

# SGX Iron Ore Monthly Report

## January 2017

### Market Overview

SGX iron ore derivative volumes totaled 107.9 mil mt in January, while open interest averaged 149.2 mil mt during the month. Our suite of ferrous products provides market participants with a wide range of trading strategies and risk management solutions.

62% Fe spot iron ore averaged \$80.40 per tonne in January, up 0.8% from December (and up 95.3% y/y). Spot prices continued to defy the bears, fluctuating around the \$80 range, while the forward curve for 2017 rose ~17% during the month. Coking coal on the other hand continued to nose-dive, leading to a surge in spot steelmaker margins which, if sustained, may incentivise higher production in the near-term.

Chinese manufacturing economic indicators remained relatively robust in January, with signs of continued stability in industrial activity and profitability, though questions have been arising over sustainability. All eyes are on now China's policymakers for near-term market direction post-Lunar New Year.

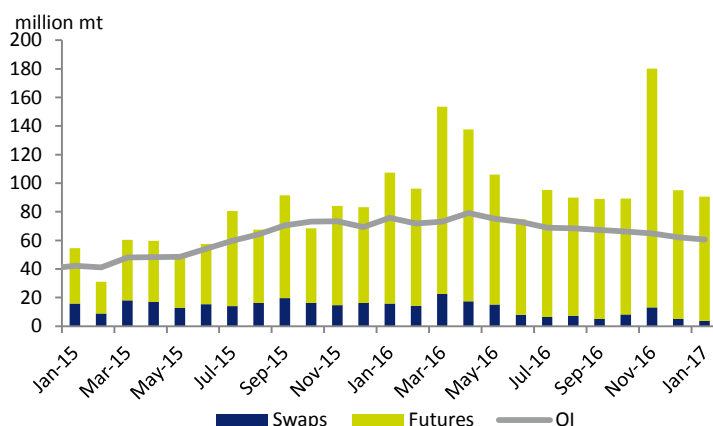


### SGX iron ore derivative volumes

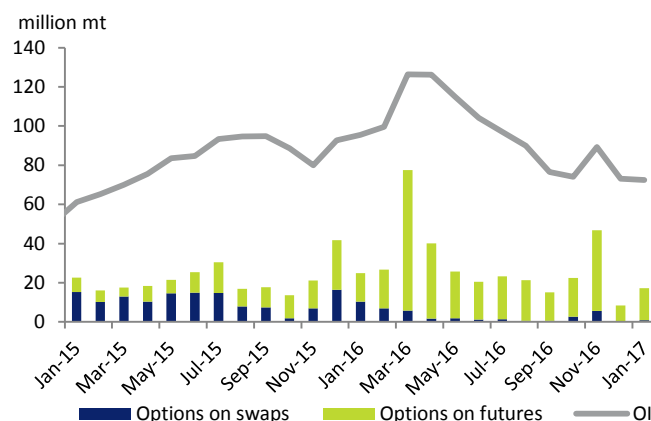
62% Fe iron ore derivative volumes in January totaled 107.8 mil mt (+4% m/m; -18% y/y), with open interest averaging 149.0 mil mt (-8% m/m; -18% y/y). Separately, coking coal derivative interest continued to surge with volumes hitting 870,000 tonnes, more than the entire volume cleared in 2016.

Our latest SGX Iron Ore Weekly Options Report is available [here](#).

**Iron Ore Swaps/Futures\* Volumes & Open Interest (62% Fe)**



**Iron Ore Options Volumes & Open Interest (62% Fe)**



\*SGX iron ore swaps & futures are fully fungible and include margin offset (close to 100%). Details on margin requirements are included at the back of this report.

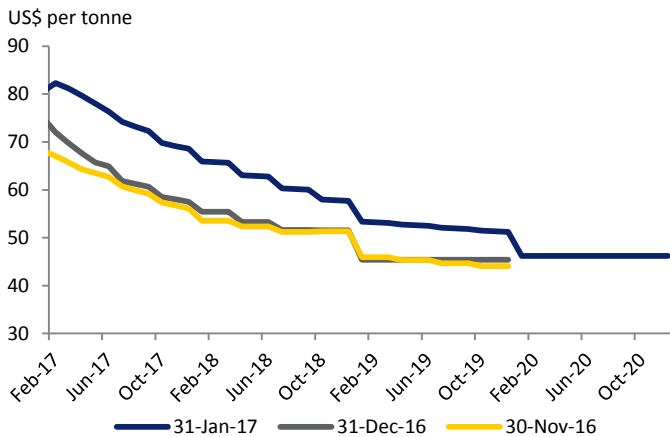
Source: SGX

	Jan-17		Jan-16		2016 YTD
	Volume	Open Interest	Volume	Open Interest	Volume
Iron Ore Swaps (62% Fe)	7,436 contracts (3.7 mil mt)	24,294 contracts (12.1 mil mt)	31,640 contracts (15.8 mil mt)	47,933 contracts (24.0 mil mt)	7,436 contracts (3.7 mil mt)
Iron Ore Options on Swaps (62% Fe)	1,780 contracts (0.9 mil mt)	19,759 contracts (9.9 mil mt)	20,760 contracts (10.4 mil mt)	94,405 contracts (47.2 mil mt)	1,780 contracts (0.9 mil mt)
Iron Ore Futures (62% Fe)	869,214 contracts (86.9 mil mt)	569,352 contracts (56.9 mil mt)	914,921 contracts (91.5 mil mt)	578,848 contracts (57.9 mil mt)	869,214 contracts (86.9 mil mt)
Iron Ore Options on Futures (62% Fe)	162,920 contracts (16.3 mil mt)	700,439 contracts (70.0 mil mt)	144,525 contracts (14.5 mil mt)	524,372 contracts (52.4 mil mt)	162,920 contracts (16.3 mil mt)
Iron Ore Swaps/Futures (62% Fe)	876,650 contracts (90.6 mil mt)	593,646 contracts (69.1 mil mt)	946,561 contracts (107.3 mil mt)	626,781 contracts (81.9 mil mt)	876,650 contracts (90.6 mil mt)
<b>Iron Ore Derivatives (62% Fe)</b>	<b>1,041,350 contracts (107.8 mil mt)</b>	<b>1,313,843 contracts (149.0 mil mt)</b>	<b>1,111,846 contracts (132.1 mil mt)</b>	<b>1,245,558 contracts (181.5 mil mt)</b>	<b>1,041,350 contracts (107.8 mil mt)</b>
Iron Ore Swaps/Futures (58% Fe Fines)	0 contracts (0.0 mil mt)	0 contracts (0.0 mil mt)	0 contracts (0.0 mil mt)	0 contracts (0.0 mil mt)	0 contracts (0.0 mil mt)
Iron Ore Swaps/Futures (Lump Premium)	800 contracts (0.1 mil mt)	2,284 contracts (0.2 mil mt)	1,950 contracts (0.2 mil mt)	2,298 contracts (0.3 mil mt)	800 contracts (0.1 mil mt)
<b>Iron Ore Derivatives (All Products)</b>	<b>1,042,150 contracts (107.9 mil mt)</b>	<b>1,316,127 contracts (149.2 mil mt)</b>	<b>1,113,796 contracts (132.3 mil mt)</b>	<b>1,247,856 contracts (181.8 mil mt)</b>	<b>1,042,150 contracts (107.9 mil mt)</b>

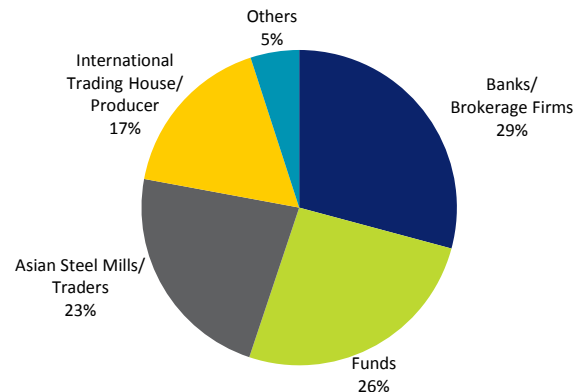
\*Open interest represents average for the month

\*\*SGX iron ore swaps & futures are fully fungible and include margin offset. Details on margin requirements are included at the back of this report.

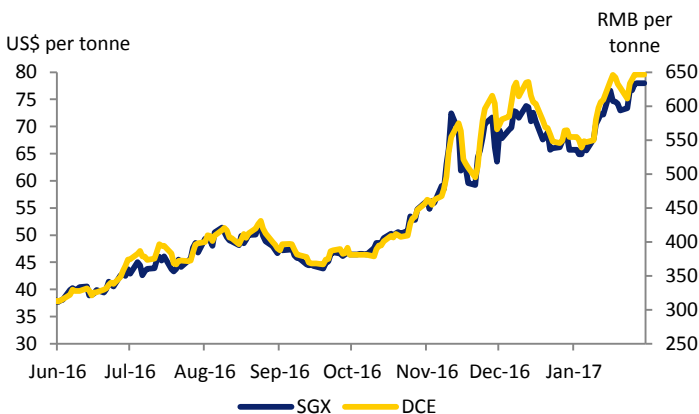
### SGX Iron Ore Forward Curve (62% Fe fines)



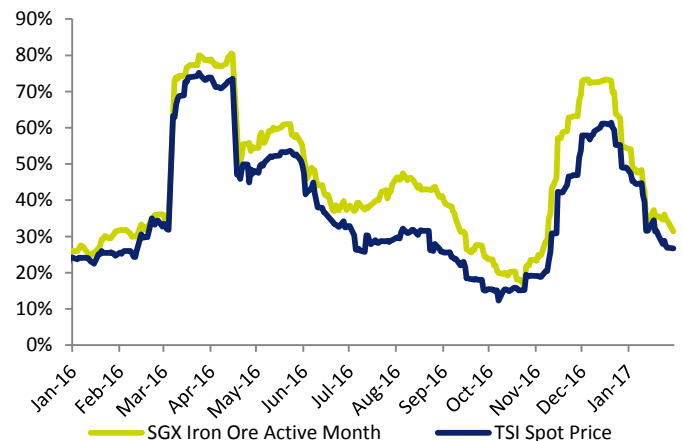
### Market Participant Mix (L3M)



### SGX 62% Fe Iron Ore Futures vs DCE 62% Fe Iron Ore Futures



### Iron Ore Price Volatility (30-day annualised)



\*May 2017 contracts

\*\*DCE prices include VAT and port charges

\*\*\*L3M = Last Three Months

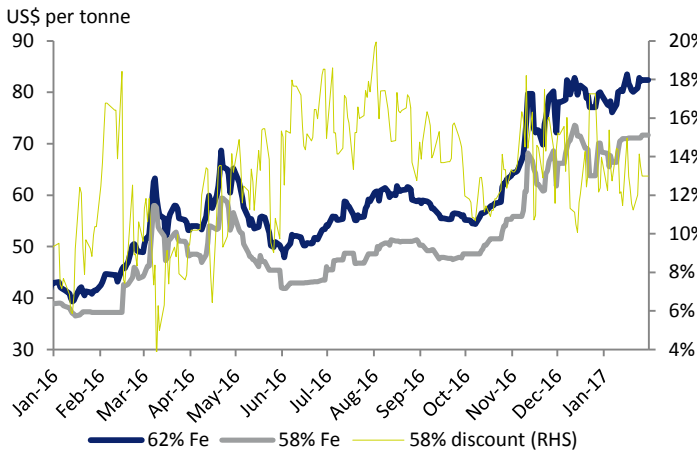
Source: Bloomberg, SGX

## Iron ore price continues to defy bears; coking coal price plunge deepens

The benchmark iron ore spot price averaged \$80.40 per tonne in January (up 0.8% m/m). Spot price volatility remained subdued with prices remaining supported around the \$80 per tonne mark on mill restocking, solid demand and positive steelmaker margins. Iron ore continues to defy bearish expectations, with January marking the fourth consecutive rise in average monthly prices despite the continued backwardation in the forward curve. Forward pricing for 2017 ended the Jan at US\$75.42, a 17% rise from a month ago.

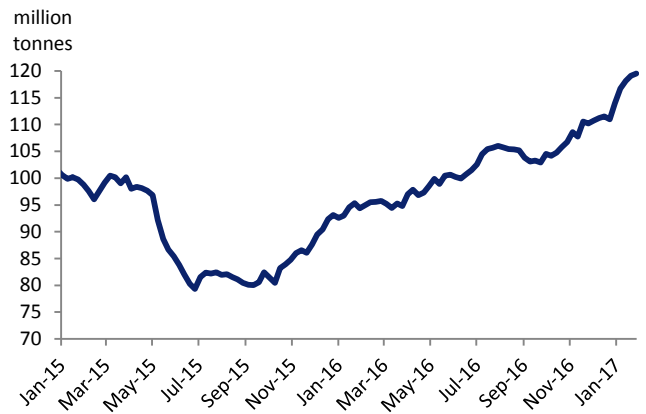
ASEAN HRC steel averaged \$509.55 per tonne during the January (down 0.5% m/m), while the benchmark coking coal price index averaged \$184.94 per tonne (down 30.7% m/m). The continued slide in coking coal prices has led to a surge in spot steelmaker margins which may incentivise higher steel production in the near-term. That said, not all steelmakers are likely to benefit, with those exposed to the traditional quarterly price fix/hedge of \$285 per tonne for Q1-17 (versus current spot at \$169.70) unlikely to experience the improved margins.

**Iron Ore Spot Price, CFR China  
(62% Fe vs 58% Fe)**



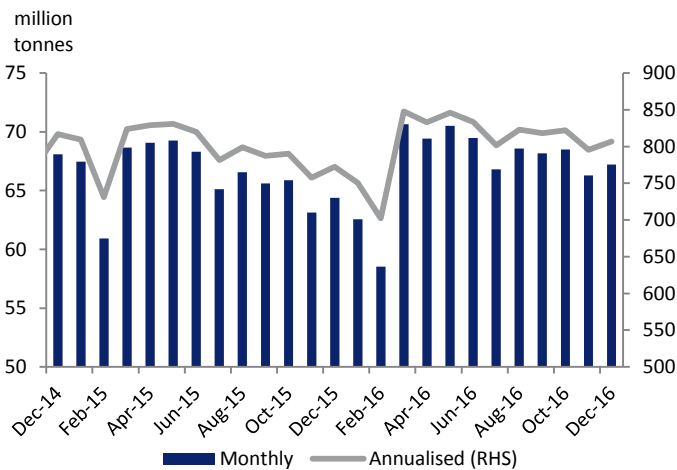
Source: Bloomberg, TSI, SGX

**Iron Ore Inventory at Chinese Ports**



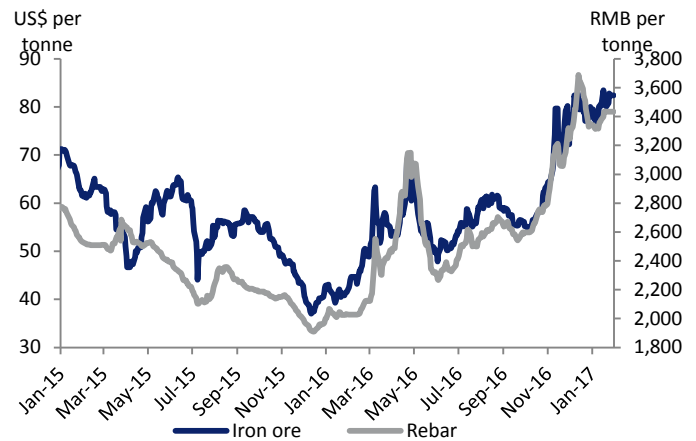
Source: Bloomberg, Steelhome, SGX

**Chinese Steel Production**



Source: China National Bureau of Statistics, SGX

**Iron Ore Price vs Rebar**



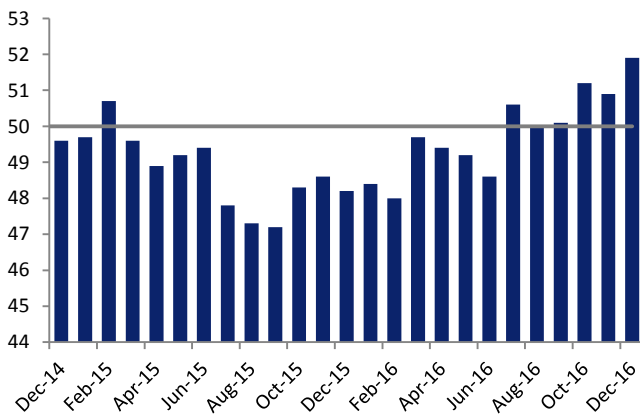
Source: Bloomberg, TSI, SGX

## China manufacturing PMI remains steady in January; looking to post CNY for direction

Chinese manufacturing data appears to have remained robust in January, with the official manufacturing PMI edging marginally lower to 51.3 (from 51.4 in December), ahead of consensus at 51.2. The sub-indices showed a decline in both new orders and production. The Caixin manufacturing PMI will be released on 3 Feb.

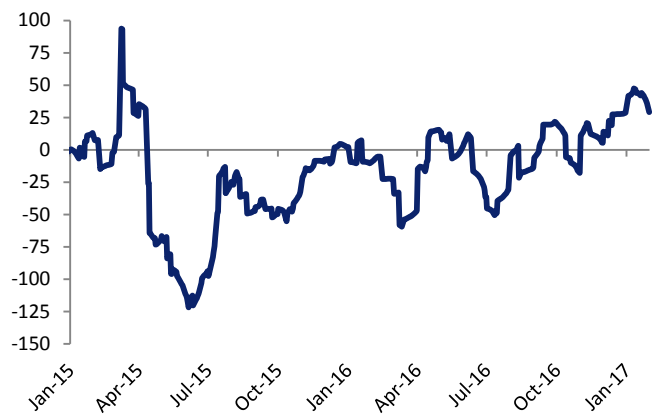
While industrial activity in China remains largely stable and profitability has improved, questions have been emerging over sustainability, particularly moving towards the summer and H2-17. New bank loans in December exceeded expectations, though mortgage lending appears to have begun to trend lower. With the markets now quiet during Lunar New Year, all eyes will look for direction from mid-Feb on policymaker priorities between growth, stability and reform etc.

**Chinese Caixin Manufacturing PMI**



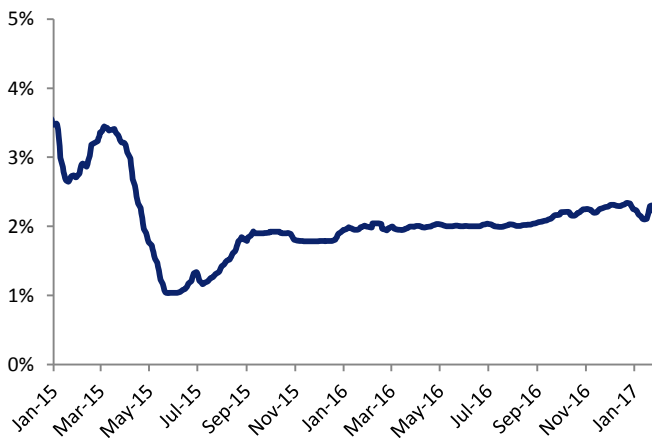
\*Jan-17 Caixin PMI to be released on 3 Feb  
Source: Bloomberg, SGX

**Citigroup Economic Surprise Index - China**



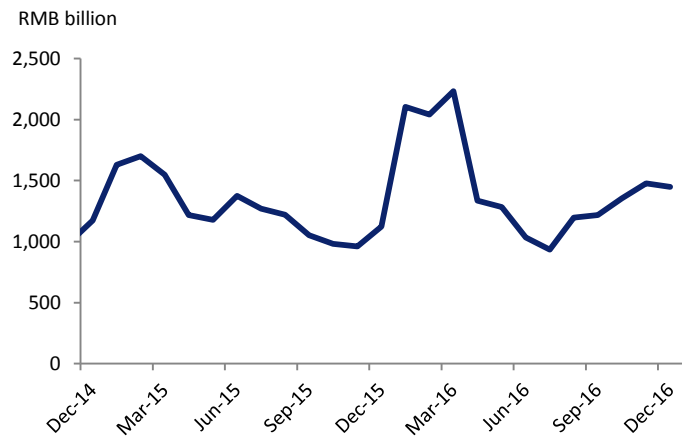
Source: Bloomberg, Citigroup, SGX

**SHIBOR**



Source: Bloomberg, SGX

**Chinese Total Social Financing**



\*3-month trailing average

Source: Bloomberg, China National Bureau of Statistics, SGX

## Key news during the month

### China

- **Official manufacturing PMI remained robust in January**, edging slightly lower to 51.3 (vs 51.4 in December), ahead of consensus expectations of 51.2.
- **China warns officials over failure to crack down on steel overcapacity.** China warned local officials over failures to curb industrial overcapacity after discovering two firms making steel illegally. A State Council statement said 138 people would be held accountable in connection with the incidents.
- **China's CCB signs \$4.3bn of debt/equity swaps with steel & coal firms.** China Construction Bank has signed around RMB 30bn worth of debt-for-equity swaps with eastern Anhui province's state-owned coal and steel firms, according to Xinhua. The country's largest lender – ICBC – also recently signed several debt-for-equity swaps with Shanxi province's highly indebted state-owned coal and steel firms.
- **China to remove 800Mt coal capacity by 2020.** China plans to remove 800Mt of outdated coal capacity by 2020, while adding 500Mt of more advanced capacity over the same period, as part of the government's capacity exchange scheme. Under the five-year plan, annual coal output is forecast at 3.9Bt by 2020, representing growth of 0.8% a year from the 3.7Bt in 2015.
- **China crude steel output increases 1.2% y/y in 2016.** NBS statistics show China produced 808.37Mt of crude steel in 2016.
- **China iron ore imports topped 1Bt for the first time in 2016.** Customs data showed China imported just under 89Mt of iron ore in December, down 3.2% m/m. Imports totaled 1.024Bt in 2016, an increase of 7.5% y/y.
- **China steel exports decreased 3.5% to 108Mt in 2016.** Customs data showed finished steel exports totaled 7.8Mt in December, down 26.8% y/y.

### Australia

- **BHP Billiton's Q4-16 production increases 9% y/y to 70Mt.** The company maintained its FY17 (y/e/ 30 June) guidance of between 265-275Mt.
- **Rio Tinto reports rise in iron ore shipments in 2016.** Shipments rose 3% y/y to 327.6Mt in 2016, in line with previous guidance.
- **Australia forecasts steep decline coming in iron ore prices.** Australia's Department of Industry, Innovation and Science predicted iron ore to average US\$51.60 this year, and easing further to US\$46.70 in 2018.
- **Atlas Iron expected to head back into the black.** The Australian miner, which almost went bankrupt a year ago, said last month that it expects to become net cash positive by mid-2017 due to higher iron ore prices. Atlas has entered into forward price hedges and cut costs below selling prices.

### Brazil

- **First shipment from Vale's new S11D mine are en route to Asia.** S11D, also known as Serra Sul, will add 90Mtpa of annual capacity to Vale's output by 2020, or about 20% of its total expected output for that year.

### Other

- **Indian steel policy proposes to boost domestic coking coal supply.** India's Steel Ministry sought comments on a draft policy aiming to increase domestic availability of washed coking coal, and to reduce import dependence by 50% by 2030-31.
- **India aims to ensure higher iron ore availability for domestic steel mills.** The country's Mines Ministry is proactively pushing provinces to increase the number of iron ore blocks up for auction and to ensure higher volumes of raw material availability to domestic steel producers.
- **World steel output rose 0.8% y/y in 2016 – WSA.** Crude steel output was reported at 1.62Bt, while average capacity utilisation was 69.3% (down from 69.7% in 2015).

## Margin Requirements (as of 1 February 2017)

Contract Name	Currency	Contract month (From)	Contract month (To)	Maint. Margin	Initial Margin	Initial to Maint. Ratio
Iron Ore CFR China Swap / Option	USD	Feb-17	Mar-17	5,200	5,720	1.1
Iron Ore CFR China Swap / Option	USD	Apr-17	Jun-17	5,300	5,830	1.1
Iron Ore CFR China Swap / Option	USD	Jul-17	Sep-17	5,300	5,830	1.1
Iron Ore CFR China Swap / Option	USD	Oct-17	Dec-17	5,300	5,830	1.1
Iron Ore CFR China Swap / Option	USD	Jan-18	Dec-99	5,300	5,830	1.1
Iron Ore CFR China Futures	USD	Feb-17	Mar-17	1,040	1,144	1.1
Iron Ore CFR China Futures	USD	Apr-17	Jun-17	1,060	1,166	1.1
Iron Ore CFR China Futures	USD	Jul-17	Sep-17	1,060	1,166	1.1
Iron Ore CFR China Futures	USD	Oct-17	Dec-17	1,060	1,166	1.1
Iron Ore CFR China Futures	USD	Jan-18	Dec-99	1,060	1,166	1.1
SGX MB/TSI Iron Ore CFR China (58% Fines) Swap	USD	Feb-17	Dec-99	1,800	1,980	1.1
SGX MB/TSI Iron Ore CFR China (58% Fines) Futures	USD	Feb-17	Dec-99	360	396	1.1
SGX Platts Iron Ore CFR China (Lump Premium) Swap	USD	Feb-17	Dec-99	1,300	1,430	1.1
SGX Platts Iron Ore CFR China (Lump Premium) Futures	USD	Feb-17	Dec-99	260	286	1.1
Australia Premium Coking Coal Swap	USD	Feb-17	Mar-17	9,500	10,450	1.1
Australia Premium Coking Coal Swap	USD	Apr-17	Jun-17	14,000	15,400	1.1
Australia Premium Coking Coal Swap	USD	Jul-17	Sep-17	10,000	11,000	1.1
Australia Premium Coking Coal Swap	USD	Oct-17	Dec-99	9,500	10,450	1.1
Australia Premium Coking Coal Futures	USD	Feb-17	Mar-17	1,900	2,090	1.1
Australia Premium Coking Coal Futures	USD	Apr-17	Jun-17	2,800	3,080	1.1
Australia Premium Coking Coal Futures	USD	Jul-17	Sep-17	2,000	2,200	1.1
Australia Premium Coking Coal Futures	USD	Oct-17	Dec-99	1,900	2,090	1.1
China Premium JM25 Coking Coal Swap	USD	Feb-17	Mar-17	12,000	13,200	1.1
China Premium JM25 Coking Coal Swap	USD	Apr-17	Jun-17	16,000	17,600	1.1
China Premium JM25 Coking Coal Swap	USD	Jul-17	Sep-17	13,000	14,300	1.1
China Premium JM25 Coking Coal Swap	USD	Oct-17	Dec-99	10,000	11,000	1.1
China Premium JM25 Coking Coal Futures	USD	Feb-17	Mar-17	2,400	2,640	1.1
China Premium JM25 Coking Coal Futures	USD	Apr-17	Jun-17	3,200	3,520	1.1
China Premium JM25 Coking Coal Futures	USD	Jul-17	Sep-17	2,600	2,860	1.1
China Premium JM25 Coking Coal Futures	USD	Oct-17	Dec-99	2,000	2,200	1.1
Hot-Rolled Coil Steel CFR ASEAN Swap/Futures	USD	Feb-17	Mar-17	500	550	1.1
Hot-Rolled Coil Steel CFR ASEAN Swap/Futures	USD	Apr-17	Jun-17	500	550	1.1
Hot-Rolled Coil Steel CFR ASEAN Swap/Futures	USD	Jul-17	Sep-17	600	660	1.1
Hot-Rolled Coil Steel CFR ASEAN Swap/Futures	USD	Oct-17	Dec-17	600	660	1.1
Hot-Rolled Coil Steel CFR ASEAN Swap/Futures	USD	Jan-18	Dec-99	600	660	1.1

## Cross-Product Margin Offsets

Products Grouping	Margin Credit
<b>Iron Ore &amp; Steel</b>	
Iron Ore 58% Fe (M58)	Iron Ore 58% Fe (T58) 70%
Iron Ore 62% Fe (FE)	Iron Ore 58% Fe (M58/T58) 60%
Iron Ore 62% Fe (FE)	HRC Steel (HR) 50%
Iron Ore 58% Fe (M58/T58)	HRC Steel (HR) 50%
<b>Coking Coal</b>	
Iron Ore 62% Fe (FE)	Coking Coal (AC/CC) 50%
Iron Ore 58% Fe (M58/T58)	Coking Coal (AC/CC) 50%
<b>Thermal Coal</b>	
Iron Ore 62% Fe (FE)	Thermal Coal API 5 (5C) 55%
Iron Ore 62% Fe (FE)	Thermal Coal Indo Sub-Bit (CI) 45%
Iron Ore 62% Fe (FE)	Thermal Coal API 4 (4C) 45%
<b>Freight</b>	
HRC Steel (HR)	Panamax time charter (PV) 45%
Iron Ore 62% Fe (FE) & 58% Fe (M58/T58)	Capesize time charter (4 routes) (CV) 45%
Iron Ore 58% Fe (M58/T58)	Panamax time charter (PV) 45%
Iron Ore 62% Fe (FE) & 58% Fe (M58/T58)	Capesize time charter (5 routes) (CW) 40%
Iron Ore 62% Fe (FE)	Panamax time charter (PV) 40%
HRC Steel (HR)	Capesize time charter (5 routes) (CW) 35%
HRC Steel (HR)	Capesize time charter (4 routes) (CV) 35%
Iron Ore 62% Fe (FE)	C5 voyage – W.Australia to Qingdao (C5) 35%
Iron Ore 58% Fe (M58/T58)	C5 voyage – W.Australia to Qingdao (C5) 30%
<b>Fuel Oil</b>	
Iron Ore 62% Fe (FE)	Fuel Oil 380cst (3M) 45%
Iron Ore 62% Fe (FE)	Fuel Oil 180cst (1M) 40%
HRC Steel (HR)	Fuel Oil 180cst (1M) 30%
HRC Steel (HR)	Fuel Oil 380cst (3M) 30%

\*Margin offsets are available for opposite swap/futures positions in the same underlying commodity

\*\* SGX margin schedules are revised regularly. Latest schedules can be found on our website [here](#)

Source: SGX

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