

Iron Ore Futures Weekly Report

(Near term: Bullish)

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Market Outlook and Trading Advice:

Iron ore i2009 in the completion of the previous high and the breakthrough of yearly line last week, the upside space was completely opened, this week began to accelerate the upward mode, at one stroke broke through the 700 mark and was high from 730 above, the rise is extremely sharp, driving the whole black sector appeared collective strength. From the fundamental point of view, iron ore is still continuing to improve, downstream raw material destock is still maintaining a fast speed, long process steel mills to further increase output, the average daily production of molten iron increased 26,700 tons to 2.409 million tons, continue to set a new record. The strong demand side makes the departing port volume continue to be strong, with a weekly increase of 75,300 tons to 3.0814 million tons this week. The port inventory further fell to below 11,000 tons, which is in an absolute low position right now. The recent rapid rise in the furnace material price makes the profit margin of steel mills further narrow. In addition, the approaching of the rainy season in south China, it is expected that the demand side will gradually weaken the upward drive of iron ore price. In terms of supply, the shipment of foreign mines was still sluggish, but the decline was further narrowed. The reduction is mainly contributed by Brazilian mines, and the shipment of Australian mines begins to recover. The weekly increase was 543,000, among which the shipment to China was increased of 716,000 tons to 13.956 million tons. With the end of the maintenance, the subsequent shipment volume of Australian mine will gradually increase, and the current tight supply of iron ore will be eased. In general, the resilience of iron ore supply and demand will continue in the short term, but from the perspective of valuation, the current iron ore price has been in a state of overvaluation.

Overall, the short-term market sentiment will still be relatively strong, and the volatility will be further increased, so we recommend the option strategy of buy straddle.

1. Iron Ore Market Review

As of May 22, platts 62%Fe was quoted at 96.85 USD per dry ton, a sharp increase of 3.86% from the previous week. The prices of imported ore varieties also continued to rise generally this week. In terms of Australian mine, different from the sustained strengthening of medium and high quality premium Australian ore, the price increase of medium and low quality Australian fines is more obvious. Specifically, the premium level of PB fines compared with JMBF and SS fines declined in this week. The profit level of steel mills fell when the cost of raw materials rose sharply, which reduced the acceptance of premium of high-quality ore. The overall price of Brazilian mines was still lower than the Australian mines, among which Carajas fines is the weakest variety in the imported mainstream mines. Because of the current tight supply situation. This is a departure from the current situation where supply is still tight. Mainly because of the substitution effect of domestic high grade and low aluminum refined fines still continues. Steel mills to domestic mine procurement strength has been further strengthened this week, the domestic fine price continued the momentum of strong rise. Specifically, Hebei Hanxing and Wuan area of fine price rise in front, mainly because the local supply is very tight. The increase in Tangshan area was significantly smaller, mainly because local steel mills favored more cost-effective lump ore, reducing the consumption of domestic refined fines. Iron fines resources are also in short supply in northeast China. Steel mills began to raise prices due to the better cost performance compared with imported ore. The current tight supply situation may ease with the completion of some local mine maintenance next week, but steel mill output and profit level will remain resilient in the short term, and the price of domestic refined fines in northeast China is expected to remain firm.

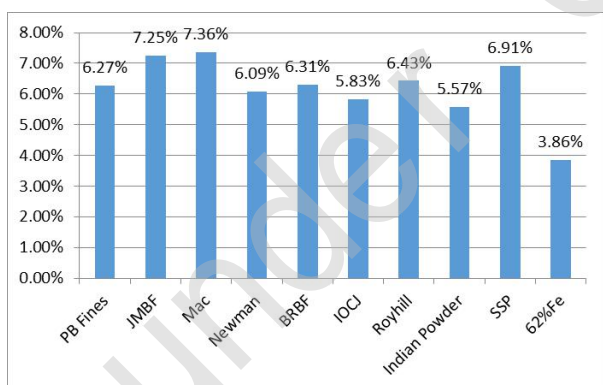


Chart: Up or down of weekly offshore ore prices
Source: Mysteel, Founder CIFCO Futures

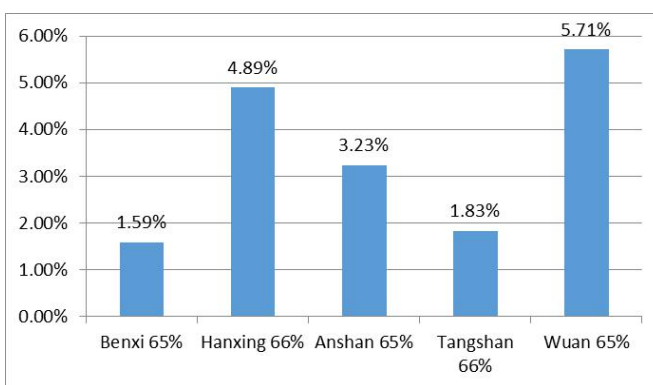


Chart: Up or down of weekly onshore ore prices

	Onshore Ore Prices						Royhill	Indian Powder	SSP
	PB Fines	JMBF	Mac	Newman	BRBF	IOCI			
2020/5/18	686.0	621.0	666.0	706.0	745.0	840.0	669.0	646.0	550.0
2020/5/25	729.0	666.0	715.0	749.0	792.0	889.0	712.0	682.0	588.0
Weekly Up or Down	43.0	45.0	49.0	43.0	47.0	49.0	43.0	36.0	38.0
	6.27%	7.25%	7.36%	6.09%	6.31%	5.83%	6.43%	5.57%	6.91%

Chart: Weekly offshore ore prices in Rizhao port

Source: Mysteel, Founder CIFCO Futures

Onshore Ore Prices					
	Benxi 65%	Hanxing 66%	Anshan 65%	Tangshan 66%	Wuan 65%
2020/5/18	630.0	797.0	620.0	657.0	700.0
2020/5/25	640.0	836.0	640.0	669.0	740.0
Weekly Up or Down	10.0	39.0	20.0	12.0	40.0
	1.59%	4.89%	3.23%	1.83%	5.71%

Chart: Weekly onshore ore prices

Source: Mysteel, Founder CIFCO Futures

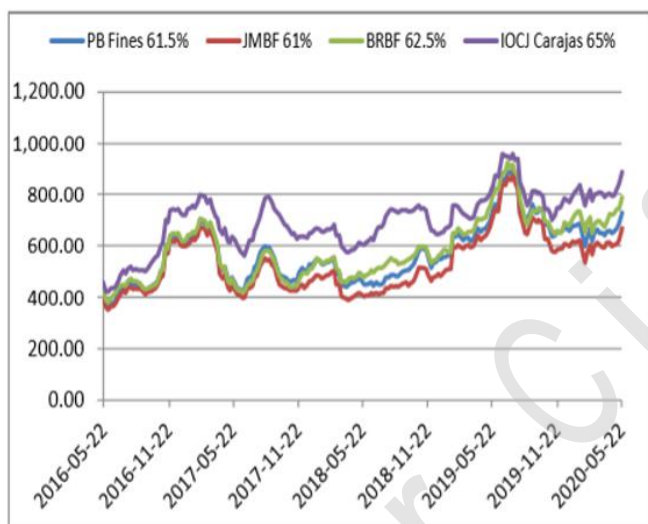


Chart: Medium and high-grade iron ore spot price

Source: Mysteel, Founder CIFCO Futures

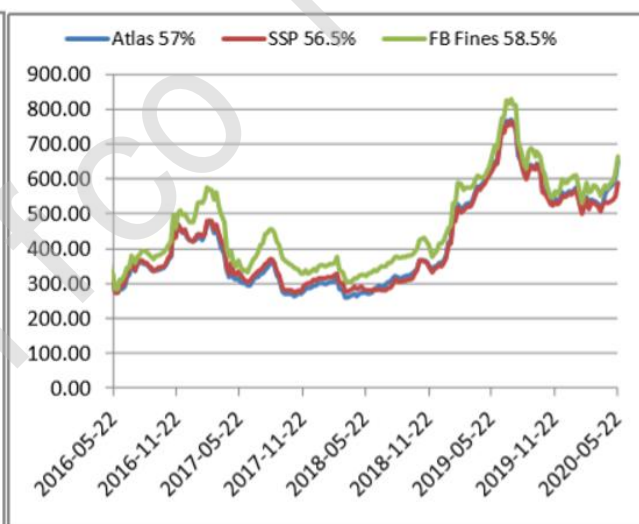


Chart: Low-grade iron ore spot price

In futures market, I2009 and I2101 prices have increased significantly this week, the pattern showed the near month contracts were stronger than forward month contracts. After the delivery of the i2005 this week, the i2105 contract was listed, with the future price significantly discounted than spot price, and the market was still relatively pessimistic about the trend of the forward month. From the trading volume perspective, the i2009 and i2101 have significantly increased, among which the forward month contract growth is more obvious, about twice the main contract. In terms of open interest, the near and forward month contracts also

increased positions to different degrees, among which the extended positions of the forward month contracts were significantly larger than the near month contracts. In general, the market showed an increase in the trading volume with the ideal momentum and price combination, the market enter into a bullish mood.

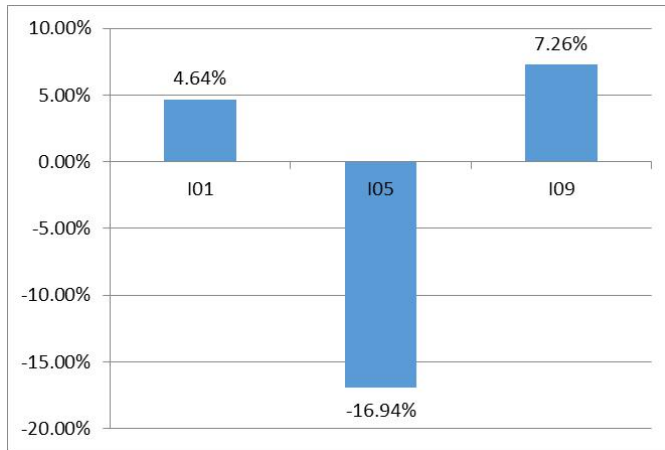


Chart: Up or down of weekly futures prices

Source: Wind, Founder CIFCO Futures

Contract	O pen	C lose	Settle	Chg	Vo l (10,000 lots)	Vo lChg	Turnover (10,000 RMB)	O I (10,000 lots)	O IChg
105	729	605.5	614.5	-16.94%	3.1	1222.75%	189863.4	0.8	59.74%
1009	668	716.5	723	7.26%	605	40.32%	42775363.2	91	4.76%
101	614.5	643	653	4.64%	39.03	79.59%	2505015.4	12.88	31.00%

Chart: Weekly data of iron ore futures

Source: Wind, Founder CIFCO Futures



Chart: Technical chart of i2005

Source: Wind, Founder CIFCO Futures



Chart: Price of contract 05 and price forecast

Source: Wind, Founder CIFCO Futures

II. Basis and Spread

The i2009 is slightly stronger than the spot price this week, the basis of the forward month contracts have been strengthened to varying degrees. As of May 22, the basis difference of the i2009 contract was 86.9 RMB/ton, a slight decrease of 1.8 RMB/ton from last week. After the completion of the i2005, the newly listed i2105 brought the basis difference of the i2005 back to around 200. In terms of price difference between varieties, the Carajas and PB fines increased slightly by 6 RMB/ton to 160 RMB/ton. The PB fines and JMBF was decreasing by 2 RMB/ton to 63 RMB/ton. The PB fines and SS Fines was increasing by 5 RMB/ton to 141 RMB/ton. In general, PB's premium weakened this week. As of the end of this week, the 09-01 contract spread was 73.5 RMB/ton to 20 RMB/ton. The trend of near month contracts was stronger than forward month contracts became more obvious.



Chart: Spread of contract 09 and 01

Source: Wind, Founder CIFCO Futures



Chart: Spread of contract 05 and 09

Source: Wind, Founder CIFCO Futures

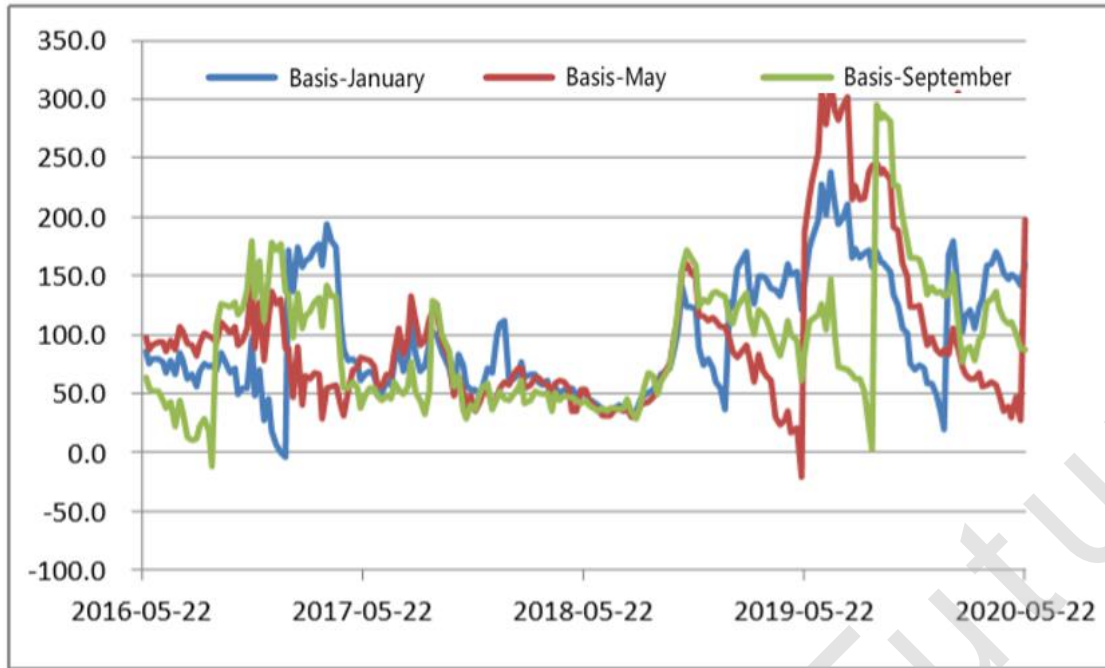
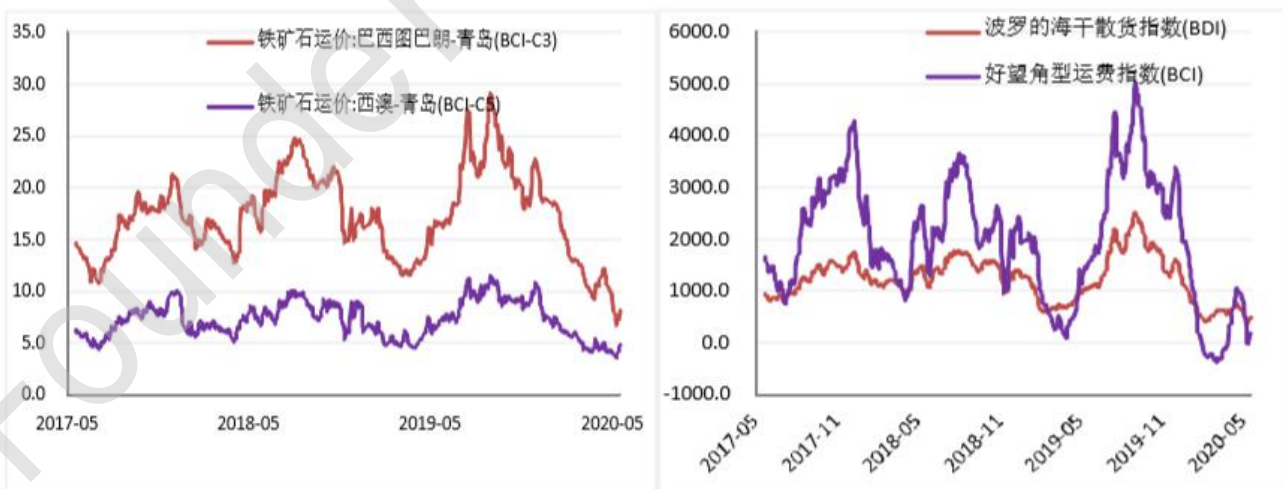


Chart: Basis of spot iron ore (PB fines 61.5%) in Rizhao port
 Source: Wind, Founder CIFCO Futures

III. Shipping Market Review

After the previous continuous decline, BDI and BCI hit the bottom and rebounded this week. As of May 21, BDI was at 494, up 103 (25.70%). BCI also turned from negative to positive this week, up 228 to 180. Freight prices are rising this week. As of May 21, the freight from Tubalang to Qingdao was 8.1 USD/ton, up 1.40 USD/ton (21.21%) on a weekly basis. Freight from western Australia to Qingdao was quoted at 4.80 USD ton, up 1.20 USD/ton (31.84%) from the previous week.

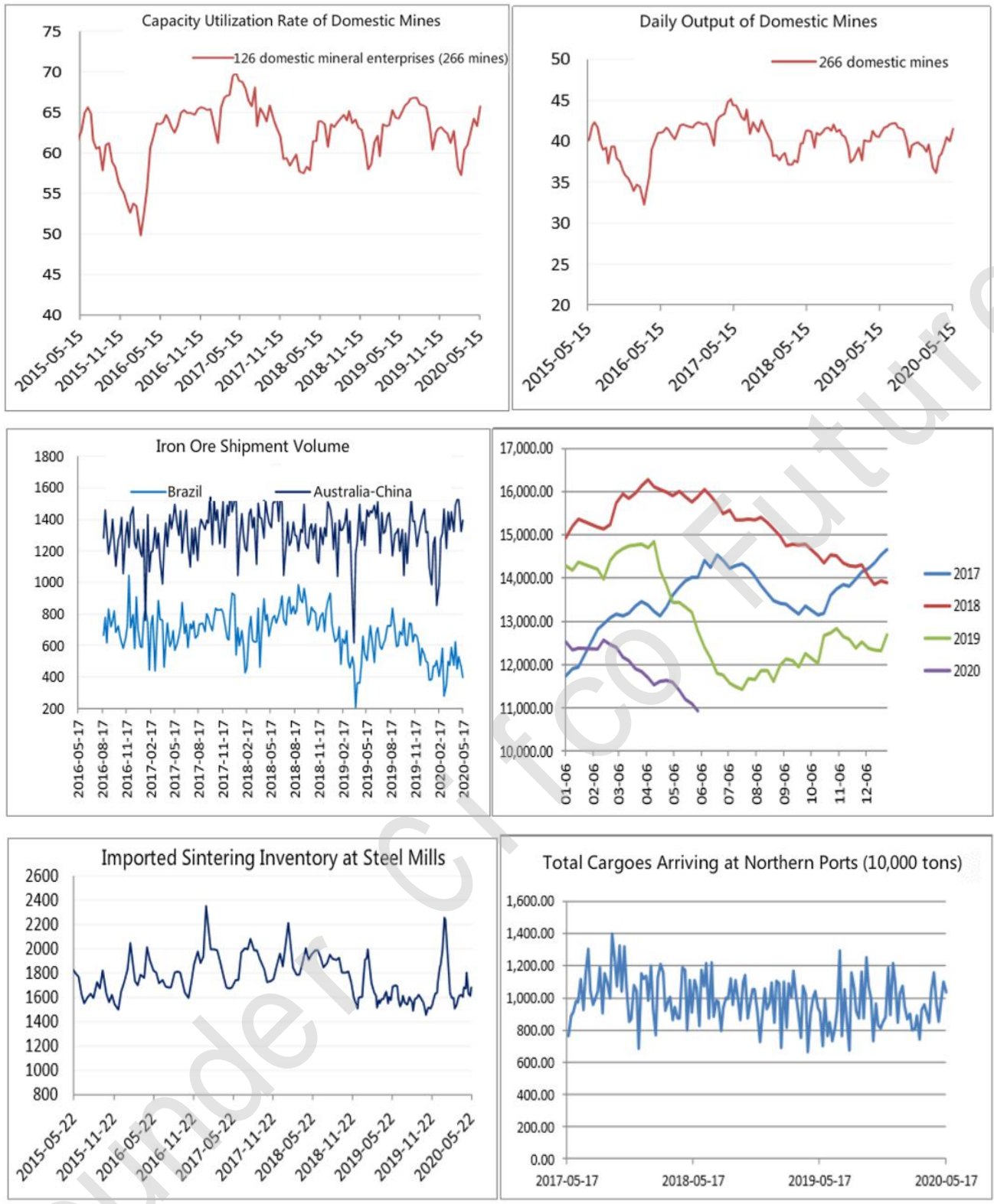


Source: Wind, Founder CIFCO Futures

IV. Supply

After a short period of decline before the May holiday, the supply of domestic mines returned to the upward trend after the holiday. The latest data (May 15) showed that the operating rate of 126 mining enterprises in China was 65.77% in the current period, 2.46% higher than that before the festival. The average daily output of domestic mines in the latest period was 415,000 tons, an increase of 15,600 tons/day on a month-on-month basis. In terms of foreign mining, the total shipment volume of Australian Brazil mines was decreased by 133,000 tons to 19.823 million tons. Shipments from Australian mines began to recover, with an increase of 543,000 tons to 15.881 million tons, including an increase of 716,000 tons to 13.956 million tons to China. Shipments from Brazilian mines remained sluggish, missing market expectations, falling another 676,000 tons to 3.942 million tons in the period. The latest phase of outbound mine arrivals at the northern port was 10.37 million tons, down 620,000 tons from the previous month. As of May 22, the imported mine inventory of 45 ports in China was 109.2608 million tons, decreasing by 1.6882 million tons. The inventory of Australia mine was 63.03 million tons, decreasing by 921.9 million tons. The inventory of Brazil mine was 21.8985 million tons, decreasing by 695,000 tons. The inventory of trade mine was 53.08 million tons, decreasing by 811,700 tons, and the pellet increased by 117,400 tons to 6.57 million tons. The lump mine increased by 96,900 tons to 20.8004 million tons, and the refined fines increased by 457,000 tons to 6.5419 million tons.

In terms of the inventory of steel mills, the total inventory of imported sintering fines of 64 sample steel mills was 16.788,500 tons with a weekly increase of 655,300 tons.

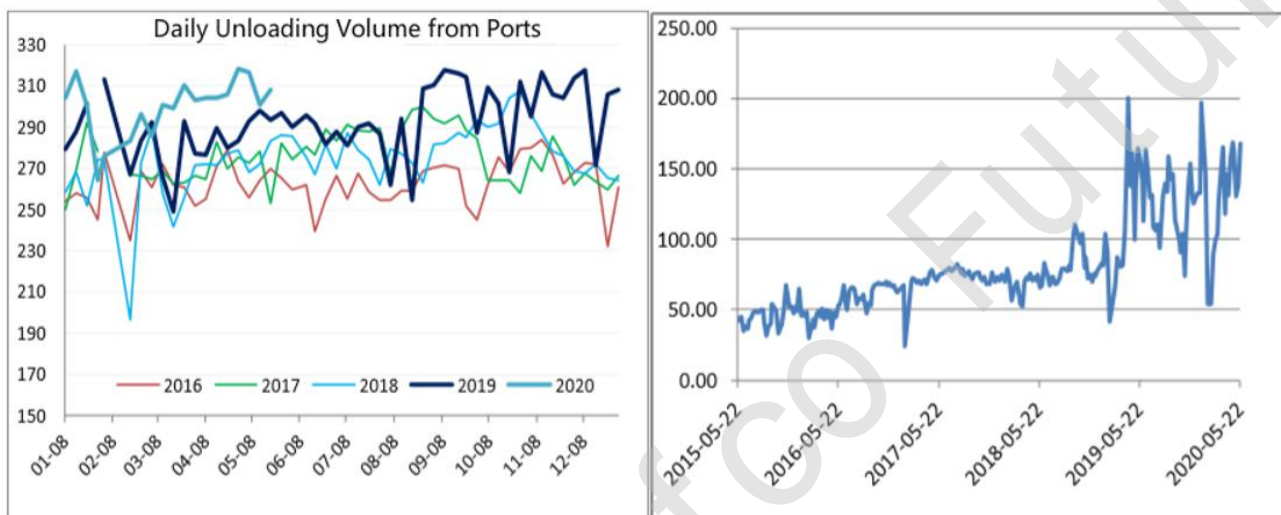


Source: Wind, Founder CIFCO Futures

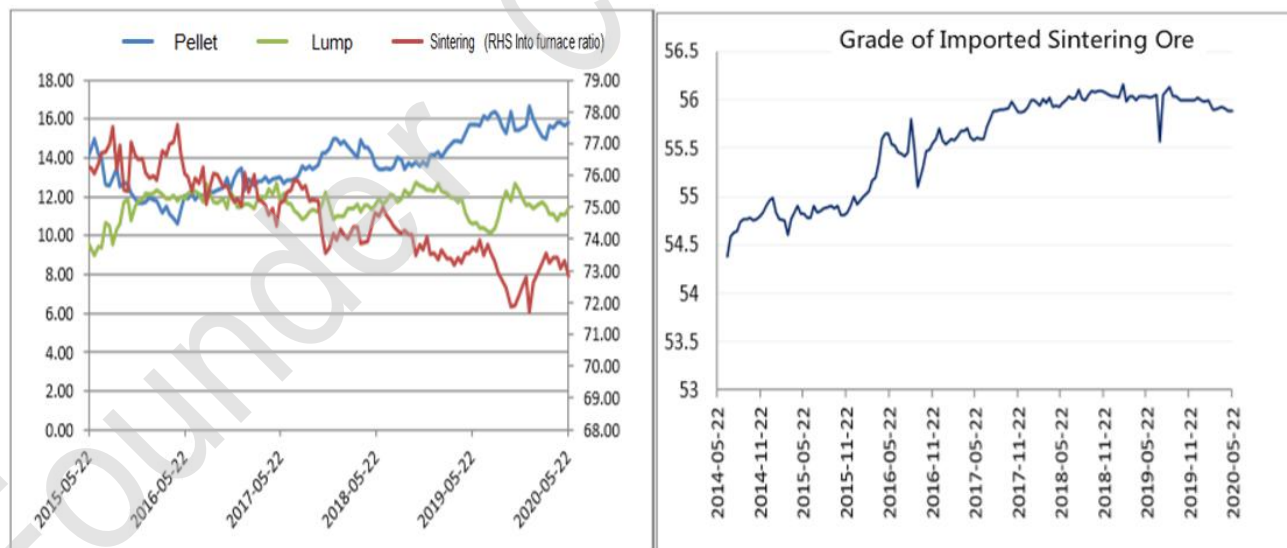
V. Demand

The latest phase (May 22) steel mill sinter ore into the furnace grade was 55.89%, increasing by 0.01%.

The ratio of pellets, sinter and lumps ore into furnace was 15.79%, 72.84% and 11.37% compared with 15.63%, 73.32% and 11.04% respectively in the previous period. Due to the increase in the furnace price, the profit margin of the long-process steel mills was narrowed recently, and the steel mills increased the use of lumps with higher cost performance, which was especially in Tangshan area. The average daily volume of departing port volume increased by 75,300 tons to 3.0814 million tons. The average daily spot trading volume also increased significantly from last week, returning to the pre-holiday level, the weekly volume of 1.6776 million tons/day increased by 300,000 tons/day.



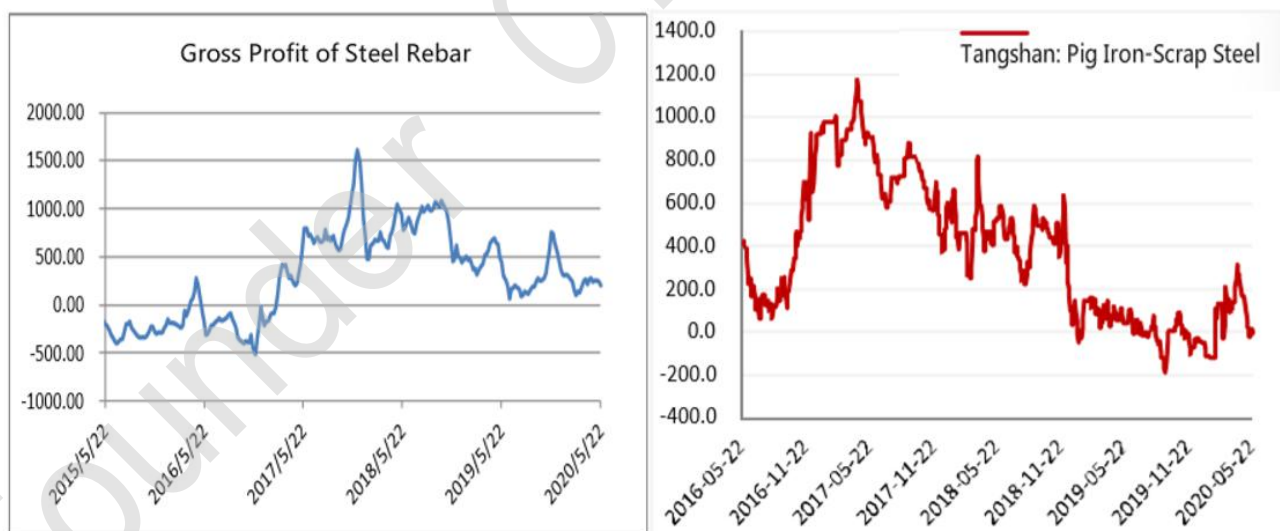
Source: Wind, Founder CIFCO Futures



Source: Mysteel, Founder CIFCO Futures

Due to the stronger-than-expected demand, the price of finished steel continued to rise slightly this week, but the price of furnace material was increased more obviously, making the profit level of the long-process steel mill narrow slightly, but the gross profit of rebar still maintained above 200 RMB/ton. At present, the inventory of finished products was still high and the production was still continued to rebound. With the approaching of the southern rainy season, the room for further improvement of the apparent consumption of finished products is limited, and the profit level of the long-process steel mills is difficult to further expand. In the near future, the long process steel plant has a strong desire to increase production, which is mainly realized by increasing the amount of scrap steel added, which leads to the continuous rise of scrap steel price. The continuous narrowing of the rebar and steel scrap price makes the profit of the short process electric furnace compressed obviously.

The average operating rate of 71 electric arc furnace steel mills nationwide was 67.19%, down 0.11% and the weekly crude steel output rose 0.4%. In general, the growth rate of electric furnace output has recovered to a high level, although there is still a certain gap compared with the same period last year, but in the case of a relatively strong scrap price in the short term, the room for further growth will be limited. The increase in the cost of molten iron was slightly larger than that of scrap steel. The price difference between pig iron and scrap steel increased slightly, and the marginal effect of scrap steel on the replacement of molten iron was strengthened. The proportion of profitable steel mills in China was 78.53% , increased by 1.84%.



Source: Wind, Founder CIFCO Futures

The operating rate of blast furnace in 163 steel mills nationwide was 70.44%, unchanged from last week. The steel demand continued to be strong and the inventory reduction of finished steel was still relatively smooth. The five major social steel inventories still maintain a destocking speed of more than 1 million tons. The production enthusiasm of steel mills is still high, and the production of finished steel increases significantly. On this Friday, the output of five major steel varieties rose by 754,800 tons weekly, among which the weekly output of rebar exceeded 3.9 million tons at once. When the current output has recovered to the level of the same period last year, it is also at the highest level of the same period in history. The average daily production of molten iron also continued to rise this week, increasing by 26,700 tons to 2.409 million tons, which continued to refresh the highest weekly output so far this year. The current output has exceeded that of the same period last year and the growth rate of output will gradually slow down. Steel mills maintain high consumption of imported ore and domestic refined fines, but the procurement is still based on demand, and the willingness to actively replenish stock is not strong. The imported sintering inventory of 64 sample steel mills was increased of 655,300 tons to 16.788,500 tons. Overall, the high output of steel mills will continue in the short term, however, the production of molten iron has gradually approached the peak, so the room for further improvement in iron ore demand may be limited.



Output (10,000 tons)	Steel Rebar	Wire Rod	Hot Rolling	Cold Rolling	Medium Plate
2020. 05. 15	381. 31	157. 56	307. 51	72. 87	137. 03
2020. 05. 22	391. 56	155. 59	308. 21	71. 41	137. 05
Weekly Up or Down	10. 25	-1. 97	0. 7	-1. 46	0. 02

Source: Mysteel, Founder CIFCO Futures

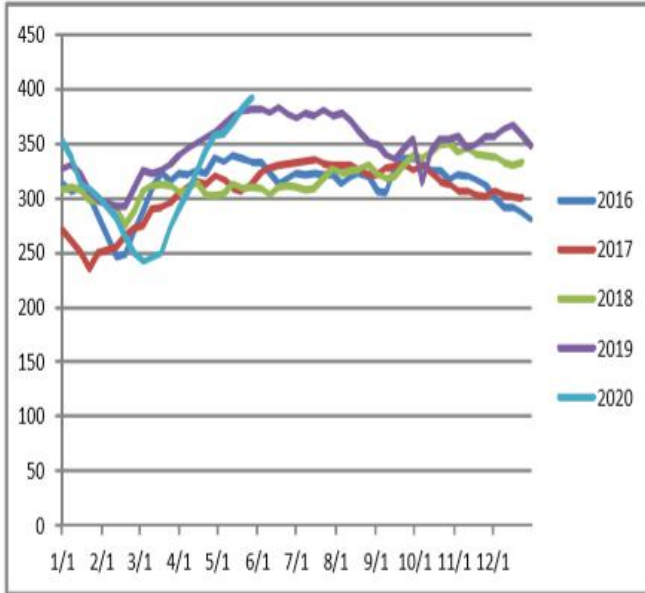


Chart: Weekly output of steel rebar (10,000 tons)

Source: Mysteel, Founder CIFCO Futures



Chart: Weekly output of wire rod (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

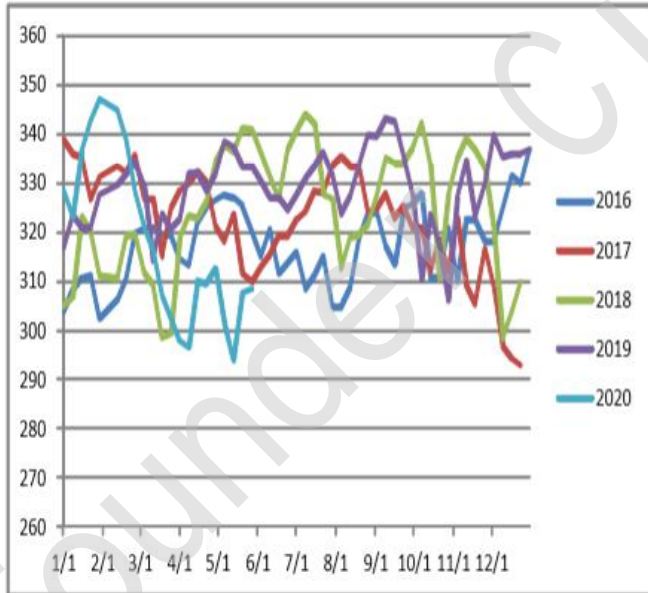


Chart: Weekly output of hot rolling (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

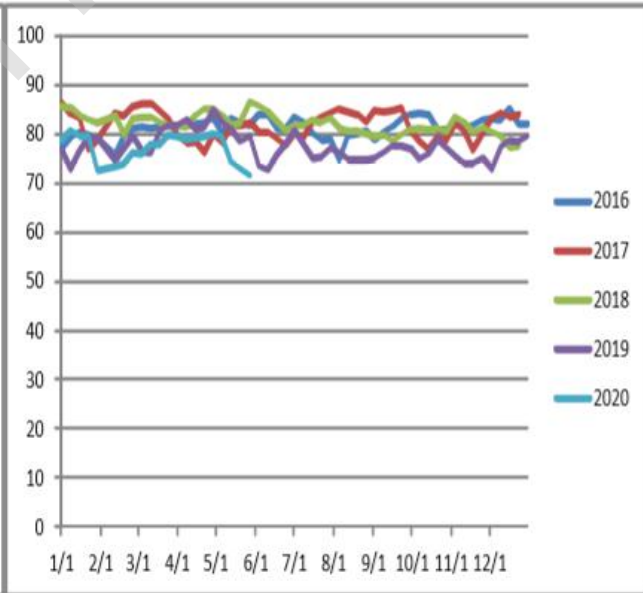


Chart: Weekly output of cold rolling (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

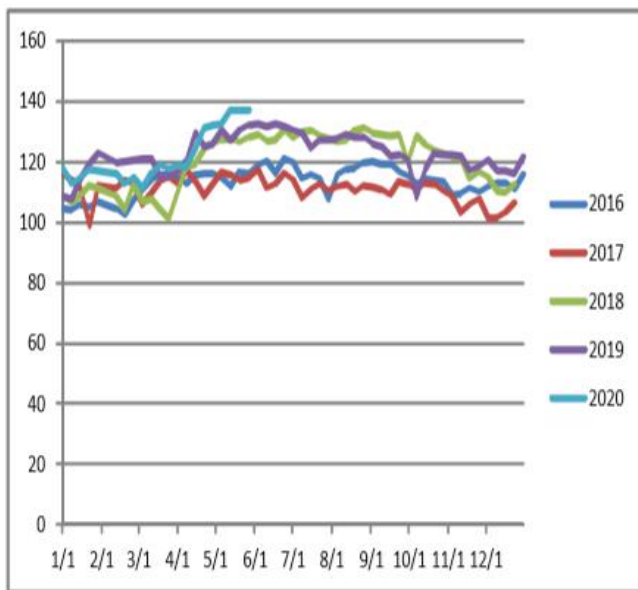


Chart: Weekly output of steel plate (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

Output (10,000 tons)	Steel Rebar	Hot Rolling	Medium Plate	Wire Rod	Cold Rolling
2020. 05. 15	893. 2	305. 96	103. 33	274. 42	132. 04
2020. 05. 22	836. 64	291	98. 64	250. 62	130. 5
Weekly Up or Down	-56. 56	-14. 96	-4. 69	-23. 8	-1. 54

Chart: Social inventory (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

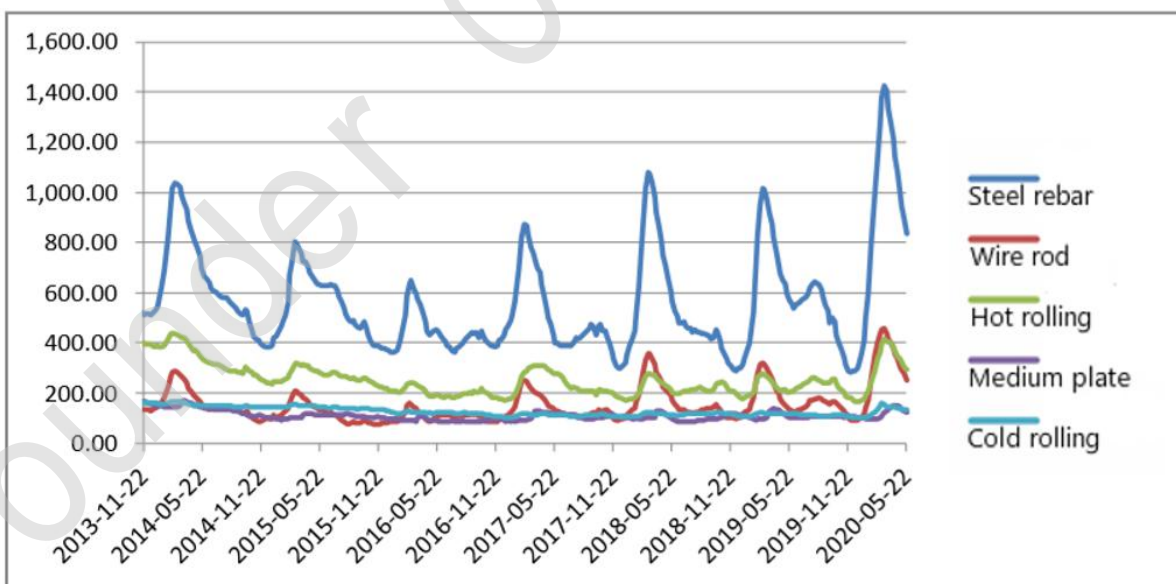


Chart: Weekly social inventory of five steel products

Source: Wind, Founder CIFCO Futures

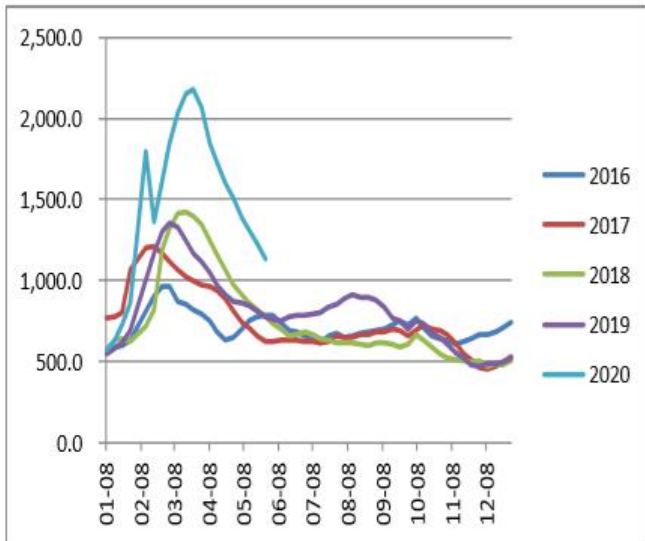


Chart: Total inventory of steel rebar (10,000 tons)

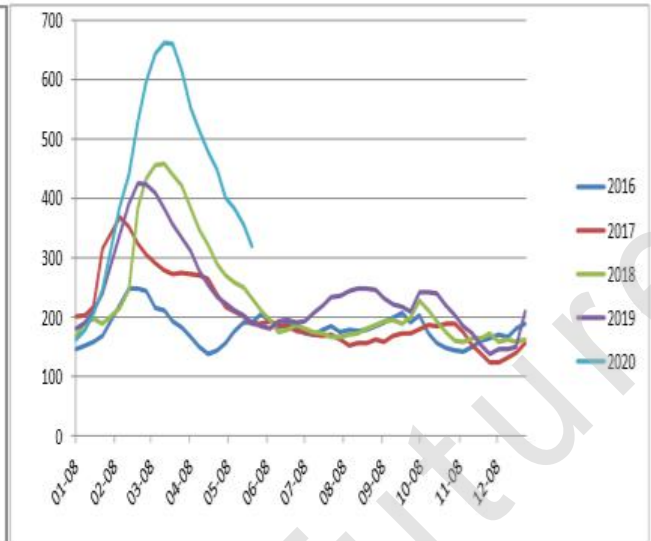


Chart: Total inventory of wire rod (10,000 tons)

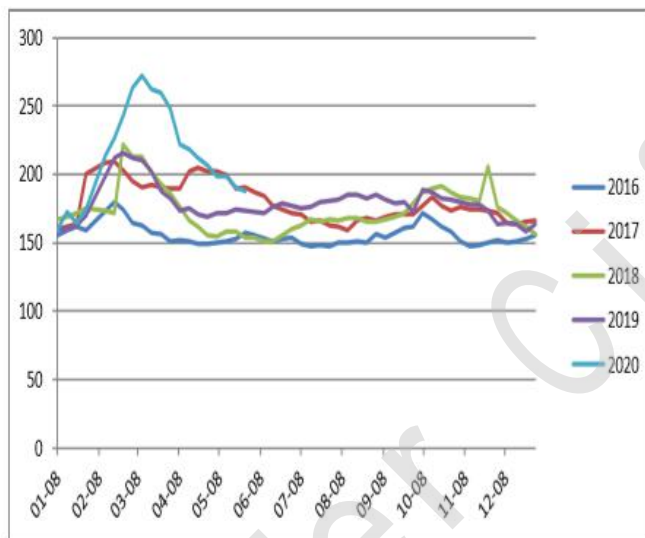


Chart: Total inventory of steel plate (10,000 tons)

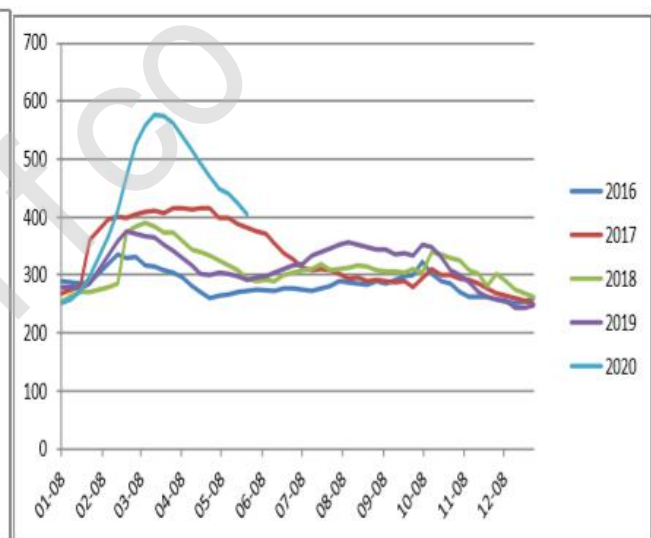
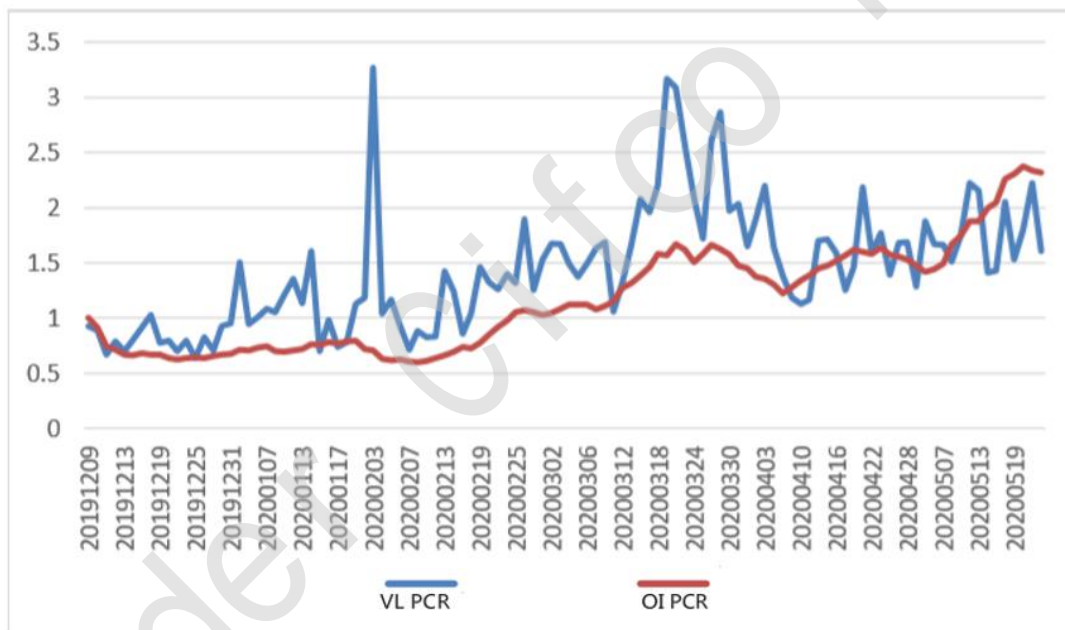
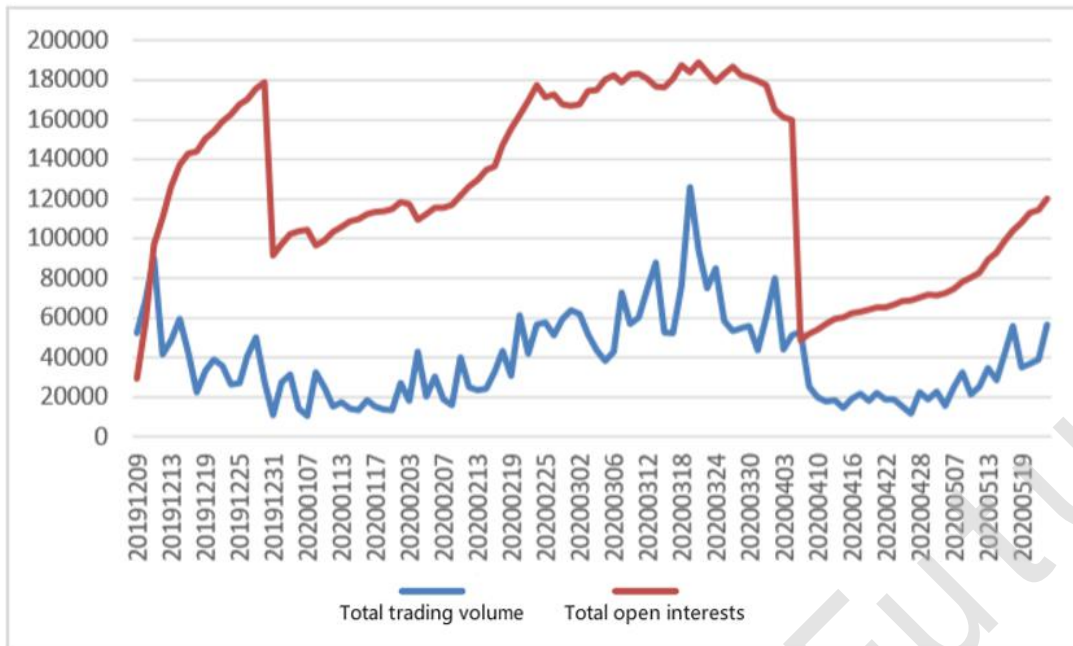


Chart: Total inventory of hot rolling (10,000 tons)

VI. Iron Ore Options

6.1 Options trading and open interest analysis

The daily average trading volume of iron ore options were 44,649 lots, up 14,362 lots from last week and the daily average open interest were 112,061 lots, up 23,219 lots compared with last week. The put-call ratio of the daily average trading volume was 1.84, up 0.05 and the average daily open interest was 2.32, up 0.41 from the previous week.



6.2 Volatility analysis

The implied volatility of iron ore options increased this week, with the weighted daily implied volatility of 40.16%, up 4.43% from the previous week

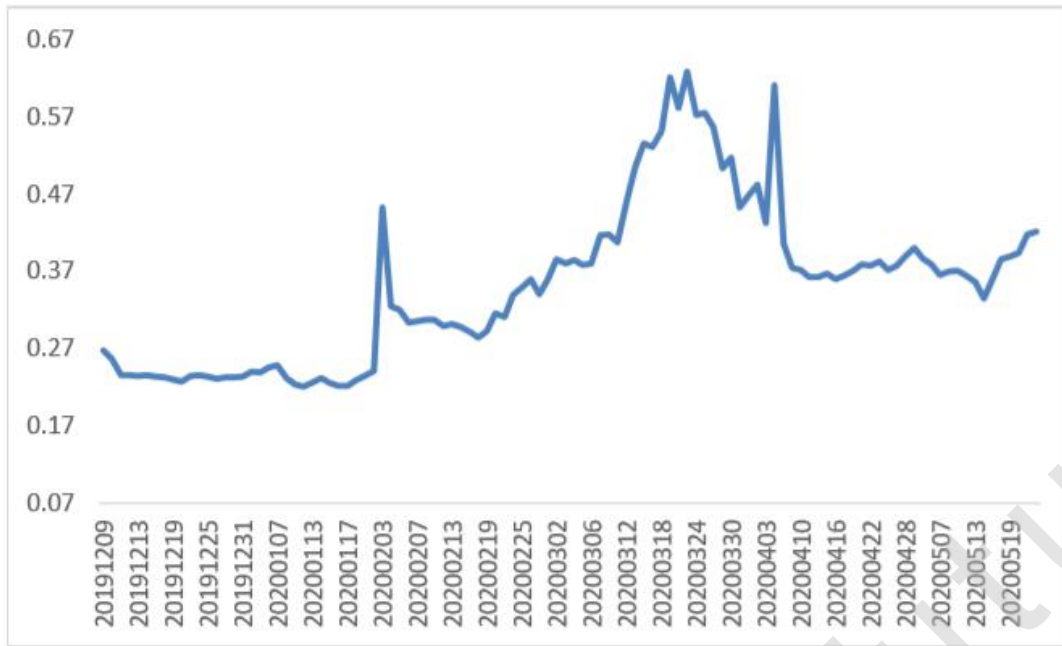


Chart: Implied volatility of iron ore options

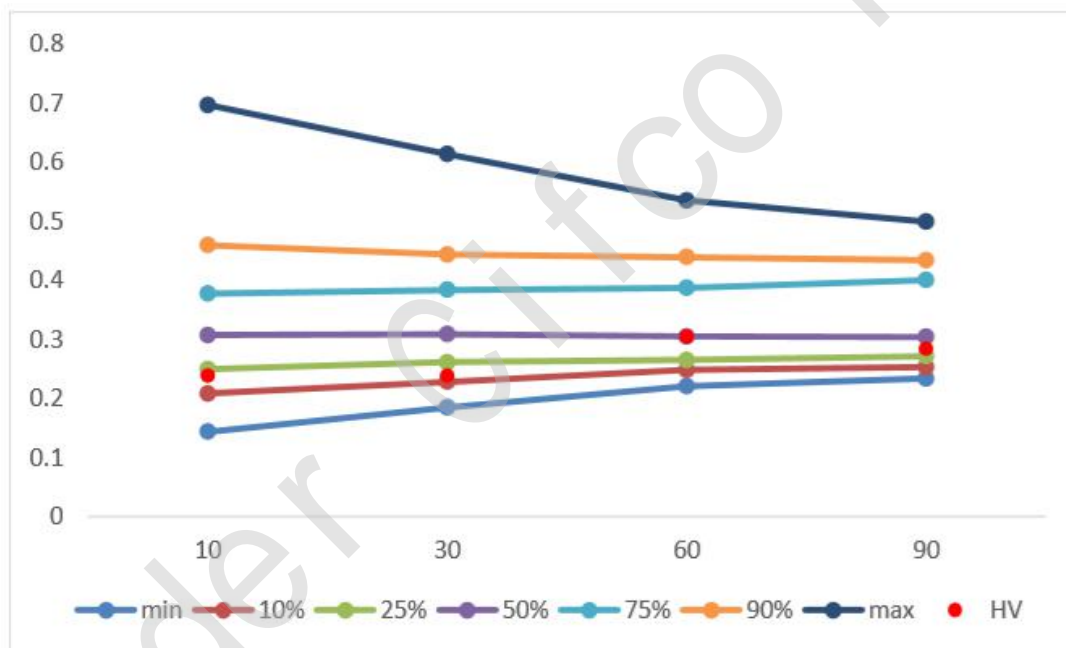


Chart: Volatility cones of iron ore options

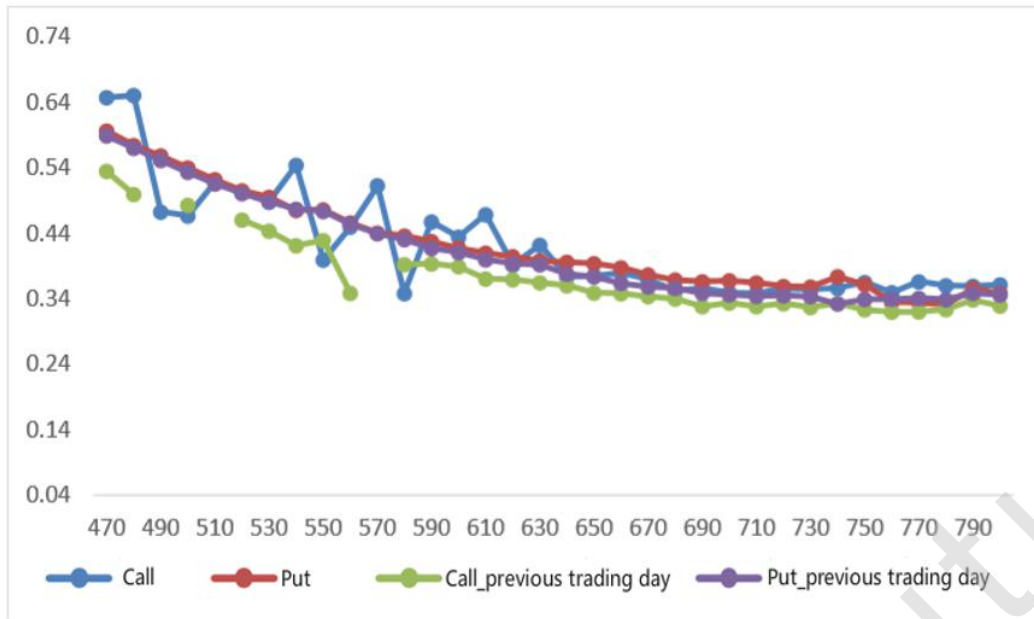


Chart: Implied volatility of nearby contract

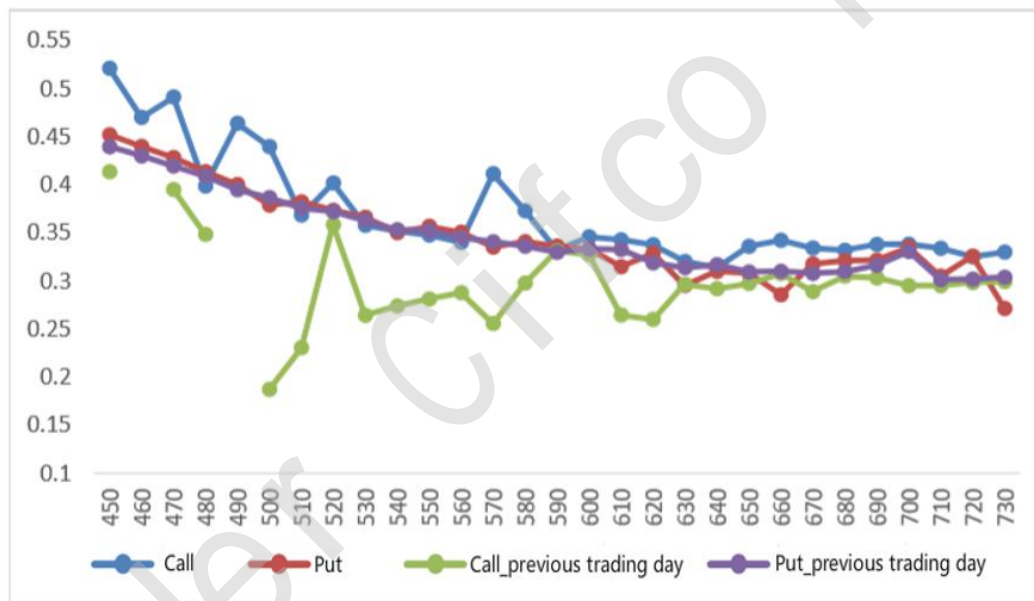


Chart: Implied volatility of forward contract

6.3 Options strategy

The implied volatility of iron ore options has returned to the normal level after the recent gradual decline. The volatility of iron ore futures is likely to rise again in the near future, so we can construct a long straddle strategy. The futures market price will show a high probability of falling from its high in May. We think the short-term peak will appear, so the strategy of selling OTM call options can be used.

I. Sell strangle options

分析	买卖	名称	手数	价格类型	价格	买价	卖价	IV	Delta	Gamma	Vega	Theta	合约乘数
<input checked="" type="checkbox"/>	买	铁矿石期权2009-C-720	1	卖价	0.0	46.4	-	33.61%	0.5683	0.0028	1.3338	-0.3462	100
<input checked="" type="checkbox"/>	买	铁矿石期权2009-P-720	1	卖价	42.9	27.0	42.9	29.88%	-0.4296	0.0028	1.3338	-0.3465	100

最大收益: +∞ 最大亏损: -10,385.04
 总Delta: 13.8664 总Gamma: 0.5624 总Vega: 266.7475 总Theta: -69.2610

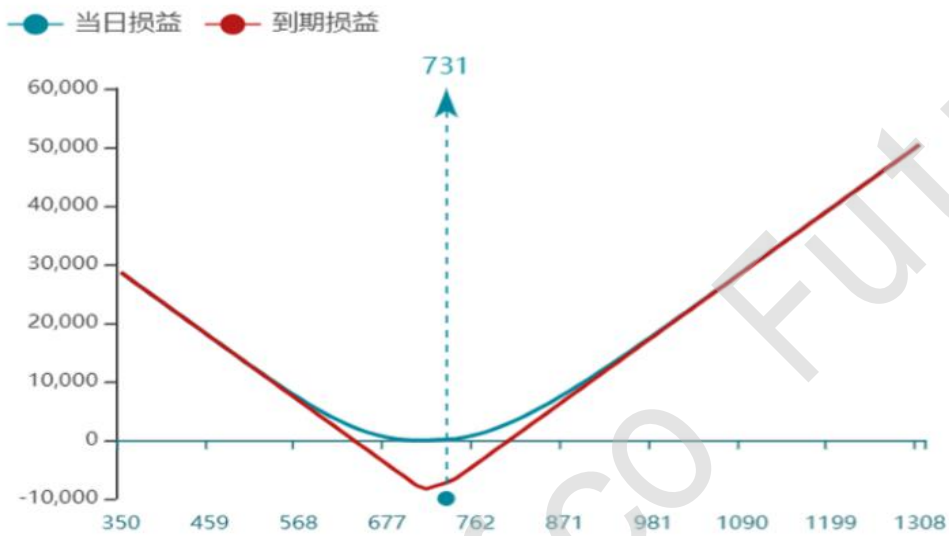


Chart: Break-even balance

II. Sell put options

删除	分析	买卖	名称	手数	价格类型	价格	买价	卖价	IV	Delta	Gamma	Vega	Theta	合约乘数
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	卖	铁矿石期权2009-C-720	1	买价	16.0	16.0	36.0	26.69%	0.4770	0.0029	1.3205	-0.3333	100

最大收益: 1,600.00 最大亏损: -∞
 总Delta: -47.6118 总Gamma: -0.2961 总Vega: -132.8624 总Theta: 32.6496

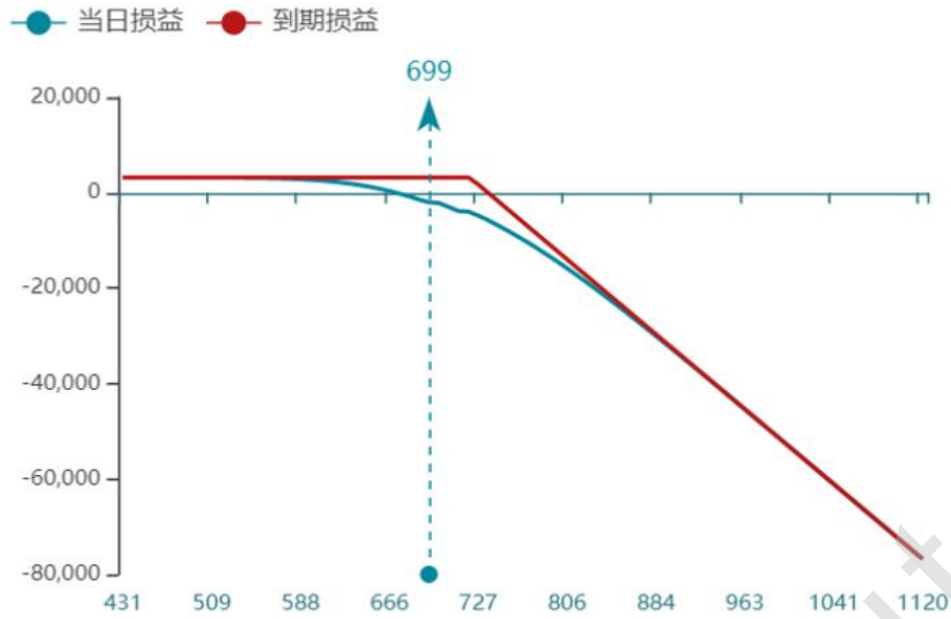


Chart: Break-even balance

VII. Open interests of top futures firms



Chart: Top 5 of short positions

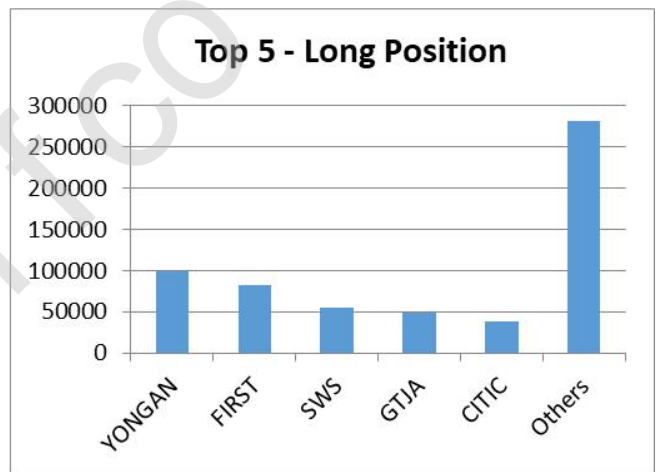


Chart: Top 5 of long positions

Source: Wind, Research Institute of Founder CIFCO Futures

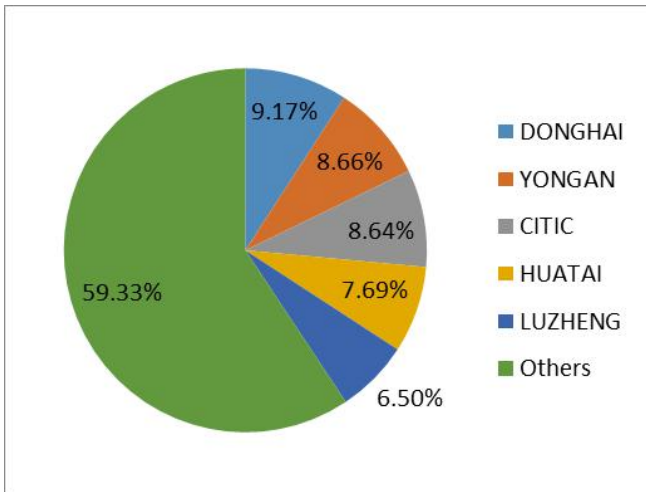


Chart: Short positions proportion

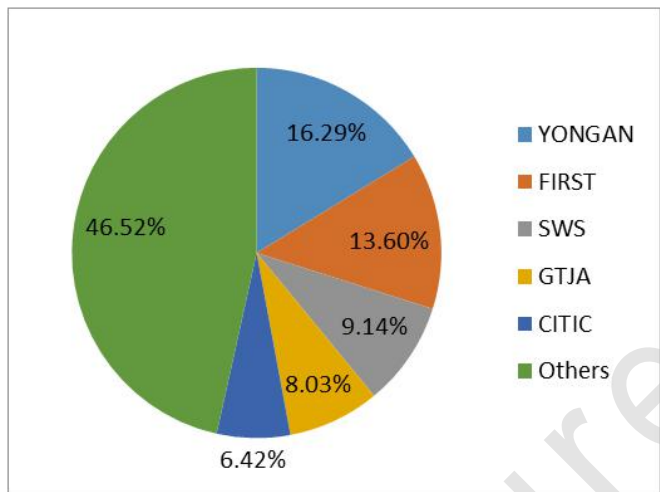


Chart: Long positions proportion

Source: Wind, Research Institute of Founder CIFCO Futures

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