazil. Iron prices for average 62% Fe content closed 2020 at US\$160/dmt with annual average at US\$110/dmt. This is the most required iron ore quality for integrated steel mills and used for base sinter mix.

### 3. Outlook iron ore prices in 2021: We believe prices will drop in 2021 from US\$160/dmt in December 2020 and finishing 2021 at around US\$120/dmt, reaching an average of US\$140/dmt or US\$40/drop from beginning of January 2021 for 62% Fe content. High grade (65% Fe) iron ore will have an estimated US\$15/dmt premium for to reach US\$155/dmt average due to:

- Chinese marginal iron ore demand growth that we estimate at around 1% Y-o-Y or additional 10Mt demand.
- Rest of the World iron ore seaborne demand increase will be around 25Mt only.
- Supply is catching up with volume coming back from Brazil, marginal additions from Australia, swing producers that are induced at this price level.

### 4. Our call: Considering our proprietary framework criteria that includes financial (quantitative) and risk (qualitative), we hereby recommend:

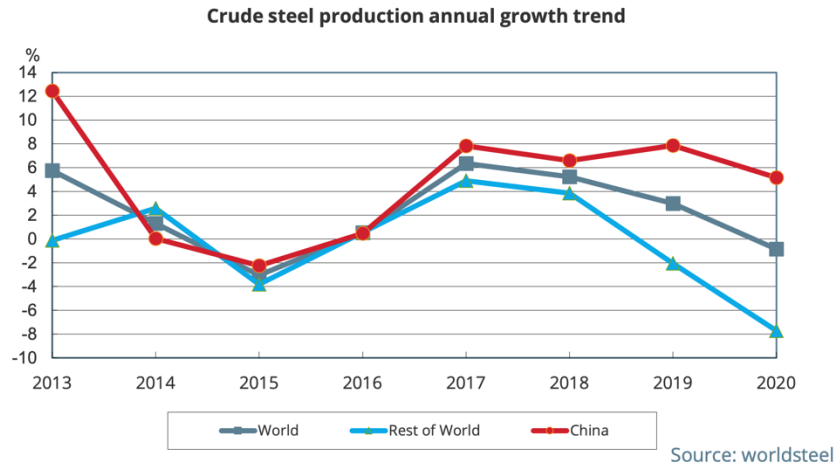
- **VALE is our top ranked company** and we recommend an **Overweight allocation on (VALE.SA) shares with TP of R\$ 119.13<sup>1</sup> or 33% upside potential due to attractive multiples and improving on qualitative criteria dropping from Medium to Low Risk on Performance & ESG criteria.**
- Considering all criteria abovementioned that include financial (quantitative) and risk (qualitative), we hereby recommend an **Overweight allocation on FMG (FMG.AX) shares with TP of AU\$ 26.53<sup>2</sup> or 15% upside potential for a pure play exposure to iron ore fundamentals in the international market.**

<sup>1</sup> Target Price based on EV/EBITDA multiple using market average as reference.

<sup>2</sup> Target Price based on EV/EBITDA multiple using market average as reference.

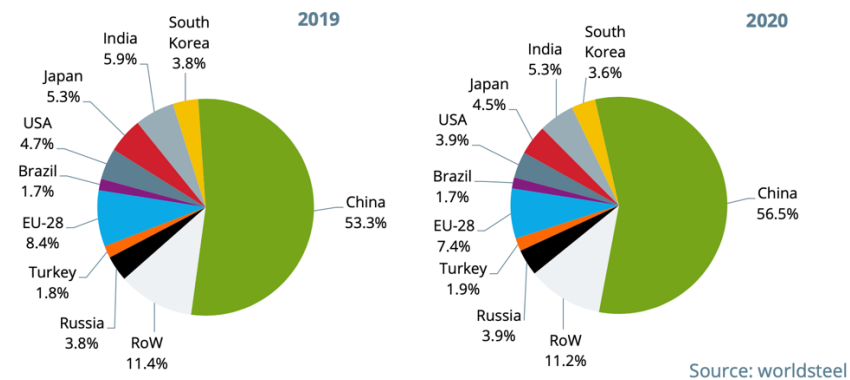
## Demand/Steel

COVID-19 pandemic affected the industrial production and supply chains across the world and impacting heavily the world steel production that dropped 0.9% Y-o-Y in 2020 reaching 1,864.0 million tonnes (Mt).



- China was one of the few countries who has positive steel production growth in 2020 that reached 1,053.0 Mt, up by 5.2% Y-o-Y and breaking the mythic barrier of 1.0 bnt mark. Considering this scenario, China's share of global crude steel production increased from 53.3% in 2019 to 56.5% in 2020 reinforcing our call that in steel raw materials (iron ore, metallurgical coal, coke and manganese) prices **it's all about China!**

### Share of global crude steel production



- In Asia ex-China, India's crude steel production for 2020 was 99.6 Mt, down by 10.6% on 2019. Japan produced 83.2 Mt in 2020, down 16.2% on 2019. South Korea produced 67.1 Mt, down 6.0% on 2019.
- The EU produced 138.8 Mt of crude steel in 2020, a decrease of 11.8% compared to 2019. Germany produced 35.7 Mt of crude steel in 2020, down 10.0% on 2019.
- Annual crude steel production for South America was 38.2 Mt in 2020, a decrease of 8.4% on 2019. Brazil produced 31.0 Mt in 2020, down by 4.9% compared to 2019.

### World crude Steel production - Summary

million tonnes (Mt)	2020	2019	%2020/2019
<b>Europe</b>	<b>281.1</b>	<b>296.8</b>	<b>-5.3</b>
of which:			
EU (28)	138.8	157.4	-11.8
CIS	102.0	100.4	1.5
<b>North America</b>	<b>101.1</b>	<b>119.7</b>	<b>-15.5</b>
of which:			
United States	72.7	87.8	-17.2
<b>South America</b>	<b>38.2</b>	<b>41.7</b>	<b>-8.4</b>
<b>Africa</b>	<b>17.2</b>	<b>17.2</b>	<b>0.0</b>
<b>Middle East</b>	<b>45.4</b>	<b>44.3</b>	<b>2.5</b>
<b>Asia</b>	<b>1 374.9</b>	<b>1 354.4</b>	<b>1.5</b>
of which:			
China	1 053.0	1 001.3	5.2
<b>Australia/New Zealand</b>	<b>6.1</b>	<b>6.2</b>	<b>-1.4</b>
<b>World</b>	<b>1 864.0</b>	<b>1 880.1</b>	<b>-0.9</b>

Source: worldsteel

### Economics

As World Bank mentioned in the last version of Global Outlook report, COVID-19 caused a global recession whose depth was surpassed only by the two World Wars and the Great Depression over the past century and a half.

- Although global economic activity is growing again, it is not likely to return to business as usual for the foreseeable future. The pandemic has caused a severe loss of life, is tipping millions into extreme poverty, and is expected to inflict lasting scars that push activity and income well below their pre-pandemic trend for a prolonged period.
- This major impact caused would drop GDP contraction across the Globe with few exceptions, like China and Vietnam. In the table below we have estimates for final 2020 and forecast for 2021.

	GPD growth (%)						
	2015	2016	2017	2018	2019	2020E	2021F
<b>WORLD</b>	2.87	2.61	3.30	2.98	2.36	-4.30	4.00
<b>CHINA</b>	7.04	6.85	6.95	6.75	6.11	2.00	7.90
<b>EU</b>	2.30	2.04	2.79	2.19	1.55	-7.40	3.60
<b>USA</b>	2.91	1.64	2.37	2.93	2.16	-3.60	3.50
<b>INDIA</b>	7.99	8.26	7.04	6.12	4.18	-9.60	5.40
<b>JAPAN</b>	1.22	0.52	2.17	0.32	0.65	-5.30	2.50
<b>RUSSIA</b>	-1.97	0.19	1.83	2.54	1.34	-4.00	2.60
<b>SOUTH KOREA</b>	2.81	2.95	3.16	2.91	2.04	-1.00	4.00
<b>BRAZIL</b>	-3.54	-3.27	1.32	1.38	1.14	-4.50	3.00

Source: World Bank, JP Morgan

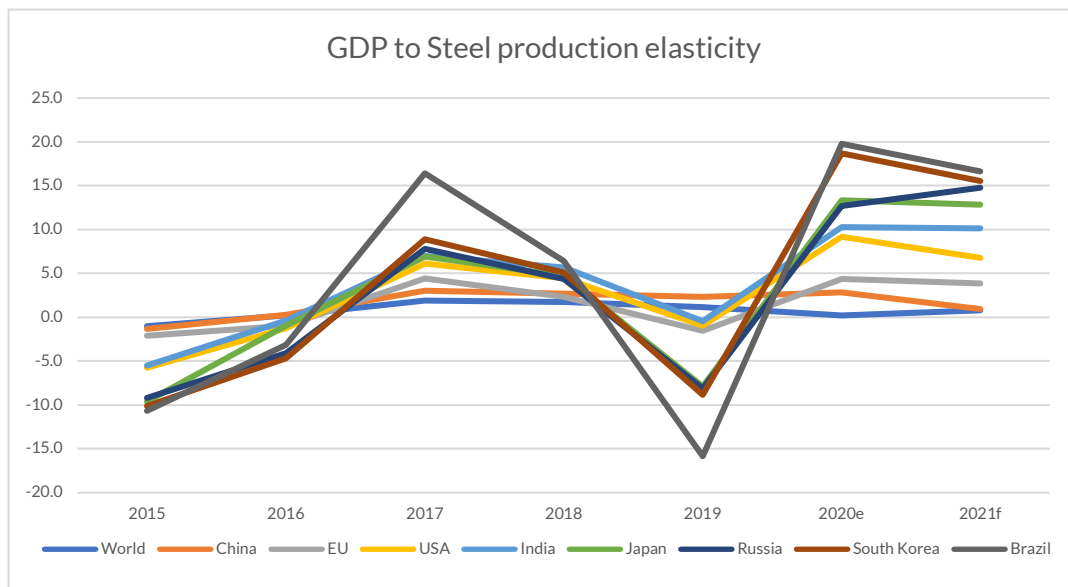
- The pandemic drove global steel production-to-GDP elasticity ratio back to 2016, where the economic growth was also recovering for a minor crisis with manufacture sector drop.

- d) Due to massive investment plans in infrastructure and construction sector, China managed to accelerate its economy and driving to impressive 2.6x steel production to GDP ratio only seen back to 2000s decade.
- e) Rest of the world countries suffered the most driven by never seen supply chains disruption, manufacture sector stopped for many months and only minor activities from construction sector were up and running. In the table below we have estimates for final 2020 and forecast for 2021.

Growth: Steel Production-to-GDP elasticity (x)

	2015	2016	2017	2018	2019	2020E	2021F
WORLD	-1.0	0.2	1.9	1.7	1.1	0.2	0.8
CHINA	-0.3	0.1	1.1	1.0	1.2	2.6	0.2
EU	-0.8	-1.2	1.4	-0.4	-3.9	1.6	2.9
USA	-3.6	-0.3	1.7	2.1	0.6	4.8	2.9
INDIA	0.3	0.9	0.9	1.3	0.5	1.1	3.4
JAPAN	-4.1	-0.6	0.0	-0.9	-7.4	3.1	2.7
RUSSIA	0.4	-3.2	0.8	-0.4	-0.2	-0.7	1.9
SOUTH KOREA	-0.9	-0.5	1.1	0.7	-0.7	6.0	0.8
BRAZIL	-0.5	1.5	7.5	1.3	-7.0	1.1	1.1

Source: Worldsteel, World Bank, Tarraco Commodities Solutions analysis



Source: Worldsteel, World Bank, Tarraco Commodities Solutions analysis

**Steel production:**

Since the reopening of most economies in mid-May, pent-up demand initiated a strong rebound of economic activities, suggesting a V-shaped recovery. However, to date, this has not been enough to offset the drop during the lockdown. Many steel using sectors remain below their pre-COVID-19 level.

- 5. A recovery from the pandemic remains fragile due to the second wave of infections and some countries and other with third waves, continued social distancing measures, elevated unemployment and weak confidence allied with increasing concern on the timing of a demand recovery.

6. On the positive side, health systems are in a much better shape to tackle the pandemic now due to the lessons learnt from the first wave. A careful balance between containing the virus and maintaining the viability of economies is being widely sought.

Added to this in the northern hemisphere there is uncertainty over how COVID-19 will evolve during the upcoming flu season which may have a serious impact on the outlook for 2021. The risk is tilted toward the downside. A double-dip or W-shaped recovery cannot be ignored, and we might see full recovery only in 2022 as seen below estimates for 2021.

	2015	2016	2017	2018	2019	2020E	2021F
<b>WORLD</b>	-2.9	0.5	6.3	5.2	2.7	-0.9	3.3
<b>CHINA</b>	-2.2	0.5	7.8	6.6	7.3	5.2	1.2
<b>EU</b>	-1.8	-2.5	3.9	-0.8	-6.0	-11.8	10.5
<b>USA</b>	-10.6	-0.5	4.0	6.1	1.3	-17.2	10.0
<b>INDIA</b>	2.0	7.2	6.3	7.7	1.9	-10.6	18.5
<b>JAPAN</b>	-5.0	-0.3	-0.1	-0.3	-4.8	-16.2	6.7
<b>RUSSIA</b>	-0.8	-0.6	1.5	-0.9	-0.3	2.6	5.0
<b>SOUTH KOREA</b>	-2.6	-1.6	3.6	2.0	-1.5	-6.0	3.2
<b>BRAZIL</b>	1.9	-4.9	9.9	1.8	-8.0	-4.9	3.2

Source: Worldsteel.org, Tarraco Commodities Solutions analysis

10. World steel production is poised to grow 3.3% Y-o-Y in 2021 driven by recovery in industrial sectors in the developed economies and infrastructure and construction sector in the emerging economies.
11. China crude steel production will have lower growth comparing to 2020 as all great part of the investments and inventory build happened already and as per China CISA leaders, growth rates will be normalised in 2021 to around 1.2% Y-o-Y.
12. The highlight would be India that would grow above 18% Y-o-Y in 2021 due to strong economic transformation and private sector investment. EU and US are resume production after economies are back on track due to restriction flexibility on COVID-19 helped by vaccination programmes with both growing around 10% Y-o-Y in 2021.
13. Brazil crude steel production could rebound 3% Y-o-Y driven by strong construction sector pent-up demand and automotive sector due to lower interest rates.
14. Total steel production additional volumes in 2021 will be at 60.4 Mt, almost a whole South Korea annual production or twice Brazil size, but only 12.7Mt additional coming from China.
15. World pig iron growth in 2021 will be in tandem to crude steel growth as we do not oversee major change in metallic mix nor shift to steel process route (BF-BOF / EAF) to achieve 1,304.3 Mt or additional 41.7Mt.
16. China pig iron production will grow less than 1% or 0.68% Y-o-Y in 2021 with additional 6.1Mt production.
17. India pig iron production growth in 2021 is estimated to be at 12.2% Y-o-Y to top 78.5Mt as capacity utilization in integrated mills expands in the year.
18. Europe Union pig iron production will bounce back in 2021 with 10% Y-o-Y growth in 2021 driven by higher utilization rates in Germany, France and Italy.

## Steel production (million tonnes)

	2015	2016	2017	2018	2019	2020E	2021F	Δ2021-2020
<b>WORLD</b>	1,625.1	1,632.8	1,735.9	1,825.5	1,846.4	1,829.1	1,889.5	60.4
<b>CHINA</b>	803.8	807.6	870.8	928.3	1,001.3	1,053.0	1,065.6	12.7
<b>EU</b>	166.2	162.2	168.4	167.1	157.3	138.8	153.4	14.6
<b>USA</b>	78.8	78.5	81.6	86.6	87.8	72.7	80.0	7.3
<b>INDIA</b>	89.0	95.5	101.4	109.3	111.4	99.6	118.0	18.4
<b>JAPAN</b>	105.1	104.8	104.7	104.3	99.3	83.2	88.8	5.6
<b>RUSSIA</b>	70.9	70.4	71.5	72.1	71.9	73.4	77.1	3.7
<b>SOUTH KOREA</b>	69.7	68.6	71.0	72.5	71.4	67.1	69.2	2.1
<b>BRAZIL</b>	33.2	31.6	34.8	35.4	32.6	31.0	32.0	1.0

Source: Worldsteel.org, Tarraco Commodities Solutions analysis

## Pig iron/ Crude steel ratio (x)

	2015	2016	2017	2018	2019	2020	2021F
<b>WORLD</b>	0.71	0.72	0.68	0.69	0.69	0.69	0.69
<b>CHINA</b>	0.86	0.87	0.82	0.83	0.81	0.84	0.84
<b>EU</b>	0.56	0.56	0.55	0.54	0.54	0.54	0.54
<b>USA</b>	0.32	0.28	0.27	0.28	0.25	0.27	0.27
<b>INDIA</b>	0.66	0.67	0.66	0.66	0.67	0.67	0.67
<b>JAPAN</b>	0.77	0.77	0.75	0.74	0.75	0.75	0.75
<b>RUSSIA</b>	0.74	0.74	0.73	0.72	0.71	0.71	0.71
<b>SOUTH KOREA</b>	0.68	0.67	0.66	0.65	0.67	0.66	0.66
<b>BRAZIL</b>	0.84	0.83	0.82	0.81	0.81	0.81	0.81

Source: Worldsteel.org, Tarraco Commodities Solutions analysis

## Pig iron production (million tonnes)

	2015	2016	2017	2018	2019	2020	2021F	Δ2021-2020
<b>WORLD</b>	1,160.5	1,173.5	1,186.1	1,252.8	1,282.0	1,262.7	1,304.3	41.7
<b>CHINA</b>	691.4	702.3	713.6	771.1	809.4	887.5	893.6	6.1
<b>EU</b>	93.6	91.3	93.2	90.8	85.7	75.5	83.5	7.9
<b>USA</b>	25.4	22.3	22.4	24.1	22.3	19.3	21.3	1.9
<b>INDIA</b>	58.4	63.7	66.8	72.6	74.2	66.2	78.5	12.2
<b>JAPAN</b>	81.1	80.2	78.3	77.3	74.9	62.2	66.4	4.2
<b>RUSSIA</b>	52.6	51.9	52.0	51.7	50.7	52.2	54.8	2.6
<b>SOUTH KOREA</b>	47.6	46.3	47.1	47.1	47.5	44.1	45.5	1.4
<b>BRAZIL</b>	28.0	26.3	28.6	28.7	26.3	25.0	25.8	0.8

Source: Worldsteel.org, Tarraco Commodities Solutions analysis

### Outlook for iron ore demand

Demand growth in the iron ore seaborne market will be led mainly by Europe, Japan and South Korea as China growth will be eased.

- China iron ore demand growth will be less than 1% or 0.7% Y-o-Y, 9.7Mt additional in line with pig iron growth.
- India iron ore demand growth will be at 19.6% Y-o-Y or 19.6Mt additional in 2021 driven by higher production of integrated steel mills.
- Europe integrated steel mills will demand additional 12.7Mt or 10.5% Y-o-Y growth in 2021 as more blast furnace are re-ignited and capacity utilization increase.

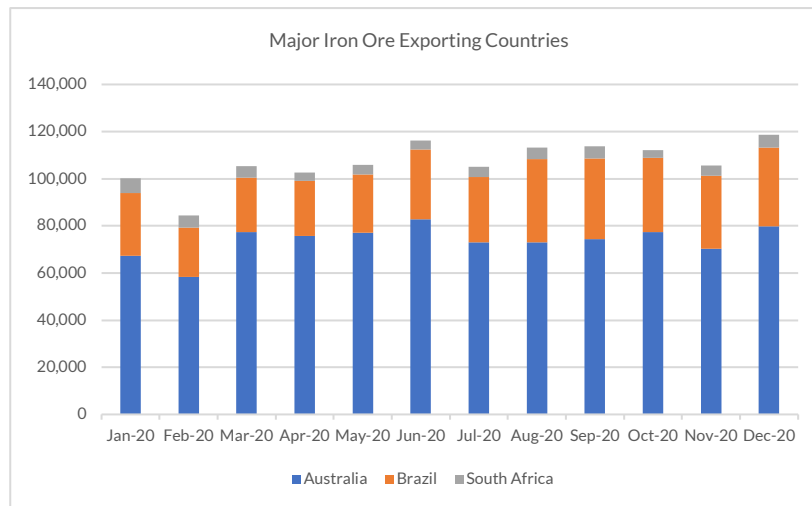
Iron ore demand (million tonnes)

	2015	2016	2017	2018	2019	2020	2021F	Δ2021-2020
<b>WORLD</b>	1,856.8	1,877.6	1,897.8	2,004.5	2,051.2	2,020.3	2,086.9	66.7
<b>CHINA</b>	1,106.2	1,123.7	1,141.8	1,233.8	1,295.0	1,420.0	1,429.7	9.7
<b>EU</b>	149.8	146.1	149.1	145.3	137.1	120.8	133.5	12.7
<b>USA</b>	40.6	35.7	35.8	38.6	35.7	31.0	34.1	3.1
<b>INDIA</b>	93.4	101.9	106.9	116.2	118.7	106.0	125.6	19.6
<b>JAPAN</b>	129.8	128.3	125.3	123.7	119.8	99.5	106.2	6.7
<b>RUSSIA</b>	84.2	83.0	83.2	82.7	81.1	83.5	87.7	4.2
<b>SOUTH KOREA</b>	76.2	74.1	75.4	75.4	76.0	70.6	72.8	2.3
<b>BRAZIL</b>	44.8	42.1	45.8	45.9	42.1	40.1	41.4	1.3

*Source: Worldsteel.org, Tarraco Commodities Solutions analysis*

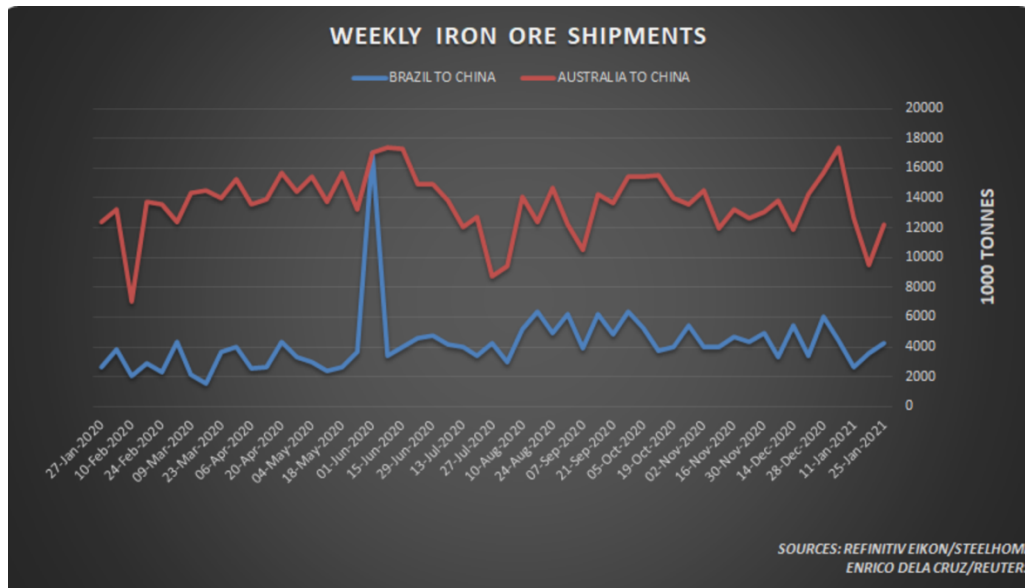
### **Raw materials supply**

In 2020, global iron ore demand achieved 2,087Mt or 1.5% Y-o-Y drop comparing to 2019. China was only the one of the few countries with positive iron ore demand growth in 2020, 9.6% Y-o-Y or additional demand of 124.Mt, which is another typical Japanese demand in good old times. In order to fulfil this massive demand growth, China has imported 1,170Mt of iron ore and the balance 250Mt was supplied internally from Chinese iron ore concentrates with some buffers of around 150Mt on inventories at Chinese ports and at the steel mills.

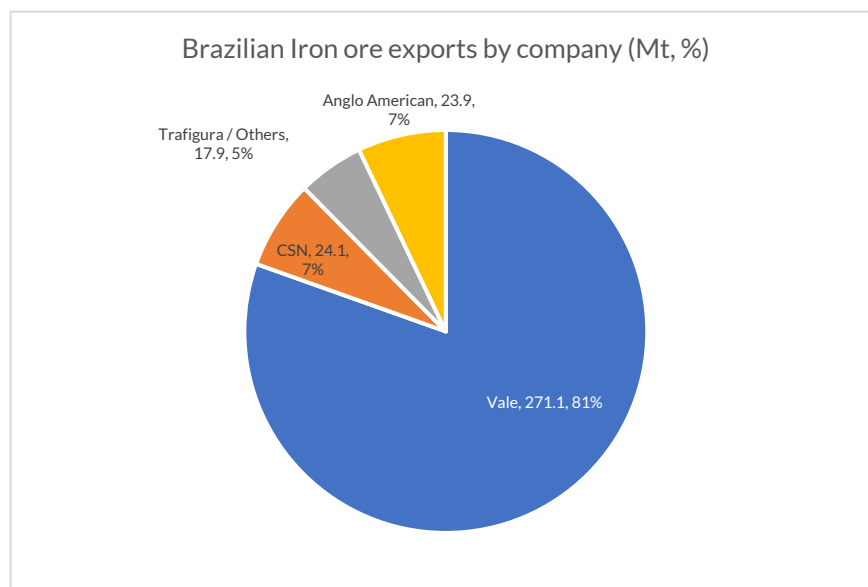


*Source: Refinitiv Eikon, Tarraco Commodities Solutions analysis*

19. Australia iron ore exports achieved 886.5Mt in 2020, 5.7% Y-o-Y or additional 47.8Mt driven by efficiency gains from BHP, Rio Tinto, FMG and Roy Hill production that was delivered mainly to China as demand soared.
20. Brazilian iron ore exports were almost flattish at 337.4Mt or 0.4% Y-o-Y growth still suffering by Vale’s performance and weak Q12020 due to seasonal wet season in North and Southeast region. Brazil exported amazingly 77.3% share of iron ore to China in 2020.



Source: Refinitiv Eikon



Source: LBH, Tarraco Commodities Solutions analysis

### **China iron ore supply and demand**

According to Chinese government planning, the top ten steel groups will account for no less than 60% of China’s crude steel output by 2025, with the goal to be competitive globally. The key to the integration is private steel companies as they currently account for 63% of the country’s crude steel output.

- a) Tight run-of-mine supply due to mine closures meant that domestic concentrate prices remained high. High operating rates at mills meant that domestic concentrates remained cost-effective vis-à-vis imported iron ore. Prices did dip towards the end of December due to larger macro-economic fears on the escalating COVID situation and a large cold-front hitting China.
- b) Strong profit margins of upward 300 yuan/mt for blast furnace and EAF producers meant that despite strong iron ore prices, steel mills remained incentivised to keep production high.

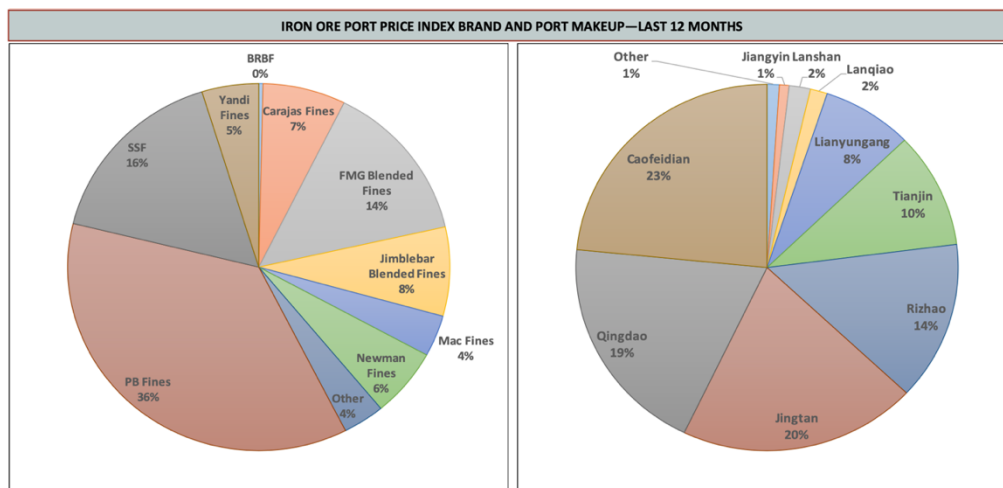


- c) The anticipation of stricter pollution controls meant that lump and pellet premiums have enjoyed somewhat better prices of late, with inventory levels at the ports running lower on the increased demand.
- d) Vale shifted some fines production away from IOCJ and into BRBF.

**Demand by quality and source**

Demand for low-grade iron ore has been weak due to increasing coke prices, mills preferring medium-grade products. As such, inventory levels of low-grade iron ore have been growing at the domestic Chinese ports.

- a) Port inventories overall have grown due to limited deliveries in Shandong and Tangshan provinces due to rain and snow. Steel mills are likely to increase purchases after the Chinese New Year holiday as the impact from inclement weather weakens, allowing deliveries to rise.
- b) Stockpiling for the Chinese New Year holiday will mean that inventory levels medium-grade iron ore products may come under pressure despite the increased shipments from Australia in the second half of December.



Source: MMi Iron Ore Index Review 2020

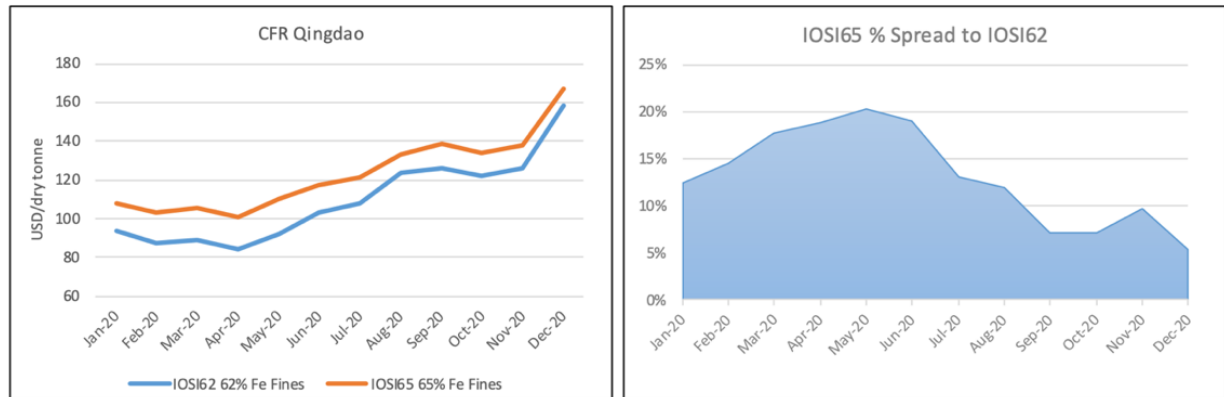
**Prices**

Iron ore prices jumped more than 68% in 2020 driven by strong Chinese demand and shortages of supply from Brazil. Iron prices for average 62% Fe content closed 2020 at US\$160/dmt with annual average at US\$110/dmt. This is the most required iron ore quality for integrated steel mills and used for base sinter mix.

- a) Iron ore 62% Fe prices are mostly driven by Australian iron ores, Rio Tinto Pilbara Fines, FMG SSF as well as new Vale BRBF blended fines.
- b) Iron ore 65% Fe grades have spectacular performance due to shortage of reduction of Vale IOCJ and strong demand for high grade materials was mills shifted from cost to productivity mode and additional Fe units boost pig iron production and consequently steel production.
- c) The price difference peaked around 20% between 65% grade to 62% grade in March and dropping to 5% in December 2020.

**IRON ORE SEABORNE PRICE INDEX MONTHLY AVERAGES**

		CFR Qingdao, USD/dry tonne													
Index	Fe Content	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	2020	
IOSI62	62% Fe Fines	93.85	87.46	88.60	83.89	92.47	103.49	108.23	124.02	126.26	122.16	126.25	158.24	110.01	
IOSI65	65% Fe Fines	107.56	102.94	105.31	100.97	110.12	117.06	121.21	132.95	138.39	133.94	137.65	166.75	123.28	



Source: MMI Iron Ore Index Review 2020

**Outlook iron ore prices in 2021**

We believe prices will drop in 2021 from US\$160/dmt in December 2020 and average 2020 at US\$ 110/dmt to finish 2021 at around US\$120/dmt, a US\$40/drop or average US\$140/dmt for 62% Fe content and US\$15/dmt premium for high grade iron ore (65%) to reach US\$155/dmt average due to:

21. Chinese marginal iron ore demand growth that we estimate at around 1% Y-o-Y or additional 10Mt.
22. Rest of the World iron ore seaborne demand increase will be around 25Mt only.
23. Supply is catching up with volume coming back from Brazil, marginal additions from Australia, swing producers that are induced at this price level.

YEAR/PRODUCER	VALE	RIO TINTO <sup>1</sup>	BHP <sup>2</sup>	FMG	ANGLO AMERICAN	CSN
2020E	300	330	250	177	66	33
2021F	325	333	280	180	67	39

<sup>1</sup>Rio Tinto Pilbara operations only. IOC accounts for accounts for around 11Mt.

<sup>2</sup> BHP and FMG release financial and production reports & guidance in line with Australian fiscal year or Jul

Source: Companies presentation, Tarraco Commodities Solutions analysis

**Betting in winning horses**

Considering a possible scenario of price decrease from January to December 2021, but with a higher average price than 2020, we hereby prefer always companies with a good combination of leavers:

24. High volumes
25. Low CFR China costs
26. High quality blends
27. High realized prices
28. High margins
29. Low performance & ESG risks

Ranking by criteria above using 2021 estimates:

ITEM/PRODUCER	VALE	BHP <sup>(1)</sup>	FMG	RIO TINTO <sup>(2)</sup>	ANGLO AMERICAN	CSN
VOLUME (MTPY)	325	280	180	333	58	39
C1 COST (US\$/WMT)	13.60	12.00	13.00	14.50	28.41	16.00
AVERAGE FREIGHT TO CHINA (US\$/WMT)	12.50	8.00	8.00	8.00	12.50	14.00
CFR CHINA COST (US\$/DMT)	28.68	21.97	23.07	24.72	43.06	31.91
AVERAGE FE (%)	64.00	62.00	62.00	62.00	65.30	62.00
REALIZED PRICE (US\$/DMT)	150.00	140.00	140.00	140.00	156.00	140.00
SALES MARGIN	<b>121.32</b>	<b>118.03</b>	<b>116.93</b>	<b>115.28</b>	<b>113.00</b>	<b>108.09</b>
RISKS	LOW	LOW	LOW	LOW	MID	MID

*Source: Companies reports and Tarraco Commodities Solutions analysis*

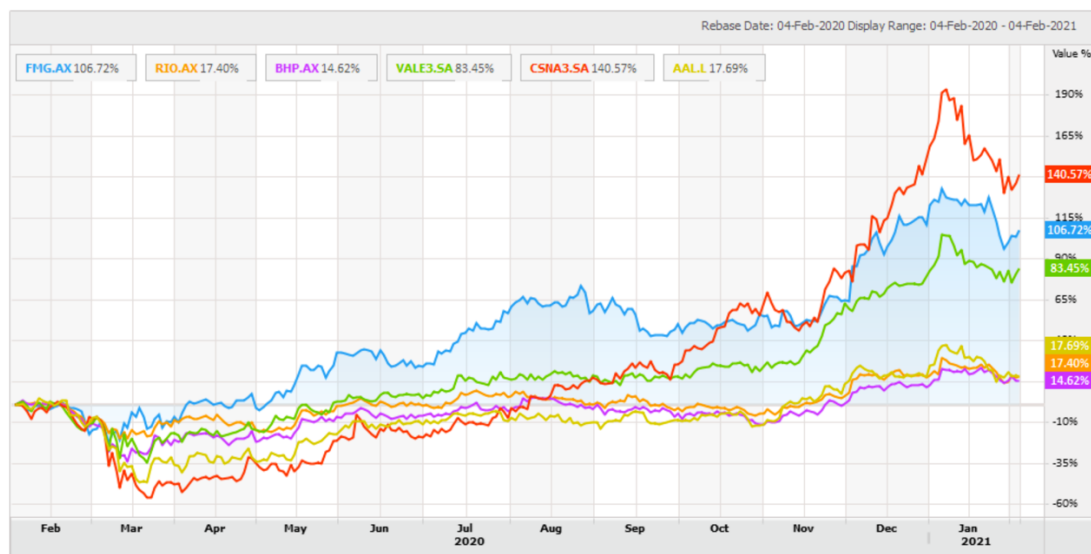
- (1) Rio Tinto number account only of WA operations.
- (2) BHP numbers are annualised and refers to FY2020 – July to June period.

Financial ratios market consensus estimates – FY2021:

ITEM/PRODUCER	FMG (FMG.AX)	VALE (VALE3.SA)	ANGLO AMERICAN (AAL.L)	RIO TINTO <sup>1</sup> (RIO.L)	BHP <sup>2</sup> (BHPB.L)	CSN (CSNA3.SA)	AVERAGE
EV/REVENUES	2.97	2.12	1.69	2.68	3.41	2.25	2.52
EV/EBITDA	4.20	3.62	4.18	4.87	5.89	6.19	4.83
EV/EBIT	5.02	4.03	5.23	5.73	7.44	7.75	5.87
PE	N/A	5.32	7.83	8.34	10.32	11.06	8.57
DIVIDEND YIELD	10.75	7.80	5.08	7.82	6.47	1.12	6.51
FCF YIELD	10.68	N/A	19.67	9.08	9.13	N/A	12.14
P/B	N/A	1.79	1.47	2.53	2.73	3.85	2.47
ROE	49.14	33.5	18.61	31.66	26.00	50.69	34.93

*Source: Eikon estimates*

Companies shares performance – 1Y:



*Source: Eikon*

## Recommendation

- 30 VALE is our top ranked company** for a local and international exposure in iron ore and nickel therefore we recommend an **Overweight allocation on (VALE.SA) shares with TP of R\$ 119.13<sup>3</sup> or 33% upside potential due to attractive multiples and improving on qualitative criteria dropping from Medium to Low Risk on Performance & ESG criteria** as last week the company has reached an agreement with Minas Gerais Attorney General and State on paying US\$7 billion in fines for Brumadinho tailing dam burst case.
31. Considering all criteria abovementioned that include financial (quantitative) and risk (qualitative), we hereby recommend an **Overweight allocation on FMG (FMG.AX) shares with TP of AU\$ 26.53<sup>4</sup> or 15% upside potential for a pure play exposure to iron ore fundamentals in the international market.**

## Risks

The main risk for our recommendation is vaccines roll-out is behind the schedule and another wave of infection could hit countries and damaging more the economies, whether this happens we can see a W-Shape or double dip recovery in the world that might impact steel production, iron ore consumption and eroding iron ore price average to below estimate.

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<sup>3</sup> Target Price based on EV/EBITDA multiple using market average as reference.

<sup>4</sup> Target Price based on EV/EBITDA multiple using market average as reference.

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