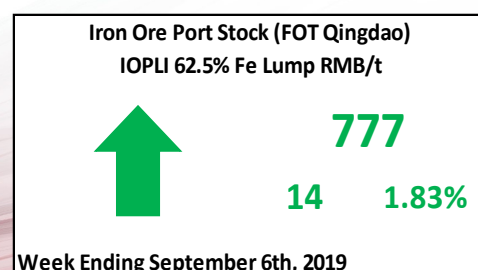
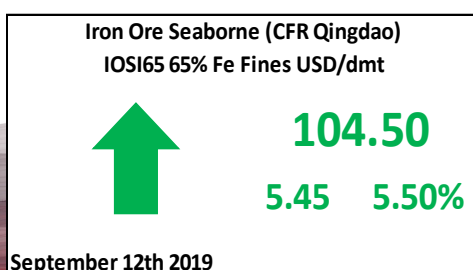
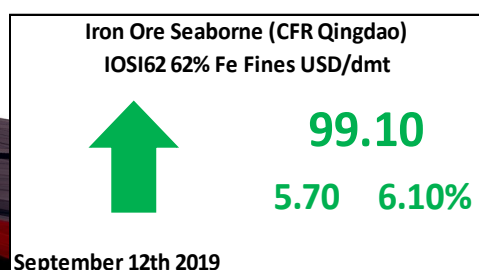
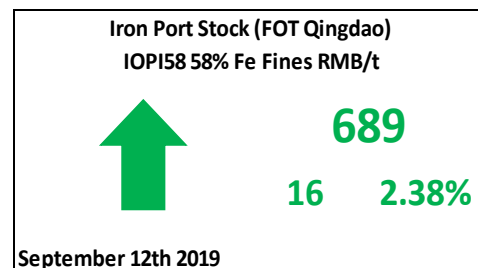
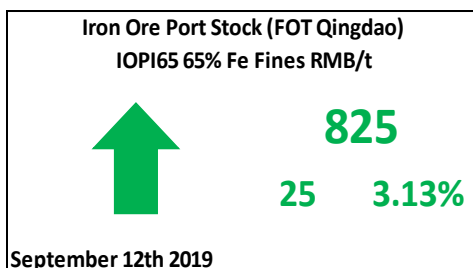
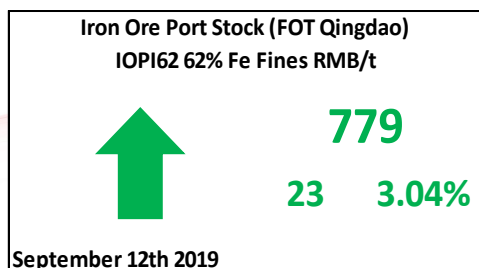


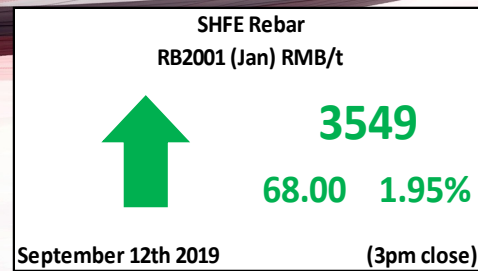
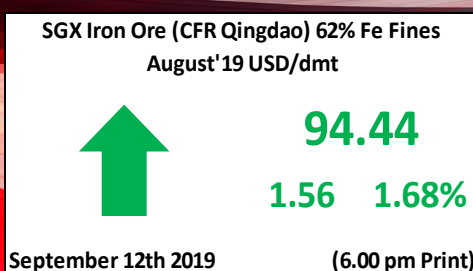
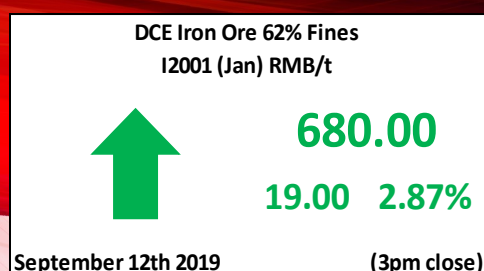


MMi Dashboard

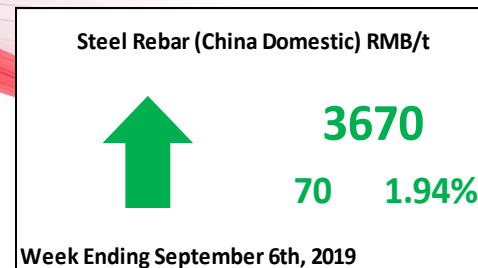
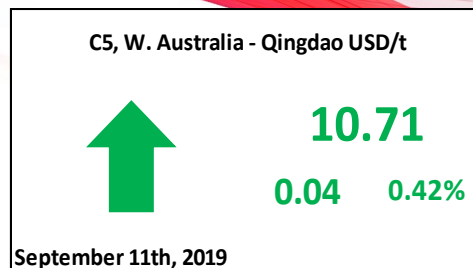
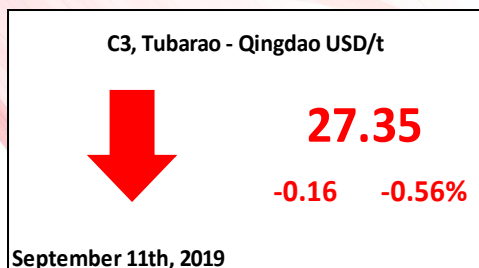
Iron Ore Price Indices



Exchange Traded Contracts



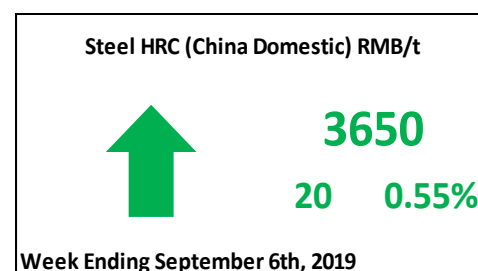
Freight Rates



Inventory Levels



Steel Price



IRON ORE PORT STOCK INDEX (IOPI)

September 12th 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	779	23	3.0%	753	726	497	928	101.97	3.12	3.2%	98.39	97.27	64.11	126.12
IOPI58	58% Fe Fines	689	16	2.4%	662	637	374	823	90.73	2.19	2.5%	86.86	85.47	46.88	112.44
IOPI65	65% Fe Fines	825	25	3.1%	794	797	654	992	108.21	3.39	3.2%	104.01	107.23	85.47	135.34

IRON ORE SEABORNE INDEX (IOSI)

September 12th 2019		CFR Qingdao, USD/dry tonne							MARKET COMMENTARY			
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²	Prior to the Mid-Autumn Festival holiday, activity in the port stock market fell off. Traders stood on the side-lines, especially as the iron ore DCE Futures market leapt higher just prior to close. Traders in North China say they will come back into the market after the holiday, seeming confident and firm on the rising prices. According to SMM, rebar inventory has been declining for the last five weeks, which will support mill buying activity following the holiday. However, strict production cuts and transport control are still expected in mid-late September given the upcoming 70th anniversary celebration, and iron ore prices may be limited by these potential activities.			
IOSI62	62% Fe Fines	99.10	5.70	6.10%	92.88	95.52	62.95	127.50				
IOSI65	65% Fe Fines	104.50	5.45	5.50%	99.16	108.03	83.20	137.95				

IRON ORE PORT LUMP INDEX (IOPLI)

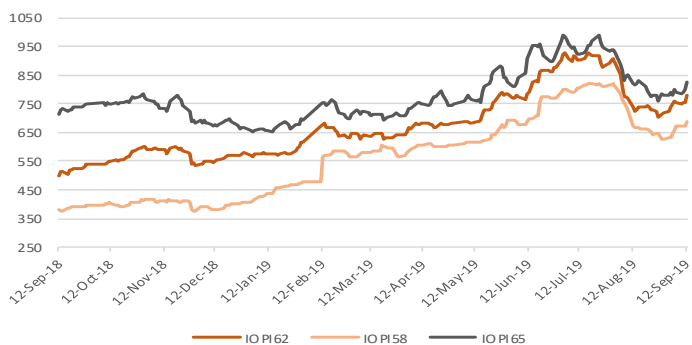
Week Ending September 6th, 2019		FOT Qingdao (inc. 16% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne ³						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low ²	High ²	Price	W-o-W	Change %	MTD	YTD	Low ²	High ²
IOPLI62	62.5% Fe Lump	777	14	1.8%	777	896	691	1051	94.90	1.66	1.78%	94.90	114.16	87.28	133.81

IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

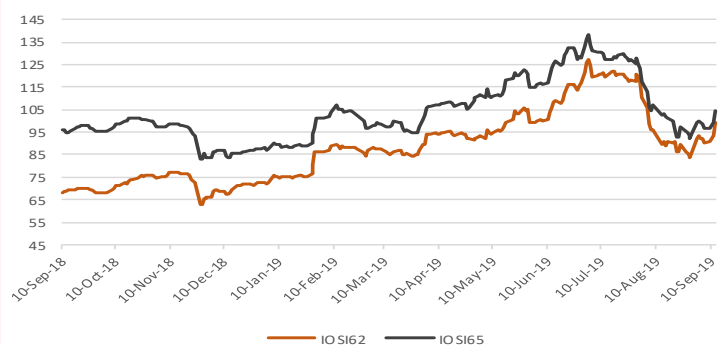
Week Ending September 6th, 2019				RMB/tonne (excluding tax) ³				USD/tonne (excluding tax) ³			
Province	Region	Product	Basis	This week	Change %	Low ²	High ²	This week	Change %	Low ²	High ²
Hebei	Hanxing	66% Fe Concentrate	Dry	788	-2.2%	630	1032	111.19	-2.34%	92.31	150.03
Hebei	Qian'an	65% Fe Concentrate	Dry	840	-1.2%	690	960	118.53	-1.29%	100.26	139.35
Liaoning	Anshan	65% Fe Concentrate	Wet	660	-4.3%	515	745	93.13	-4.46%	75.46	104.66
Shandong	Zibo	65% Fe Concentrate	Dry	840	-1.8%	725	1040	118.53	-1.87%	106.23	151.33
Week Ending September 6th, 2019				This week	Change %	Low ²	High ²				
China Mines Concentrate Composite Index RMB/WT				731.70	-2.5%	609.04	859.50				

¹ Exchange rate applied: RMB/USD = 7.0846 ² Last 12 months
³ Weekly exchange rate applied: RMB/USD 7.0870

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

September 12th 2019		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	May	June	July	August	MTD	QTD	YTD	May	June	July	August	MTD	QTD	YTD
IOPI62	62% Fe Fines	729	825	909	759	753	822	726	98.40	111.42	123.29	100.18	98.39	109.72	97.27
IOPI58	58% Fe Fines	637	726	809	691	662	736	637	86.39	98.60	110.47	91.86	86.86	98.95	85.47
IOPI65	65% Fe Fines	812	901	954	823	794	874	797	110.00	121.97	129.53	108.92	104.01	116.88	107.23

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

September 12th 2019		CFR Qingdao, USD/dry tonne							FREIGHT RATES						
Index	Fe Content	May	June	July	August	MTD	QTD	YTD	FREIGHT RATES - DRY BULK US\$/wet tonne						
Index	Fe Content	May	June	July	August	MTD	QTD	YTD	Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	98.68	108.57	120.82	92.61	92.88	105.13	95.52	W. Australia - Qingdao	C5	10.71	0.04	0.42%	4.39	11.42
IOSI65	65% Fe Fines	115.53	124.49	129.53	101.34	99.16	113.43	108.03	Tubarao - Qingdao	C3	27.35	-0.16	-0.56%	11.61	29.10

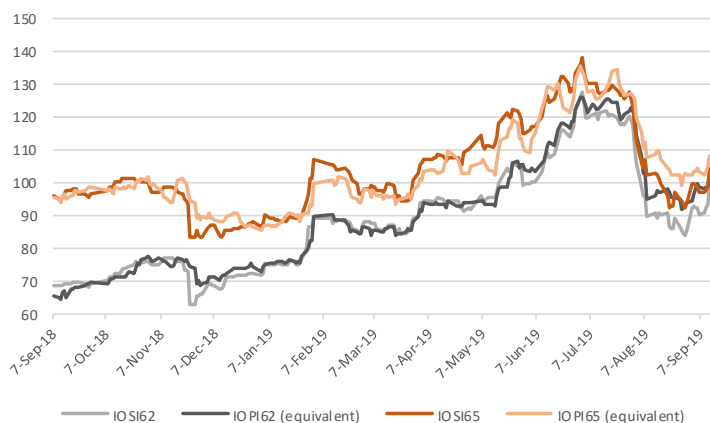
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending September 6th, 2019		FOT Qingdao (inc. 16% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne ¹						
Index	Fe Content	May	June	July	August	MTD	QTD	YTD	May	June	July	August	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	919	1009	1046	870	777	931	896	117.12	128.00	132.99	108.80	94.90	119.15	114.16

IRON ORE INDEX PREMIUMS/DISCOUNTS

September 12th 2019				PORT STOCK INDEX (RMB/WT)		September 12th 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	-90	-11.55%	IOSI65	65% Fe Fines	5.40	5.45%		
IOPI65	65% Fe Fines	46	5.91%						

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

September 12th 2019				September 12th 2019			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	744	24	-35	Roy Hill	96.62	5.15	-2.48
SIMEC Fines	713	29	-66	SIMEC Fines	94.00	4.63	-5.10
PB Fines	758	23	-21	PB Fines	97.60	5.63	-1.50
Newman Fines	782	24	3	Newman Fines	99.27	5.82	0.17
MAC Fines	755	23	-24	MAC Fines	95.95	5.28	-3.15
Jimblebar Blended Fines	700	23	-79	Jimblebar Blended Fines	85.67	4.12	-13.43
Carajas Fines	829	27	50	Carajas Fines	104.52	5.42	5.42
Brazilian SSF	730	32	-49	Brazilian SSF	95.97	5.07	-3.13
Brazilian Blend Fines	768	25	-11	Brazilian Blend Fines	98.35	5.58	-0.75
RTX Fines	713	20	-66	RTX Fines	90.55	4.83	-8.55
West Pilbara Fines	736	23	-43	West Pilbara Fines	96.47	5.05	-2.63

September 12th 2019			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	615	7	-74
FMG Blended Fines	689	14	0
Robe River	626	8	-63
Western Fines	621	8	-68
Atlas Fines	611	8	-78
Yandi	662	13	-27

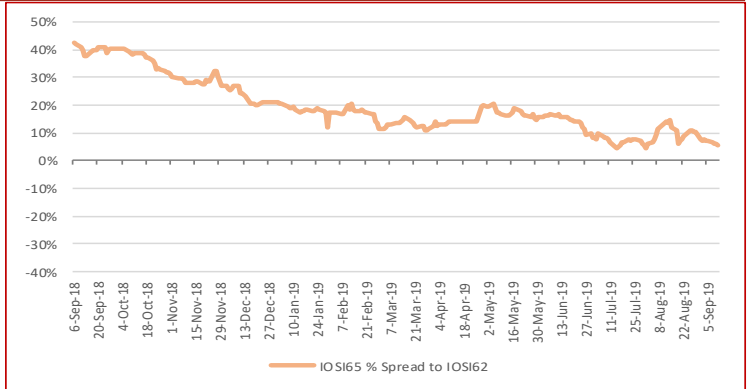
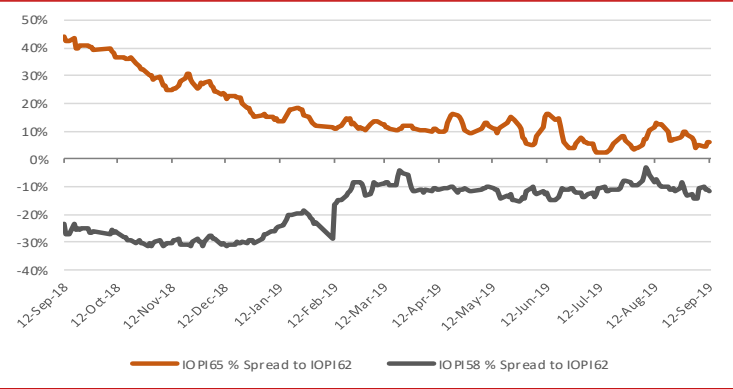
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	10.00	1.00	1% Fe	High Grade Fe 60 - 63%	0.75	0.25	
	High Grade Fe 63 - 64%	12.00	1.00		High Grade Fe 63 - 64%	1.50	-0.25	
	High Grade Fe 64 - 65%	12.00	1.00		High Grade Fe 64 - 65%	1.50	-0.25	
	High Grade Fe 65 - 65.5%	12.00	1.00		High Grade Fe 65 - 65.5%	1.50	-0.25	
	Low Grade Fe	19.00	2.00					
1% Alumina	High Fe Grade Al <2.25%	0.00	0.00	1% Alumina	High Fe Grade Al <2.25%	0.50	0.00	
	High Fe Grade Al 2.25-4%	30.00	0.00		High Fe Grade Al 2.25-4%	3.00	0.00	
	Low Fe Grade Al <2.25%	10.00	0.00					
	Low Fe Grade Al 2.25-4%	39.00	6.00					
1% Silica	High Fe Grade Si <4%	5.00	0.00	1% Silica	High Fe Grade Si <4%	0.50	0.00	
	High Fe Grade Si 4-6.5%	26.00	-3.00		High Fe Grade Si 4 - 6.5%	1.50	0.25	
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	3.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.00	0.00	
	High Fe Grade 0.115%<P<0.15%	7.00	2.00		High Fe Grade 0.115%<P<0.15%	2.25	0.25	
	Low Fe Grade 0.09<P<0.1%	0.00	0.00					

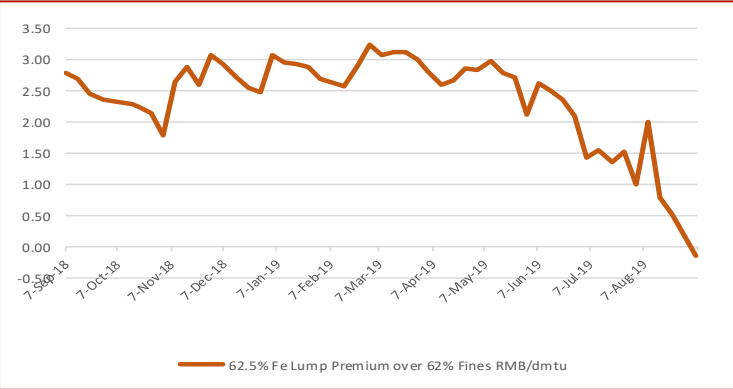
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-35.00	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	0.00	0.00	Rizhao	0.00	0.00
Caofeidian	-20.00	0.00	Jingtang	-20.00	0.00	Majishan	0.00	0.00	Shekou	0.00	0.00
Dalian	-35.00	0.00	Lanqiao	0.00	0.00	Nantong	-20.00	0.00	Tianjin	-10.00	0.00

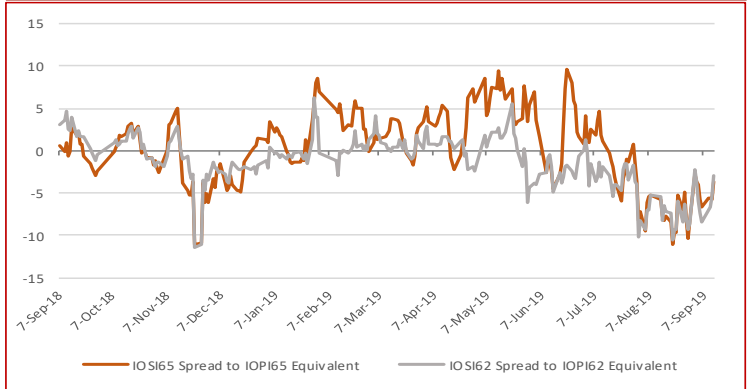
IRON ORE INDEX PREMIUMS/DISCOUNTS



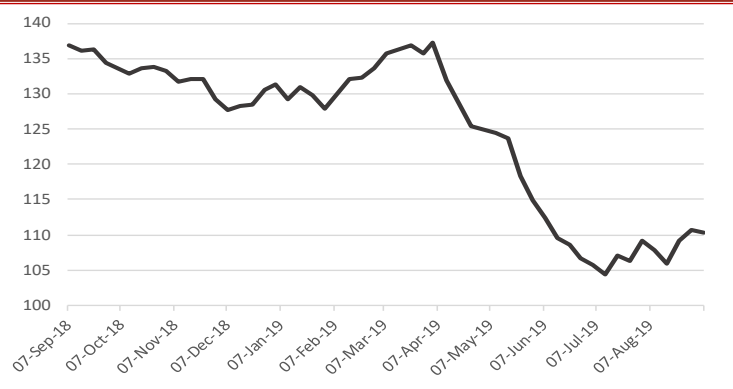
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



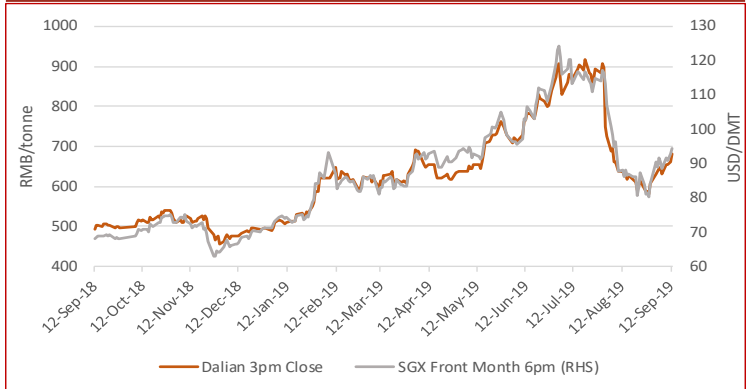
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



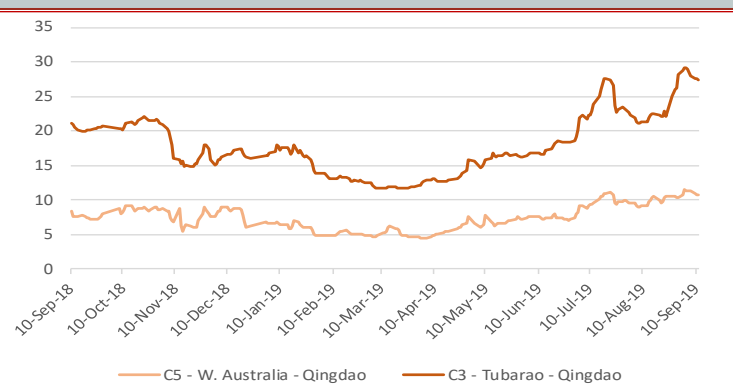
IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending September 6th, 2019				
Province	This week	Change %	Low ²	High ²
Jingtang	12.85	-0.70%	10.80	16.37
Qingdao	13.17	-0.75%	12.38	19.01
Caofeidian	14.75	-3.53%	14.32	20.10
Tianjin	7.09	-1.39%	6.39	10.05
Rizhao	12.13	1.42%	11.65	17.10
Total (35 Ports)	110.30	-0.32%	104.40	137.30

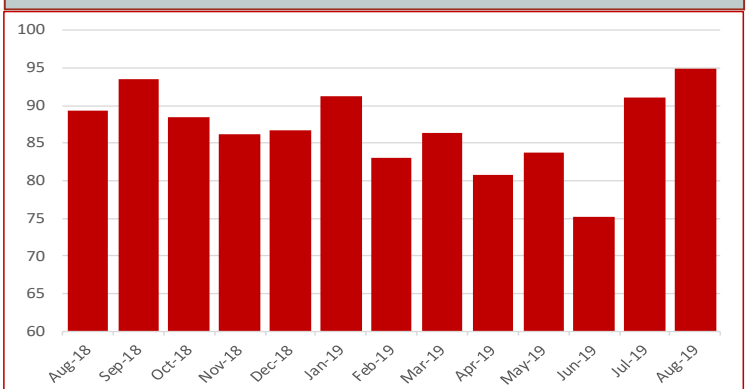
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Sept 12th 3pm close			Sept 12th 5.30 pm		
Contract	I2001	Change	Change %	Sep'19	Change	Change %
Closing Price	680.00	19.0	2.87%	94.44	1.56	1.68%
Vol traded ('000 lots)	237.97	-47.4	-16.61%	4.49	-0.88	-16.34%
Open positions ('000 lots)	156.19	-4.5	-2.80%	159.25	1.62	1.03%
Day Low	659.0	13.0	2.01%	93.20	2.24	2.46%
Day High	681.0	16.0	2.41%	94.44	1.56	1.68%

DRY BULK FREIGHT RATES (USD/MT)

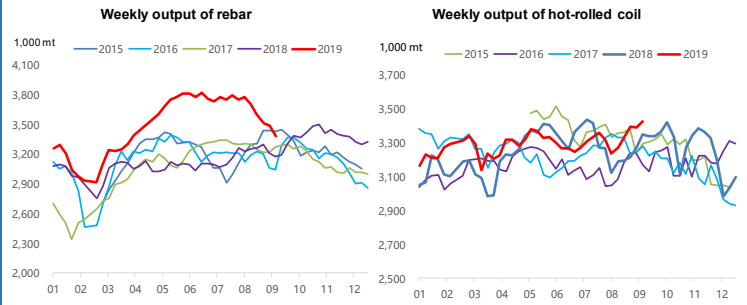


TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne			
Product	6/9/2019	Change	Change %
ReBar HRB400 φ18mm	3,670.0	70	1.94%
Wirerod Q300 φ6.5mm	3,970.0	90	2.32%
HRC Q235/SS400 5.5mm*1500*C	3,650.0	20	0.55%
CRC SPPC/ST12 1.0mm*1250*2500	4,250.0	30	0.71%
Medium & Heavy Plate Q235B 20mm	3,760.0	10	0.27%
GI ST02Z 1.0mm*1000*C	4,490.0	0	0.00%
Colour Coated Plate	6,950.0	-50	-0.71%



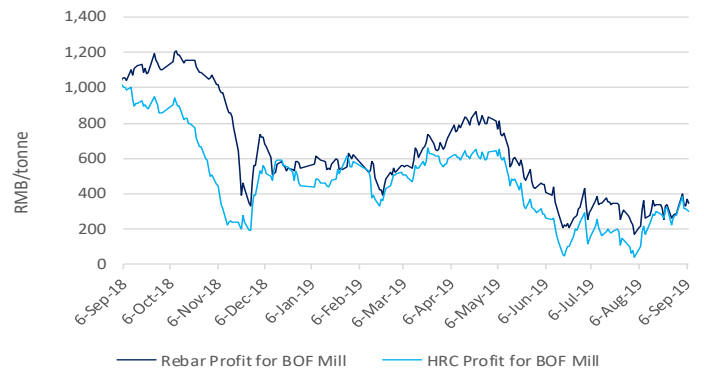
CHINESE STEEL MILL PROFITABILITY

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	92.30	8.55	Mmi CFR Equivalent index for 1st Feb
Coke	1,910	-100	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,270	50	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,062	56	Q234, incl. tax
Rebar cost - Blast furnace	3,306	51	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	344	29	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,378	55	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	302	-5	based on Shanghai prices, incl. tax

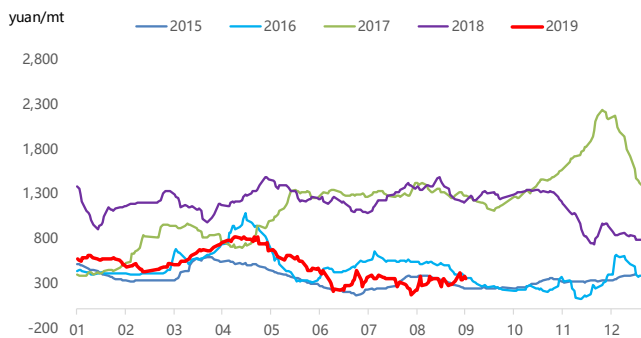
Note: 1. Costs in the table are calculated based on today's market prices and facout our management, sales, financial and depreciations fees.
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY

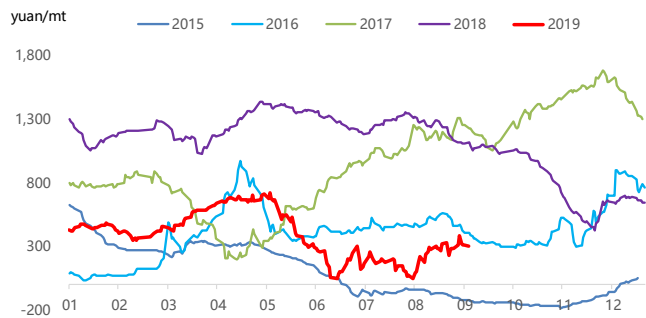


CHINESE STEEL MILL PROFITABILITY

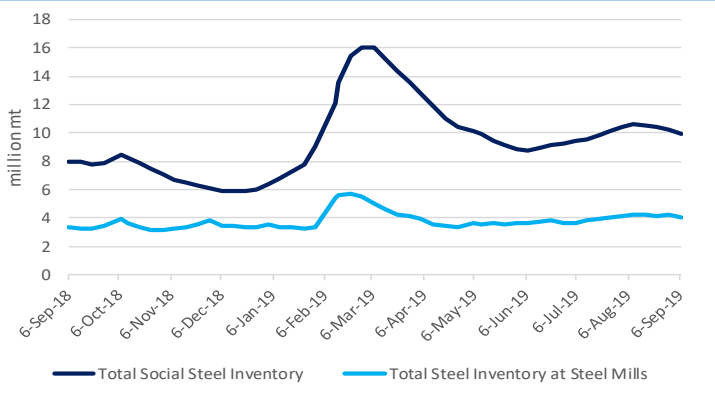
Rebar profits



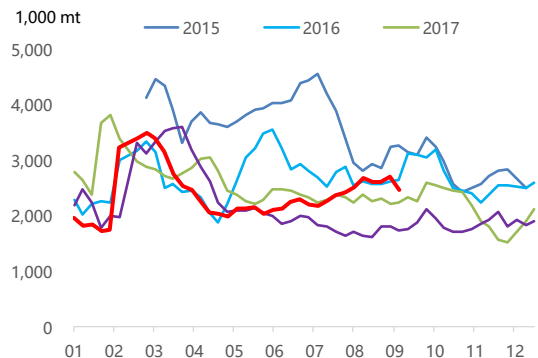
Hot-rolled coil profits



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					
September 12th 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	61.52%	2.37%	3.76%	0.097%	9.45%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	10.00%
Newman Fines	62.52%	2.16%	4.15%	0.088%	7.74%	Newman Fines	62.80%	2.20%	4.30%	0.080%	6.40%
MAC Fines	60.82%	2.24%	4.58%	0.079%	7.59%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%
Jimblebar Blended Fines	60.58%	3.04%	4.57%	0.119%	7.51%	Jimblebar Blended Fines	59.50%	3.70%	5.80%	0.135%	8.30%
Carajas Fines	65.46%	1.32%	1.35%	0.075%	8.32%	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	62.90%	1.54%	4.59%	0.070%	8.49%	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%
September 12th 2019	Specifications applied for 58% brand assessments						Specifications applied for 58% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture		Fe	Alumina	Silica	Phos	Moisture
SSF	56.58%	3.08%	6.33%	0.057%	8.05%						
FMG Blended Fines	58.20%	2.60%	5.44%	0.059%	7.77%						
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	57.31%	1.54%	6.33%	0.041%	8.90%						

BLOOMBERG TICKERS

PORT STOCK INDICES				SEABORNE INDICES	
	FOT Qingdao (RMB/wet tonne)		CFR Qingdao Equivalent (USD/dry tonne)		CFR Qingdao (USD/DMT)
IOPI62	IRCNO001		IRCNO004		IRCNO034
IOPI58	IRCNO002		IRCNO005		IRCNO035
IOPI65	IRCNO003		IRCNO006		
IOPLI62	IRCNO036		IRCNO037		

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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