

Iron Ore Futures Weekly Report

(Near term: Bullish)

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Market Outlook and Trading Advice:

Iron ore price are volatile this week, the overall price shows a trend of surging down and was a small move up from last week. The large amplitude of iron ore price this week is mainly due to the pessimistic market view against with the strong fundamentals of iron ore itself, which drives the price in turn. All global asset classes prices have fallen sharply this week, especially in the commodity's Non-ferrous sector in the middle of a sharp correction, further exacerbated the short-term market panic. In the pessimistic market atmosphere, iron ore as a very active international commodities product, it is difficult to stay immune in this significant impact. But as short-term market sentiment fades, the iron ore are starting to take over again base on its fundamentals. This week, the factory warehouse continued to lower the inventory, Social inventory shows an obvious turning point, downstream demand of steel is further release. As the pressure of high inventory of finished materials has been greatly relieved, the output of steel mills has also seen a significant recovery, and the average daily molten iron output has returned to the level of 2.1 million tons, and the consumption of iron ore by steel mills in the long process has further increased. From the level of imported sintering inventory of sample steel mills this week, it further recovered to 15.9 million tons, which has increased for two consecutive weeks. A new round of replenishment of steel mills has been gradually launched, and the subsequent demand for iron ore still has the expectation of further strengthening. Port inventory continued to decline this week and it has been in a very low position, the supply side of the tight situation will continue in the short term. From the fundamental point of view, iron ore prices will remain strong in the short term. But the global capital market and the risk of all kinds of assets classes may still appear a large fluctuation which will produce short-term disturbance to the iron ore prices, please pay attention to the buying level when the reasonable price is appear.

1. Iron Ore Market Review

As of March 20, Platts 62% Fe was quoted at 86.55 USD per dry metric ton, down 4.89% from last week. Most of the prices of imported ore varieties were reduced. Specifically, this week, represented by MNP and others middle and high-grade iron ore from Australia in the top of the fall. PB fell about 2% this week, almost erased all the gains last week. Recently, the middle and high-grade PB continues to strengthen, but the steel mills are limited by the current low profit level. This week's replenishment is mainly low-quality Australian iron ore

fines, so SSE and mixed fines fall relatively small. Brazilian mine prices have bucked the trend this week, with prices of BRBF holding steady compared with last week, and IOCJ even up slightly. Brazilian mine prices have held up this week not because of better downstream demand, but mainly because the tight supply situation has not eased, and inventories in the Brazilian mine port fell further this week. Domestic ore, the current Tangshan area of iron fines production is still unable to fully meet the needs of local steel mills, so part of Hebei steel mills continue to maintain the purchase in Liaoning. And the steel mills in Liaoning province, which are in maintenance condition in the early stage, also began to gradually resume production recently, leading to the further tightening supply of iron ore fine resources in that area. Liaoning iron ore fine prices continued the upward trend this week, and the increase was significantly higher than last week, Anshan and Benxi prices are more than 5%. Prices in Hebei were basically stable, with prices in Tangshan remains unchanged from last week, while prices in Hanxing and Wuan fluctuated slightly.

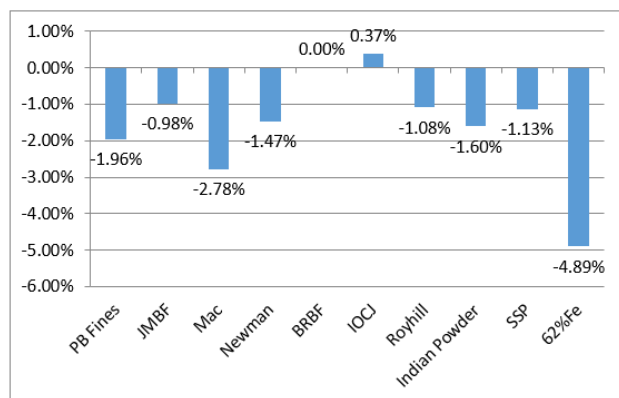


Chart: Up or down of weekly offshore ore prices

Source: Mysteel, Founder CIFCO Futures

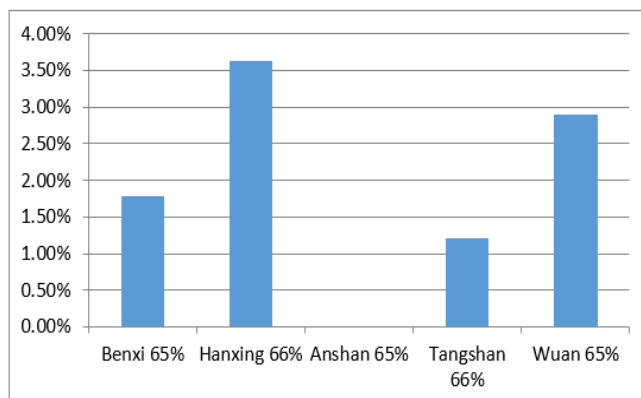


Chart: Up or down of weekly onshore ore prices

	Offshore Ore Prices								
	PB Fines	JMBF	Mac	Newman	BRBF	IOCJ	Royhill	Indian Powder	SSP
2020/2/21	669.0	604.0	652.0	681.0	709.0	816.0	642.0	616.0	540.0
2020/2/28	615.0	565.0	598.0	630.0	649.0	776.0	607.0	578.0	514.0
Weekly Up or Down	-54.0	-39.0	-54.0	-51.0	-60.0	-40.0	-35.0	-38.0	-26.0
	-8.07%	-6.46%	-8.28%	-7.49%	-8.46%	-4.90%	-5.45%	-6.17%	-4.81%

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%
2020/3/13	600.0	818.0	620.0	665.0	710.0
2020/3/20	630.0	819.0	660.0	665.0	700.0
Weekly Up or Down	30.0	1.0	40.0	0.0	-10.0
	5.00%	0.12%	6.45%	0.00%	-1.41%

Chart: Weekly onshore ore prices

Source: Mysteel, Founder CIFCO Futures

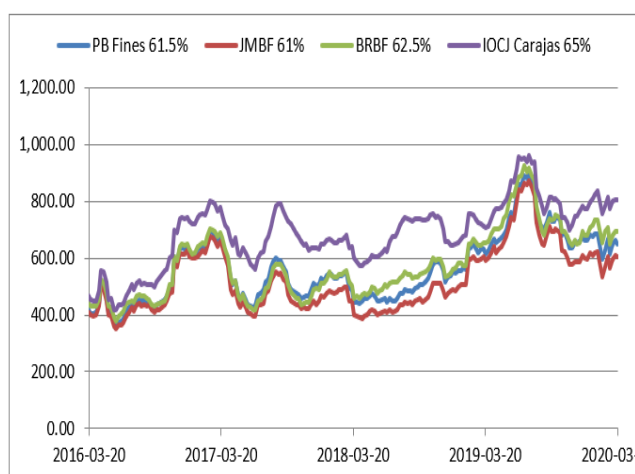


Chart: Medium and high-grade iron ore spot price

Source: Mysteel, Founder CIFCO Futures

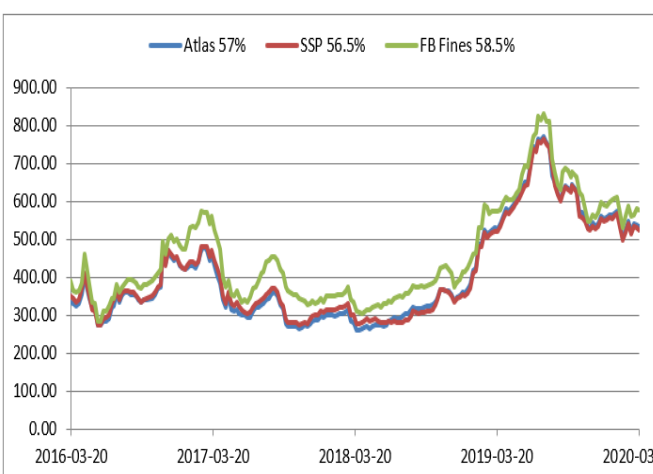
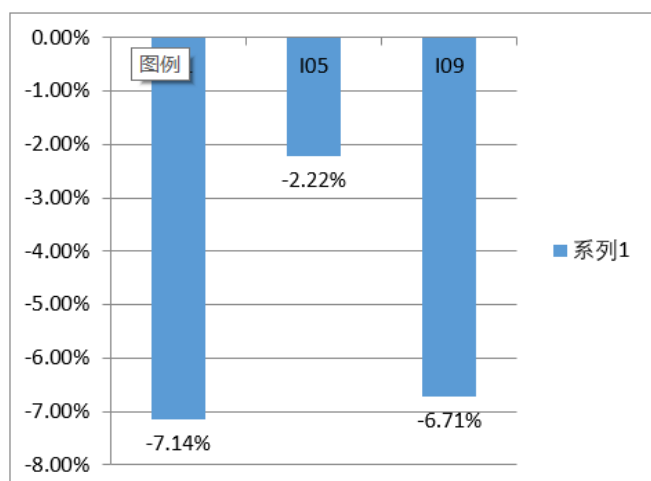


Chart: Low-grade iron ore spot price

We've seen surge of iron ore futures prices of both nearby and forward contracts. To be specific, nearby contract price rose much higher than that of forward contract. Contract 05 increased by 4.08% this week. Forward contract prices went up by over 1%. Total trading volume of contract 05 plummeted, whereas forward contract 09 and contract 01 surged by around 40%. Open interests of both forward contract 01 and nearby contract 05 decreased, whereas that of contract 09 slightly increased. For futures contracts, this week the iron ore nearby contract prices have significantly reduced. Specifically, the trend of the nearby contracts is still significantly stronger than the forward contracts, the i2005 contract prices down 2.22% this week, and the weekly prices of the forward contract prices fell about 7%. In terms of trading volume for each contract, the trading volume growth of i2005 is still the smallest, and the forward contract(i2009) weekly trading volume growth is increased of more than 100%. Open interests of i2005 continued to reduce positions and i2009 had largest increase this week. The nearby contract began to roll over gradually to the forward month.



	Close Price (RMB/ton)		
	I01	I05	I09
2020/3/13	602.5	676.5	633.5
2020/3/20	559.5	661.5	591.0
Weekly Up or Down	-43.0	-15.0	-42.5
	-7.14%	-2.22%	-6.71%

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
2020/3/13	10.67	596.61	105.54	3.86	64.06	29.25
2020/3/20	15.02	702.72	213.11	4.14	51.34	36.19
Weekly Up or Down	4.35	106.10	107.57	0.28	-12.72	6.94
	40.79%	17.78%	101.93%	7.37%	-19.85%	23.71%

Chart: Weekly trading volume of iron ore futures

Source: Wind, Founder CIFCO Futures



Chart: Technical chart of contract 05

Source: Wind, Founder CIFCO Futures

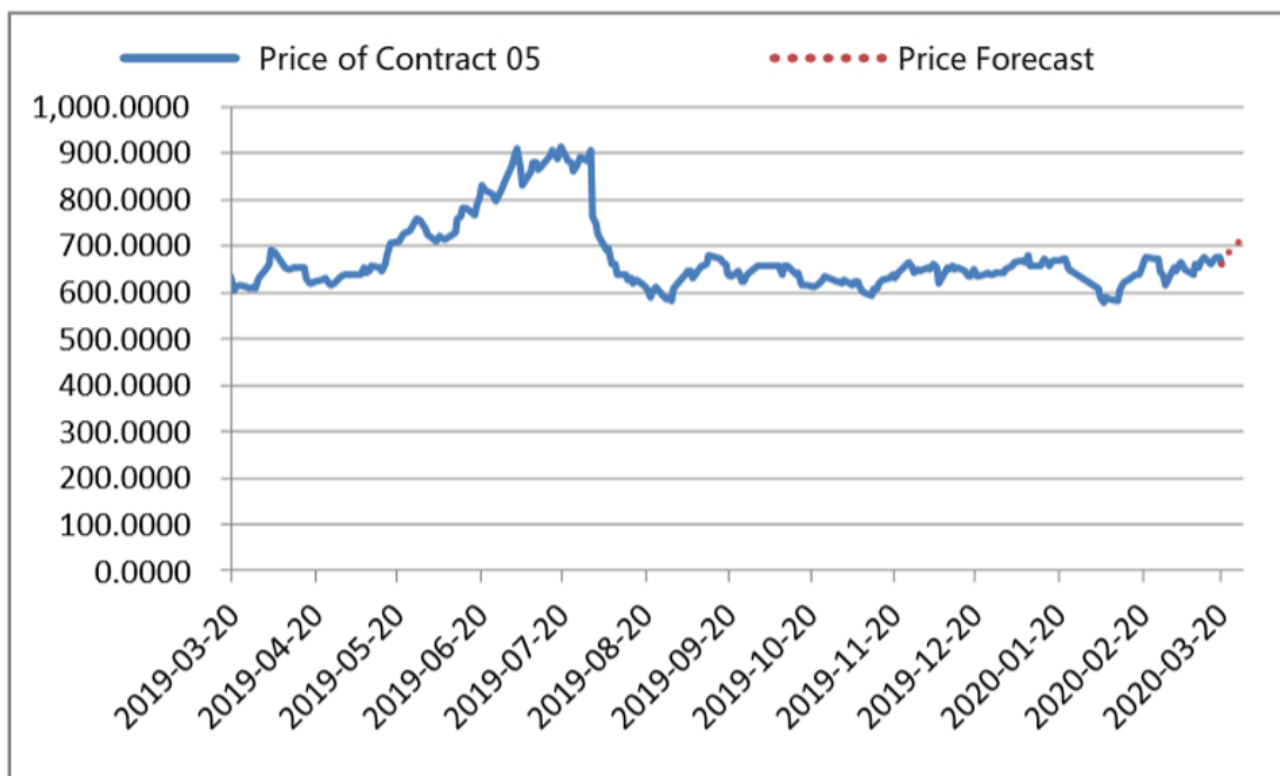


Chart: Price of contract 05 and price forecast

Source: Wind, Founder CIFCO Futures

II. Basis and Spread

In this week, the basis difference of iron ore contracts in the nearby and forward months has been widened to different degrees, among which the i2005 has the smallest expansion, i2009 has the largest expansion. As of March 20, the i2005 basis was 57.1 RMB/ton, 0.9 RMB/ton more than last week. In terms of the spread difference between products, spread between IOCJ Carajas and PB increased by 24 RMB/ton to 156 RMB/ton this week; spread between PB and JMBF was 47 RMB/ton this week, with a decrease of 7 RMB/ton on a weekly basis; spread between PB and SSP was 125 RMB/ton, with a decrease of 7 RMB/ton on a weekly basis. In general, the PB premium was significantly weakened in this week. As of this weekend, 09-01 contract spread of 31.5 RMB/ton, the increase of 0.5 RMB/ton last week; The 05-09 contract spread widened by 27.5 RMB/ton to 70.5 RMB/ton this week.

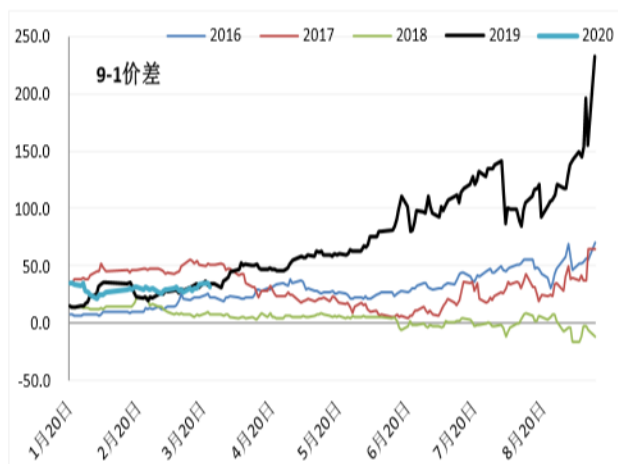


Chart: Spread of contract 09 and 01

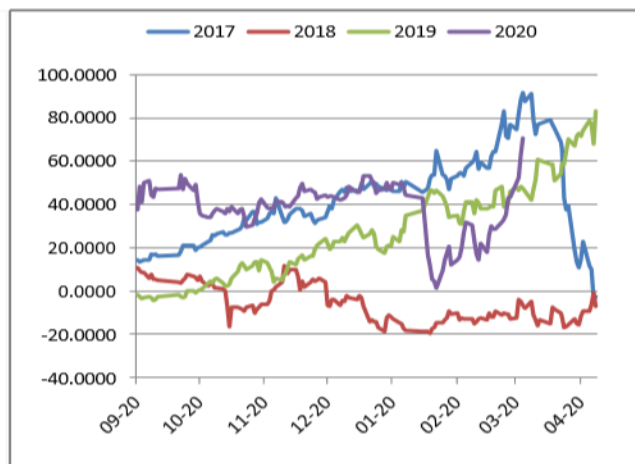


Chart: Spread of contract 05 and 09

Source: Wind, Founder CIFCO Futures

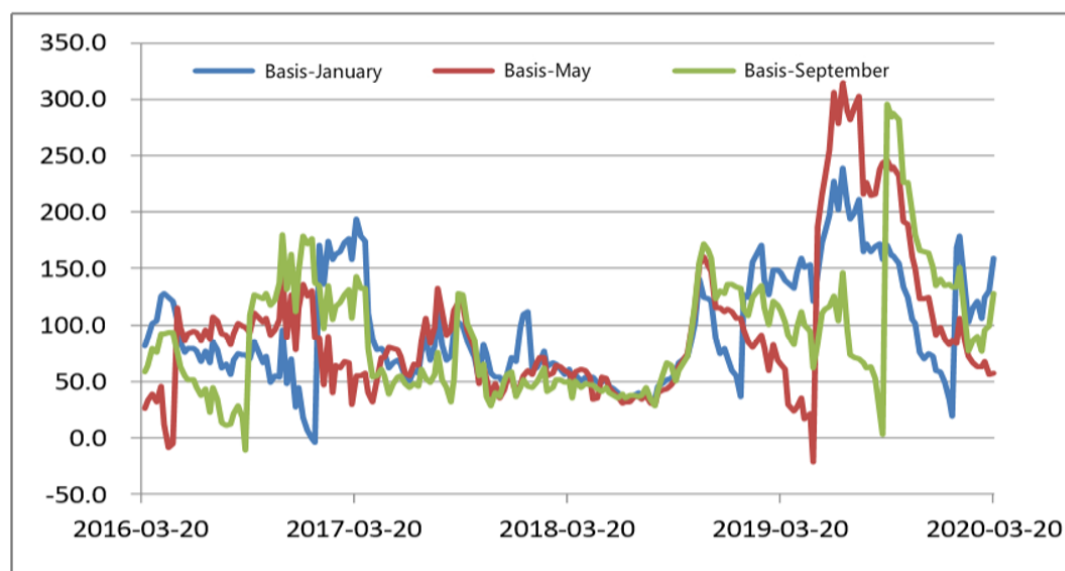
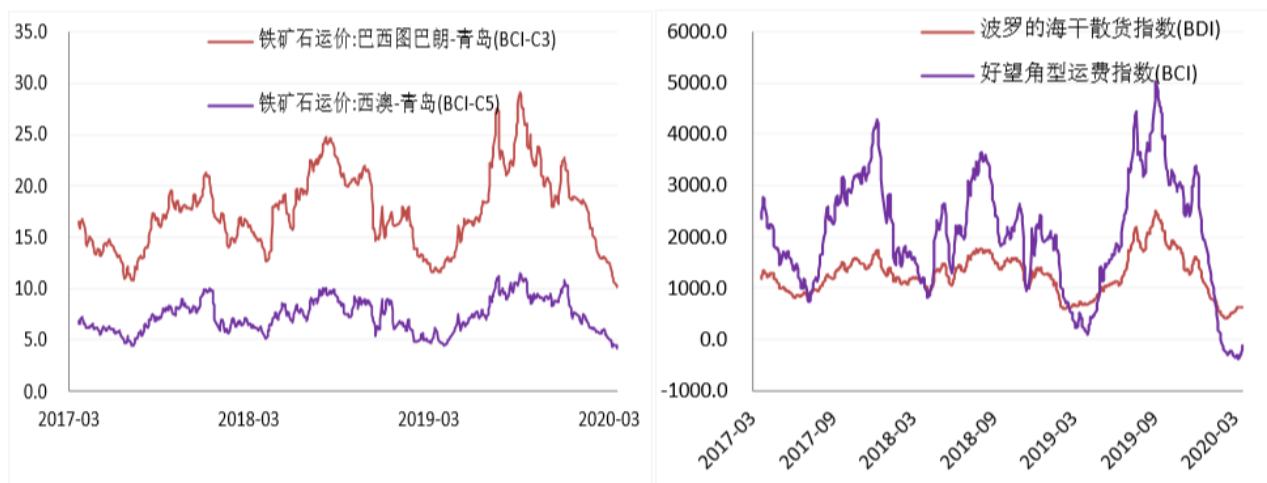


Chart: Basis of spot iron ore (PB fines 61.5%) in Rizhao port

Source: Wind, Founder CIFCO Futures

III. Shipping Market Review

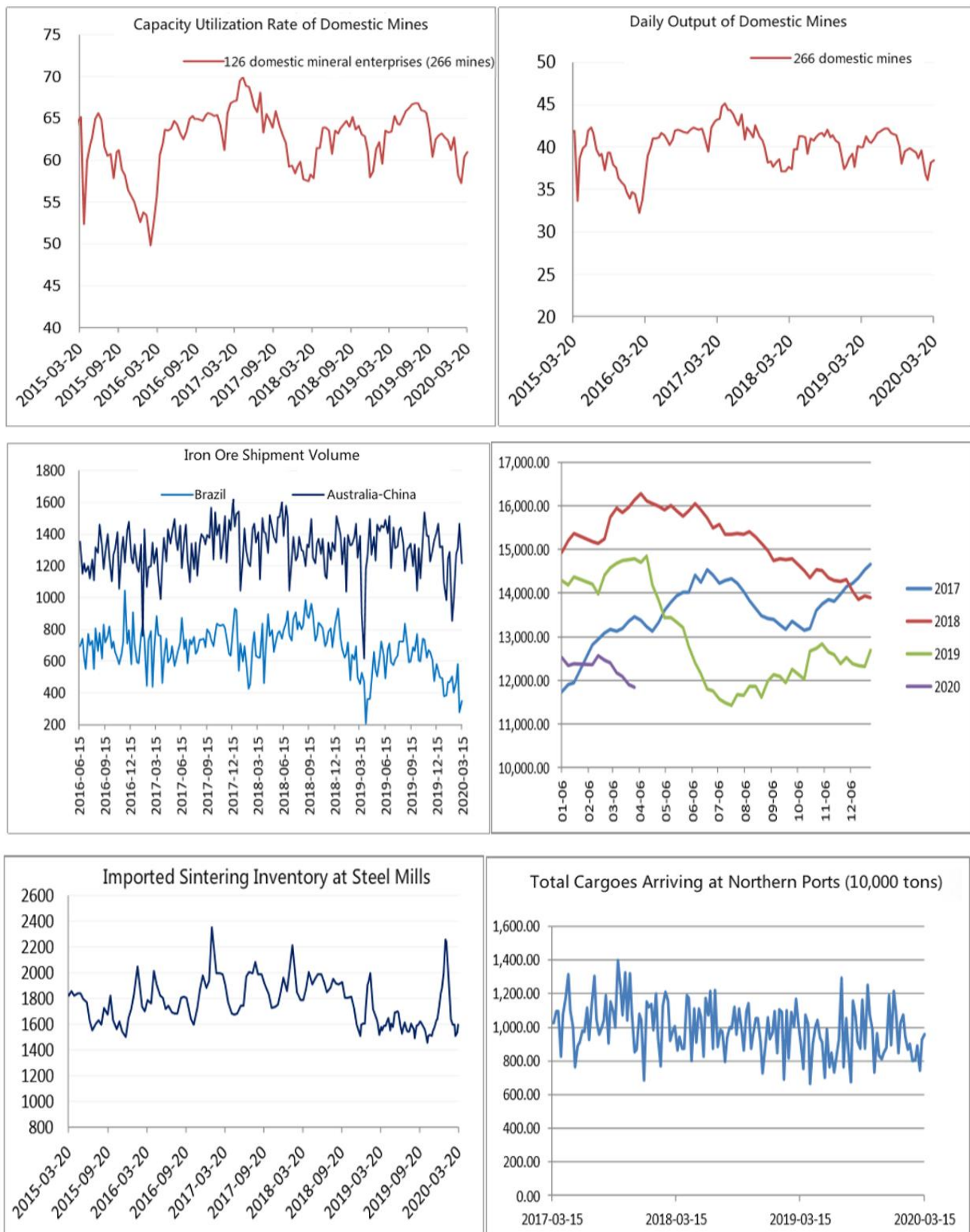
BDI rebound this week. BDI quoted 633 on March 12th, up 34 (5.68%). BCI quoted -355, down 48. Freight from Tubaro to Qingdao port quoted 10.7 USD/ton, down 1.7 (13.43%). Freight from West Australia to Qingdao port quoted 4.5 USD/ton, down 0.5 (10.63%). This week, BDI decreased slightly to 630 as of March 19, with a decrease of 3 (0.47), while BCI rebounded significantly to -166 this week, with a increase of 189 (MOM). Freight continued to decline this week, as of March 19, Tubaro to Qingdao port quoted 10.7 USD/ton, down 0.6 USD/ton (5.25%) from the previous week. Freight from Western Australia to Qingdao port was quoted at 4.2 USD/ton, down 0.30 (5.71%).



Source: Wind, Founder CIFCO Futures

IV. Supply

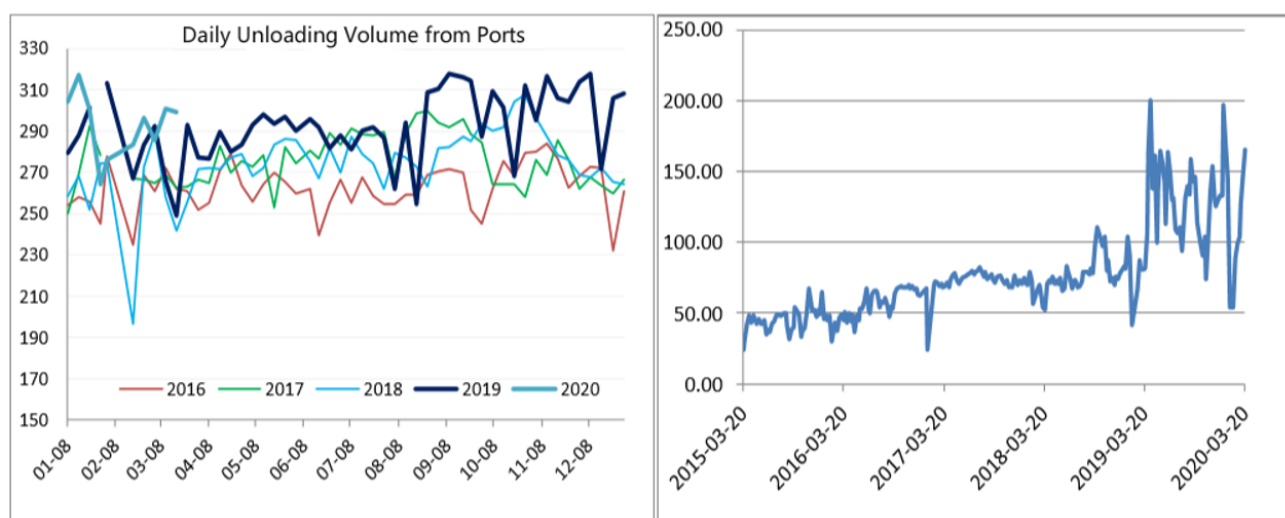
Domestic mine supply has continued to recover recently. The latest data (March 20) shows that the operating rate of 126 mining enterprises in China is 60.97%, a small increase of 0.54% compared with the previous period. The average daily output of domestic mines in the latest period was 384,600 tons, increasing by 340 tons/day. the total shipment volume of Australian and Brazilian this week decreased by 2.949 million tons to 18.181 million tons. After the significant drop in the shipment volume of Brazilian last week, the shipment volume of Australian this week also showed a sharp decline, falling by 3.671 million tons, among which, the shipment volume to China was 12.168 million tons, falling by 2.518 million tons from the previous week. Shipments from Brazilian picked up slightly this week, rising 722,000 tons from the previous month to 3.485m tons, but remain at a low level. The latest import number was 9.58 million tons, an increase of 320,000 tons. As of March 20, the inventory of national 45 port was 118.4413 million tons, dropped 670000 tons, including 65.9364 million tons of PB, YOY increase of 429600 tons, Brazil ore 30.2272 million tons of inventory, dropped 528300 tons, the ore trade stock 57.3434 million tons, dropped 438700 tons, 19.0235 million tons of ore, dropped 45500 tons, 4.5201 million tons of pellets, dropped 38700 tons.



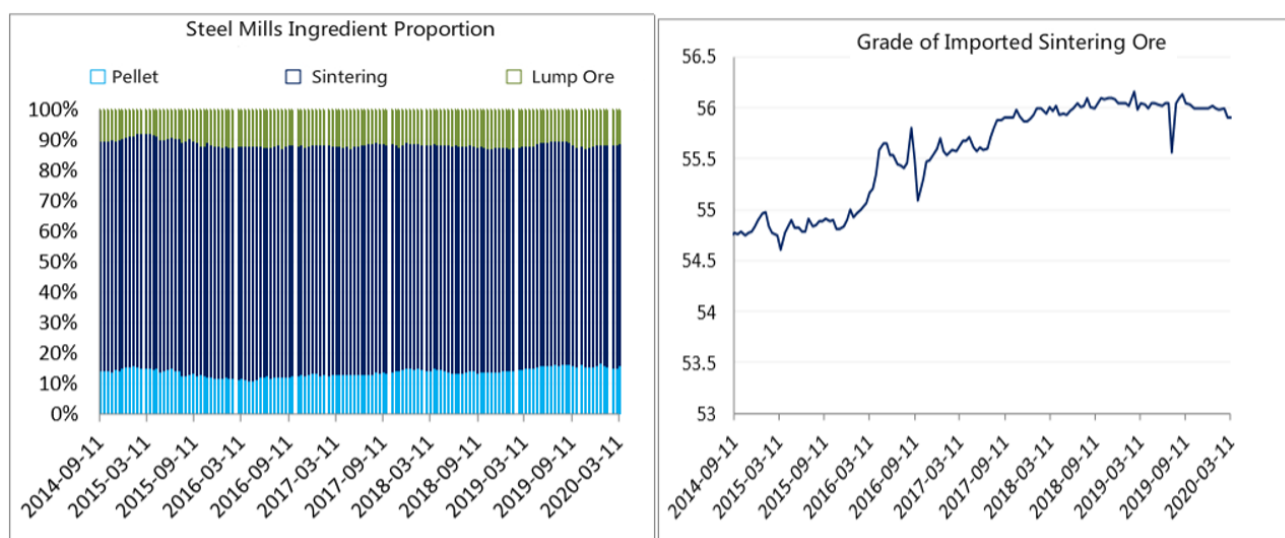
Source: Wind, Founder CIFCO Futures

V. Demand

Sintering ore accounted for 55.9% of raw materials before putting into furnace (March 11th), basically unchanged with last week. Pellet, sintering ore, lump ore accounted for 15.66%, 73.25% and 11.08%, the priors were 14.98%, 73.54% and 11.48%. Due to the recent improvement in long process profits, steel mills have increased the proportion of pellets into the furnace, reducing the consumption of lumps. This week steel mill enquiries are further increased, some steel mills have begun to make up for the warehouse, the average daily transport volume is still maintained in the vicinity of 3 million tons of high. Average daily trading volume at major ports in China recovered to 1.65 million tons this week, up 17.5 tons/day from the previous week. It has risen for six consecutive weeks since the holiday.



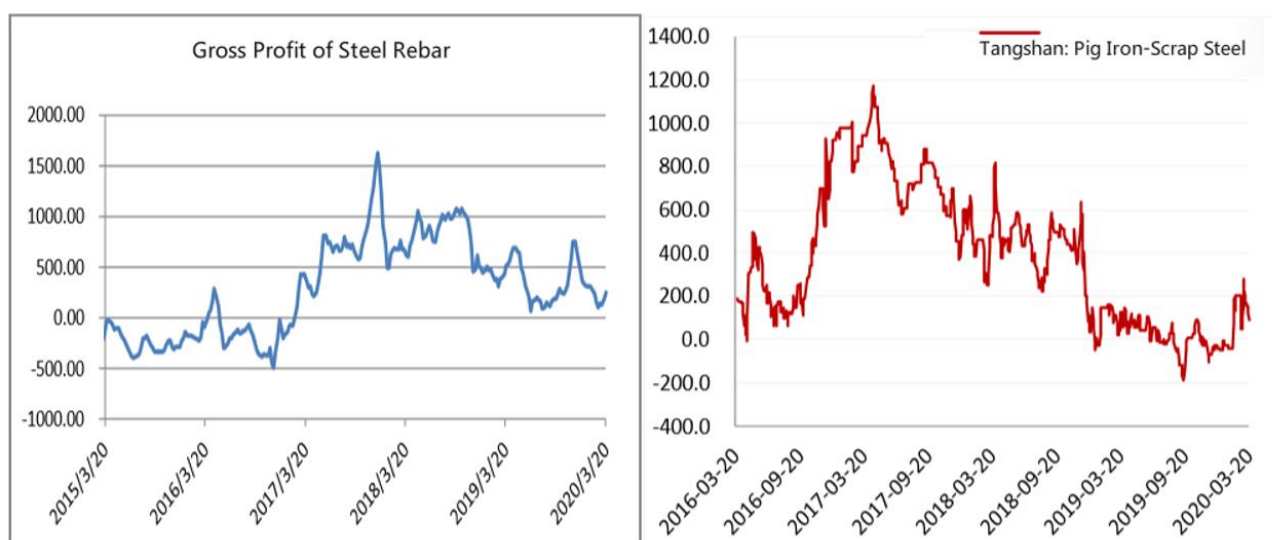
Source: Wind, Founder CIFCO Futures



Source: Mysteel, Founder CIFCO Futures

This week, with the further release of the downstream steel demand, the inventory began to turn, prices continue to strengthen, the profits of the long process steel mills was recovered, the gross profit of rebar steel

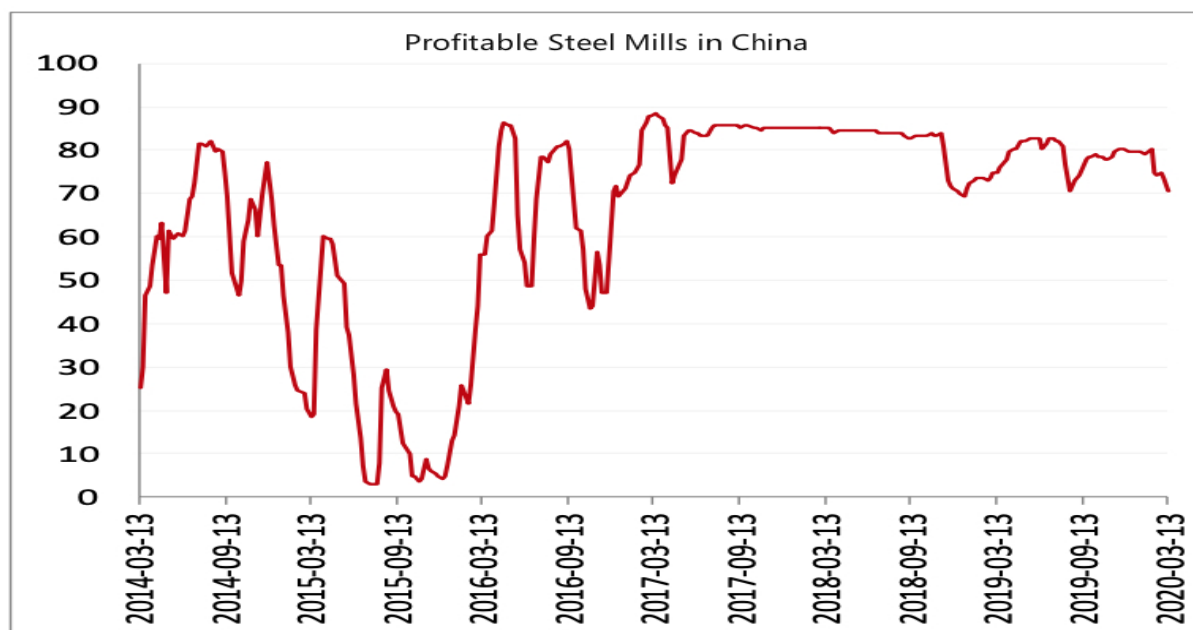
has recovered to about 250 RMB this week. Scrap steel prices also rose slightly this week, cast iron and scrap spread narrowed. Electric furnace operating rate and output this week showed a significant increase, but due to scrap steel supply is still too tight, the shortage of workers, and the level of profit constraints, is still at a low level compared with previous years. The average operating rate of 71 electric arc furnace steel mills nationwide was 22.51%, up 9.31% (MOM) this week. The weekly crude steel output was 304,700 tons, up 158,200 tons (MOM). With the continuous improvement of downstream demand and the gradual recovery of scrap steel supply, the progress of furnace production is expected to be further accelerated next week. The proportion of profitable steel mills nationwide this week was 73.62%, up 3.07% (MOM).



Source: Wind, Founder CIFCO Futures

Operation rate of total 163 blast furnace in China was 64.5%, up 0.97% compared with last week. In terms of inventory, the demand for finished materials has further improved this week. The average daily turnover of mainstream building materials firms in China has recovered significantly. The inventory of finished materials factory was declined after the holiday at the first time. Weekly decline of 601,200 tons, and it will be starting the destocking cycle. Inventory growth also fell to 710,800 tons this week. The strength of the rebar is expected to be further strengthened, supporting the entire ferrous sector to remain strong. From the output point of view, this week's production has a small decline, but basically held flat at the level of last week, the output of the five major steel varieties this week decreased slightly 39,000 tons, of which the weekly output of thread is 2,487,500 tons, increased 35,000 tons/week. The average daily production of melted iron increased by 0.33 million tons to 2.06664 million tons, which was basically the same as last week. The long process still maintained a considerable amount of rigid consumption for iron ore, and the total daily consumption of imported ore sinter fines was 567,600 tons this week. Before the large-scale reproduction of electric furnace, with the gradual release of steel demand for the downstream, the demand for the iron ore is expected to get better in the future. The total inventory of imported sintering in the sample steel plant is 15.376,500 tons, with an average

usable day of 25 days. The current inventory has fallen to the level before the steel plant's pre-holiday replenishment, and the steel plant is likely to conduct a new round of centralized replenishment.



Output (10,000 tons)	Steel Rebar	Wire Rod	Hot Rolling	Cold Rolling	Medium Plate
2020. 03. 13	248. 75	111. 93	307. 24	77. 95	118. 52
2020. 03. 20	272. 98	119. 82	302. 53	79. 64	117. 45
Weekly Up or Down	24. 23	7. 89	-4. 71	1. 69	-1. 07

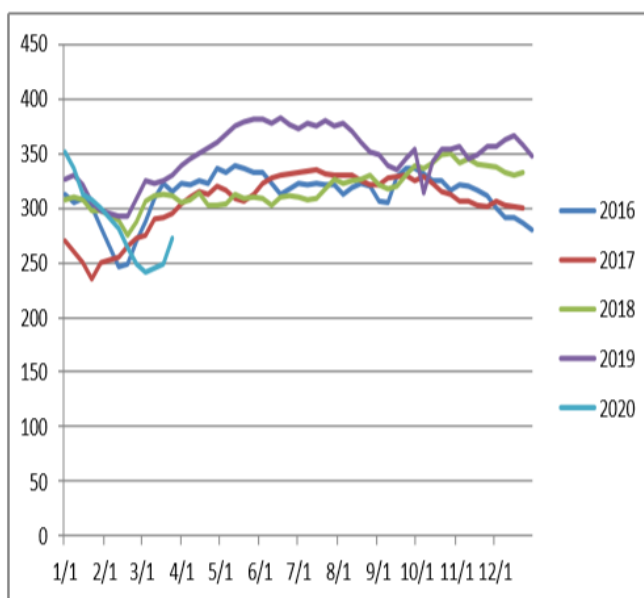


Chart: Weekly output of steel rebar (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

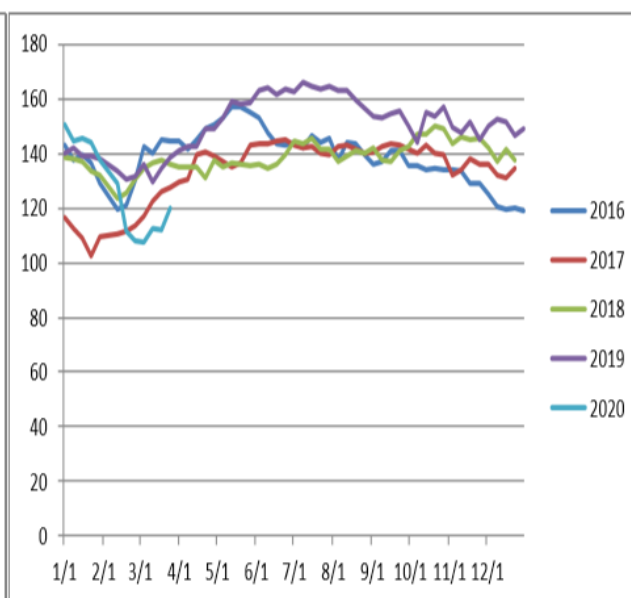


Chart: Weekly output of wire rod (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

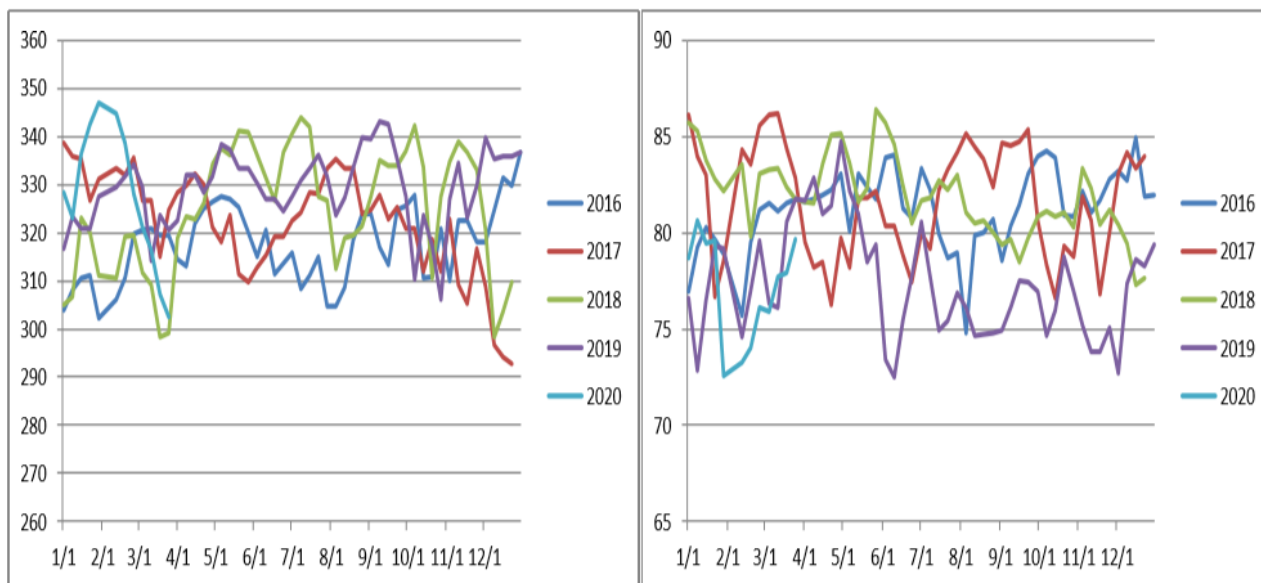


Chart: Weekly output of hot rolling (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

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

Source: Mysteel, Founder CIFCO Futures

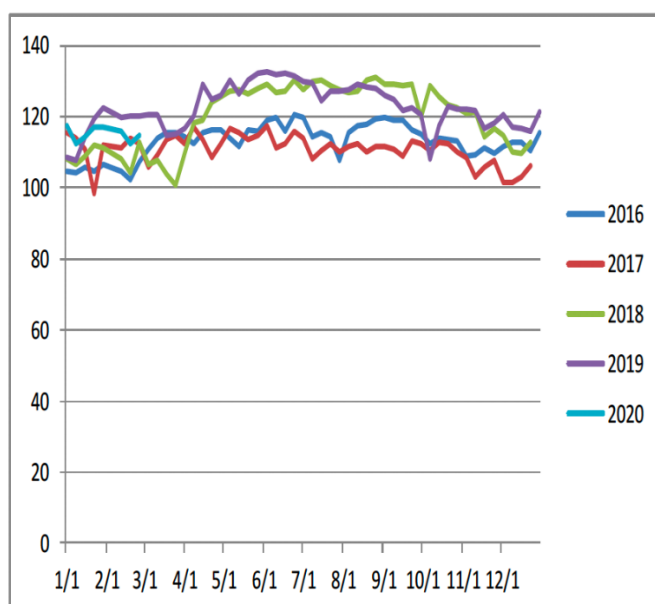


Chart: Weekly output of steel plate (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

Output (10,000 tons)	Steel Rebar	Hot Rolling	Medium Plate	Wire Rod	Cold Rolling
2020. 03. 13	1426. 95	412. 98	147. 79	456. 34	154. 45
2020. 03. 20	1405. 25	404. 88	141. 3	438. 34	145. 89
Weekly Up or Down	-21. 7	-8. 1	-6. 49	-18	-8. 56

Chart: Social inventory (10,000 tons)

Source: Mysteel, Founder CIFCO Futures

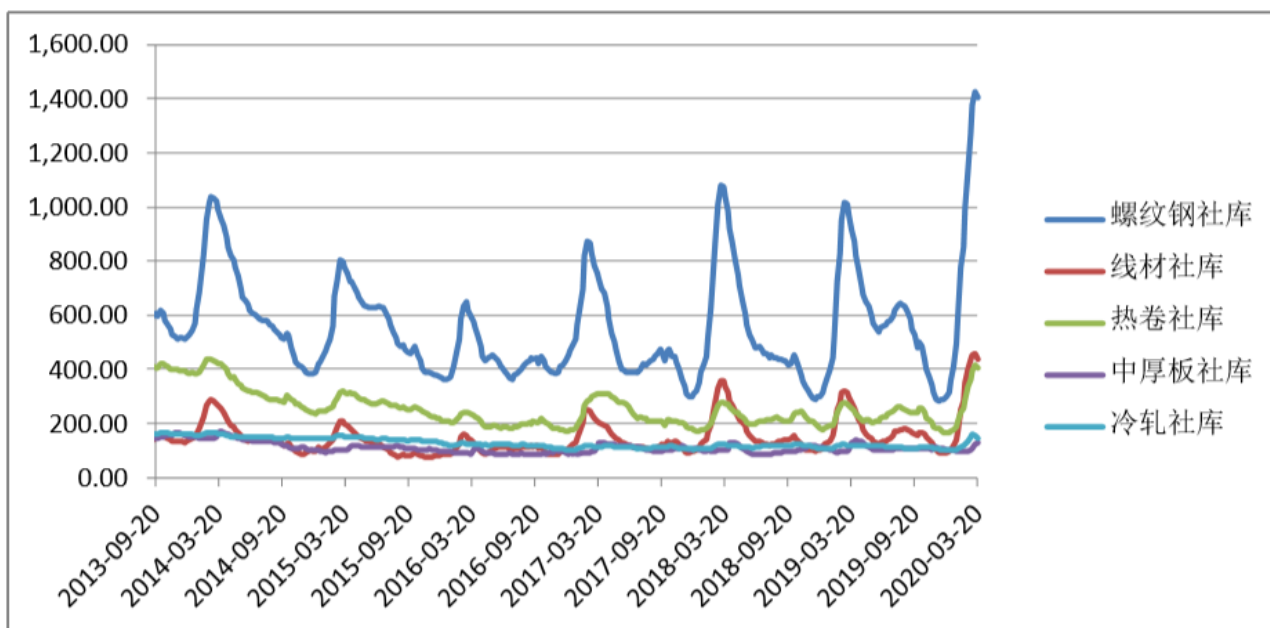


Chart: Weekly social inventory of five steel products

Source: Wind, Founder CIFCO Futures

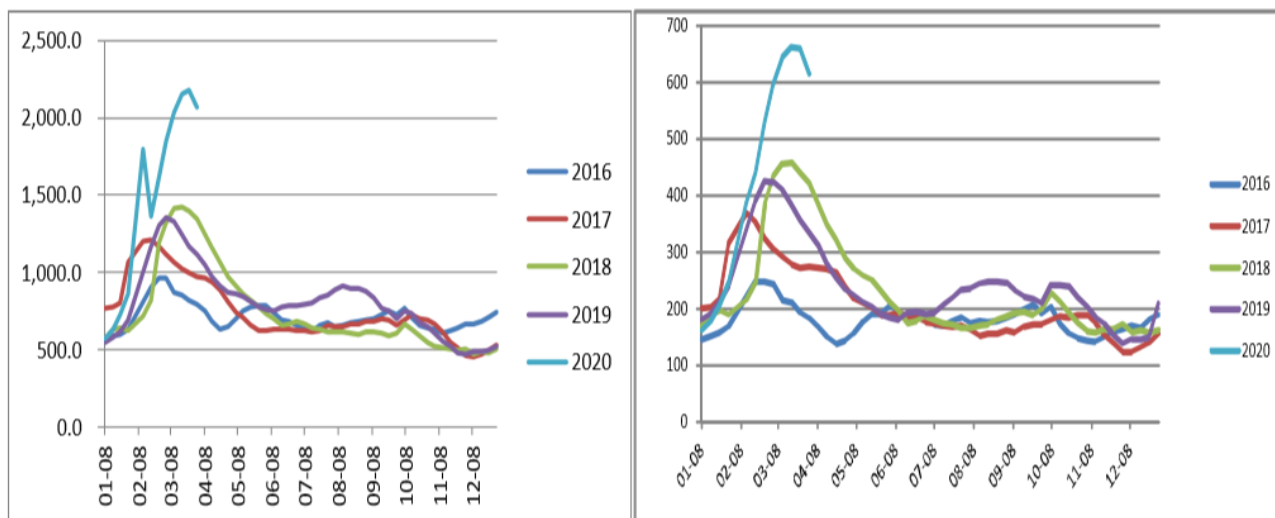


Chart: Total inventory of steel rebar (10,000 tons)

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

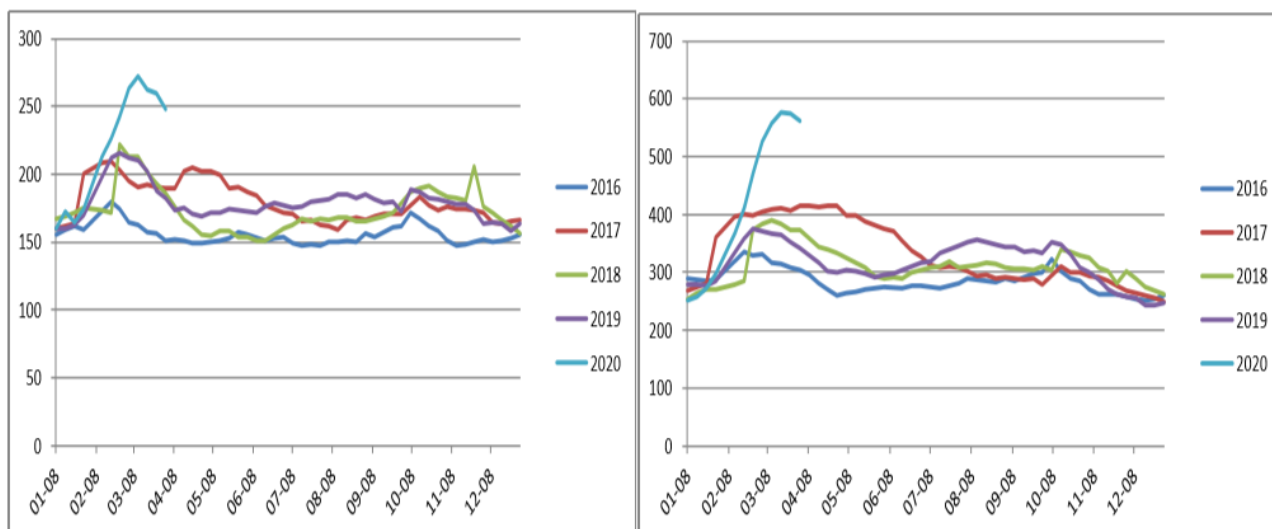


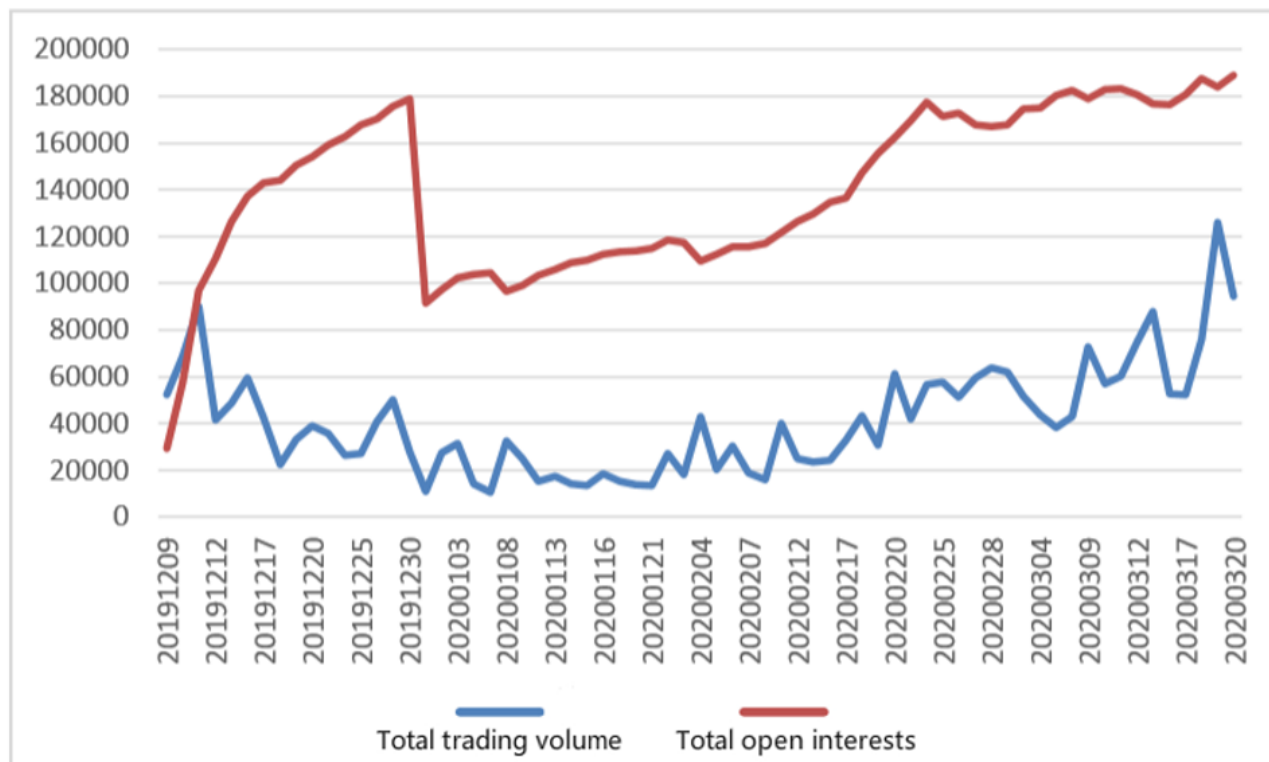
Chart: Total inventory of steel plate (10,000 tons)

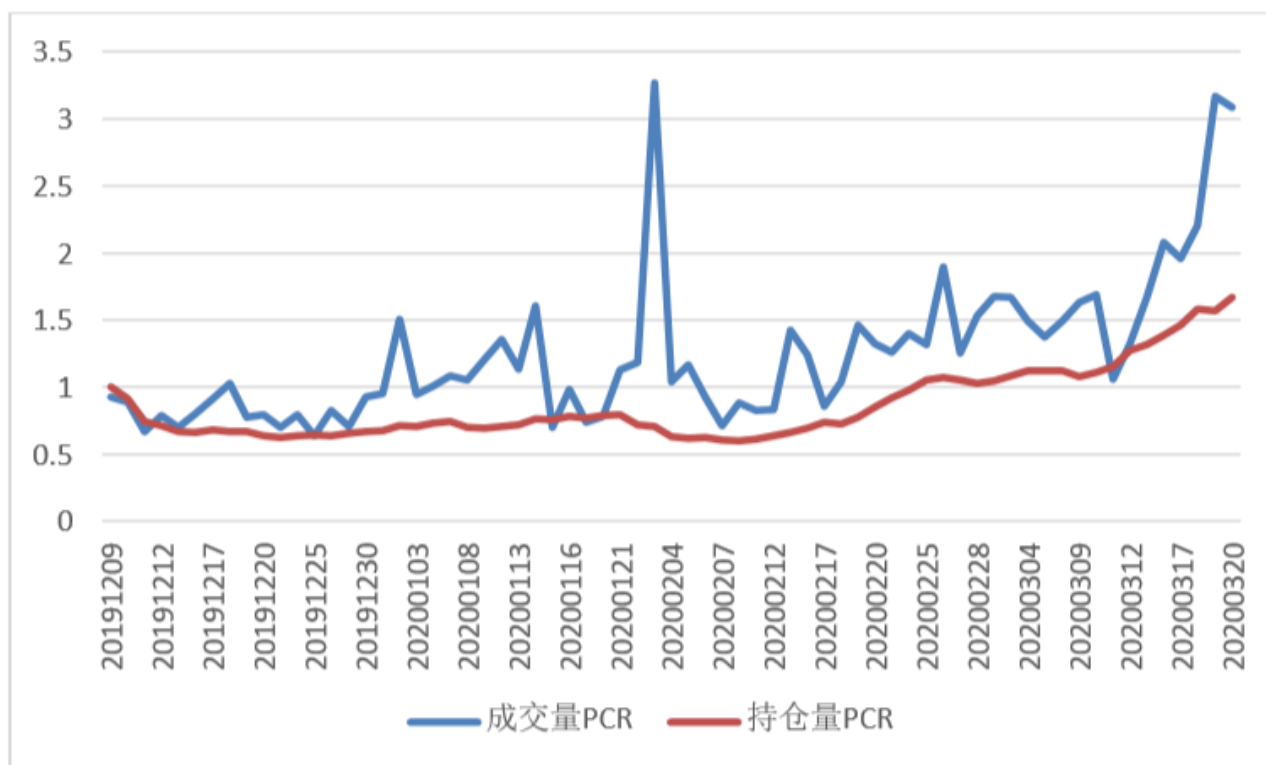
Chart: Total inventory of hot rolling (10,000 tons)

VI. Iron Ore Options

6.1 Options trading and open interests analysis

Daily trading volume of iron ore options were 80,210 lots last week, up 9826 lots compared with last week. Daily open interests was 183,541 lots per day last week, up 3,040 lots. The put-call ratio of daily trading volume was 2.5, down 1.02. The put-call ratio of open interests was 1.53, up 0.35 compared with last week.





6.2 Volatility analysis

Implied volatility slightly dropped this week with daily average of 56.45%, up 12.27%.

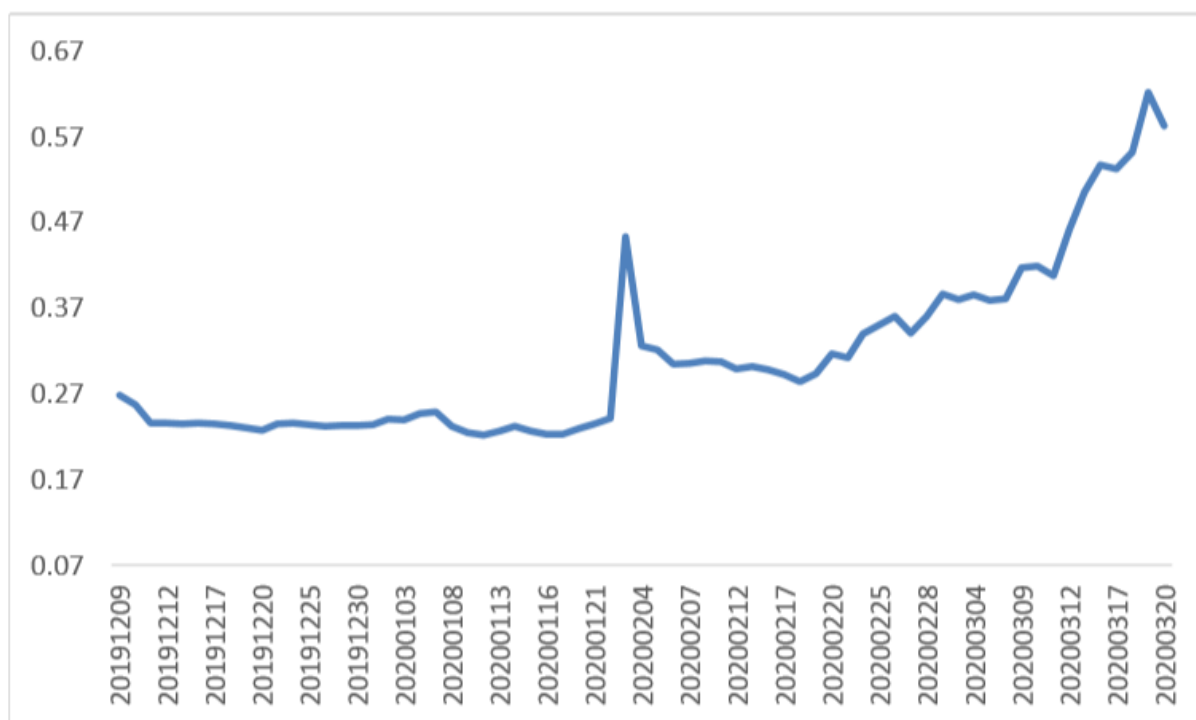


Chart: Implied volatility of iron ore options

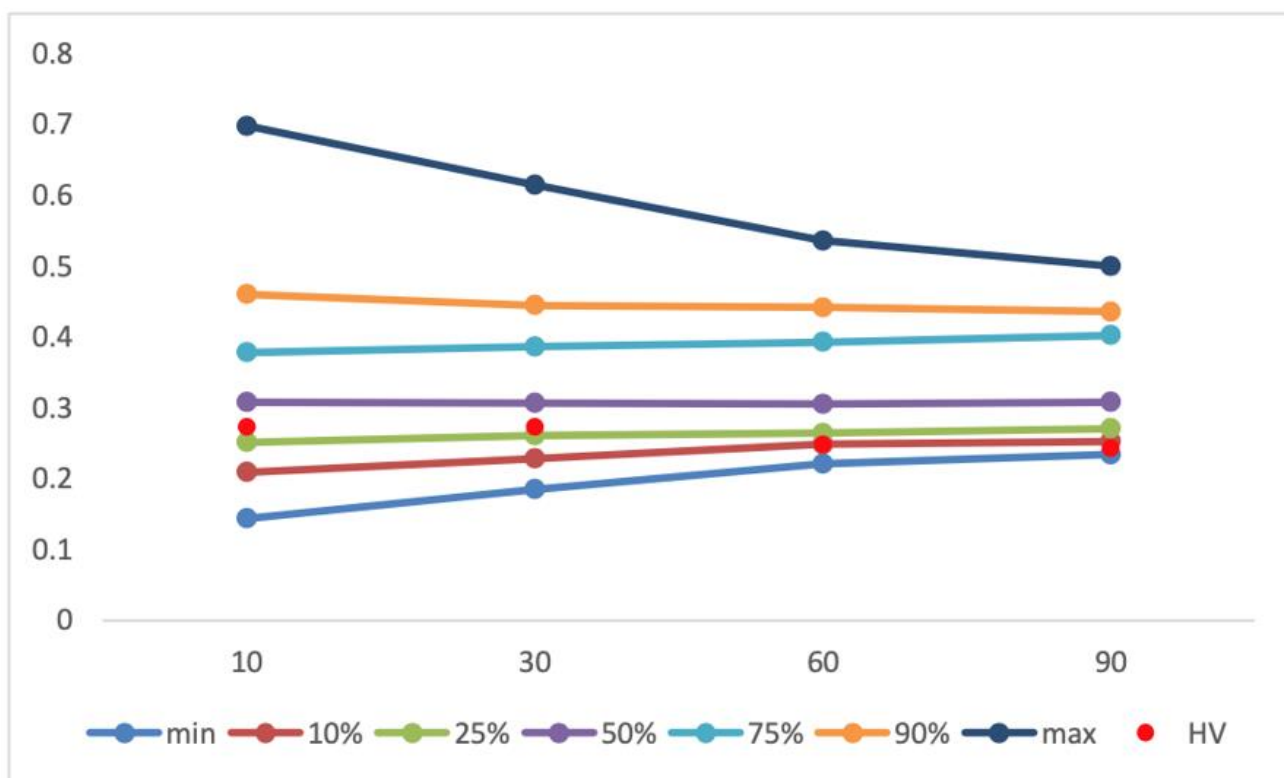


Chart: Volatility cones of iron ore options

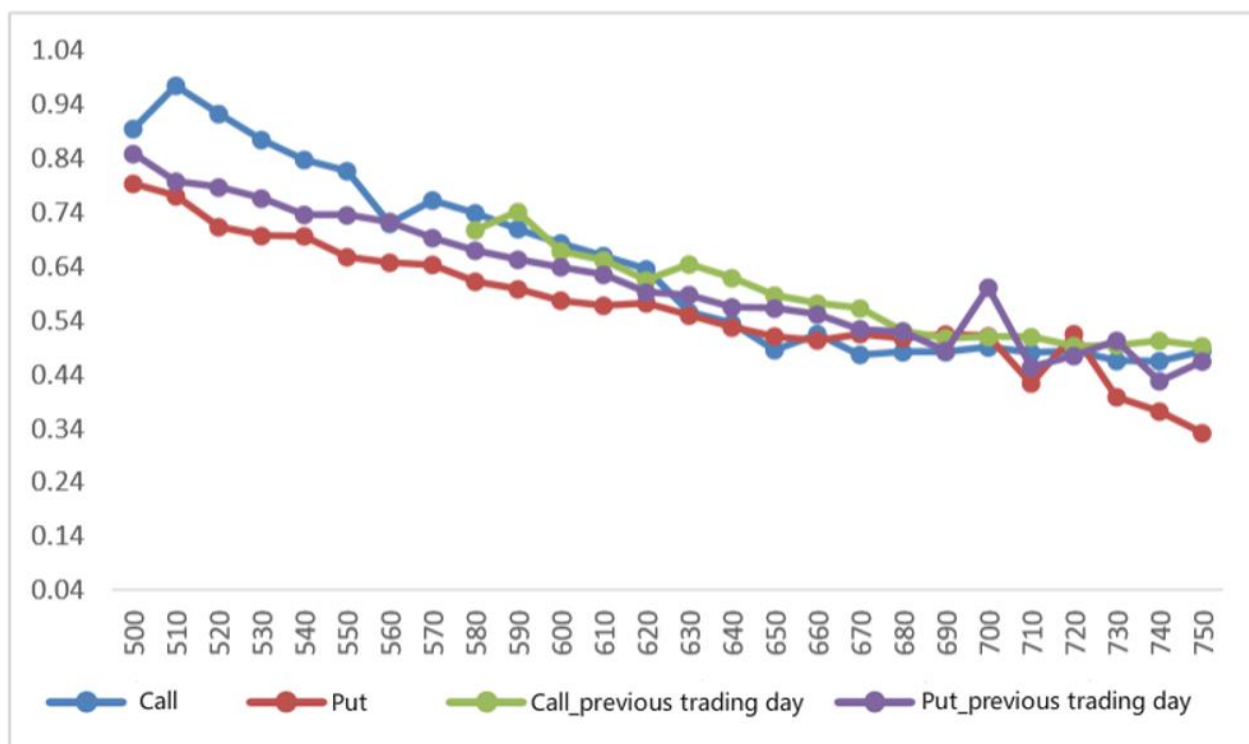


Chart: Implied volatility of nearby contract

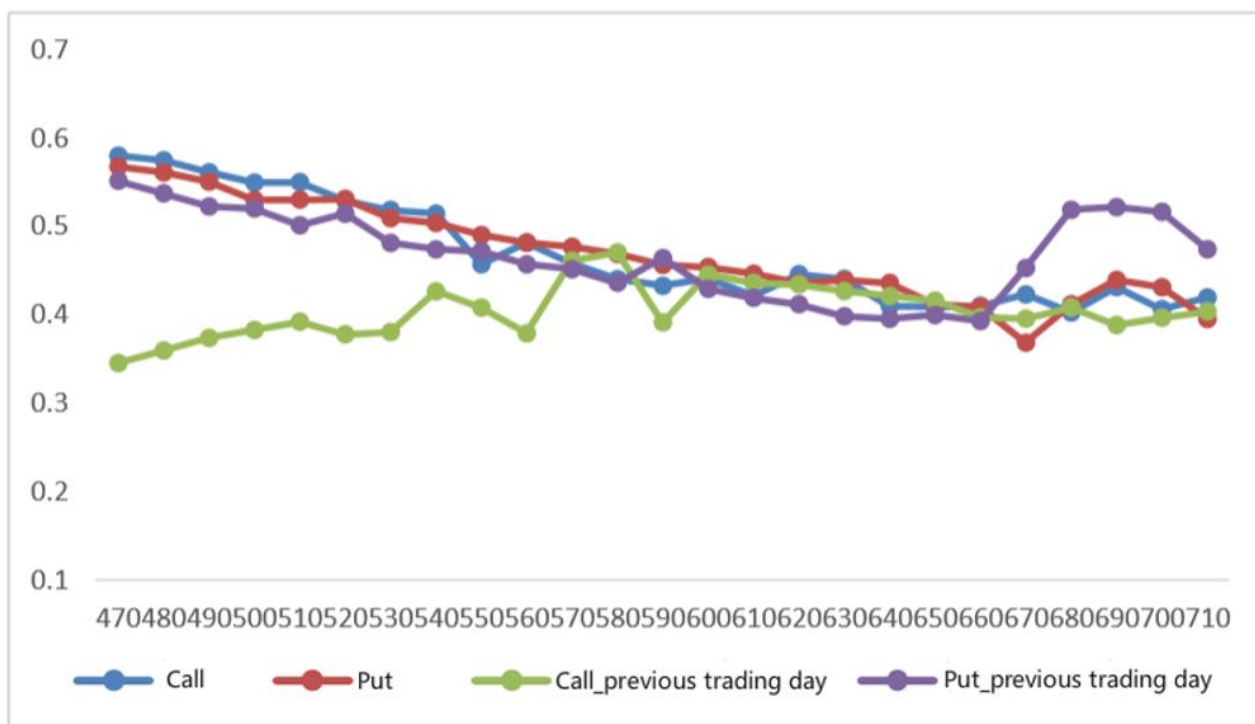


Chart: Implied volatility of forward contract

6.3 Options strategy

Currently, the implied volatility of iron ore options was at a historic high, and is likely to decline. Therefore, it is suggested to short the strangle option, or sell out-of-the-money put options, or buy out-of-the-money call options.

I. Sell strangle options

分析	买卖	名称	手数	价格类型	价格	买价	卖价	隐含波动率	Delta	Gamma	Vega	Theta	合约乘数
✓	卖	铁矿石期权I2005-C-60C1	1	卖价	44.2	42.9	44.2	28.48%	0.6702	0.0048	0.9070	-0.2494	100
✓	卖	铁矿石期权I2005-P-59C1	1	卖价	14.0	13.1	14.0	30.54%	-0.2797	0.0044	0.8305	-0.2328	100

田加入标的

田保存策略

最大收益: 5,820.00 最大亏损: -∞

总Delta: -39.0278 总Gamma: -0.9178 总Vega: -173.7520 总Theta: 48.2615

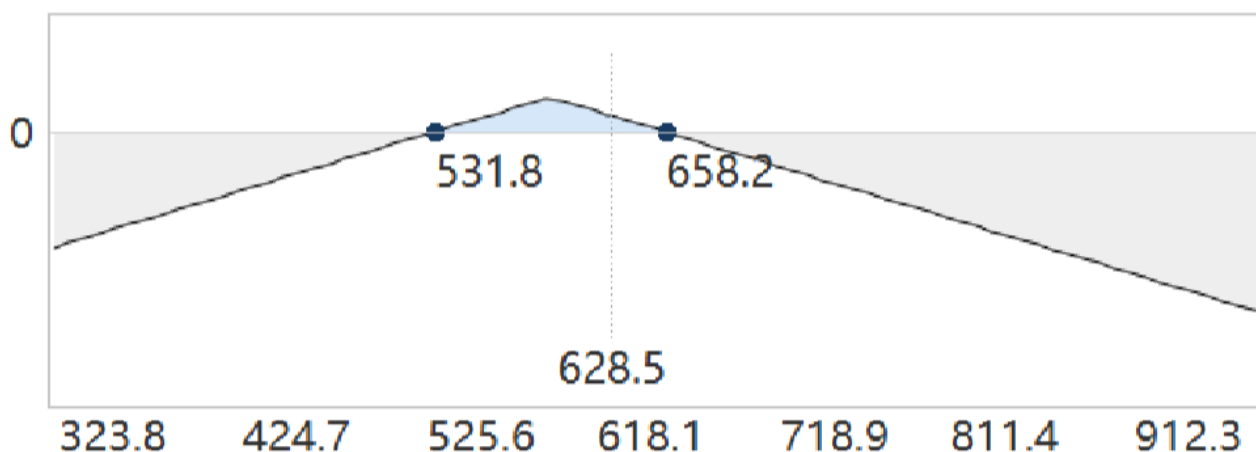


Chart: Break-even balance

II. Sell put options

分析	买卖	名称	手数	价格类型	价格	买价	卖价	隐含波动率	Delta	Gamma	Vega	Theta	合约乘数
✓	卖	铁矿石期权I2005-P-600	1	卖价	16.8	16.3	16.8	30.17%	-0.3276	0.0048	0.9073	-0.2506	100

田加入标的

田保存策略

最大收益: 1,680.00 最大亏损: -58,320.00

总Delta: 32.7731 总Gamma: -0.4754 总Vega: -90.7298 总Theta: 25.0759

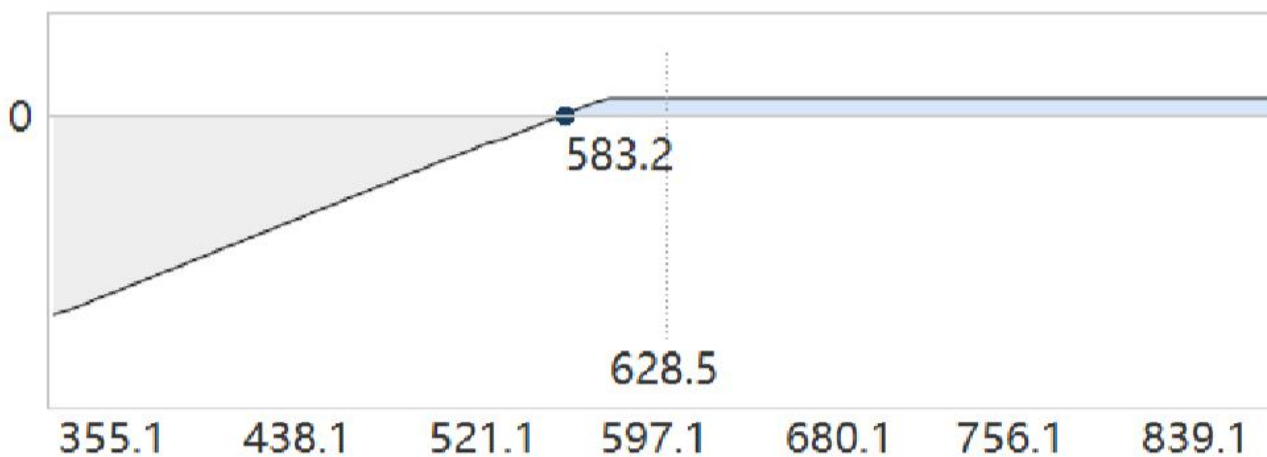


Chart: Break-even balance

III. Buy call options



分析	买卖	名称	手数	价格类型	价格	买价	卖价	隐含波动率	Delta	Gamma	Vega	Theta	合约乘数
<input checked="" type="checkbox"/>	买	铁矿石期权I2005-C-630	1	买价	24.4	24.4	25.4	26.40%	0.5152	0.0052	0.9678	-0.2759	100

加入标的

保存策略

最大收益: +∞ 最大亏损: -2,440.00

总Delta: 51.5188 总Gamma: 0.5245 总Vega: 96.7756 总Theta: -27.6071

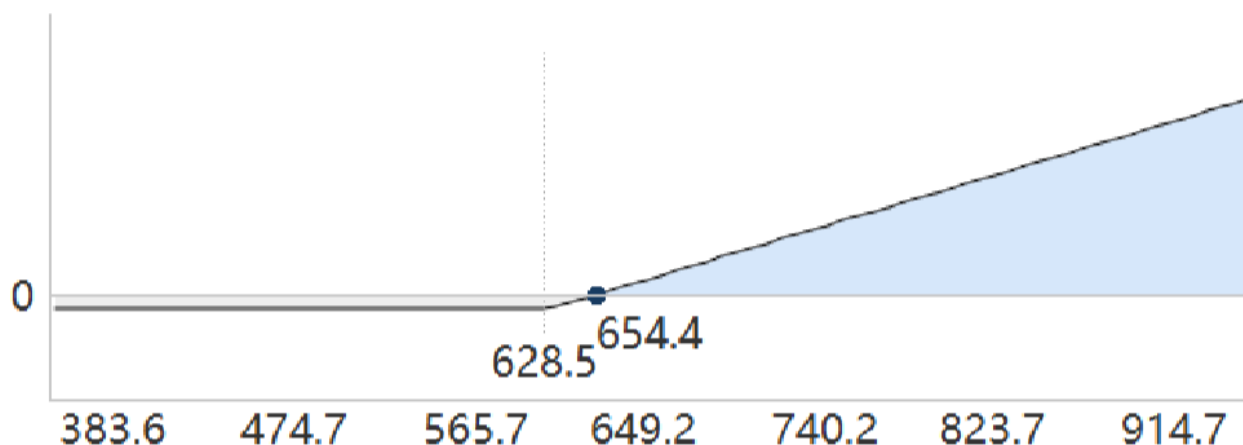


Chart: Break-even balance

VII. Open interests of top futures firms

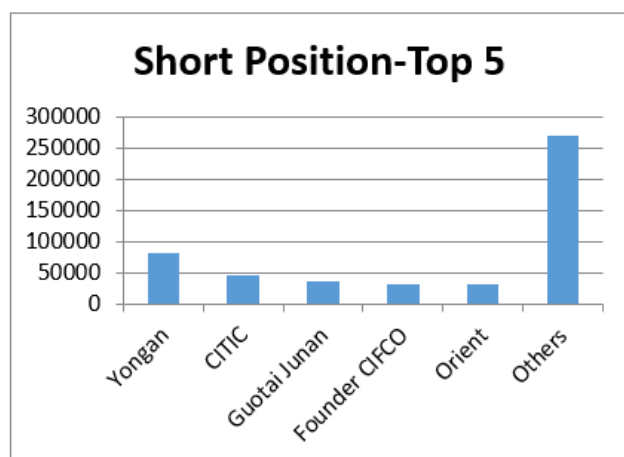


Chart: Top 5 of short positions

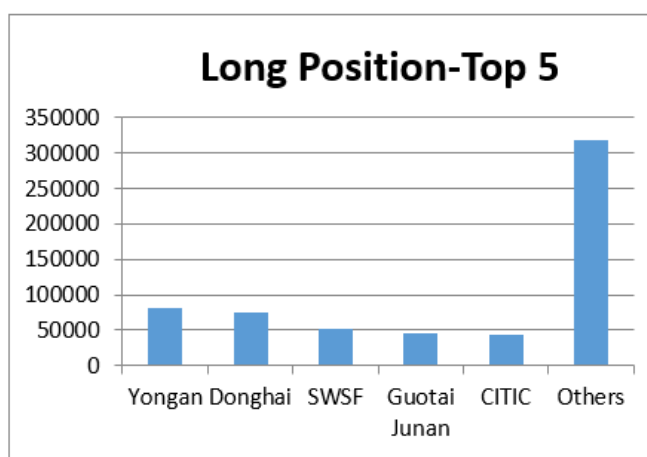


Chart: Top 5 of long positions

Source: Wind, Research Institute of Founder Cifco Futures

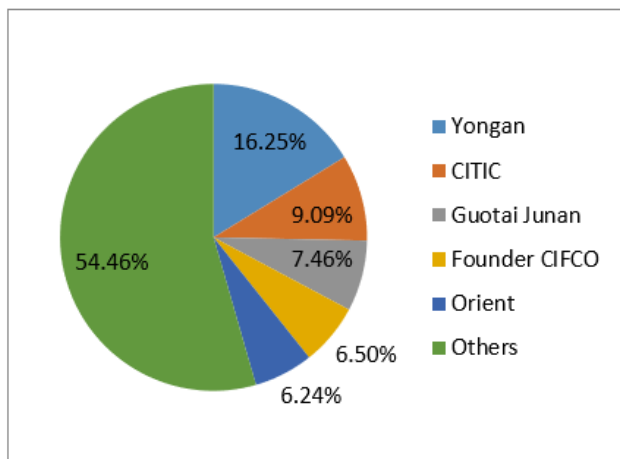


Chart: Short positions proportion

Source: Wind, Research Institute of Founder CIFCO Futures

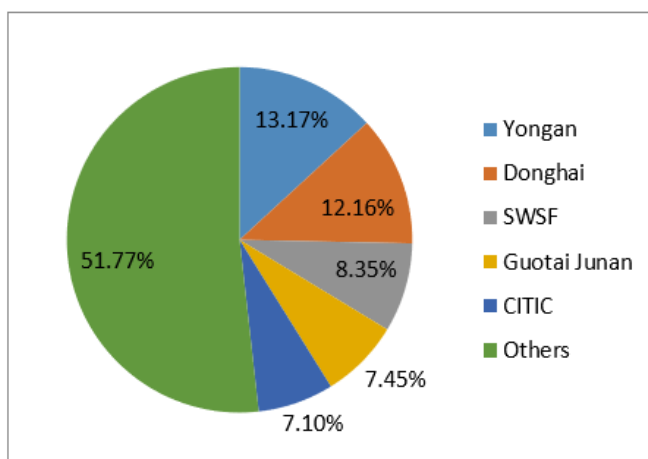


Chart: Long positions proportion

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