

## Iron Ore Futures Weekly Report

(Near term: Trading Buy)

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### Market Outlook and Trading Advice:

Iron ore price center has moved down this week, but the trend of the high fall is more obvious, there's not enough energy to going up. The factory warehouse continued to reducing the inventory significantly, the weekly decline of more than 2 million tons, five varieties of steel factory warehouse and social warehouse have further expanded the decline, the apparent consumption level to the highest value in the history of the same period. At the same time, with the continuous recovery of molten iron production, the average daily molten iron production this week increased by 32,400 tons to 2,236,400 tons. However, the improved demand of the iron ore price to appear marginal weakening, i2009 expectations are still more pessimistic. The impact of overseas public health events on the global demand of iron ore continues, with steel production in the great lakes region of the US recently declining significantly. On the supply, shipments fell back below 20m tons this week, mainly due to a partial overhaul after the mine completed its end-of-season rush in March. Rio Tinto did not lower its full-year production target in the first quarter and it should not be the reason for further concerns about subsequent arrivals. Although vale has lowered its annual production target to 31-330 million tons, it is difficult to change the general trend that iron elements will gradually enrich in China in the second half of the year, and the amount of available imported ore in China will still increase from last year. Port inventories of imported mines continued to recover, and Japanese steel companies began to resell some of the Long-term agreement mines to China, which is expected to further increase the pressure of port arrival in late April. The i2009 still does not have the enough reason for continued strength in the short term, we maintain the idea of shorting above 620.

**1. Iron Ore Market Review**

As of April 17, Platts 62% Fe traded at 85.45 USD per dry ton, up 0.29% from last week with most prices of imported ore varieties also basically to rise. In terms of Australian mines, the premium level of medium-high quality Australian fines this week is significantly positively correlated with its own grade and the higher the grade, the stronger the premium. Specifically, NHGF (62.5%) increased more than PB and Mac fines, JMBF price trend is the weakest, the ring ratio fell this week. With the profit turn better, steel factory increased the acceptance of high - quality fines. In addition, due to the trade volume is tight, low - quality SS fines prices remain strong. In Brazil, shipments and port inventories both fell this week, and prices continued their upward trend since April. Among them, the imported mining market led the rise this week, up more than 4%. Domestic ore, the price of main production areas continued to the downward trend. The northeast area is more obvious, because the recent export of the plate was affected, so that the steel mills on the end of the raw material price will be strengthened, after negotiations with the mine, Anshan fines prices fell 20 RMB/ton this week. The price of Hanxing fines this week is mainly affected by the price drop of surrounding iron fines with its own supply and demand changes a little. Domestic ore supply and demand is expected to weaken further in the short term, the price is still likely to continue to fall for the coming week. Domestic production still has further recovery in the near future, steel mills on its price will continue to suppress, prices are likely to continue to fall later on.

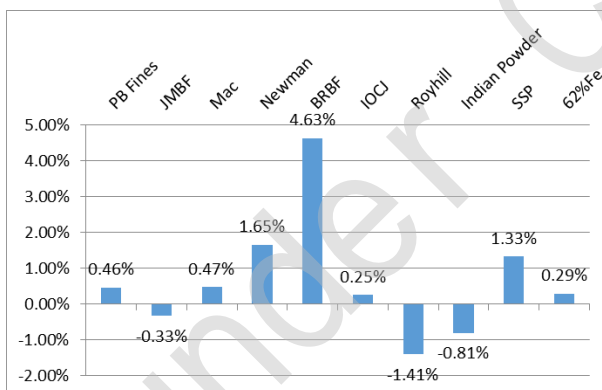


Chart: Up or down of weekly offshore ore prices

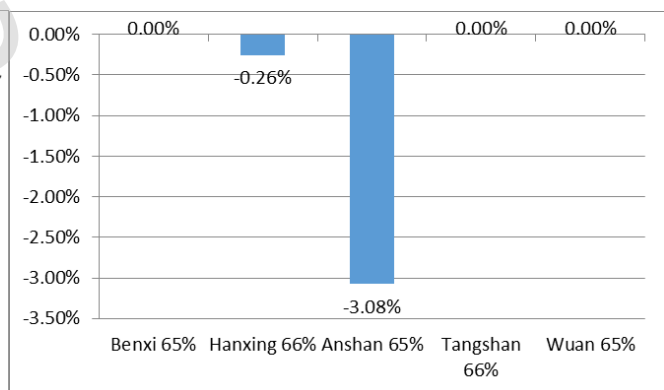


Chart: Up or down of weekly onshore ore prices

Source: Mysteel, Founder CIFCO Futures

	Offshore Ore Prices						Royhill	Indian Powder	SSP
	PB Fines	JMBF	Mac	Newman	BRBF	IOCI			
2020/4/10	654.0	612.0	634.0	668.0	691.0	800.0	639.0	617.0	528.0
2020/4/17	657.0	610.0	637.0	679.0	723.0	802.0	630.0	612.0	535.0
Weekly Up or Down	3.0	-2.0	3.0	11.0	32.0	2.0	-9.0	-5.0	7.0
	0.46%	-0.33%	0.47%	1.65%	4.63%	0.25%	-1.41%	-0.81%	1.33%

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%
2020/4/10	610.0	781.0	650.0	609.0	660.0
2020/4/17	610.0	779.0	630.0	609.0	660.0
Weekly Up or Down	0.0	-2.0	-20.0	0.0	0.0
	0.00%	-0.26%	-3.08%	0.00%	0.00%

Chart: Weekly onshore ore prices

Source: Mysteel, Founder CIFCO Futures

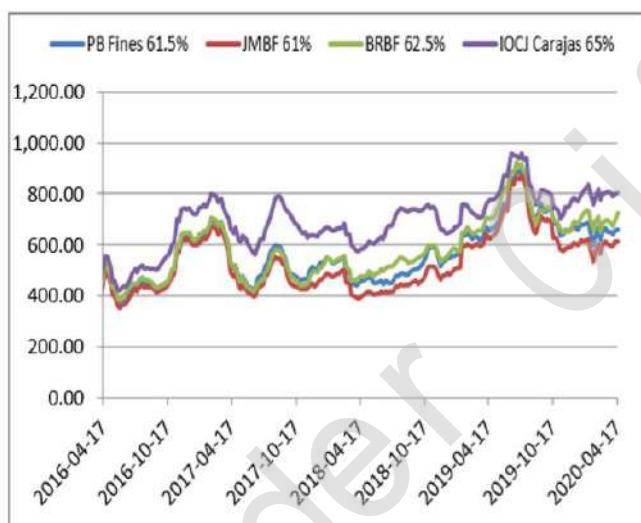


Chart: Medium and high-grade iron ore spot price

Source: Mysteel, Founder CIFCO Futures

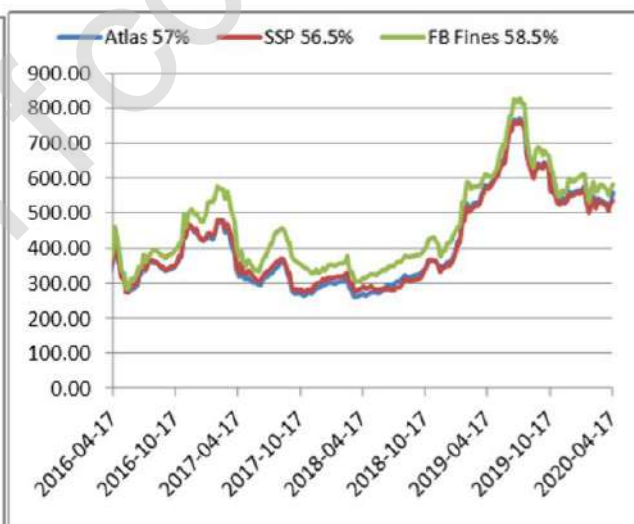
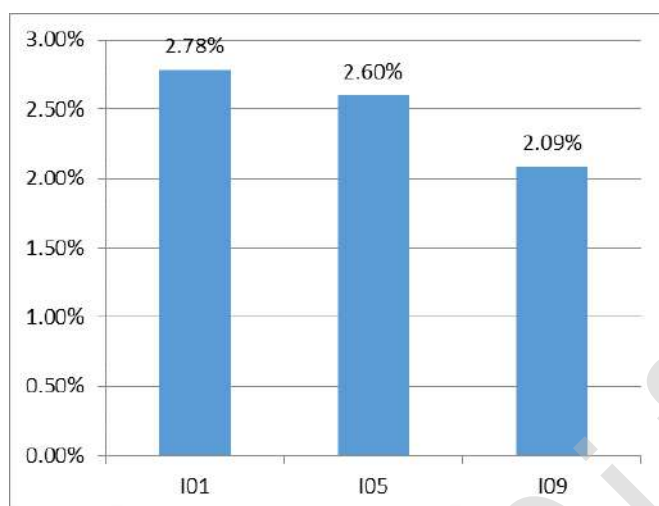


Chart: Low-grade iron ore spot price

In futures market, iron ore near and forward contracts prices have different degrees of increase this week. The i2009 is the weakest caused by the pessimistic forecast price. The i2005 due to nearby delivery and by the basis repair has increased more compared with i2009. The i2101 contract has seen the biggest gains this week. From the weekly trading volume perspective, i2005 is close to delivery, the average daily volume of this week fell by more than 50%. The wait-and-see sentiment is getting stronger of i2009 because of the the long-term supply and demand uncertainty. The average daily volume also showed a small drop, only the i2001 has been magnified. In terms of open interests, i2005 continued to reduce positions significantly and i2009 also showed a small decline in the position. Long position has gradually roll over to i2101.



	Close Price (RMB/ton)		
	i01	i05	i09
2020/4/10	557.0	673.0	599.5
2020/4/17	572.5	690.5	612.0
Weekly Up or Down	15.5	17.5	12.5
	2.78%	2.60%	2.09%

Chart: Up or down of weekly futures prices

Source: Wind, Founder CIFCO Futures

	Transaction Volume (Lot)			Open Interest (10,000 lot)		
	i01	i05	i09	i01	i05	i09
2020/4/10	2.69	17.15	96.76	8.72	19.12	62.25
2020/4/17	3.12	8.34	90.63	9.03	11.51	62.06
Weekly Up or Down	0.43	-8.81	-6.13	0.31	-7.60	-0.19
	16.00%	-51.37%	-6.33%	3.53%	-39.77%	-0.30%

Chart: Weekly trading volume of iron ore futures

Source: Wind, Founder CIFCO Futures



Chart: Technical chart of i2005

Source: Wind, Founder CIFCO Futures

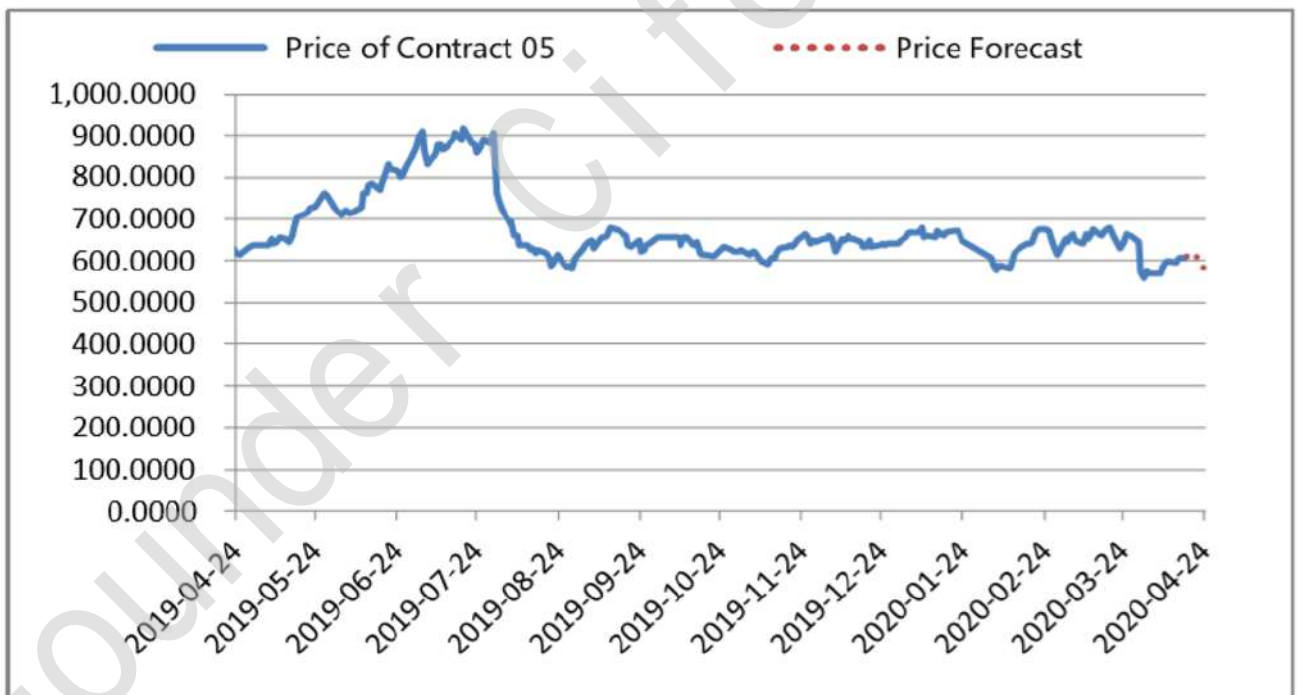


Chart: Price of contract 05 and price forecast

Source: Wind, Founder CIFCO Futures

## II. Basis and Spread

In this week, future price is generally stronger than spot price, the basis of the nearby and forward months has been fallen. As of April 17, the basis difference of i2005 has converged to 34.6 RMB/ton, down 14.3 RMB/ton from last week and i2009 weekly basis difference decreased 9.3 RMB/ton. In terms of the spread difference between products, spread between IOCJ Carajas and PB maintained steady this week, a small drop 1 RMB/ton to 145 RMB/ton, spread between PB and JMBF was 47 RMB/ton, with an increase of 5 RMB/ton on a weekly basis. PB and SSF is 122 RMB/ton, fell 4 RMB/ton. In general, the premium grade with high quality Australian fines was significantly positive correlation with its grade this week, the stronger the grade, the higher the premium. As of the end of this week, the 09-01 contract spread was 39.5 RMB/ton, down to 3 RMB/ton from last week; The 05-09 contract spread widened further this week by 5 RMB/ton to 78.5 RMB/ton.



Chart: Spread of contract 09 and 01

Source: Wind, Founder CIFCO Futures

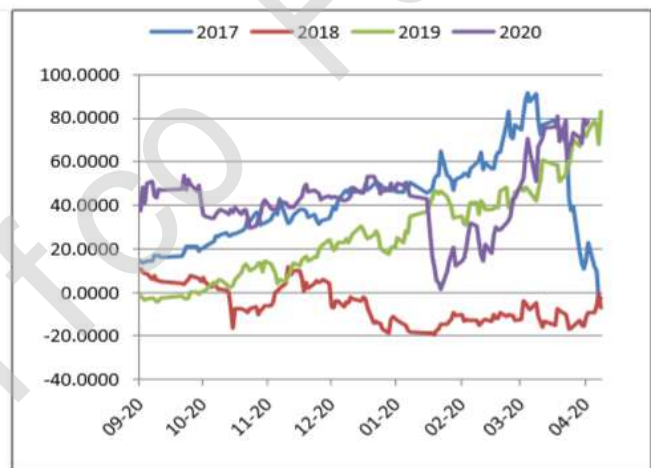


Chart: Spread of contract 05 and 09

Source: Wind, Founder CIFCO Futures

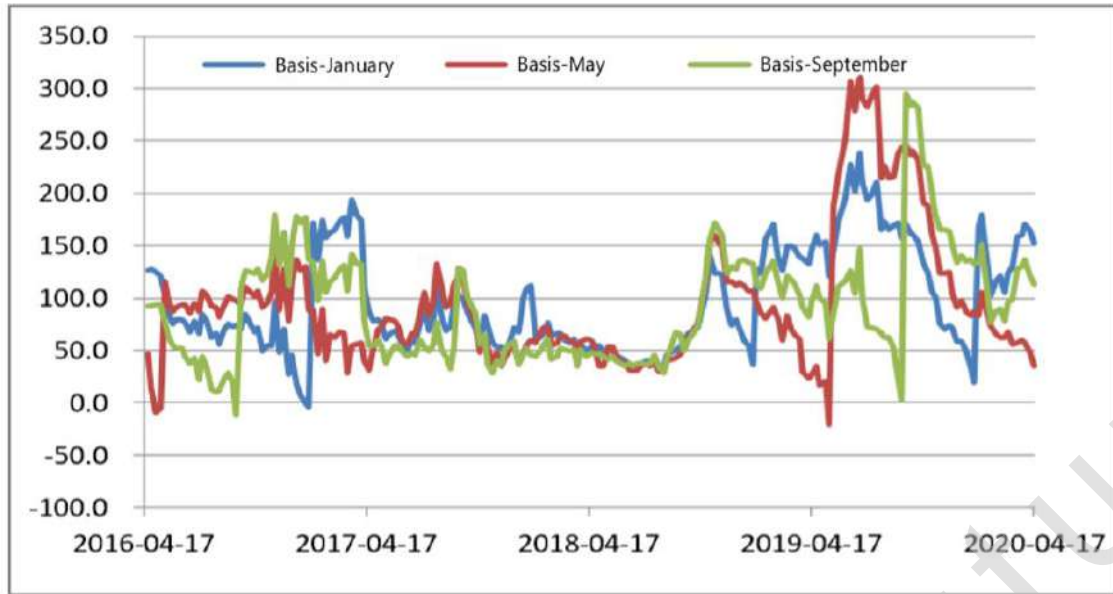


Chart: Basis of spot iron ore (PB fines 61.5%) in Rizhao port

Source: Wind, Founder CIFCO Futures

### III. Shipping Market Review

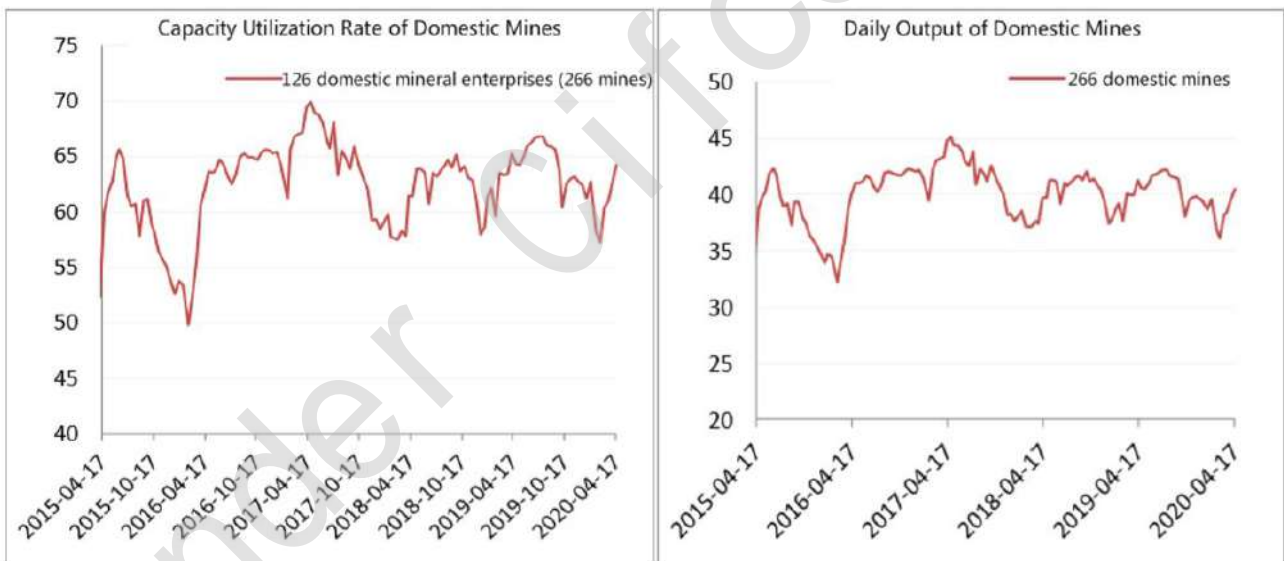
BDI showed a sharp rebound again and quoted 726 as of end of April 16, weekly rose 91(14.33%). BCI rose even more pronounced, up 346(63.96) to 887; Freight also showed a synchronous recovery this week. As of April 16, the freight from Tubaro to Qingdao quoted 11.9 USD/ton, up by 0.9 (8.00%). Western Australia to Qingdao was quoted at 4.70 USD/ton, up \$0.10(1.76%).



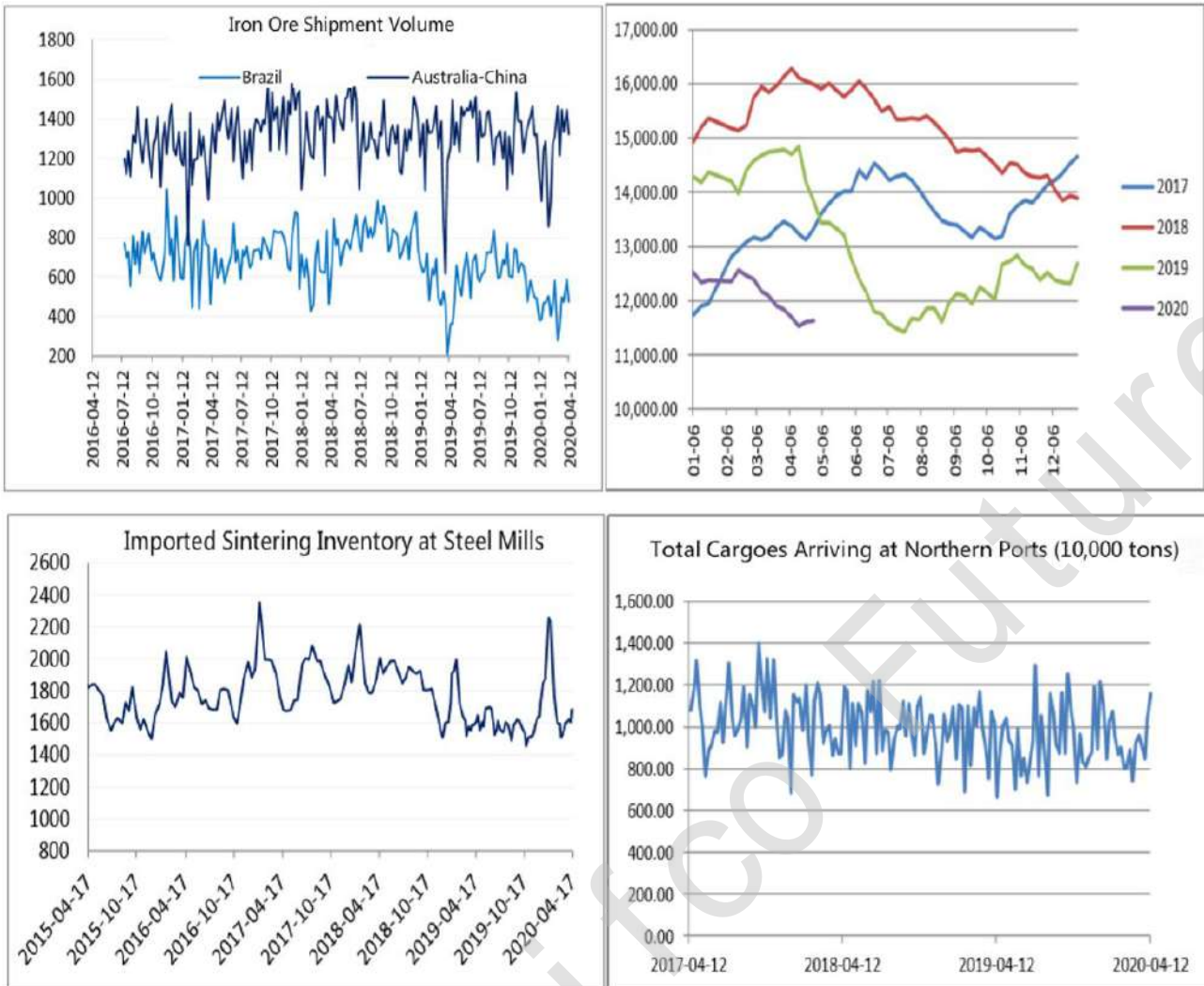
Source: Wind, Founder CIFCO Futures

**IV. Supply**

Domestic mine supply has continued to recover recently. The latest data (April 17) shows that the operating rate of 126 mining enterprises in China is 64.29%, up 1.62% compared with the previous period. The average daily output of domestic mines is 405,600 tons in the latest period, with an increase of 10,200 tons/day compared with the previous period. In terms of foreign mining, the total shipment volume of Australian and Pakistani mines this week decreased by 3.174 million tons to 19.86 million tons, while the shipment volume of Australian mines decreased by 2.55 million tons to 1.579 million tons, including 13.235 million tons to China, down by 1.77 million tons. Brazilian mine shipments fell 1.119 million tons to 4.727 million tons. The latest northern import number was 11.56 million tons, up 1.12 million tons from the previous week. As of April 17, the inventory of national 45 port was 116.3578 million tons, increase of 264,300 tons., including 64.742 million tons of Australian iron ore, which increase of 311,000 tons (weekly). Brazilian iron ore inventories were 28.0576 million tons, down 187,400 tons (weekly). In terms of steel mill inventory, the total inventory of imported ore sintering fines of 64 sample steel mills this week was 16.806,200 tons, with a weekly increase of 756,600 tons.



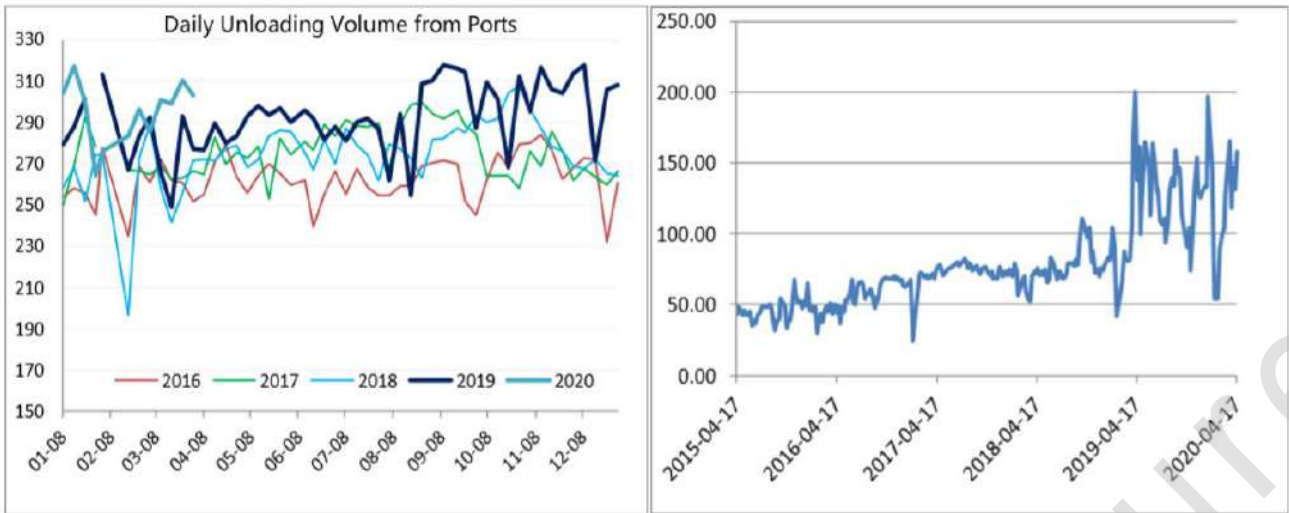




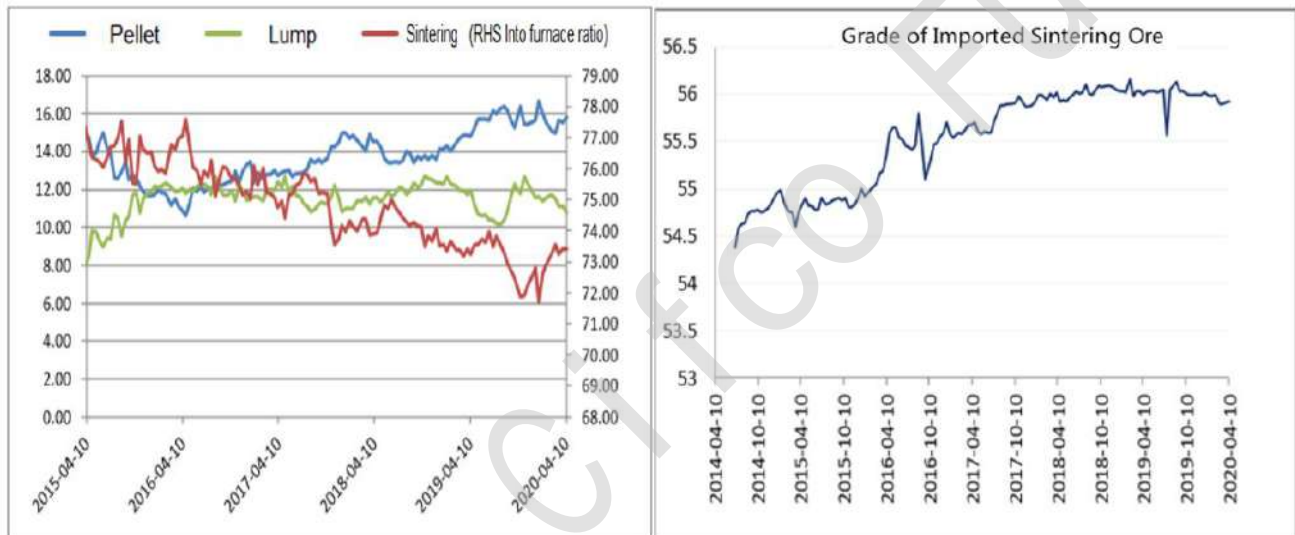
Source: Wind, Founder CIFCO Futures

### V. Demand

As of April 8, the sintering ore into the furnace grade was 55.93%, up 0.02%. The ration of pellet, sinter and block ore into furnace was 15.84%, 73.40%, 10.76% respectively and the previous period was 15.51%, 73.41%, and 11.08%. Due to the continuous improvement of the long process profit in the recent period, the steel mill appropriately increased the proportion of pellet into furnace and reduced the amount of block ore. The steel mill's replenishment efforts have been improved this week, the average spot trading volume of major ports in China on Sunday rose 262,800 tons/day to 1.5 million tons/day this week. The Daily departing port volume remained above 3 million tons, with a weekly increase of 0.03 million tons to 3.0414 million tons.



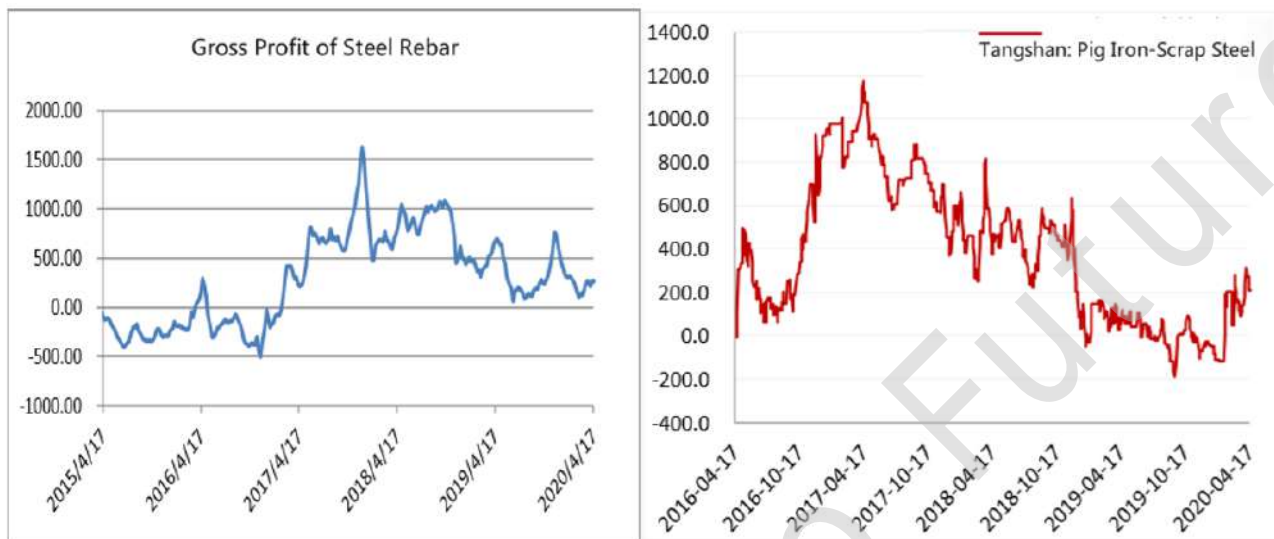
Source: Wind, Founder CIFCO Futures



Source: Mysteel, Founder CIFCO Futures

The finished products continued to destocking substantially this week, the prices of rebar and hot coil all had a small rise, although the price of iron ore, manganese silicon and scrap rose, but the overall profit level of the long process still had a small rise, the gross profit of the current rebar recovered to 250-300 RMB/ton level. Scrap prices rebounded significantly this week, but short - process furnace profits are still inline, production enthusiasm is higher. Electric furnace production starts and continues to rebound this week, the average operating rate of 71 electric arc furnace steel mills nationwide was 56.49%, up 3.9% this week. The weekly crude steel output was 639,700 tons, up 69,800 tons. The southwest of the furnace has reached full capacity

state, output growth is obvious in southern China and electric furnace subsequent production still have further room to rise. After entering April, the growth rate of crude steel output began to be faster than molten iron output, and the extrusion effect of scrap steel on molten iron gradually appeared. The proportion of profitable steel mills nationwide this week was 76.07 percent, up 0.61% (Weekly).



Source: Wind, Founder CIFCO Futures

Operating rate of total 163 steel mills in China 68.65%, up 0.55% compared with last week, extending the recovery trend. This week, the material continued to substantially destocking this week, the five major steel varieties of factory inventory and the decline of social inventory have further expanded, which social inventory fell 1.1351 million tons, factory inventory fell 881,200 tons. The total output of five major steel varieties on Friday increased by 293,500 tons (Weekly) and the output of the rebar recovered to more than 3.4 million tons, close to the high level before the year. The output of the long process and the short process continued to increase. Under the circumstance that the output of steel mills is gradually returning to the peak season level, the inventory of finished products can maintain a relatively fast destocking speed in the near future, mainly due to the over-expected release of terminal demand, the apparent consumption level of finished products has reached the highest value in the same period of history. The steel mills have a small increase of iron ore replenishment, but the overall purchase is still on demand. The imported sintering inventory and available days of sample steel mills have recovered, and the acceptance of high-quality Australian fines has been further improved.



Output (10,000 tons)	Steel Rebar	Wire Rod	Hot Rolling	Cold Rolling	Medium Plate
2020. 04. 10	325. 51	144. 02	310. 04	79. 31	124. 12
2020. 04. 17	343. 44	148. 75	309. 39	79. 6	131. 17
Weekly Up or Down	17. 93	4. 73	-0. 65	0. 29	7. 05

Source: Mysteel, Founder CIFCO Futures

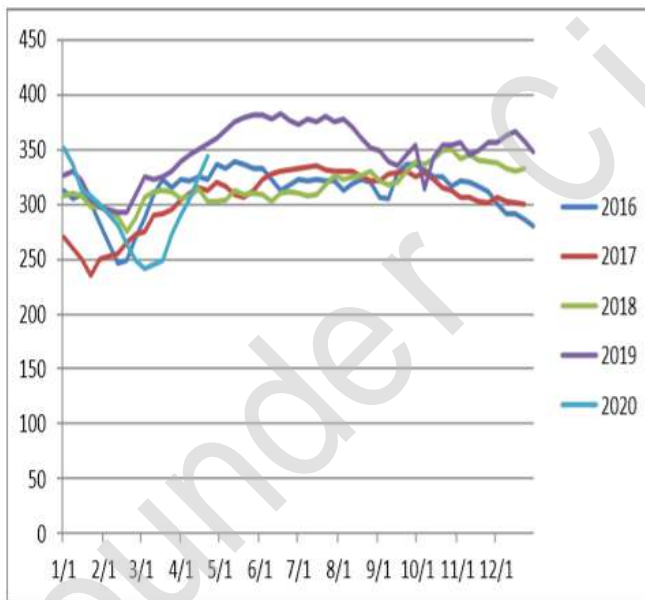


Chart: Weekly output of steel rebar (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

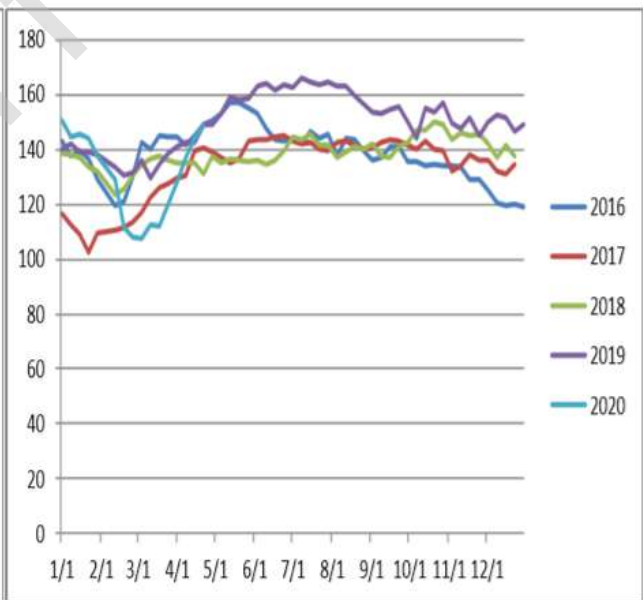


Chart: Weekly output of wire rod (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

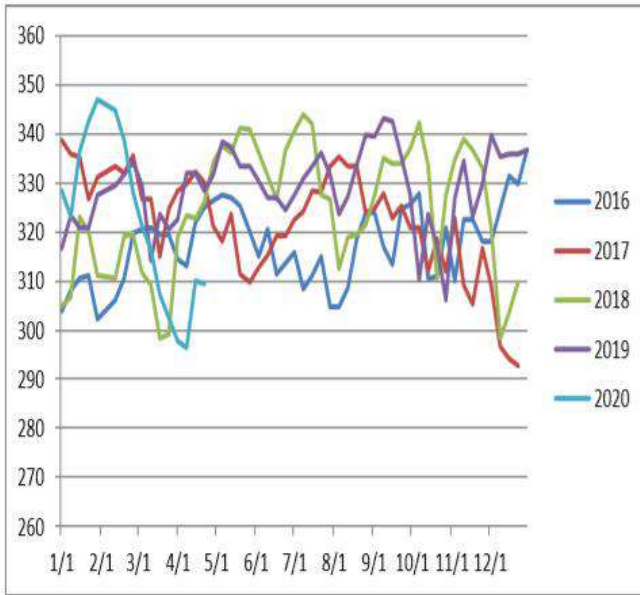


Chart: Weekly output of hot rolling (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

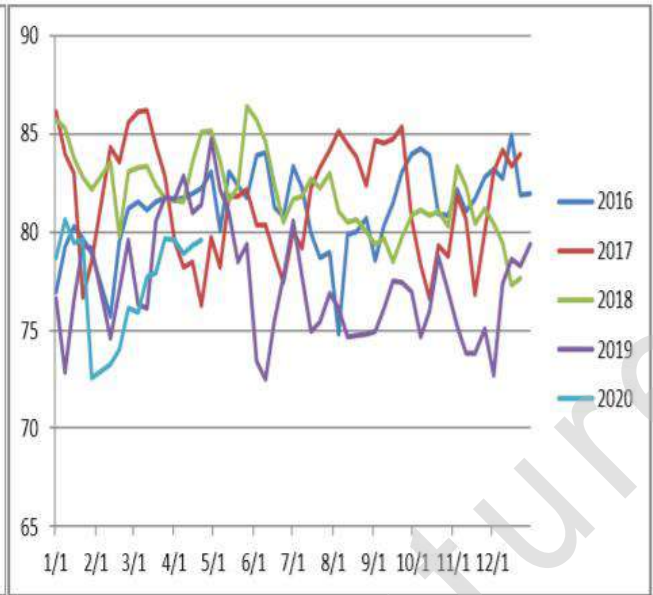


Chart: Weekly output of cold rolling (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

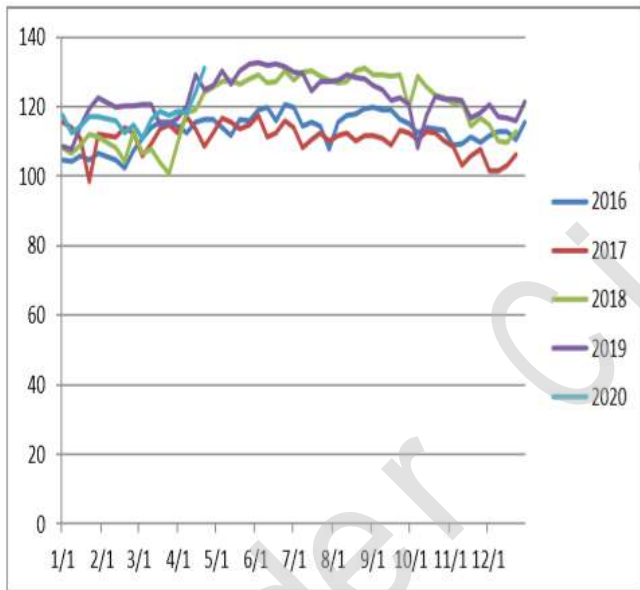


Chart: Weekly output of steel plate (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

Output (10,000 tons)	Steel Rebar	Hot Rolling	Medium Plate	Wire Rod	Cold Rolling
2020. 04. 10	1211	384. 14	123. 21	376. 63	150. 14
2020. 04. 17	1141. 7	368. 95	115. 2	356. 12	145. 78
<b>Weekly Up or Down</b>	-69. 3	-15. 19	-8. 01	-20. 51	-4. 36

Chart: Social inventory (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

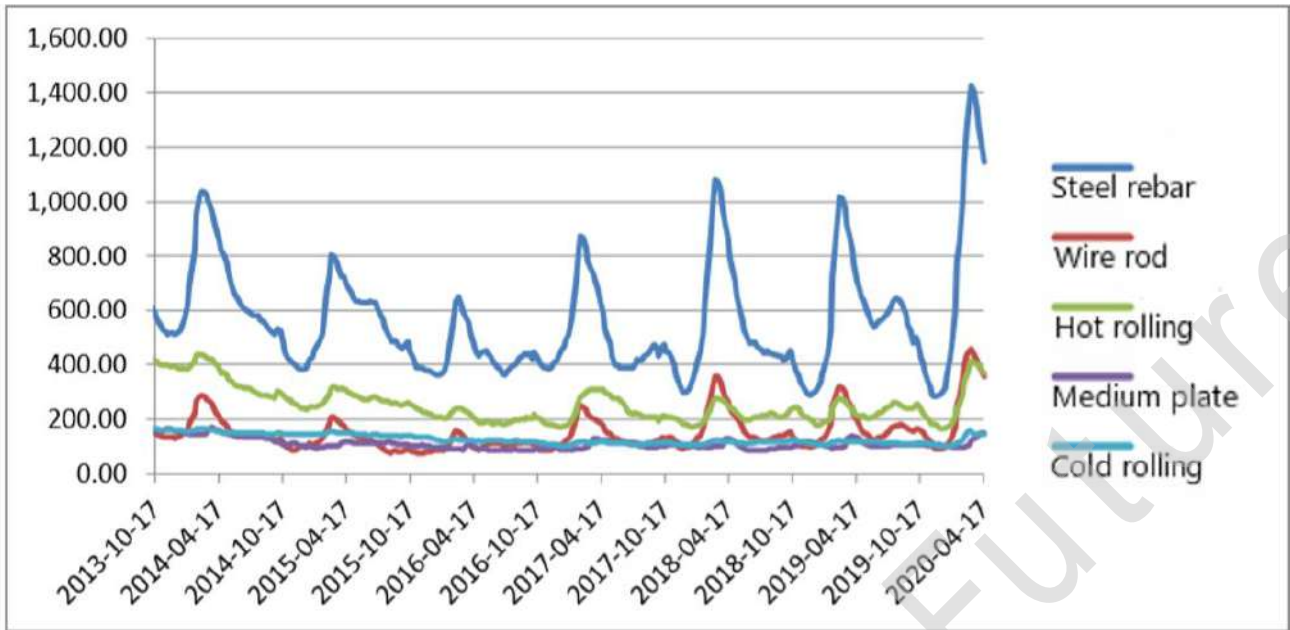


Chart: Weekly social inventory of five steel products

Source: Wind, Founder CIFCO Futures

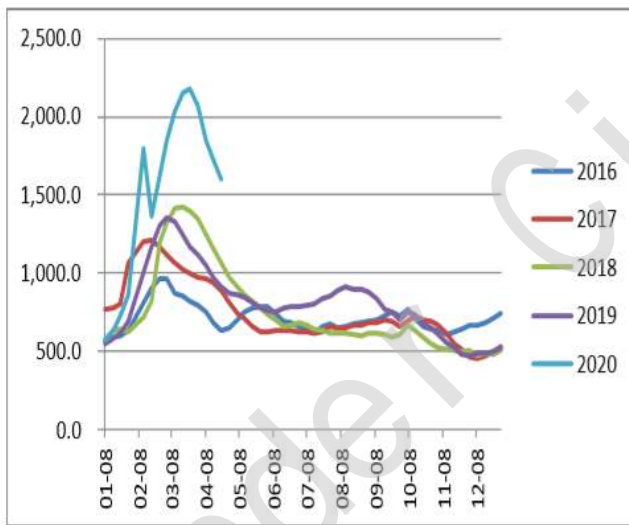


Chart: Total inventory of steel rebar (10,000 tons)

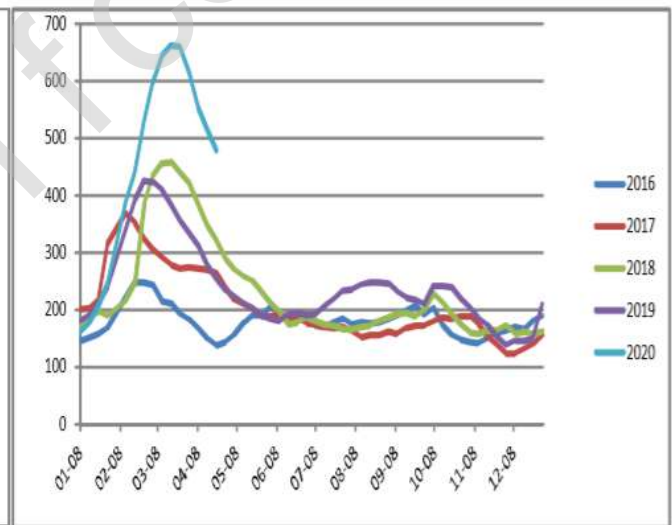


Chart: Total inventory of wire rod (10,000 tons)

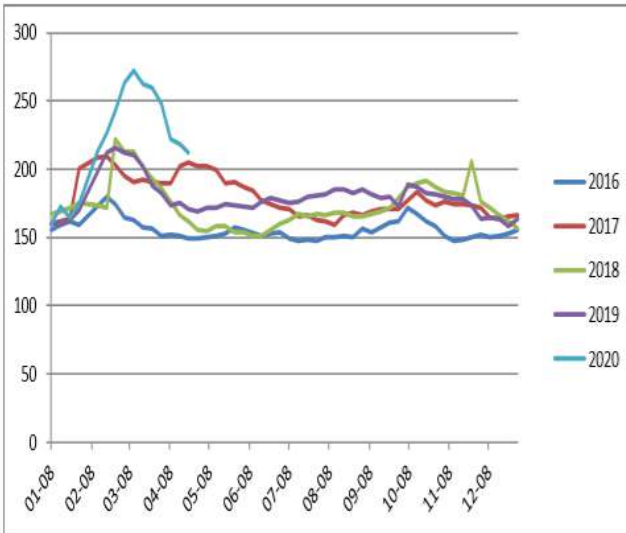


Chart: Total inventory of steel plate (10,000 tons)

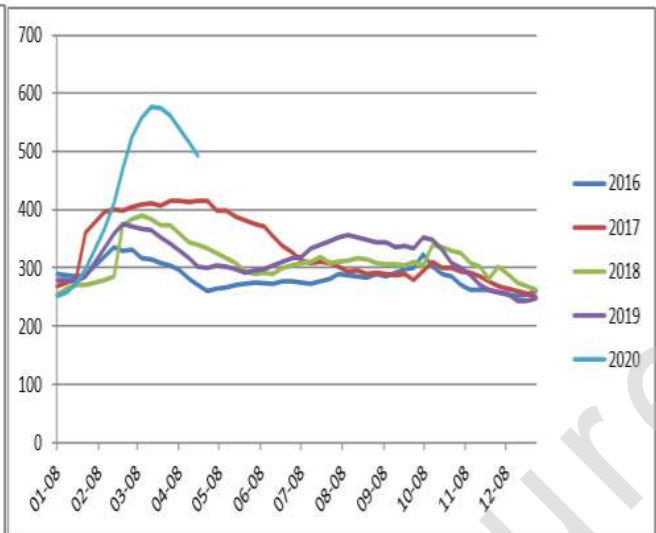
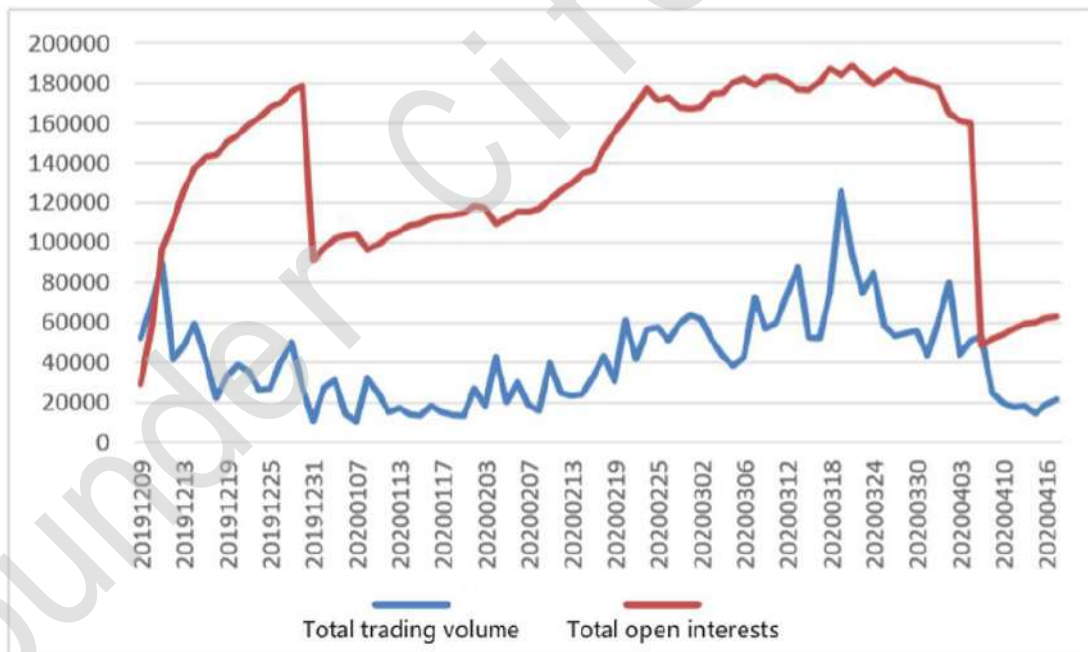


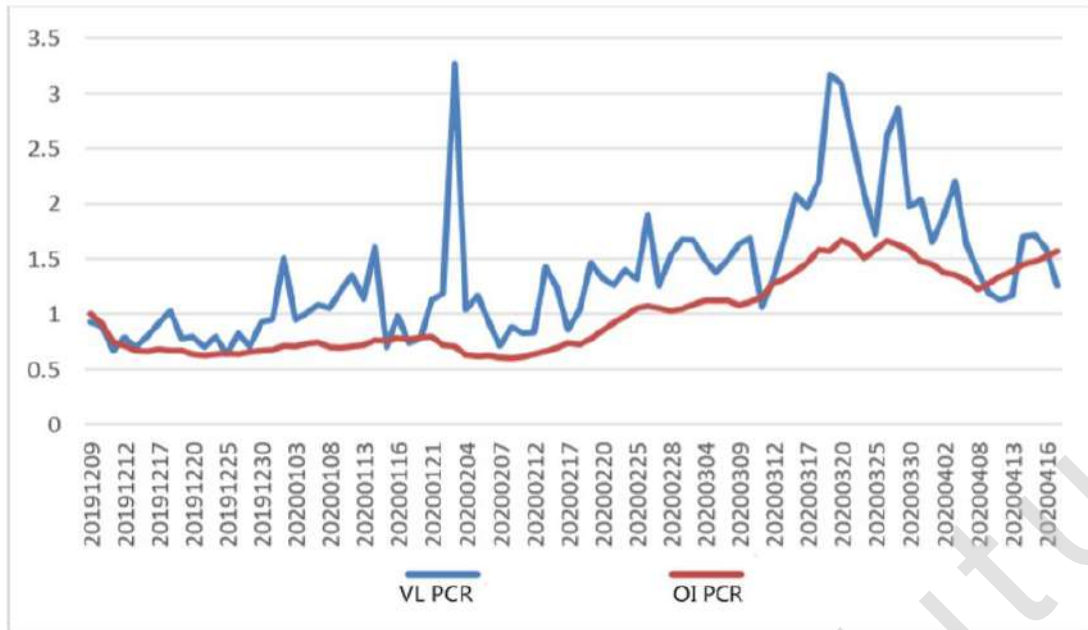
Chart: Total inventory of hot rolling (10,000 tons)

## VI. Iron Ore Options

### 6.1 Options trading and open interest analysis

The daily average trading volume of iron ore options were 18,336 lots, down 19,001 lots and the daily average open interest were 60,419, down 18,194 lots compared with last week. The put-call ratio of daily average trading volume was 1.49, up 0.15 and the daily open interest was 1.48, up 0.19 compared with last week.





6.2 Volatility analysis

Implied volatility slightly dropped this week with daily average of 36.31%, down 7.77%.



Chart: Implied volatility of iron ore options



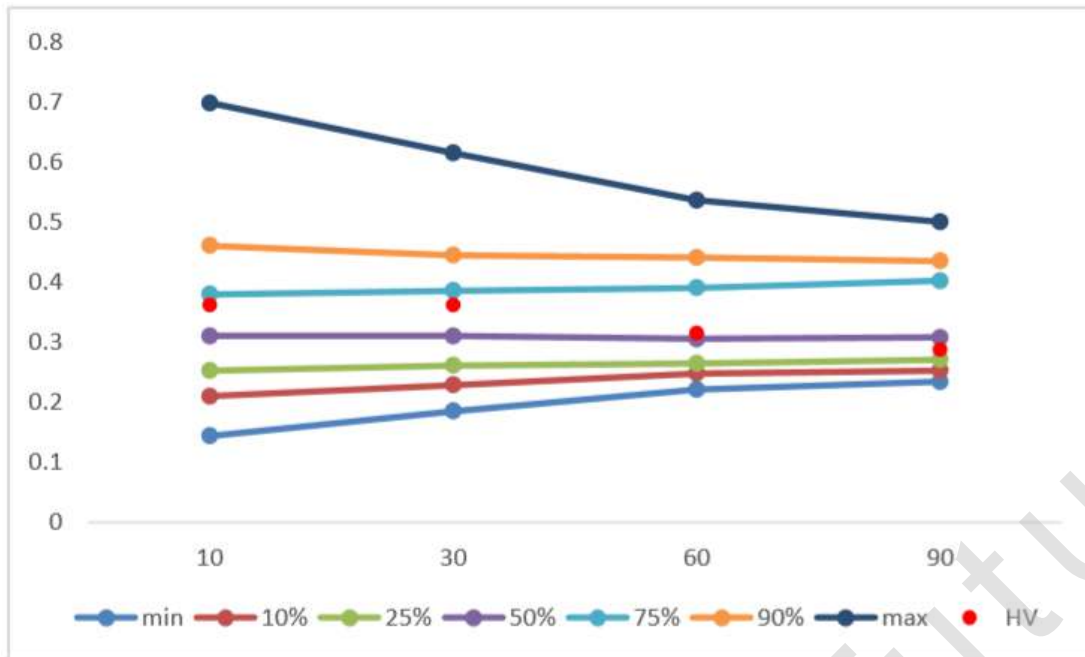


Chart: Volatility cones of iron ore options

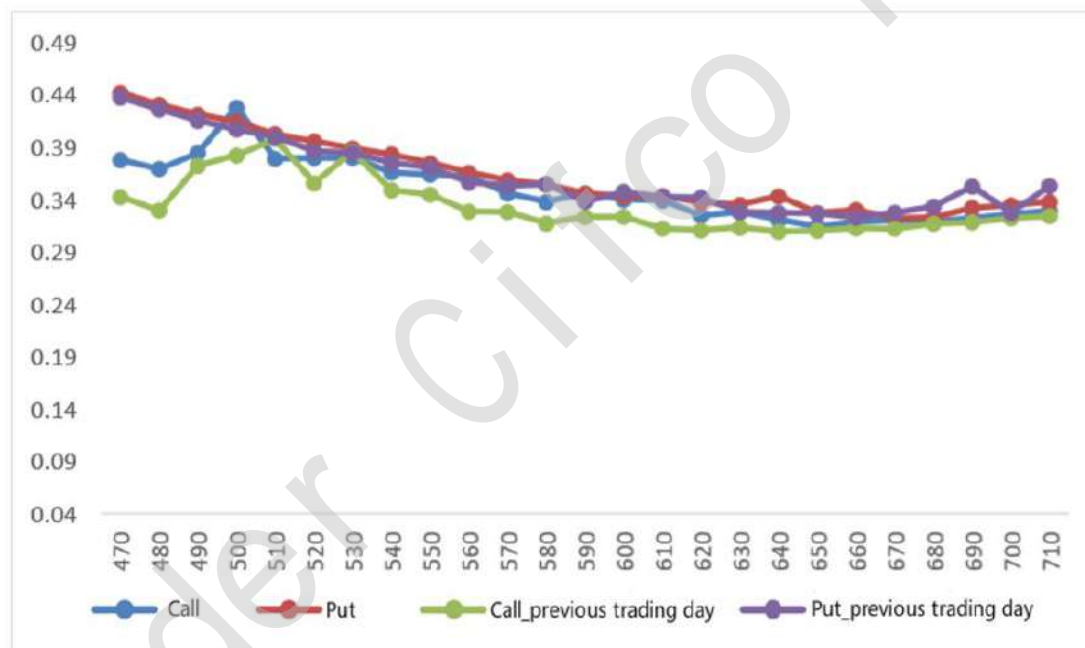


Chart: Implied volatility of nearby contract

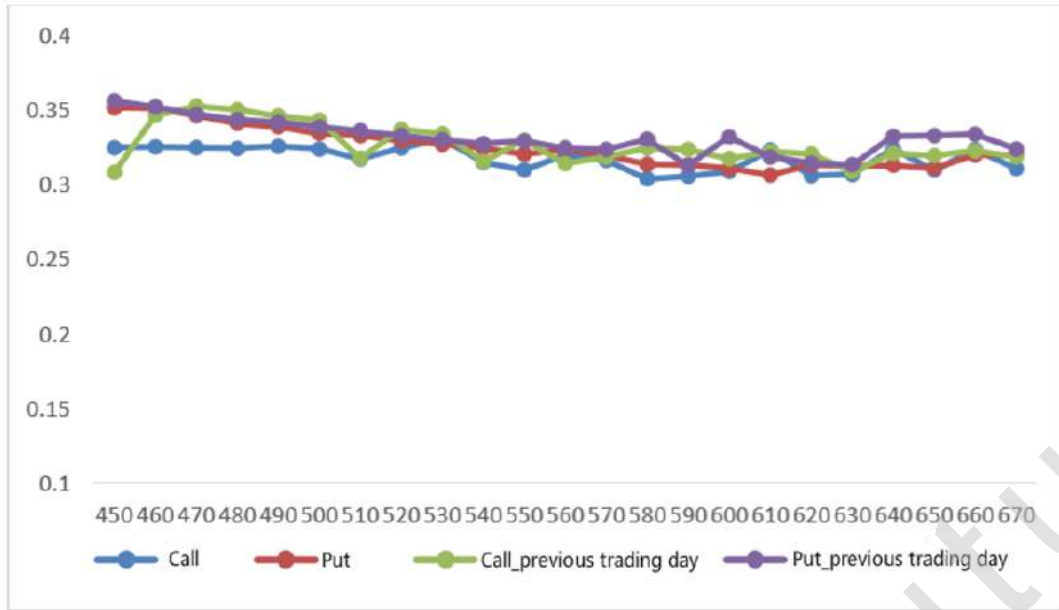


Chart: Implied volatility of forward contract

### 6.3 Options strategy

At present, the implied volatility of iron ore options is at a relatively high level since the listing, but the price trending will gradually become stable after the recent large price fluctuations and the expectations of volatility will be limited. we can construct the short straddle strategy and short volatility. The probability of short term will show a down turn trend, it is difficult to continue to strengthen, so the strategy of selling OTM options can be used.

#### I. Sell strangle options

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
卖 铁矿石期权2009-P-590 1	1	买价	42.7	42.7	44.4	35.48%	-0.4232	0.0026	1.3414	-0.2483	100
卖 铁矿石期权2009-C-600 1	1	买价	42.0	42.0	45.9	32.44%	0.5477	0.0026	1.3529	-0.2518	100

加入标的     保存策略    最大收益: 8,470.00    最大亏损: -∞  
 总Delta: -12.3853    总Gamma: -0.5205    总Vega: -267.2079    总Theta: 50.4460

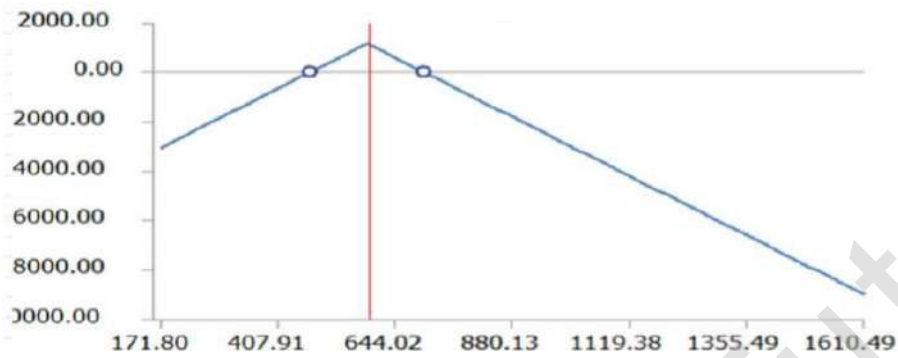


Chart: Break-even balance

II. Sell put options

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
卖 铁矿石期权2009-C-620 1	1	买价	36.2	36.2	37.6	33.45%	0.4969	0.0026	1.3751	-0.2529	100

加入标的     保存策略    最大收益: 3,620.00    最大亏损: -∞  
 总Delta: -49.6065    总Gamma: -0.2630    总Vega: -136.3724    总Theta: 25.5046

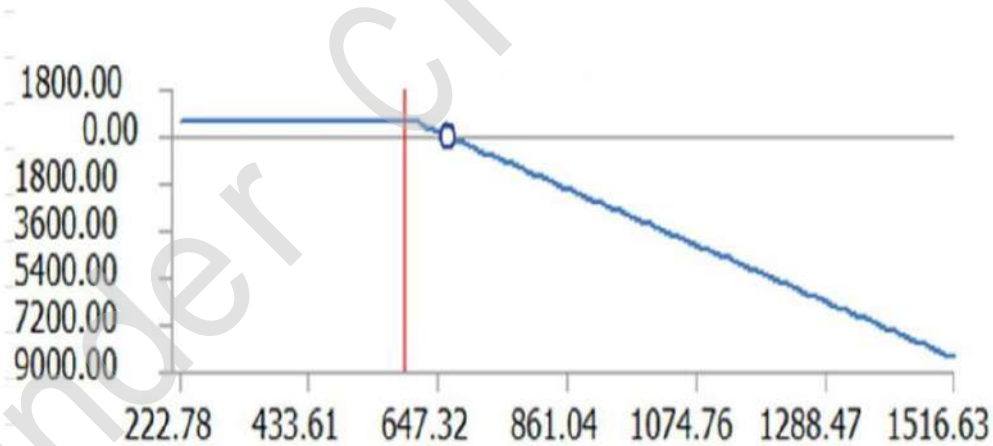


Chart: Break-even balance

VII. Open interests of top futures firms

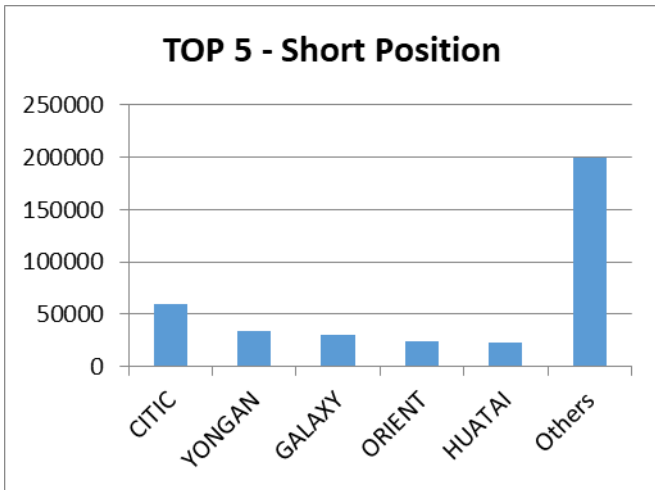


Chart: Top 5 of short positions

Source: Wind, Research Institute of Founder CIFCO Futures

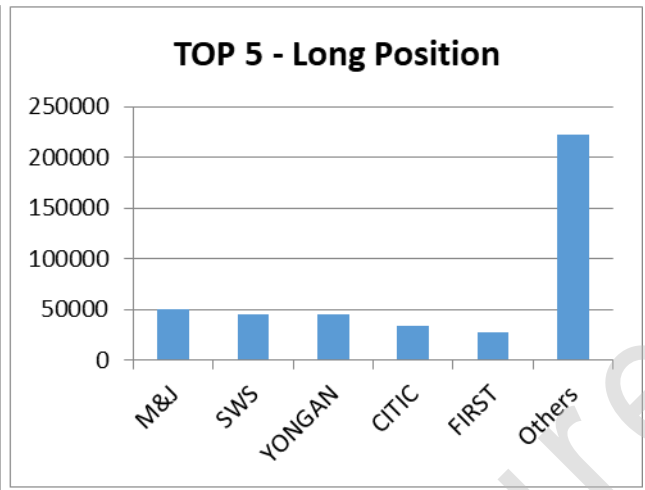


Chart: Top 5 of long positions

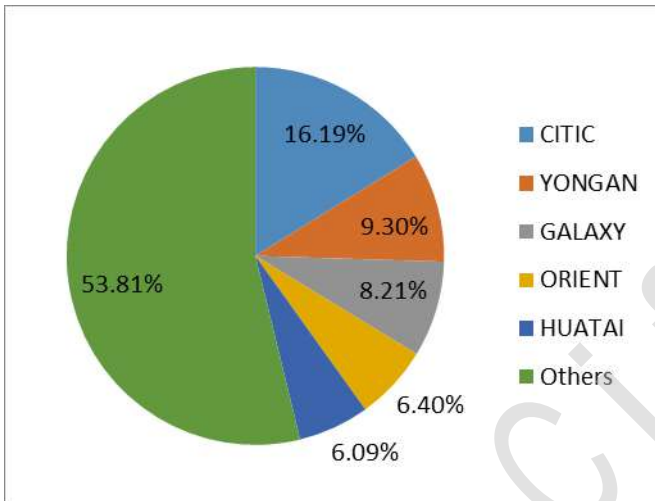


Chart: Short positions proportion

Source: Wind, Research Institute of Founder CIFCO Futures

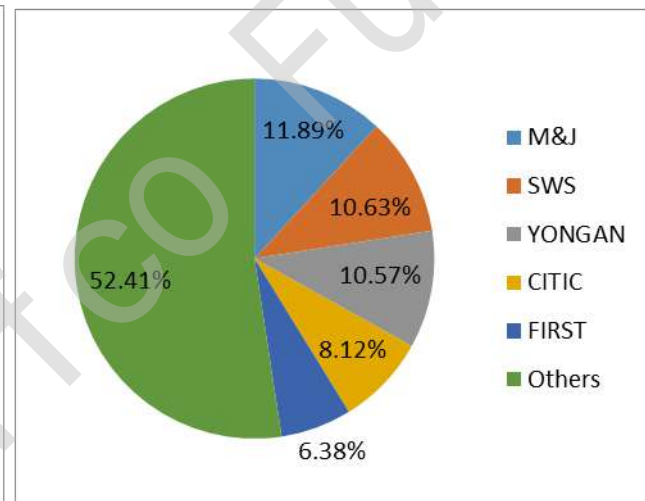


Chart: Long positions proportion

# 行方正 以致远

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