

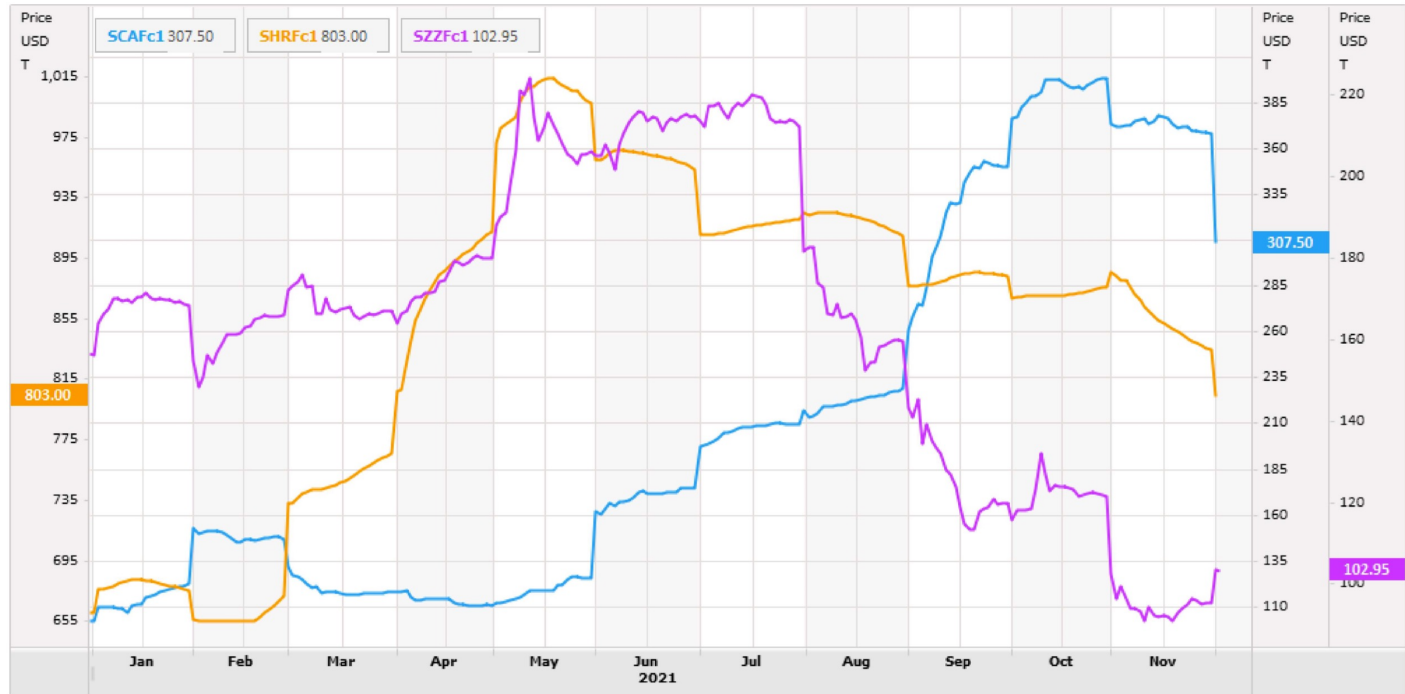
# MINING: IRON ORE IN THE TIGER YEAR

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GLOBAL INSIGHT 2022 – 2 DECEMBER 2021

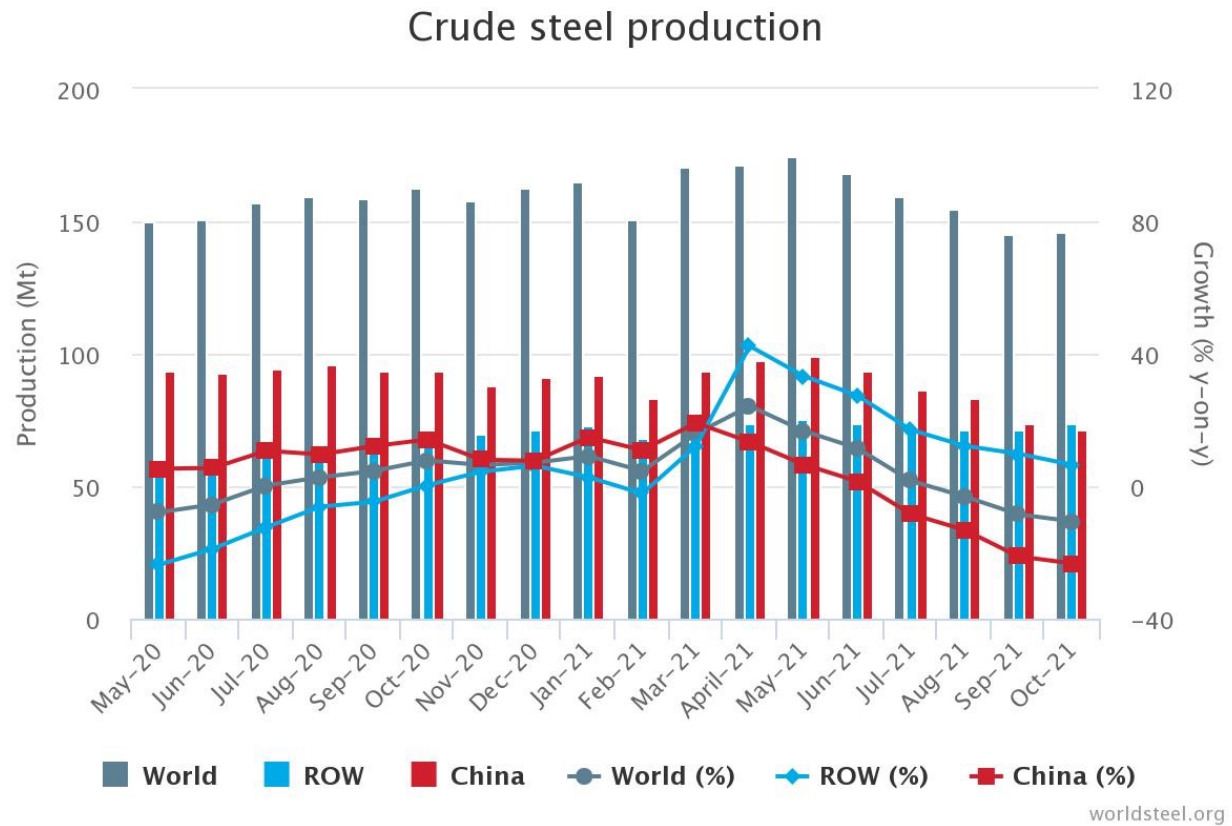


# The Roller Coster Year



Source: Refinitiv

**It's all about  
China in the  
steelmaking  
industry**



Sources: Worldsteel.org

## The heavy-hand of the Chinese Government

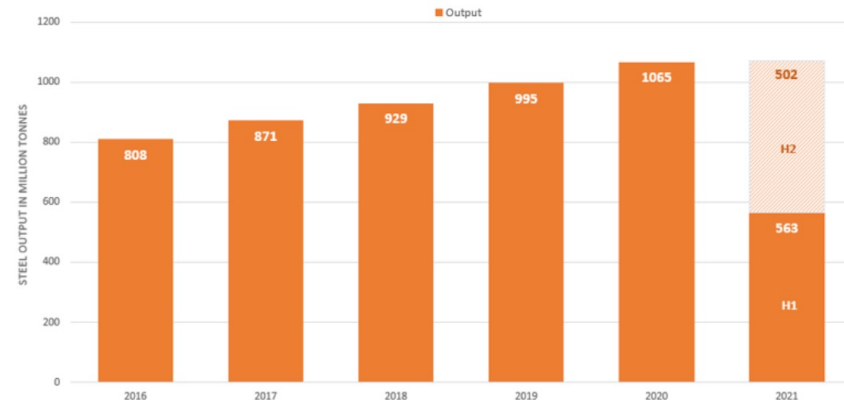
The Chinese government ordered steel makers to ensure that annual steel production in 2021 remained on an equal footing with 2020 levels.

Between July and December, China's crude steel production is expected to decline by 59 Mt, or 11% in the year, to 502 Mt, based on data from the National Bureau of Statistics.

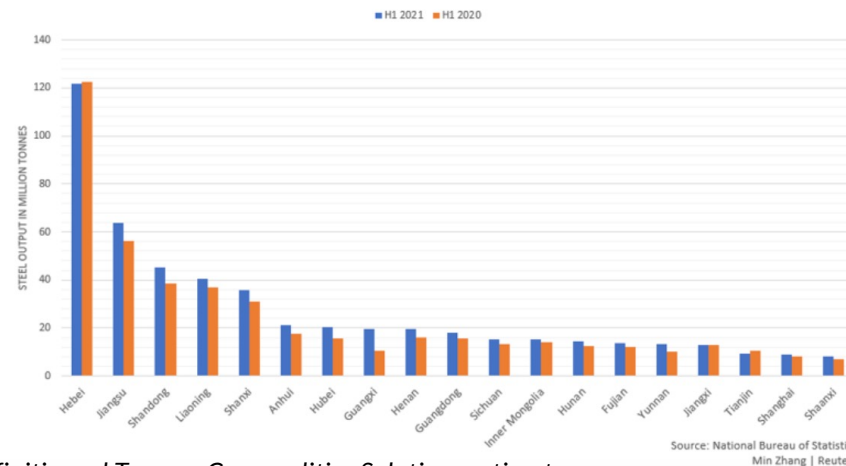
Chinese domestic demand is likely to decline in the second half annually as well, but the decline could be marginal as the government began to boost consumption and was also expected to accelerate infrastructure construction.

As a result, there would be a shortage of at least 20 million to 30 Mt of steel (32-48Mt) in the domestic market in the second half of the year if China successfully maintains its 2021 annual production at the level seen in 2020.

CHINA'S ANNUAL CRUDE STEEL OUTPUT IN 2016-2021



CHINA'S PROVINCIAL CRUDE STEEL OUTPUT FOR H1 IN 2020-2021



Source: National Bureau of Statistics  
Min Zhang | Reuters

Sources: Companies, Refinitiv and Tarraco Commodities Solutions estimates

## 2022 LOOKS POSITIVE...

- There is already a concern within the Chinese Government about this cooling of the economy and some kind of economic stimulus is expected after discussions with provincial councillors.
- The infrastructure and manufacturing sectors are expected to gain traction in 2022 and steel production is expected to accelerate after the Beijing Olympics in late February 2022.
- In addition, at the end of 2022 there will be an important Meeting of politburo to define the new leader or lead the current leader Mr. Xi which traditionally should show strong growth.

**” People displaced by flooding should be resettled and supported ASAP”**

Trívium  
China

**”Financial institutions must use last month’s reserve requirement ratio cut to help small firms.”**

Trívium  
China

**“Inflation will be tackled by increasing domestic production and strengthening supervision of key commodities.”**

Trívium  
China

**” Local governments should promote the recovery of consumption and use special purpose bonds to expand investment.”**

Trívium  
China

## THE WINNING HORSES

- Considering a possible Vale guidance scenario where prices can vary in the range between \$90 to 120 per metric ton, we made a ranking based on:
- High volumes
- Low cost CFR China
- High quality content
- High realized prices
- High margins
- Low Risks & ESG
- 

## Peak scenario @ USD 120/dmt to Fe 62%

| ITEM/MINER                               | 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)                       | 17.00        | 14.00              | 15.00        | 15.00                    | 29.00          | 16.00        |
| AVERAGE FREIGHT COST TO CHINA (US\$/WMT) | 20.00        | 12.00              | 14.00        | 12.00                    | 20.00          | 22.00        |
| CFR COST CHINA (US\$/DMT)                | 37.00        | 26.00              | 29.00        | 27.00                    | 49.00          | 38.00        |
| AVERAG FE (%)                            | 64.00        | 62.00              | 62.00        | 62.00                    | 65.30          | 62.00        |
| AVERAGE REALIZED PRICE (US\$/DMT)        | 130.00       | 120.00             | 120.00       | 120.00                   | 136.50         | 120.00       |
| SALES MARGIN                             | <u>93.00</u> | <u>94.00</u>       | <u>91.00</u> | <u>93.00</u>             | <u>87.50</u>   | <u>82.00</u> |
| RISK                                     | LOW          | LOW                | LOW          | LOW                      | MID            | MID          |

(1) Rio Tinto number account only of WA operations.

(2) BHP numbers are annualised and refers to FY2020 – July to June period.

Sources: Companies, Refinitiv and Tarraco Commodities Solutions estimates

**Vale**  
**is heavily**  
**discounted**

## Financial estimates for 2022

| ITEM/MINER     | VALE3.SA | BHP.AX <sup>(1)</sup> | FMG.AX | RIO.L <sup>(2)</sup> | AAL.L | CMIN3.SA | MÉDIA |
|----------------|----------|-----------------------|--------|----------------------|-------|----------|-------|
| EV/REVENUES    | 1.26     | 2.45                  | 2.32   | 2.07                 | 1.65  | 1.49     | 1.87  |
| EV/EBITDA      | 2.1      | 4.02                  | 3.93   | 2.78                 | 3.91  | 2.92     | 3.28  |
| PE             | 2.92     | 7.69                  | 7.13   | 4.66                 | 5.27  | 7.15     | 5.80  |
| DIVIDEND YIELD | 21.74    | 9.87                  | 11.11  | 16.65                | 9.87  | 8.76     | 13.00 |
| FCF YIELD      | N/A      | 32.53                 | 11.72  | 11.99                | 18.89 | -3.41    | 14.34 |
| ROE            | 55.14    | 35.63                 | 31.46  | 42.85                | 30.35 | 27.4     | 37.14 |

(1) BHP - FY2022

(2) Rio Tinto - FY2022

Sources: Companies, Refinitiv and Tarraco Commodities Solutions estimates

# Tarraco Commodities Solutions

Tarraco Commodities Solutions is a boutique commodity consultancy empowered to offer complete solutions to companies across the commodity market value chain

We are focused on 4 major pillars:

Market and financial analysis to support investment or trading decision-making

Formulation and execution of market strategies

Technical Marketing

Procurement



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