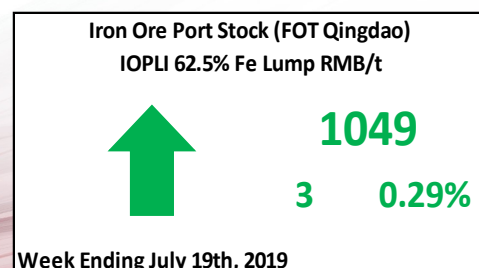
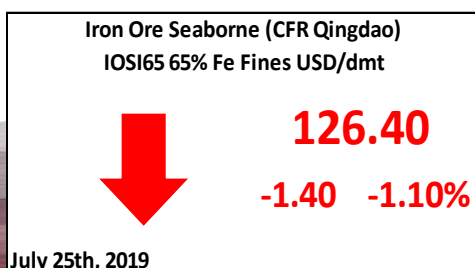
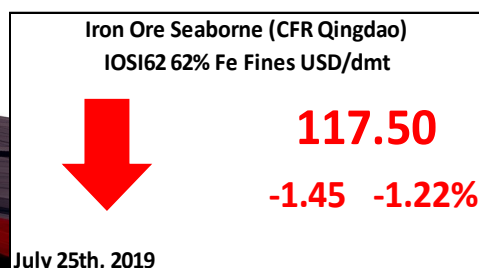
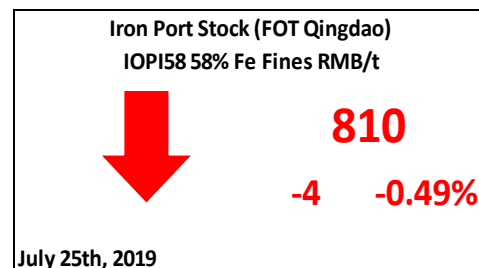
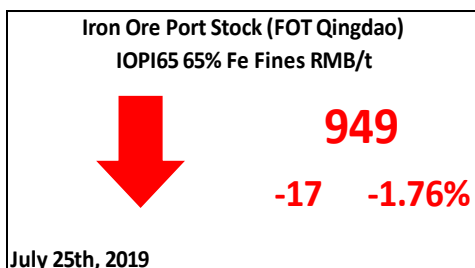
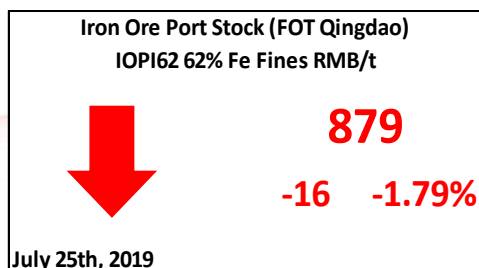


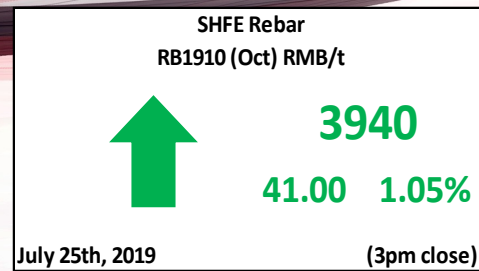
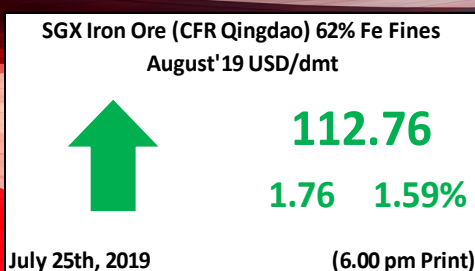
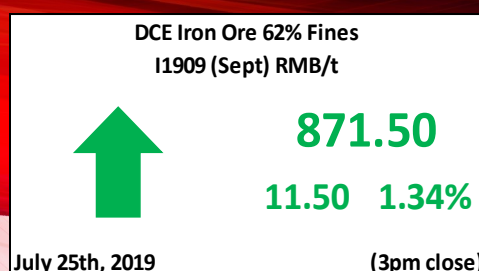


MMi Dashboard

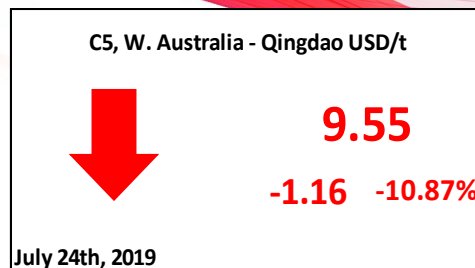
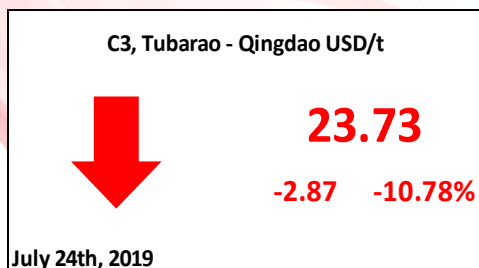
Iron Ore Price Indices



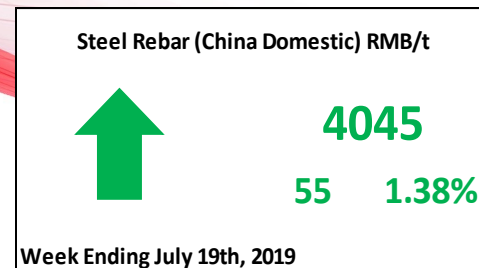
Exchange Traded Contracts



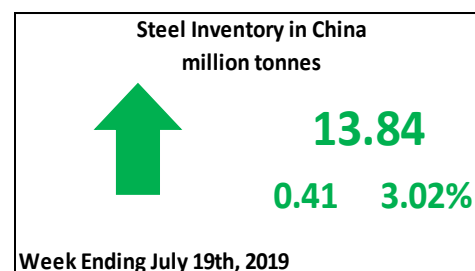
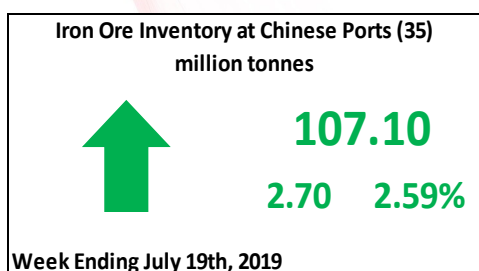
Freight Rates



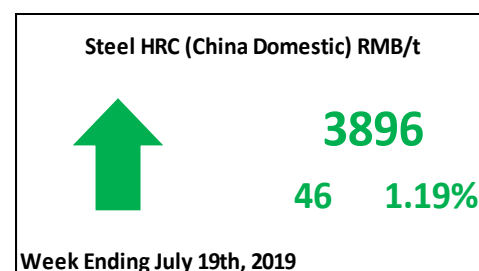
Steel Price



Inventory Levels



Steel Price



IRON ORE PORT STOCK INDEX (IOPI)

July 25th, 2019		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ¹						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²	Price	Change	Change %	MTD	YTD	Low ²	High ²
IOPI62	62% Fe Fines	879	-16	-1.8%	912	714	484	928	119.09	-2.02	-1.7%	123.70	96.03	62.54	126.12
IOPI58	58% Fe Fines	810	-4	-0.5%	807	621	347	823	110.64	-0.36	-0.3%	110.24	83.59	43.55	112.44
IOPI65	65% Fe Fines	949	-17	-1.8%	957	789	646	992	128.89	-2.14	-1.6%	130.03	106.59	85.30	135.34

IRON ORE SEABORNE INDEX (IOSI)

July 25th, 2019		CFR Qingdao, USD/dry tonne							MARKET COMMENTARY			
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ³	High ³	Port iron ore transactions picked up today, as mills accelerated their buy programmes. According to SMM, some mills in East China are relatively bearish on market direction and as such, have no intention to increase their iron ore inventory for this moment. The Tangshan government reaffirmed their production policy requiring the sintering machines and shaft furnace for all mills in Tangshan to shut down and keep their blast furnaces warm but prohibit any production from July 26 to July 28. Mills classified "A" were just required to cut off 20% of their sintering machine and shaft furnace capacity. Deliveries from Caofeidian are still forbidden.			
IOSI62	62% Fe Fines	117.50	-1.45	-1.22%	121.25	95.44	62.95	127.50				
IOSI65	65% Fe Fines	126.40	-1.40	-1.10%	130.17	109.02	83.20	137.95				

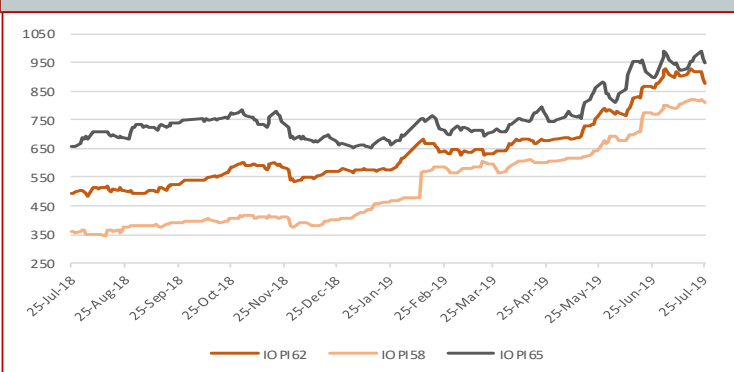
IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending July 19th, 2019		FOT Qingdao (inc. 16% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne ⁴						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low ³	High ³	Price	W-o-W	Change %	MTD	YTD	Low ³	High ³
IOPLI62	62.5% Fe Lump	1049	3	0.3%	1049	900	613	1051	133.41	0.51	0.38%	133.37	115.30	77.55	133.81

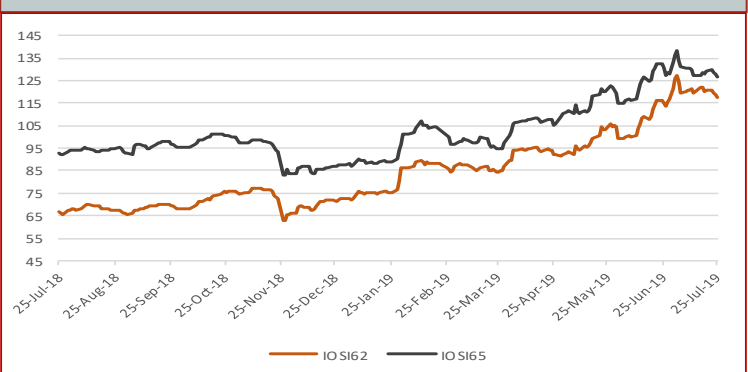
IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending July 19th, 2019				RMB/tonne (excluding tax) ⁴				USD/tonne (excluding tax) ⁴			
Province	Region	Product	Basis	This week	Change %	Low ²	High ²	This week	Change %	Low ²	High ²
Hebei	Hanxing	66% Fe Concentrate	Dry	1019	-1.3%	601	1032	148.28	-1.17%	91.97	150.03
Hebei	Qian'an	65% Fe Concentrate	Dry	950	2.7%	680	950	138.24	2.80%	100.26	138.24
Liaoning	Anshan	65% Fe Concentrate	Wet	705	0.0%	465	745	102.59	0.09%	68.21	102.59
Shandong	Zibo	65% Fe Concentrate	Dry	1040	3.0%	660	1040	151.33	3.07%	99.75	151.33
Week Ending July 19th, 2019				This week	Change %	Low ²	High ²	¹ Exchange rate applied: RMB/USD = 6.8837 ² Last 12 months ³ Since June 1 ⁴ Weekly exchange rate applied: RMB/USD 6.8722			
China Mines Concentrate Composite Index RMB/WT				850.71	1.9%	552.82	850.71				

IRON ORE PORT INDEX, FOT QINGDAO (RMB/WT)



IRON ORE SEABORNE INDEX, CFR QINGDAO (USD/DMT)



IRON ORE PORT STOCK INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

July 25th, 2019		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	March	April	May	June	MTD	QTD	YTD	March	April	May	June	MTD	QTD	YTD
IOPI62	62% Fe Fines	639	675	729	825	912	912	714	87.09	85.37	98.40	111.42	123.70	123.70	96.03
IOPI58	58% Fe Fines	583	600	637	726	807	807	621	75.22	77.49	86.39	98.60	110.24	110.24	83.59
IOPI65	65% Fe Fines	714	753	812	901	957	957	789	98.08	95.78	110.00	121.97	130.03	130.03	106.59

IRON ORE SEABORNE INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

July 25th, 2019		CFR Qingdao, USD/dry tonne							FREIGHT RATES						
Index	Fe Content	March	April	May	June	MTD	QTD	YTD	FREIGHT RATES - DRY BULK US\$/wet tonne						
Index	Fe Content	March	April	May	June	MTD	QTD	YTD	Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	86.18	93.42	98.68	108.57	121.25	121.25	95.44	W. Australia - Qingdao	C5	9.55	-1.16	-10.87%	4.39	11.15
IOSI65	65% Fe Fines	97.22	106.75	115.53	124.49	130.17	120.17	109.02	Tubarao - Qingdao	C3	23.73	-2.87	-10.78%	11.61	27.52

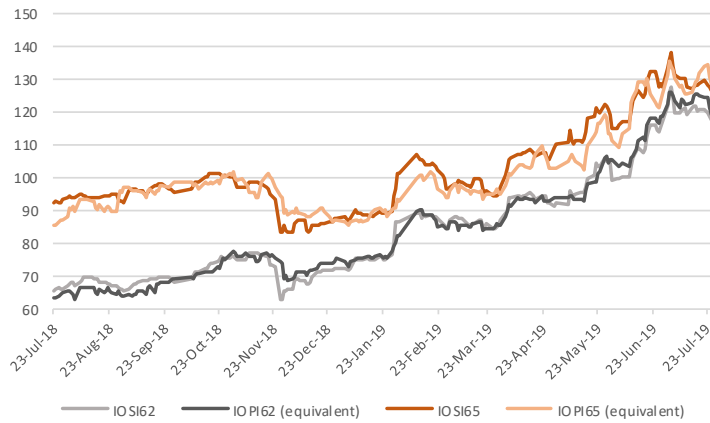
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending July 19th, 2019		FOT Qingdao (inc. 16% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne ¹						
Index	Fe Content	March	April	May	June	MTD	QTD	YTD	March	April	May	June	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	858	872	919	1009	1049	1049	900	99.57	111.03	117.12	128.00	133.37	133.37	115.30

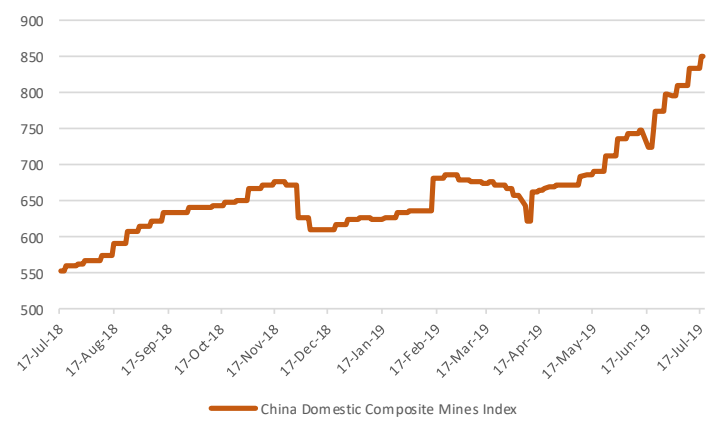
IRON ORE INDEX PREMIUMS/DISCOUNTS

July 25th, 2019		PORT STOCK INDEX (RMB/WT)				July 25th, 2019		SEABORNE INDEX (USD/DMT)			
Index	Fe Content	Spread to IOPI62		% Spread to IOPI62		Index	Fe Content	Spread to IOSI62		% Spread to IOSI62	
IOPI58	58% Fe Fines	-69		-7.85%		IOSI65	65% Fe Fines	8.90		7.57%	
IOPI65	65% Fe Fines	70		7.96%							

IRON ORE INDEX COMPARISONS (USD/DMT)



CHINA DOMESTIC COMPOSITE MINES INDEX (RMB/Wet Tonne, including VAT)



IRON ORE BRAND SPOT PRICE ASSESSMENTS

July 25th, 2019				July 25th, 2019			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	830	-16	-49	Roy Hill	114.46	-1.45	-3.04
SIMEC Fines	763	-17	-116	SIMEC Fines	112.19	-1.45	-5.31
PB Fines	862	-15	-17	PB Fines	116.66	-1.45	-0.84
Newman Fines	884	-16	5	Newman Fines	118.75	-1.45	1.25
MAC Fines	843	-16	-36	MAC Fines	112.44	-1.45	-5.06
Jimblebar Blended Fines	828	-16	-51	Jimblebar Blended Fines	104.74	-1.45	-12.76
Carajas Fines	958	-16	79	Carajas Fines	126.30	-1.45	8.80
Brazilian SSF	791	-16	-88	Brazilian SSF	117.50	-1.45	0.00
Brazilian Blend Fines	856	-16	-23	Brazilian Blend Fines	118.75	-1.45	1.25
RTX Fines	832	-16	-47	RTX Fines	109.39	-1.45	-8.11
West Pilbara Fines	826	-16	-53	West Pilbara Fines	113.56	-1.45	-3.94

July 25th, 2019			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	750	-5	-60
FMG Blended Fines	813	-4	3
Robe River	746	-4	-64
Western Fines	782	-4	-28
Atlas Fines	765	-4	-45
Yandi	832	-5	22

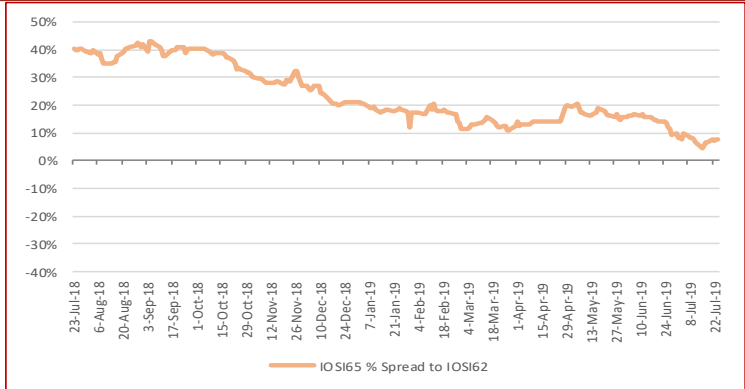
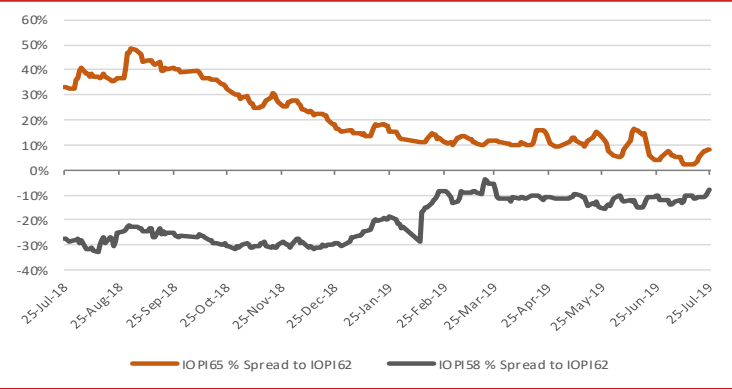
IRON ORE INDEX NORMALISATION DIFFERENTIALS

Port Stock Index Product Differentials (RMB/wet tonne)				Seaborne Index Product Differentials (USD/dry tonne)			
	Applicable range	Value	Change		Applicable range	Value	Change
1% Fe	High Grade Fe 60 - 63%	6.00	0.00	1% Fe	High Grade Fe 60 - 63%	1.75	0.00
	High Grade Fe 63 - 64%	15.00	0.00		High Grade Fe 63 - 64%	2.00	0.00
	High Grade Fe 64 - 65%	15.00	0.00		High Grade Fe 64 - 65%	2.00	0.00
	High Grade Fe 65 - 65.5%	15.00	0.00		High Grade Fe 65 - 65.5%	2.00	0.00
	Low Grade Fe	19.00	0.00				
1% Alumina	High Fe Grade Al <2.25%	20.00	0.00	1% Alumina	High Fe Grade Al <2.25%	1.50	0.00
	High Fe Grade Al 2.25-4%	8.00	0.00		High Fe Grade Al 2.25-4%	1.75	0.00
	Low Fe Grade Al <2.25%	51.00	0.00				
	Low Fe Grade Al 2.25-4%	43.00	0.00				
1% Silica	High Fe Grade Si <4%	7.00	0.00	1% Silica	High Fe Grade Si <4%	0.75	0.00
	High Fe Grade Si 4-6.5%	52.00	0.00		High Fe Grade Si 4 - 6.5%	0.75	0.00
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	1.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	1.00	0.00
	High Fe Grade 0.115%<P<0.15%	5.00	0.00		High Fe Grade 0.115%<P<0.15%	1.00	0.00
	Low Fe Grade 0.09<P<0.1%	1.00	0.00				

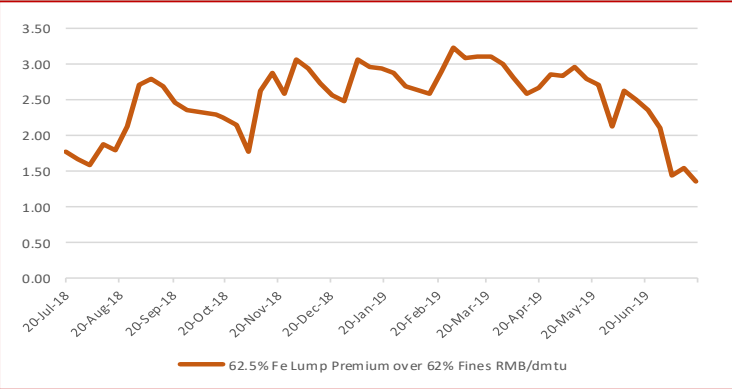
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-45.00	0.00	Fangcheng	-5.00	0.00	Lanshan	0.00	0.00	Qingdao	0.00	0.00
Beilun	5.00	0.00	Jiangyin	-20.00	0.00	Lianyungang	-10.00	0.00	Rizhao	0.00	0.00
Caofeidian	-15.00	0.00	Jingtang	-15.00	0.00	Majishan	0.00	0.00	Shekou	0.00	0.00
Dalian	-40.00	0.00	Lanqiao	0.00	0.00	Nantong	-20.00	0.00	Tianjin	-10.00	0.00

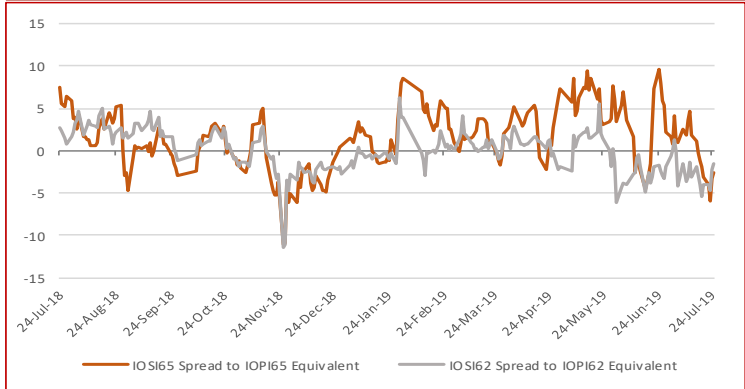
IRON ORE INDEX PREMIUMS/DISCOUNTS



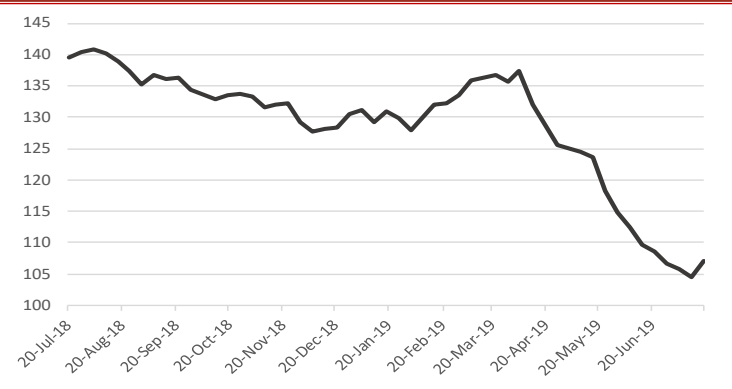
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



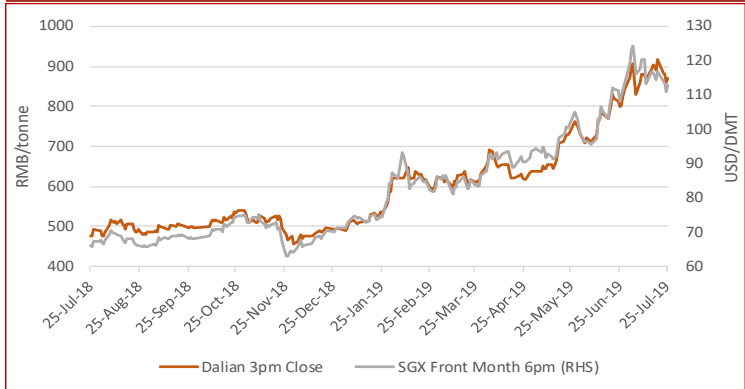
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



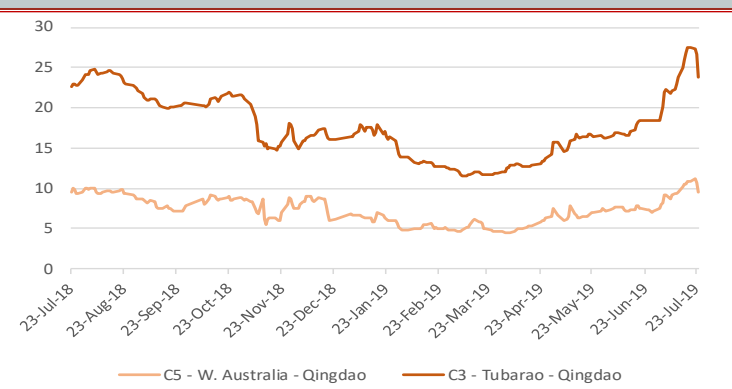
IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending July 19th, 2019				
Province	This week	Change %	Low ²	High ²
Jingtang	11.52	6.67%	10.80	17.20
Qingdao	12.87	-3.74%	12.87	19.01
Caofeidian	14.95	1.91%	14.48	20.10
Tianjin	6.55	0.61%	6.51	10.48
Rizhao	12.38	5.99%	11.65	18.08
Total (35 Ports)	107.10	2.59%	104.40	140.74

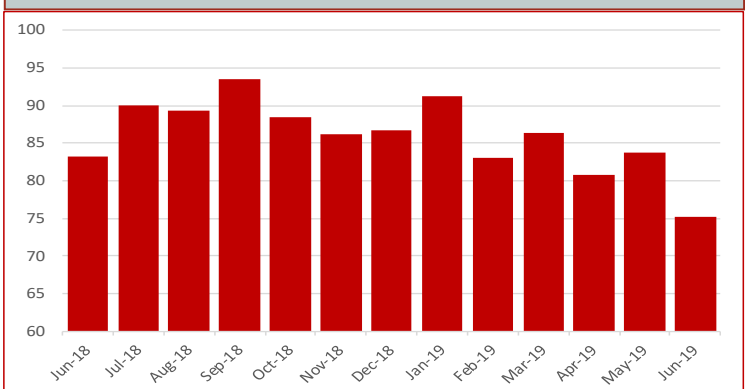
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	July 25th 3pm close			July 25th Feb 5.30 pm		
Contract	I1909	Change	Change %	Aug'19	Change	Change %
Closing Price	871.50	11.5	1.34%	112.76	1.76	1.59%
Vol traded ('000 lots)	73.64	-80.9	-52.35%	12.99	-5.58	-30.07%
Open positions ('000 lots)	103.72	-5.2	-4.75%	145.01	1.29	0.90%
Day Low	856.0	14.0	1.66%	110.74	2.29	2.11%
Day High	872.0	-5.5	-0.63%	112.76	0.97	0.87%

DRY BULK FREIGHT RATES (USD/MT)



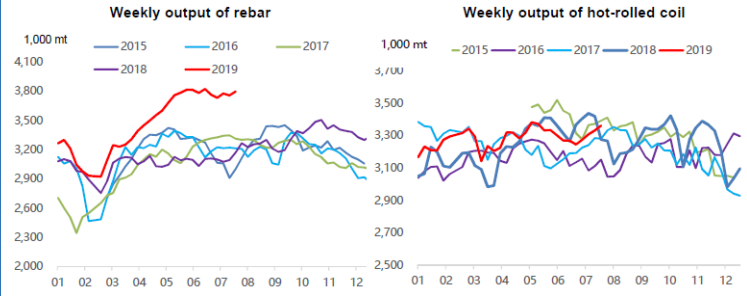
TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne

Product	19/7/2019	Change	Change %
ReBar HRB400 φ18mm	4,045.0	55	1.38%
Wirerod Q300 φ6.5mm	4,240.0	0	0.00%
HRC Q235/SS400 5.5mm*1500*C	3,896.0	46	1.19%
CRC SPPC/ST12 1.0mm*1250*2500	4,203.0	3	0.07%
Medium & Heavy Plate Q235B 20mm	3,946.0	16	0.41%
GI ST02Z 1.0mm*1000*C	4,560.0	0	0.00%
Colour Coated Plate	6,900.0	0	0.00%



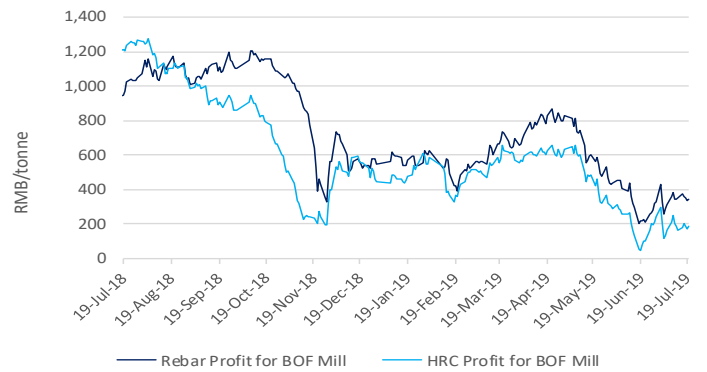
CHINESE STEEL MILL PROFITABILITY

SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)

Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	120.25	-0.90	Mmi CFR Equivalent index for 1st Feb
Coke	1,910	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,370	40	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,376	-5	Q234, incl. tax
Rebar cost - Blast furnace	3,627	-4	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	343	-6	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,692	-5	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	188	25	based on Shanghai prices, incl. tax

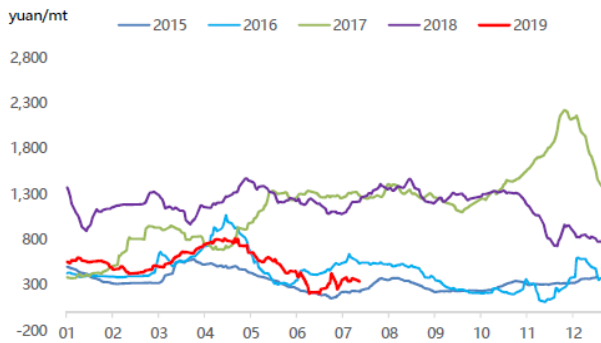
Note: 1. Costs in the table are calculated based on today's market prices and factored our management, sales, financial and depreciations fees.
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY

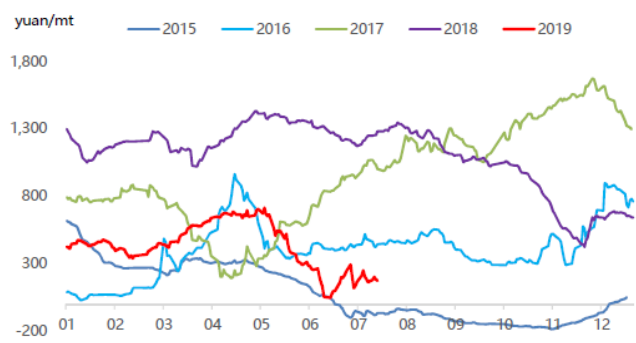


CHINESE STEEL MILL PROFITABILITY

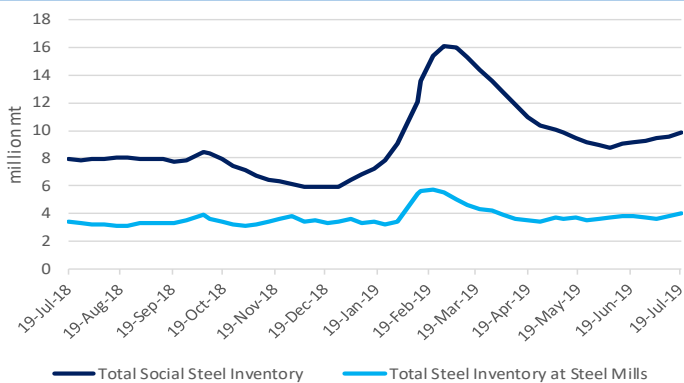
Rebar profits



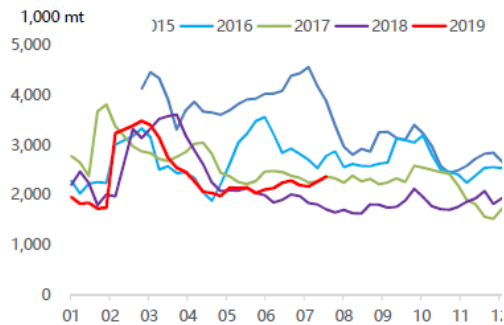
Hot-rolled coil profits



CHINESE STEEL INVENTORIES



In-plant inventory of rebar



IRON ORE INDEX SPECIFICATIONS, COMPILATION RATIONALE AND DATA EXCLUSIONS

Iron Ore Index Specifications (Port and Seaborne)					Iron Ore Index Compilation Rationale and Data Exclusions
	65% Fe Fines	62% Fe Fines	58% Fe Fines	62.5% Fe Lump	MMi iron ore indices are compiled from data provided by companies that are part of the iron ore supply chain and involved in spot market transactions. The indices are calculated using detailed transaction-level data submitted to MMi by these companies. This data is normalised to the appropriate specifications and screened to remove outliers before volume-weighted average prices are calculated from the remaining core set of data. For more details on MMi's iron ore methodology please download the guide published on our website at: www.mmiprices.com
Fe %	65.00	62.00	58.00	62.50	
Alumina %	1.40	2.25	2.25	1.50	
Silica%	1.50	4.00	5.50	3.50	
Phosphorus %	0.06	0.09	0.05	0.08	
Sulphur %	0.01	0.02	0.02	0.02	
Moisture %	8.00	8.00	9.00	4.00	
Sizing	Granular size below 10mm for at least 90% of cargo; maximum of 40% below 150 micron		Size below 6.3mm max 15% Size above 31.15mm max 25%		
Pricing Point	Qingdao Port (FOT and CFR respectively)		FOT Qingdao Port		
Timing (Seaborne)	Loading within 4 weeks, Delivery within 8 weeks		Delivery within 2 weeks		
Payment Terms	L/C at sight		L/C at sight or CAD		
Data Exclusions*					
	62%	58%	65%		
Port Index	0	0	0		
Seaborne Index	0		0		
Lump Index 62.5	0				
* Number of price submissions for iron ore indices that were excluded from index calculations today as they were anomalous and could not be verified					

IRON ORE DOMESTIC CONCENTRATE INDEX CALCULATION METHODOLOGY

The compilation method for price index generally refers to the compilation method of CPI price index and other price indices, breakdown the price data and calculate the average value according to a certain method, taking the vertical axis as the regional composite index (average of different grade index) and the horizontal axis as the grade composite index (average of different regional index), a total composite index for domestic ore can be output ultimately. The process system is also adopted in the calculation i.e. each sub-index can be obtained as well.

AVERAGE IRON ORE SPECIFICATIONS APPLIED FOR BRAND PRICE ASSESSMENTS

PORT STOCK BRANDS						SEABORNE BRANDS					
July 25th, 2019	Specifications applied for 62% brand assessments						Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture		Fe	Alumina	Silica	Phos	Moisture
Roy Hill	61.16%	2.25%	4.61%	0.052%	9.35%	Roy Hill	60.70%	2.30%	4.90%	0.055%	8.00%
SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%	SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%
PB Fines	61.49%	2.34%	3.86%	0.100%	9.39%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	10.00%
Newman Fines	62.57%	2.26%	3.96%	0.083%	7.82%	Newman Fines	62.80%	2.20%	4.30%	0.080%	6.40%
MAC Fines	60.87%	2.24%	4.65%	0.081%	7.57%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%
Jimblebar Blended Fines	60.89%	2.98%	4.42%	0.113%	7.34%	Jimblebar Blended Fines	59.50%	3.70%	5.80%	0.135%	8.30%
Carajas Fines	65.54%	1.23%	1.43%	0.068%	8.31%	Carajas Fines	65.10%	1.50%	1.70%	0.080%	8.50%
Brazilian SSF	62.00%	1.00%	6.50%	0.040%	6.00%	Brazilian SSF	62.00%	1.00%	6.50%	0.040%	6.00%
Brazilian Blend Fines	63.00%	1.40%	4.80%	0.076%	8.44%	Brazilian Blend Fines	62.50%	1.50%	5.00%	0.070%	7.00%
RTX Fines	61.00%	3.10%	4.50%	0.135%	7.50%	RTX Fines	61.00%	3.10%	4.50%	0.135%	7.50%
West Pilbara Fines	60.10%	2.30%	4.70%	0.075%	8.50%	West Pilbara Fines	60.10%	2.30%	4.70%	0.075%	8.50%
July 25th, 2019	Specifications applied for 58% brand assessments										
	Fe	Alumina	Silica	Phos	Moisture						
SSF	56.71%	3.09%	6.32%	0.059%	8.36%						
FMG Blended Fines	58.21%	2.60%	5.48%	0.063%	7.40%						
Robe River	56.28%	2.91%	5.58%	0.035%	9.29%						
Western Fines	57.88%	2.87%	7.50%	0.062%	7.45%						
Atlas Fines	56.59%	2.55%	7.14%	0.080%	8.46%						
Yandi	57.36%	1.51%	6.28%	0.041%	8.84%						

BLOOMBERG TICKERS

PORT STOCK INDICES		
	FOT Qingdao (RMB/wet tonne)	CFR Qingdao Equivalent (USD/dry tonne)
IOP162	IRCNQ001	IRCNQ004
IOP158	IRCNQ002	IRCNQ005
IOP165	IRCNQ003	IRCNQ006

CONTACT US

MMI Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7629 E: jarek@mmiprices.com
SMM Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7630 E: service.en@smm.cn
SMM Shanghai Office Details: 9th FL, Building 9, Lujiazui Software Park, No.20, Lane 91, Pudong, Shanghai Tel: +86 021 5155 0306 E: service.en@smm.cn

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