CME Group
A CME/Chicago Board of Trade/NYMEX Company

July 7, 2010

VIA E-MAIL
Mr. David Stawick
Office of the Secretariat
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

Re: Rule Certification. New York Mercantile Exchange, Inc. and CME Clearing Submission # 10-151: Notification Regarding the Listing of Iron Ore 62% Fe, CFR China (TSI) Swap Futures for Trading on the New York Trading Floor and for Clearing through CME ClearPort®

Dear Mr. Stawick:

The New York Mercantile Exchange, Inc. ("NYMEX" or the "Exchange") and CME Clearing are notifying the Commodity Futures Trading Commission ("CFTC" or "Commission") that they are self-certifying the listing of Iron Ore 62% Fe, CFR China (TSI) Swap Futures for trading on the NYMEX trading floor and for clearing through CME ClearPort. This new futures contract will be financially settled. The contract will be listed on the Exchange effective Sunday, July 11, 2010 for trade date Monday, July 12, 2010.

The Iron Ore 62% Fe, CFR China (TSI) Swap Futures commodity code shall be "TIO" and its governing rules are found under Chapter 919.

The Iron Ore 62% Fe, CFR China (TSI) Swap Futures contract specifications are summarized in the table below.

Iron Ore 62% Fe, (TSI) CFR China Port	
Contract Symbol	TIO
Contract Size	500 dry Metric Tons (dmt)
Underlying Currency	USD and cents
Trading Months	24 consecutive
Minimum Price Quotations	$0.01 per dmt ($5.00 per lot)
Settlement Type	Financial
Final Settlement	Average of the daily prices reported in USD and cents by "TSI" during the relevant contract month
Last Trading Day	Last business day prior of the contract month
Business Days	U.K. Holiday Calendar

The first listed month for the Iron Ore 62% Fe, CFR China (TSI) Swap Futures contract will be the August 2010 contract month. This new futures contract will be listed for twenty-four (24) consecutive contract months.

In addition, the Exchange and CME Clearing will allow an exchange for related position transactions as governed by the provisions of Exchange Rule 538.

The Exchange and CME Clearing are also notifying the Commission that they will offer a broker rebate of 50% for the trading and clearing of this product.

Pursuant to Section 5c(c) of the Commodity Exchange Act ("Act") and CFTC Rules 40.2 and 40.6, the Exchange and CME Clearing hereby certify that the attached contracts comply with the Act, including regulations under the Act.

Should you have any questions concerning the above, please contact Robert Levin at (212) 299-2390 or the undersigned at (312) 648-5422.

Sincerely,

/s/ Stephen M. Szarmack
Regulatory Counsel

Attachments: Contract terms and conditions
Supplemental Market Information

8326

Chapter 919
Iron Ore 62% Fe, CFR China (TSI) Swap Futures

919.01 SCOPE

The provisions of these rules shall apply to all contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

919.02 FLOATING PRICE

The Floating Price for each contract month is equal to the average price calculated for all available price assessments published for "Iron ore fines 62% Fe – CFR China Port" for that given calendar month by The Steel Index (TSI).

919.03 CONTRACT QUANTITY AND VALUE

The contract quantity shall be five hundred (500) dry metric tons. Each contract shall be valued as the contract quantity multiplied by the settlement price.

919.04 CONTRACT MONTHS

Trading shall be conducted in the contract months as shall be determined by the Exchange.

919.05 PRICES AND FLUCTUATIONS

Prices shall be quoted in U.S. dollars and cents per dry metric ton. The minimum price fluctuation shall be $0.01 per dry metric ton. There shall be no maximum price fluctuation.

919.06 TERMINATION OF TRADING

Trading shall terminate on the last business day of the contract month. Business days are based on the U.K. Public Holiday calendar.

919.07 FINAL SETTLEMENT

Delivery under the contract shall be by cash settlement. Final settlement, following termination of the trading for a contract month, will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract month.

919.08 EXCHANGE FOR RELATED POSITION

Any Exchange for Related Position (EFRP) shall be governed by the provision of Exchange Rule 538.

919.09 DISCLAIMER

NEITHER CME GROUP INC., NEW YORK MERCANTILE EXCHANGE, INC. NOR ANY OF THEIR AFFILIATES (COLLECTIVELY "CME") NOR THE STEEL INDEX ("TSI") GUARANTEES THE ACCURACY AND/OR COMPLETENESS OF THE INDEX OR ANY OF THE DATA INCLUDED THEREIN. NEITHER CME NOR TSI MAKE ANY WARRANTIES, EXPRESS OR IMPLIED, AS TO THE RESULTS TO BE OBTAINED BY ANY PERSON OR ENTITY FROM USE OF THE INDEX, TRADING BASED ON THE INDEX, OR ANY DATA INCLUDED THEREIN IN CONNECTION WITH THE TRADING OF THE CONTRACTS, OR, FOR ANY OTHER USE. NEITHER CME NOR TSI MAKE ANY WARRANTIES, EXPRESS OR IMPLIED, AND EACH HEREBY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE INDEX OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL CME OR TSI HAVE ANY LIABILITY FOR ANY LOST PROFITS OR INDIRECT, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

CONTRACT OVERVIEW

The New York Mercantile Exchange, Inc. (NYMEX or Exchange) is self-certifying the listing of financially settled Iron Ore 62% Fe, CFR China (TSI) Swap Futures contract. The contract will be based on the standard 62% iron ore content. The price for the contract will be based on price assessment published by The Steel Index (TSI). The index is based on spot price transactions of iron ore sinter fines delivered to China from any origin.

CASH MARKET OVERVIEW

Market Overview

The primary use for iron ore is as an input in steel production. The production of finished steel is a multi-varied process. Raw materials of iron ore, metallurgical coal, steel scrap along with limestone and other alloying elements are combined to produce crude steel.

Crude steel can be produced in one of two ways. The first method is the integrated method where the main raw material - iron ore is smelted using coke to produce liquid iron, which mostly goes directly to the BOF (basic oxygen furnace) where it is transformed into crude steel. The second method used to produce crude steel is by electric arc furnace where ferrous scrap is placed in a furnace along with graphite electrodes – an electric arc is struck which causes the solid scrap to melt.

It takes approximately 1.7 metric tons of iron ore to produce 1 metric ton of crude steel. It takes 1.03 metric tons of scrap to make 1 metric ton of crude steel.

Once crude steel is produced via either process method, it can be cast into an intermediate stage as a slab or billet or can be continuously cast directly into finished product.

China has rapidly become the largest consumer and producer of steel. Dramatic growth in steel production in the country has resulted in the need to import iron ore to supplement their own domestic iron ore which is of poor and declining quality. Chinese iron ore grades are typically less than one half the iron content of grades mined in other countries.

The three primary sources of Chinese iron ore imports are Australia, India and Brazil. Iron ore exports from these countries into China are typically of high quality and have a median iron content of 62%.

Iron Ore Cash Market

Iron ore production and consumption is a global industry consisting of hundreds of counterparts, inclusive of miners, steel mills and physical and financial traders. As stated above, the primary use for iron ore is as an input in steel production. Global crude steel production could top 1.5 billion metric tons this year[1], and requires more than 1.7 billion metric tons of virgin iron ore, and 500 million metric tons of other metallics, most coming from ferrous scrap, but also including processed iron units (direct reduced iron).

Steel making is vital to all industrial economies and its production requires access to iron units. Iron is a relatively abundant mineral and easily extracted, but it is capital intensive to mine and transport is constrained due to its high shipping cost relative to price. Iron ore is produced, consumed, and exported by many nations, but primary iron ore exports are concentrated in Australia, Brazil, and India. In 2009, China accounted for about 41% of the total global crude steel production[2] and has been responsible for the majority of production growth for the entire industry in the last decade[3].

Developing economies, of which China is the most notable, have become the largest contributors to the demand growth of iron ore. China consumed approximately 1,091 million metric tons of iron ore in 2009[4]. Forecast shows that China will produce approximately 640 million metric tons of crude steel in 2010[5], nearly 50% of the world's total crude steel production[6]. This forecasted increase in Chinese production of crude steel represents a 326% increase in Chinese production of crude steel since 2001[7]. Along with China, other emerging nations are building up their domestic industrial sectors and this is driving demand. Largely because of this, world iron ore production grew from 1 billion tons in 2000[8] to nearly 1.7 billion tons in 2009[9]. Rapid changes in the market have transformed the sector from a processor of low cost, stable and abundant raw material, into a cyclical margin driven business. As shown

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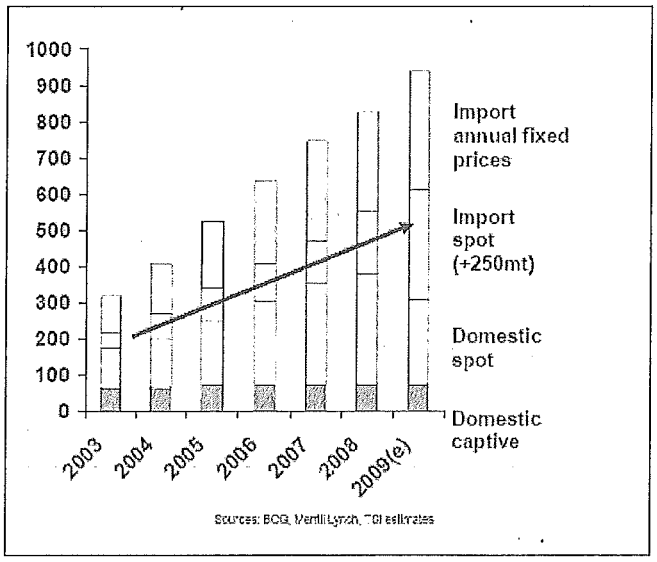
[1] Global apparent crude steel production is projected from monthly data as of April 2010 reported by the World Steel Association (www.worldsteel.org)
[2] Appendix 1
[3] UNCTAD 'The Iron Ore Market 2008 -2010, June 2009 (http://www.unctad.org/infocomm/Iron/covmar08.htm)
[4] Appendix 2
[5] Macquarie Group Ltd
[6] Appendix 5
[7] www.worldsteel.org
[8] http://www.indexmundi.com/en/commodities/minerals/iron_ore/iron_ore_table16.html
[9] Appendix 5

in Chart 1 below, the growth in Chinese steel production has dramatically increased its need for imported iron ore.

Chart 1: China Iron Ore Demand (2003 -2009)



Iron ore production is dominated by three major mining companies - BHP Billiton Ltd, Rio Tinto, and Vale, which together provide approximately two-thirds of the world's seaborne iron ore (seaborne iron ore is defined in greater detail below). Given that most steel-making countries don't have sufficient domestic supplies, the seaborne iron ore market becomes the marginal supplier. [10] This market determines price and takes on special importance for the entire industry. China imports iron ore from many countries – predominately Australia, Brazil and India.

For the past 40 years, iron ore prices were set between miners and mills through a process of annual negotiations - the "benchmark price". This industry practice of "setting price" was endemic throughout the steel industry for not only raw materials, but also for finished product. This superseded the more traditional practice of "open market price discovery" that transpires in other commodity markets via recognized commodity market mechanisms. Iron and steel pricing has been the anomaly, and is what sets it apart from other major commodities.

[10] Richard Wei of UBS predicts seaborne trade for Iron ore will rise to $1 billion tons in 2010, up 11% from 2009.

The two key factors for pricing ore are the iron content and location of the deposit. Iron ore mines never produce uniformed grades of ore. Some ore deposits are more naturally endowed with higher iron content than others, and even then, iron content within deposits will vary amongst the different parts of the mine itself. Additional formal characteristics, such as moisture, Alumina, Silica, Phosphorus, and Sulphur are considered pollutants and generally become determinants of value.

Classifications include *pellet, fines & lump*, which carry their own unique pricing terms. A notable point is that a difference in price valuation of iron ore content is not straight forward, and will be subject to variation between mines, mills and traders. Of note, these differentials are not linear interpolations, e.g., a 1% up or down iron content does not result in equal but opposite pricing differentials. This can lead to substantial pricing variations between various iron ore grades. Location of mines and requirements to transport ore to the steel mills are important aspects in determining price. Distances, logistics and costs for transport remove nearly 50% of the global iron ore production from the market. What is left is commonly called the "seaborne iron ore market".

The issue is crucial for price. Iron ore shipments are logistically cumbersome and involve the movement of large quantities of materials by rail, barge and or ship. Ore deposits are lightly processed at the mine site and then transported as pellets, fines or lumps to the steel mills. Iron ore is a "freight dependent" commodity, due to the high ratio of freight costs to the underlying commodity price. Steel mills that are vertically integrated with their own raw material supply, or which are strategically close to the ore deposits, have a freight advantage which displaces the competitiveness of far away resources from entering their supply chain. Freight costs can be substantial and represent a large and variable percentage of the seaborne iron ore price.

Availability of iron ore supply can be severely disrupted since it's heavily dependent on freight. This can occur at the port due to congestion, lack of suitable vessels or, even, weather. Brazil and India experience seasonal rains that play havoc on the loading schedules where monsoons can shut down facilities for extended periods. Ore price is negatively impacted by high moisture content and prevents loading and transport. A majority of the global fleet of capsize vessels are exclusively chartered for the seaborne iron ore market. Fluctuations in demand for seaborne iron ore will impact the entire dry bulk freight market. Freight costs can vary substantially. Seaborne transportation costs can be managed by

using derivative instruments based on several industry benchmarks for routes and time charters. Forward freight agreements (FFA's) are used in association with the transport of bulk commodities, mostly for iron ore, coal and grains. Cargo sizes vary widely with an average of about 50,000 metric tons, which amounts to about 100 futures contract equivalents. Therefore, iron ore prices are impacted not only by the supply-demand balance, but also the quality of grades, location and availability of transport.

Evolution of Spot Market Pricing

Global iron ore production stands at approximately 1.7 billion tons per year[11]. During 2009, at 686 million metric tons[12], China was the largest producer of iron ore; however it is imperative to note that China reports statistics in terms of crude ore production as opposed to usable ore production, defined by iron content. China has an abundance of ore, but the quantity it produces cannot make up for its inherent lack of quality. This lack of domestic quality forces China to become more dependent on imports. Thus, China's growth as a steel producing nation has indirectly made it the world's largest consumer of seaborne iron ore[13]. Iron ore is produced, consumed and exported by many nations, but three (3) countries are the primary iron ore exporters – Australia, Brazil, and India. Seaborne iron ore trade reached a record level in 2008 of 915 million metric tons[14] as exports increased for the fifth year in a row. During 2009, Brazil and Australia exported approximately 253 million metric tons and 307 million metric tons, respectively, of iron ore[15]. China has been the single largest importer of seaborne iron ore, and had imported 628 million metric tons of iron ore in 2009 (see Chart 2 below). Through 2008, Indian exports grew for the fourth consecutive year. Indian exports of iron ore for 2008 were approximately 101 million metric tons[16]. Although Indian exports for 2009 decreased to approximately 80 million metric tons, India continues to be the third largest exporter of iron ore[17]. Iron ore and related metal cargoes make up 50% of the entire ocean going dry bulk freight market[18].

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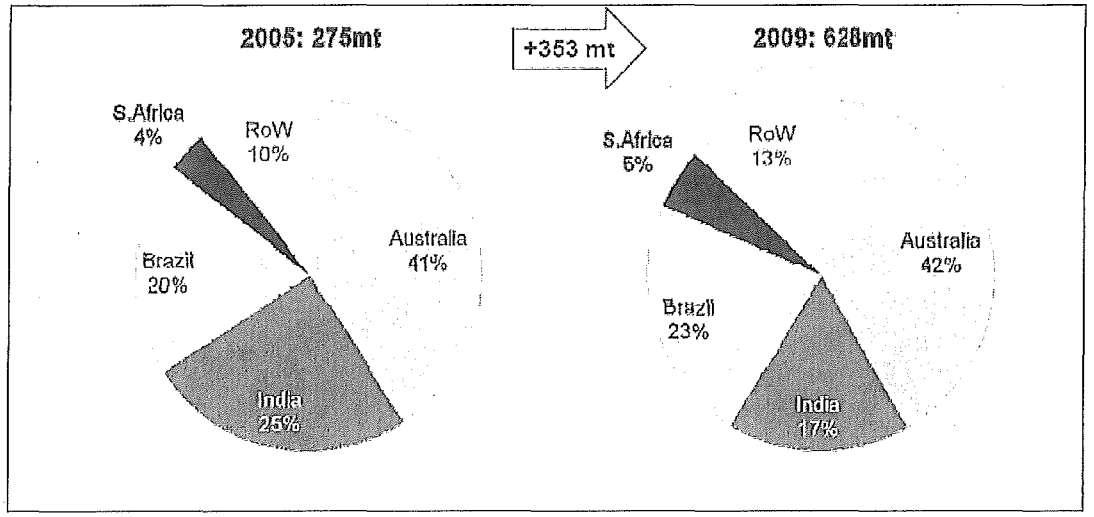
[11] Appendix 1
[12] Appendix 1
[13] BHP Billiton Ltd Marketing Report, September 2009
[14] Appendix 3
[15] Appendix 4
[16] Appendix 4
[17] Appendix 4
[18] "The Iron Ore Market 2008-2010", UNCTAD Trust Fund Project on Iron Ore. (http://www.unctad.org/infocomm/Iron/covmar08.htm)

Chart 2: China's Seaborne Iron ore Imports By Origin



Prices and Settlement Mechanism

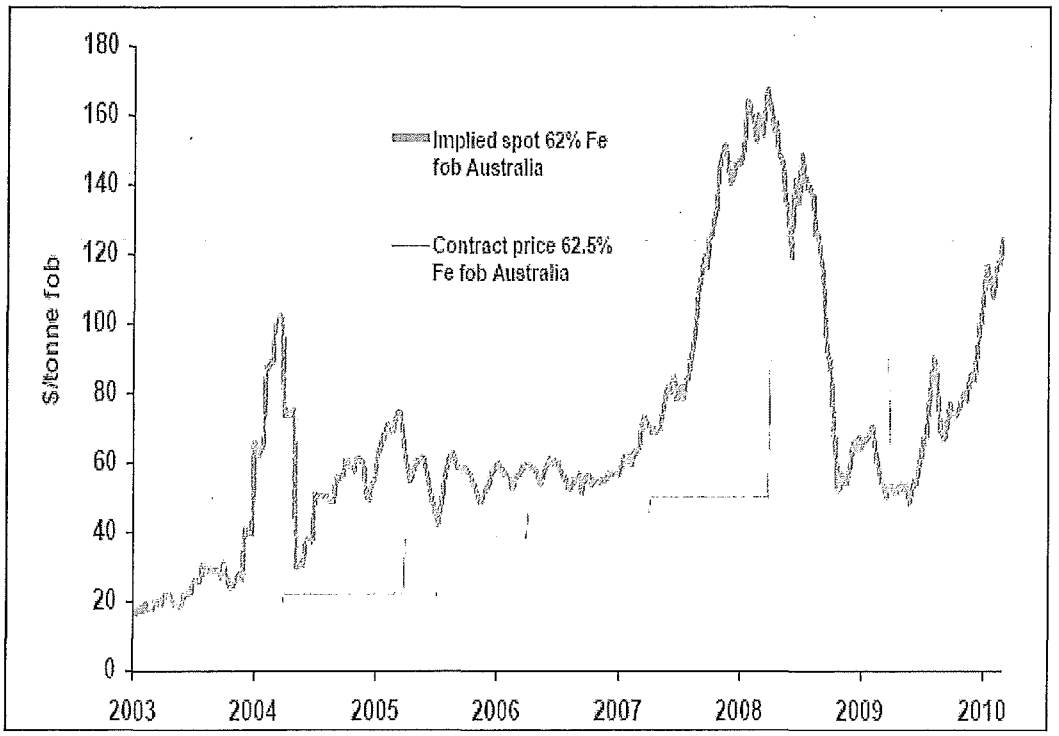
As previously mentioned, iron ore production is concentrated in three major mining companies - BHP Billiton Ltd (Australia), Rio Tinto (Australia), and Vale (Brazil), which together provide approximately two-thirds of the world's seaborne iron ore. This has led to changes in traditional business practices. For the past 40 years, iron ore prices were set between miners and mills through a contorted process of annual negotiations – "the benchmark price". This industry practice of "setting price" was uniform and accepted throughout the industry. This practice superseded "open-market price discovery" that typically transpires in other commodity markets via recognized commodity market mechanisms. Iron ore and steel pricing has been the anomaly, and this was one thing that set it apart from other major commodities.

The theory behind setting 'annual benchmarks' was that, by having the price set through an annual negotiation, the best price for both parties is achieved. Annual talks were led by a single iron ore producer and a dominant Asian steel mill who settled on a price. Once this price had been achieved, then the small to mid-tier steel mills and mining companies used this price to fix their own agreements for the April to March contract year.

However, despite benchmark pricing, a spot price has always existed in the iron ore market where steel producers could purchase iron ore for prompt delivery. This smaller market catered to when mills either needed additional iron ore or furnace shutdowns placed additional supply back onto the

market. As seaborne shipments have increased, pressure has been put on the annual benchmark pricing structure. Especially for countries such as India and Brazil, which have relied on iron ore as significant avenues of export, increased pressure has been placed on annual benchmark prices, with exporters pushing for spot pricing. While resisted by many mills, spot pricing is being aggressively implemented across the world by the major iron ore miners. Below is a chart illustrating the growing price differences between the annual benchmarks and spot prices.

Chart 3: Iron Ore Price Comparison – Spot vs. Benchmark (2003-2010)



Source: Macquarie Group

Consequently, the interaction between annual benchmark prices and spot prices have become more complicated in recent years, largely as a result of China's emergence as the leading consumer of iron ore. China, with over 300 independent steel mills, adds complications to the ability of predicting annual iron ore requirements, especially in a high growth market. In addition, reliance on low grade domestic supply has proven undependable for China and the switch from domestic to international iron ore supply compounds this problem.

Adding to this problem was the steep and rapid fall in demand during 2009[19], when iron ore prices plunged and many steel mills backed out of long term contracts when the spot price fell below the annual benchmark price. This is seen as the main driver for global mining firms to vocally call for a move away from benchmark prices. BHP Billiton Ltd (Marius Kloppers, Sept. 2009) outlines three reasons to abandon the annual benchmark system in favor of a floating price mechanism, these are:

- Spot prices more accurately and quickly reflect changes in supply/demand fundamentals.
- Floating prices reduce the risk of conflict between buyer and seller, specifically the nonperformance of contracts when prices get out of line.
- Spot prices more efficiently signal to suppliers when to cut or raise production.

Rapid demand growth from China and the inability of iron ore miners to match this with increased iron ore production is at the core of the issue[20]. Taken together, the dramatic supply/demand imbalances are seen as the cause for this industry to abandon the annual benchmark. Investment in mine expansion requires long lead times and large capital expenditures, which have not kept up with demand. These shortages have lead to dramatic price volatility where year-on-year benchmark prices diverged greatly from spot prices.

This volatility impedes the annual price negotiations between producers and mills, and annual negotiations have broken down for the second consecutive year without reaching a price consensus between miners and mills. Miners and mills are now publically stating that the benchmark system is "broken"[21], and while some agreements between parties, notably Japanese and Australian miners, are occurring, the pricing agreements with Chinese steel companies are tenuous.

Demand growth of Chinese steel mills for iron ore over the past decade has not been a steady and coordinated activity. Chinese demand for iron units is fragmented across 300 domestic steel mills, of which the top 3 control 16%[22] of imported iron ore material, and the balance of domestic steel mills must rely on the poor quality domestic market or buy imported material indirectly from other competing mills.

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[19] Appendix 2
[20] Since 2004, Chinese production has grown 23% annually versus worldwide gains (excluding China) of 3.5%.
[21] Bloomberg, March 25th 2010. RIO opting for quarterly pricing saying, "annual benchmark price is broken".
[22] Appendix 7

Access to international iron ore is mandated by the Chinese Government on a permit basis; hence, not all mills have access to this essential source of steel making. In short, the need for industrial growth and the breadth of demand from small suppliers has fostered the reliance on spot pricing. Access to seaborne iron ore has become a critical element to Chinese steel production and directly to the steel mills' growth and profitability.

Introduction of Price Indices and OTC Derivatives Trading

None of this market development could take place without reliable and independent price indices. The breakdown between miners and mills to establish annual pricing agreements has lead to the development of 3rd party indices. Independent companies have come forth to establish and compile spot market transactions into standardized price assessments for iron ore. This type of approach is necessary to accommodate the pricing complexities inherent within the iron ore markets where products are not applicable to the physical delivery process traditionally found in futures contracts. These price assessments have become the settlement mechanism for financial instruments.

As these price assessments have gained a reputation for reliability, the derivatives market has developed. In turn, it has allowed industry participants to replace long term contracts with derivatives agreements. These agreements require the use of transparent, independent index prices to settle their forward contracts. These products are expected to migrate eventually to listed exchanges as volumes and numbers of participants grow.

Price assessments require:

- Independence, a neutral reference point which is transaction-related, transparent and clearly documented in the index operating procedures.
- A means to facilitate transfer pricing of physical volume by allowing market participants to embed the index prices into their contract agreements based on a standardized benchmark. Iron ore is priced based on purity of iron content; the greater the purity, the greater the price in general. Iron ore grades of different purity levels are priced at differentials to the standard benchmark (62%).

- A means to allow financial transactions to occur and acts as a settlement mechanism for those agreements.

BHP Billiton Ltd reported that it had sold nearly 46% of its Western Australian iron ore production on a mix of cash, quarterly and index pricing for the fiscal first half of 2009[23]. Vale has also reported that it was financially impaired in 2009 by continuing with the annual benchmark system. The company stated that prices for iron ore sales will reflect the market price and gone are the days of a static annual price on a Free-On-Board (FOB) basis. Vale confirmed that nearly 50% of all global seaborne iron ore sales are now concluded on a spot basis. "Customers will have to accept a different price system that takes into account what is going on in the export market"[24].

Participants, including miners, traders and financial firms, are establishing the 62% iron content as the preferred index price. Nascent derivatives markets have become established. Banks, such as Deutsche Bank and Credit Suisse, as well as commercial firms, such as BHP Billiton Ltd, have been early active participants.

Iron ore mines will never produce uniformed grades of ore, even after beneficiation. These can vary substantially between individual physical cargoes coming from same ore body. Also, the classification differences include fines, lumps and pellets; these latter two products can carry significant premiums and their own pricing terms.

Near Term Cash Market Horizon

Strong industrial growth in the core emerging markets (BRICs) will continue to fuel demand for steel, and it is unlikely that the mining industry will invest the upfront capital quickly enough to satisfy this demand – the billions of dollars needed are too great. This expansion to meet demand will not be a smooth process and prices will remain volatile. Steel mills and miners will continue to disagree on price, and, as with other commodity markets, supply and demand factors will keep prices volatile.

It is unlikely that once the iron ore industry migrates to spot, index and quarterly pricing, it will be able to return to a long term contract basis. The size and scope of the iron ore industry, when integrated

[23] Bloomberg, March 22, 2010. "BHP Says Trend to Market-Based Ore Pricing Will Stay".
[24] Vale International Conference Call, February 11th, 2010. 4Q and 2009 Earnings Release

with other steel making raw materials (coke, scrap, metallics) and downstream finished steel products, offers a sustainable opportunity to create and list additional ferrous contracts.

Index Providers

BHP Billiton Ltd's influence has lead to the development of a group of competing 3rd party indices. Three index compilers have established leading positions in price assessments for iron ore:

- TSI (The Steel Index)
- Platts (IODEX)
- Metal Bulletin (MBIO)

It is important to note here that each of these index compilers are collecting and reporting price information for the same underlying marketplace. While they use different calculation methods, each is seeking to assess a similar price, that which is delivered cost and freight (CFR) China. Reportable prices for this market tend to be different on a daily basis, but have very strong similarities. Various firms in different market sectors are beginning to establish preferences between these indices.

All three indices publish the 62% iron ore content price (seen as the average/median grade of Chinese imports). TSI bases its prices solely on actual transactions.

The importance of price quotes for different grades should not be understated, since there is not a simple price relationship between grades based solely on iron content – buyers are willing to pay proportionally more for a higher iron content product than a lower iron content product because it saves them money in the iron-making process (lower energy consumption, coke rate and higher productivity).

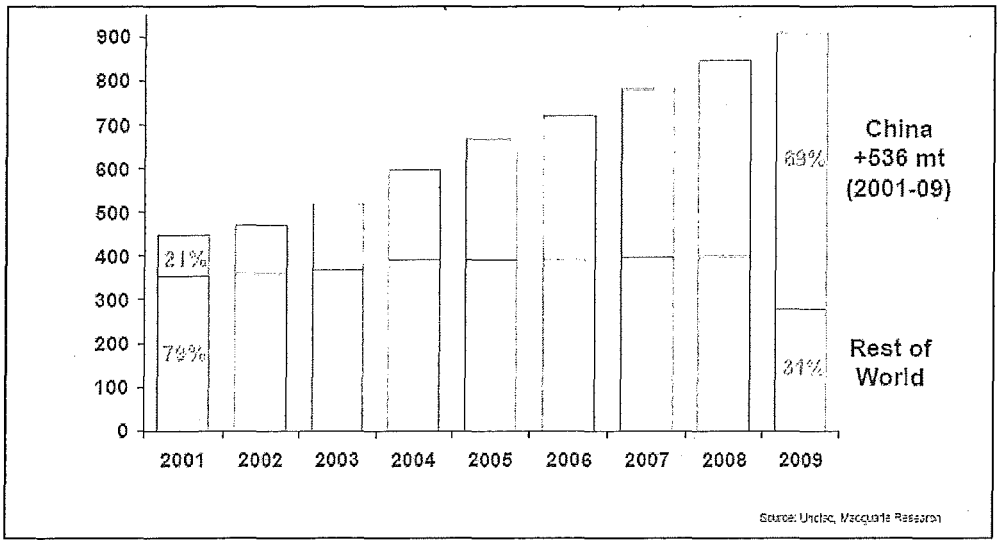
When steel prices trend higher together with higher coke and coking coal prices, the higher iron content is worth more in absolute dollar terms to the mill. However, the specific premium which a particular steel mill is willing to pay for higher grade iron ore is not uniform and dependent on its blast furnace dynamics. Additional factors can impact price as well, and these include the amount of phosphorus, moisture and impurities contained in the ore.

While these index firms have developed and implemented unique methods to calculate price indices, it is highly likely that procedures and definitions will be refined and evolve in response to market

developments. Nascent financial swap markets have started to operate of which the first was the OTC bilateral market initiated by BHP Billiton Ltd directly with Deutsche Bank and Credit Suisse. Next iron ore swaps have become accepted for clearing by international derivative clearinghouses that standardized contract specification, using these same index prices for financial settlement terms. As of today, there are only financial swaps and not a physical delivery contract listed for iron ore.

Financial trading liquidity is appearing on the 62% iron content indices delivered China. While other grades, 63.5% iron grade, and 58% and 75%, face the challenge that actual physical trades occur less frequently (75% iron reflects mainly Vale SSF, CSN and South African fines), these grades will probably trade financially as a basis differential contract to the 62% price. Since Chinese consumption of seaborne iron ore accounts for over twice the iron ore volume imported by the rest of the world (see below Chart 4 below), it is likely that this location preference remains dominant, while others are developed.

Chart 4: Seaborne Iron Ore Imports by Country



As stated above, the proposed contract under this self-certification filing will be based on The Steel Index ("TSI").

TSI is a pricing service operated by Steel Business Briefing (SBB) and has been reporting iron ore data since 2008. TSI collects industry sourced spot transactions. Developing accepted methodologies, and minimizing basis risk associated with varying iron ore contents, impurities, and

delivery points is the objective of TSI. The proposed swap futures contract will be based upon the standard 62% iron ore content. The index is based on spot price transactions of iron ore sinter fines delivered to China from any origin. The TSI index collects transaction data 7 days per week and 24 hours a day. These transactions include all that range from 60.01% to 68% iron content. The index is a volume weighted average of prices[25]. Typically transaction prices of grades other than 62% are priced at a differential to the standardized 62% grade. All transactions must be for at least 20,000 metric tons. The pricing point for the Iron Ore Index is CFR Tianjin port, China.[26]

It is important to note that each of the index compilers are collecting and reporting price information for a common underlying marketplace. While each uses slightly different calculation methods, each is seeking to assess a similar price, that which is delivered into China. This being said, the indices will report independent prices that differ on a daily basis.

Also important in price determination in addition to the calculation procedures:

- Destination port, CFR China includes a wide range of available locations
- Loading time and departure date (demurrage, multiple loading ports)
- Moisture, and impurities (phosphorus, alumina and silica)

Historical Price Data (TSI)

As stated above, TSI has been assessing the standard 62% iron ore index since November 2008. The table below provides weekly historical price data published by TSI for Iron Ore / Iron ore fines 62% Fe / CFR China Port in US dollars per metric ton for the period beginning November 17, 2008 through May 31, 2010.

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[25] Each iron ore reference price is calculated as the volume-weighted average of the relevant normalised price information submitted. Prior to calculating the average index price, averaging techniques are used to establish outliers and remove pricing points that can cause undue influence. Furthermore, when calculating the volume-weighted price, the percentage weighting assigned to the total submissions by any single Data Provider is capped in order to ensure that the average figure remains representative.

[26] Cost and Freight (named port of destination)
• Carriage of goods is to be arranged by the seller
• Risk transfers from the seller to the buyer when the goods pass the ship's rail
• Cost transfer at port of destination, buyer paying such costs as are not for the seller's account under the contract of carriage
Full methodology can be found at TSI website: http://www.thesteelindex.com/en/iron-ore/

Week of publication	TSI/ Iron Ore / Iron ore fines 62% Fe / CFR China Port $/t
17 Nov 08	59.50
24 Nov 08	62.10
1 Dec 08	69.40
8 Dec 08	70.40
15 Dec 08	75.00
22 Dec 08	71.80
29 Dec 08	71.70
5 Jan 09	72.30
12 Jan 09	72.60
19 Jan 09	73.40
26 Jan 09	73.40
2 Feb 09	75.80
9 Feb 09	79.00
16 Feb 09	74.30
23 Feb 09	72.70
2 Mar 09	66.30
9 Mar 09	61.10
16 Mar 09	60.90
23 Mar 09	59.10
30 Mar 09	59.60
6 Apr 09	59.80
13 Apr 09	59.40
20 Apr 09	60.60
27 Apr 09	60.60
4 May 09	60.60
11 May 09	64.10
18 May 09	65.00
25 May 09	65.00
1 Jun 09	67.80
8 Jun 09	72.10
15 Jun 09	74.00
22 Jun 09	78.20
29 Jun 09	77.00
6 Jul 09	81.30
13 Jul 09	82.80
20 Jul 09	91.30
27 Jul 09	95.30
3 Aug 09	104.10
10 Aug 09	105.00
17 Aug 09	94.70
24 Aug 09	85.80

Week of publication	TSI/ Iron Ore / Iron ore fines 62% Fe / CFR China Port $/t
31 Aug 09	78.70
7 Sep 09	77.30
14 Sep 09	80.00
21 Sep 09	84.30
28 Sep 09	85.30
5 Oct 09	87.20
12 Oct 09	86.30
19 Oct 09	88.10
26 Oct 09	88.40
2 Nov 09	95.60
9 Nov 09	100.90
16 Nov 09	104.20
23 Nov 09	102.10
30 Nov 09	97.90
7 Dec 09	102.20
14 Dec 09	107.40
21 Dec 09	108.90
28 Dec 09	119.10
4 Jan 10	131.20
11 Jan 10	129.50
18 Jan 10	124.30
25 Jan 10	120.00
1 Feb 10	125.90
8 Feb 10	128.20
15 Feb 10	128.20
22 Feb 10	133.10
1 Mar 10	133.10
8 Mar 10	133.70
15 Mar 10	143.80
22 Mar 10	151.10
29 Mar 10	156.30
5 Apr 10	166.20
12 Apr 10	178.10
19 Apr 10	184.80
26 Apr 10	172.90
3 May 10	175.00
10 May 10	166.60
17 May 10	151.90
24 May 10	145.20
31 May 10	147.50

Forward Markets

Evolution away from the iron ore benchmark system has significant ramifications throughout the entire ferrous metals industry in terms of pricing and managing risk. Movement to spot market pricing supports the need for price risk management, not only in raw materials (iron and ferrous scrap), but also for downstream products, such as hot rolled coil, rebar and other finished steel products. None of this would be possible without reliable pricing indices. Transitioning from the annual benchmark system does have challenges and, with less than two years of index pricing history, and several similar index providers competing for market share listing contracts on different exchange platforms, one challenge is developing a single global consensus. Another challenge is collating industry sourced spot transactions, developing acceptable methodologies, and minimizing basis risk associated with varying iron content, impurities, and delivery points, will prove challenging for an industry with little experience in derivative instruments. Some of the challenges therefore will take time and a collaborative outlook by the industry to overcome.

As illustrated in Chart 5 below, since 2007, there have been massive price increases and decreases in the iron ore market. There is a compelling need for forward markets based upon the volatile price swings of recent years and the removal of annual fixed price contracts.

At the end of 2009, the iron ore swap market was young, but rapidly growing. This market was started by BHP Billiton Ltd in mid 2008 when it teamed up with Deutsche Bank and Credit Suisse to jump start a nascent OTC Swap market. Other financial firms have joined in and, then in 2009, several clearinghouses agreed to clear iron ore swaps. Estimates are that for 2009, around 35 million metric tons of cleared and bilateral iron ore swaps had traded. Forecasts are that these volumes will double in 2010 and, within a few years, reach nearly 300 million metric tons[27].

It has been estimated that 80% of the forward market is currently cleared at one of the 3 venues. LCH is about 230 contracts (1,000 mt lot) per month while SGX is about 4,000 contracts (500 mt lot) per month (volume at ICE is publically undisclosed). Typical bid/ask is quoted at $4.00 per metric (subject to time and volume) according to snapshots taken from Bloomberg data feeds. Much of this initial volume can be attributed to financial firms supporting their own corporate clientele that are risk managing their iron ore supplies, or weak credit quality among some the major mining firms. In either case, industry is

[27] Credit Suisse as reported by Reuters LONDON, March 15 2010

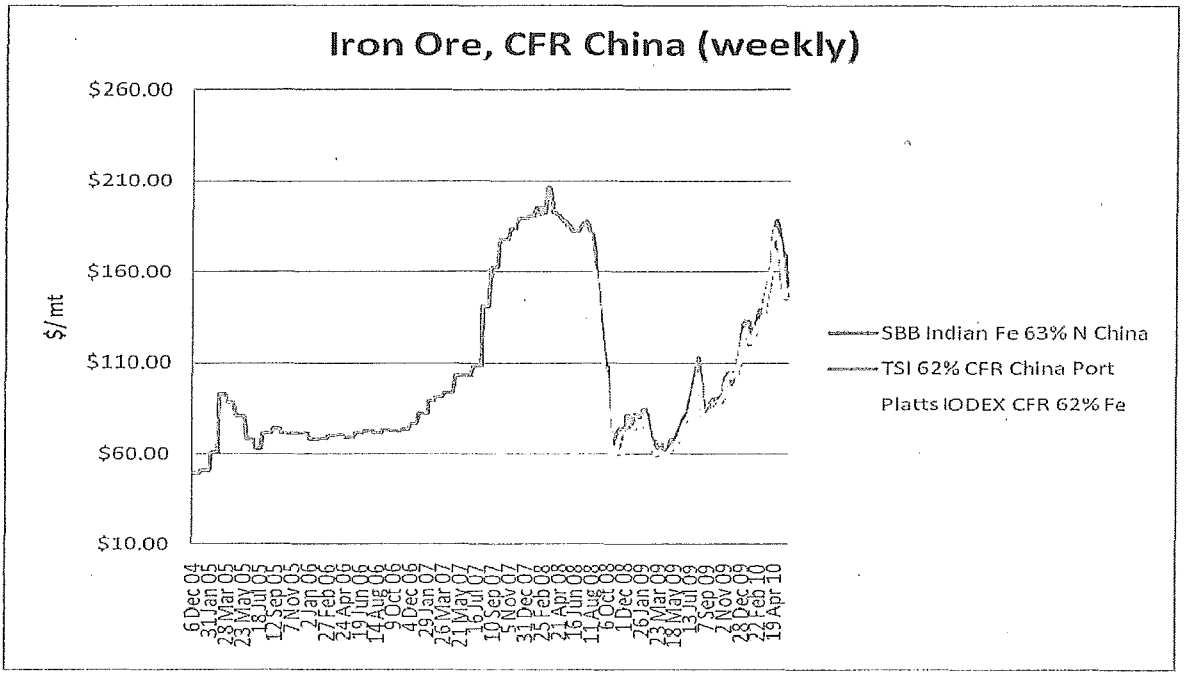
seeking to mitigate and more efficiently manage their credit risk through clearing contracts on an Exchange.

Price risk exposure can be managed and controlled not only for producers, but for all participants in the value chain. Centrally cleared financial markets increase the number of participants who can transact with one another, enhancing liquidity and improving price discovery.

- Forward price curve facilitates front end capital investment decisions and allows performance to become benchmarked against actual market prices.
- Forward spread differentials between raw materials and finished products can be locked into, thus allowing firms to protect margins and smooth revenue flows.
- Allows firms to manage forward price commitments irrespective of physical supply contracts.

The Exchange's iron ore contract, along with other related financial contracts provide the necessary building blocks for industry participants to manage price.

Chart 5: Iron Ore Prices



Source: SBB, TSI, Platts

Risk Management

In addition, financial products must provide value to the global steel industry. The industry is widely fragmented and covers a large diversity of industrial sectors. The move to use a Chinese delivered spot iron ore price to set global iron ore prices will impact not just Chinese firms, but the entire industry – especially Western mills and end consumers. It is unlikely that a series of regional iron ore indices will quickly be developed.

Participants, including miners, traders and financial firms are establishing the 62% Fe content as a benchmark price. Nascent markets have started, each of the 4 competing clearing venues nominated below have focused on this product specification.

Moreover, the breakdown of annual iron ore benchmark negotiations is key drive for development of the iron ore derivatives. Consequently, Iron ore derivatives started trading in 2008 and are listed on several clearing platforms as follows:

	SGX	LCH	ICE	NOS
Index	TSI – 62% fe CFR China	TSI – 62% fe CFR China	Platts – 62% fe CFR China	TSI – 62% fe CFR China
Floating Price	Monthly average of daily	Monthly average of daily	Monthly average of daily	Monthly average of daily
Contract Size	500 mt	1,000 mt	1,000 mt	1,000 mt
Maturity Profile	24 serial months	24 serial months	24 serial months	24 serial months
Venue	AsiaClear	EnClear	OTC Clear	NOS Clearing
Initial Margin	$3,375	$5,000	$3,000/$4200	12% (approx $16,750 per lot at current prices)
Launch Date	April 2009	May 2009	December 2009	April 2010
Life of Contract Volume	23,668 lots (500 mt)	1053 lots (2010 only) (1,000 mt)	N/A	N/A

Below is a history of volumes on the Singapore Exchange (SGX), the largest derivatives Exchange for Iron Ore.

SGX Volume (500 mt per lot)		
Month		Volume
Apr-09		323
May-09		850
Jun-09		770
Jul-09		1,370
Aug-09		1,820
Sep-09		1,100
Oct-09		1,750
Nov-09		2,910
Dec-09		1,771
Jan-10		2,837
Feb-10		1,679
Mar-10		2,772
Apr-10		4,436

Economic Motivation

Price volatility requires financial tools to manage risk. All industry participants have a different exposure to price and react differently to its movements. It is unusual that miners and mills could have equal and opposite exposures to these prices and agree when to lock into long term physical pricing contracts with one another.

Financial instruments, such as the Exchange's iron ore contract, were created to allow the industry to manage their pricing exposure without changing their physical supply relationships. Each firm has their own unique exposure to manage, and these instruments allow them the flexibility to remove forward price volatility – when and where they need to, without interfering with their physical trading partner. This is crucial, since it removes the difficult aspect of price negotiations from the physical agreement and allows both parties to independently manage price exposure.

This process involves two components – using a spot pricing index to trade physical ore contracts and then using this same pricing index to settle the financial forward instrument. Embedding the same underlying price index in both deals removes the 'basis risk' from the transaction and ensures that 'convergence' is guaranteed upon maturity.

For example, if a mill has agreed today to purchase one million metric tons of physical iron ore for delivery in the 3Q of this year from their supplier of choice at the prevailing TSI index price for the 3Q, then this mill can now purchase a TSI iron ore financial contract at the fixed forward price with the financial firm of their selection and have this contract cleared through CME ClearPort, a set of flexible clearing services open to over-the-counter (OTC) market participants to substantially mitigate counterparty risk and provide neutral settlement prices across asset classes and guaranteed by the Exchange's clearing house.

Evolution of Financial Markets

Development of robust and liquid forward markets to manage price exposure is essential for iron ore and other commodities if these industries are to use market based pricing systems.

These types of developments are evolutionary in nature. New financial products take periods of time to develop, and it is not unusual to find low volume, fragmented marketplaces at the onset. Most markets are developed on a one to one trading basis, the principle OTC swap dealers conduct bilateral business with their established counterparts, but this can quickly constrain market growth as new players enter the market that do not have bilateral credit facilities with the established firms. While some firms will support this one to one marketplace, it can put a damper on market development. This is somewhat natural given the protective interest they hold for their own business models, however this in itself can manufacture barriers to liquidity, transparency, and market maturity.

In this respect, introducing the CME ClearPort market platform can increase market participation at all levels and become a benefit to all[28]. Promoting market transparency, price discovery and trading liquidity are what encourages markets to grow. These features become essential aspects worthy of support by all participants, and the industry as a whole.

From a trading liquidity perspective, the bilateral OTC model is credit intensive and present challenges associated with expanding the global iron ore derivative market. The industry stands to benefit

[28] CME ClearPort is a clearing venue that allows registered firms to novate OTC derivative trades into a central clearing system.

from a clearing mechanism similar to models already established in commodity and energy asset classes found in Europe, North America, and Australasia.

Further supporting CME's clearing model is the geographic spread of market participants in this industry. Given the concentration of physical iron ore production in the Southern hemisphere – Australia, India, South Africa and Brazil, which is offset with steel mills predominately based in Europe and Asia. There will be an overriding need for the clearinghouse and it's clearing members to be global in perspective. And have both counterpart credit and country risk facilities available to handle client activity in these areas.

Description of Source

CRU is an independent business analysis and consultancy group focused on the mining, metals, power, cables, fertilizer and chemical sectors. Founded in the late 1960s and still privately owned to ensure its independence, the group employs more than 200 experts in London, Beijing, Santiago, Sydney and key centers within the United States. CRU is the leading authority for the world of metals and mining, power and cables, fertilizers and chemicals.

CRU uses a number of data sources in compiling and reporting import, export, and consumption data for the iron ore market. CRU's data is based on company reports for the TEX Report (Japanese statistical import/export reporting agency), World Steel Association based on UNCTAD data, Global Trade Information Services, OEF (Oxford Economic Forecasting), and CRU's analysis of the data.

ANALYSIS OF DELIVERABLE SUPPLY

In its analysis of deliverable supply, the Exchange was cognizant of the fact that individual sources of iron ore data differ in their absolute volume weighting due to the disparity in iron ore content. Iron ore volume reporting varies as sources do not use a harmonized methodology to calculate iron ore content. Certain sources harmonize data reporting to standard Fe content while others report data based on gross tonnage. Also please note that "export" volume may vary from "seaborne" volume as export data typically includes intra-company transfers whereas seaborne data may not.

According to CRU, whose data sources include the World Steel Association, the TEX Report, and Global Trade Information Services, the total apparent production of pellets, fines and lump during 2009 was approximately 1.7 billion metric tons, or approximately 141 million metric tons per month (source: Appendix 1). Total production of iron ore during 2009, excluding Chinese iron ore production statistics (which are reported in crude volume of tons mined and are low in Fe content compared to the rest of the world) was approximately 1.1 billion metric tons (source: Appendices 5 and 6) or approximately 91 million metric tons per month. The total export of iron ore during 2009 was approximately 772 million metric tons (source: Appendix 4) or approximately 64 million metric tons per month. The consumption of imported iron ore into China during 2009 was approximately 432 million metric tons (source: Appendix 3), or approximately 36 million metric tons per month which is equivalent to 72,000 iron ore contracts (contract size: 500 dry metric tons) each month. Therefore, 25% of the consumption of imported iron ore into China on a monthly basis would be approximately 9 million metric tons or 18,000 contract units.

According to data provided by Rio Tinto, the largest miner exporter of iron ore into China, the total monthly seaborne iron ore market is approximately 75 million metric tons of which approximately 51 million metric tons are imported into China (source: AJM 13th Global Iron Ore & Steel Forecast Conference, Rio Tinto Presentation, "Preparing for the Future"; March 23, 2010). This would be equivalent to approximately 102,000 iron ore contracts (contract size: 500 dry metric tons) imported into China each month. Therefore, 25% of the physical delivery of iron ore into China on a monthly basis would be approximately 12.75 million metric tons or 25,500 contract units.

On July 1, 2010, Bloomberg LP[29] reported that iron ore imports by China in 2009 soared 42% to 628 million metric tons or approximately 52 million metric tons per month. This would be equivalent to approximately 104,000 iron ore contracts (contract size: 500 dry metric tons) imported into China each month. Therefore, 25% of the physical delivery of iron ore into China on a monthly basis would be approximately 13 million metric tons or 26,000 contract units.

The Exchange notes the discrepancy between data reported by Rio Tinto and Bloomberg LP (seaborne iron ore imported into China) and the data reported by CRU (consumption of imported iron ore into China) for 2009. The data reported by both Rio Tinto and Bloomberg LP reflects the volume of seaborne iron ore imported by China for 2009 whereas the data reported by CRU for 2009 reflects an estimate of the consumption of imported iron ore into China. The volume of imported iron ore into China as reported by both Rio Tinto and Bloomberg LP is consistent and is larger than the volume of estimated consumption of iron ore in China during 2009 provided by CRU.

As a result, the Exchange has determined to base its proposed spot month position limits on the more conservative data for the estimated consumption of imported iron ore into China provided by CRU. Therefore, the Exchange has proposed spot month position limits for the Iron Ore 62% Fe, CFR China (TSI) Swap Futures contract of 15,000 contract units which represents less than 21% of the monthly consumption of iron ore imported into China.

Market Participants

The market participation in iron ore is diverse – both in numbers and geographical regions. Around the world, hundreds of companies in total are involved in the production, trading and consumption of physical iron ore. The number of market participants increases when accounting for companies involved with the domestic production of iron ore in China. Excluding, companies involved in production of domestic Chinese iron ore, the spot market and OTC market participants include:

<u>Iron Ore Miners</u>

Rio Tinto, BHP Billiton Ltd, Vale, NMDC Ltd., Anglo, SAIL, Fortescue, BC Iron, Anshan Iron and Steel, Atlas Iron ltd., Cliffs Natural Resources, Essar, Evraz.

[29] Bloomberg LP, by Jae Hur and Masumi Suga, July 1, 2010.

Commodity Traders/Steel Mills

Baosteel, JFE Holdings, Arcelor Mittal, ThyssenKrupp, Bluescope Steel, POSCO, US Steel, Cargill, Minmetals, Mercuria, Trafigura, Noble, Sino Metals, Glencore, Carbofer, Duferco, Stemcor.

Brokers

ICAP, Freight Investor Services, London Dry Bulk, DBS Vickers (Singapore).

Financial (Swaps)

Deutsche Bank, Credit Suisse, Macquarie Bank, Citibank, Morgan Stanley, Barclays, Goldman Sachs, JP Morgan, NewEdge.

Apparent Production of Pellet, Fines & Lump

(Million Metric Tons) Source: CRU

	2005	2006	2007	2008	2009*
Austria	1.8	1.8	1.8	1.8	1.8
Belgium	0.0	0.0	0.0	0.0	0.0
Finland	0.0	0.0	0.0	0.0	0.0
France	0.0	0.0	0.0	0.0	0.0
Germany	0.0	0.0	0.0	0.0	0.0
Italy	0.0	0.0	0.0	0.0	0.0
Netherlands	3.6	3.2	4.2	4.2	3.1
Norway	0.4	0.4	0.5	0.4	0.3
Portugal	0.0	0.0	0.0	0.0	0.0
Spain	0.0	0.0	0.0	0.0	0.0
Sweden	22.0	22.6	24.3	26.7	20.3
UK	0.0	0.0	0.0	0.0	0.0
Other W. Europe	0.0	0.0	0.0	0.0	0.0
Turkey	4.9	3.9	5.1	5.5	5.0
Eastern Europe	0.0	1.0	1.5	1.8	1.8
CIS	173.1	183.2	185.3	170.9	135.2
Canada	29.3	34.7	36.2	34.2	20.6
Mexico	15.8	15.7	16.1	16.1	11.3
USA	54.4	52.0	51.3	48.5	34.7
Other	0.0	0.0	0.0	0.0	0.0
Argentina	0.0	0.1	0.4	0.4	0.4
Brazil	248.1	267.8	290.5	277.6	258.1
Chile	5.9	5.3	5.5	5.7	4.2
Colombia	0.4	0.5	0.5	0.4	0.4
Peru	4.9	5.6	5.4	5.4	4.5
Venezuela	19.4	16.2	16.0	15.1	12.1
Other	0.0	0.0	0.0	0.0	0.0
Mauritania	10.6	10.7	11.8	11.0	7.0
South Africa	39.3	39.7	42.2	43.2	30.8
Other Africa	4.8	4.1	3.9	3.2	2.8
China	427.0	588.0	708.7	824.0	686.0
India	141.0	154.5	167.3	181.3	163.8
Indonesia	0.8	2.2	5.2	6.8	3.8
Japan	4.0	4.0	3.7	2.8	2.8
Malaysia	0.3	0.2	0.5	0.8	0.3

South Korea	0.0	0.0	0.0	0.0	0.0
Taiwan	-0.1	0.0	0.0	0.0	0.0
Middle East	15.8	18.9	20.5	21.2	18.9
Other Asia	3.7	6.1	9.9	14.0	8.7
Australia	258.5	271.9	292.0	344.0	312.2
New Zealand	0.0	0.0	0.0	0.0	0.0
Total	1,489.8	1,714.2	1,910.4	2,066.8	1,750.7
of which:					
Western Europe	27.8	28.1	30.8	33.1	25.5
Other Europe & CIS	178.0	188.0	191.9	178.2	142.0
North America	99.5	102.4	103.6	98.8	66.6
South America	278.8	295.5	318.2	304.6	279.7
Africa	54.7	54.4	58.0	57.3	40.6
Asia	592.5	773.9	915.9	1,050.8	884.3
Oceania	258.5	271.9	292.0	344.0	312.2

*estimates

Chinese production data represents total production including ore with low Fe content.

Consumption of Pellet, Fines & Lump

(Million Metric Tons) Source: CRU

	2004	2005	2006	2007	2008	2009*
Austria	7.8	8.8	8.7	9.2	9.2	7.5
Belgium	11.2	9.9	9.8	8.5	9.0	6.2
Finland	4.1	4.3	4.4	3.8	3.9	3.2
France	17.7	17.3	18.6	17.9	18.0	17.0
Germany	44.3	40.9	43.3	44.6	41.4	29.5
Italy	16.0	15.1	17.2	16.6	15.4	10.8
Netherlands	8.9	8.6	7.6	9.2	8.5	6.9
Norway	0.0	0.0	0.0	0.0	0.0	0.0
Portugal	0.0	0.0	0.0	0.0	0.0	0.0
Spain	5.6	5.9	4.8	5.5	5.3	4.0
Sweden	5.3	5.1	4.9	5.2	4.9	4.3
UK	15.3	15.1	15.8	16.2	15.0	10.7
Other W. Europe	0.0	0.0	0.0	0.0	0.0	0.0
Turkey	8.8	9.0	9.1	9.6	10.0	7.0
Eastern Europe	30.8	29.7	31.6	32.1	29.0	26.7
CIS	141.1	136.8	145.2	148.6	137.8	107.6
Canada	15.5	13.9	13.8	15.0	15.4	12.3
Mexico	16.9	15.6	15.4	16.0	16.3	11.3
USA	60.7	53.5	54.5	52.0	46.6	33.0
Other	3.8	3.6	3.4	5.3	4.7	3.1
Argentina	5.8	6.7	6.6	6.4	6.6	5.0
Brazil	49.7	48.3	46.2	50.8	48.4	38.9
Chile	1.7	1.8	1.8	2.0	1.8	1.3
Colombia	0.4	0.4	0.5	0.5	0.4	0.4
Peru	0.5	0.6	0.7	0.5	0.7	0.7
Venezuela	12.6	14.4	13.8	12.4	11.5	10.1
Other	0.0	0.0	0.0	0.0	0.0	0.0
Mauritania	0.0	0.0	0.0	0.0	0.0	0.0
South Africa	11.8	12.2	12.2	11.3	10.3	9.4
Other Africa	10.8	10.9	10.7	10.3	9.3	8.0
China	539.4	687.7	897.7	1,069.9	1,223.7	1,091.0
India	52.0	58.9	68.1	76.7	80.7	83.8
Indonesia	2.1	2.0	1.9	2.1	1.7	1.5

Japan	132.5	132.3	134.2	138.2	137.2	93.6
Malaysia	2.5	2.1	2.3	2.7	3.3	3.0
South Korea	41.3	40.8	41.2	44.2	46.9	33.5
Taiwan	14.8	14.3	16.5	16.8	16.2	16.3
Middle East	18.8	20.1	19.7	22.4	23.2	21.9
Other Asia	1.9	1.9	1.6	1.6	2.1	2.4
Australia	9.5	9.2	9.6	9.5	9.0	7.0
New Zealand	0.0	0.0	0.0	0.0	0.0	0.0
Total	1,330.7	1,489.8	1,714.2	1,910.4	2,066.8	1,750.7
of which: unaccounted imports/stock changes	8.8	32.2	21.0	16.8	43.4	21.7
Western Europe	136.2	130.9	135.1	136.8	130.6	100.2
Other Europe & CIS	180.6	175.5	185.9	190.2	176.8	141.3
North America	96.9	86.6	87.1	88.3	83.0	59.7
South America	70.7	72.2	69.5	72.5	69.4	56.2
Africa	22.6	23.1	22.9	21.7	19.6	17.3
Asia	805.4	960.1	1,183.1	1,374.7	1,535.1	1,347.1
Oceania	9.5	9.2	9.6	9.5	9.0	7.0

*estimates

Consumption of Imported Iron Ore

(Million Metric Tons) Source: CRU

	2004	2005	2006	2007	2008	2009*
Austria	5.94	6.94	6.88	7.33	7.33	5.66
Belgium	11.20	9.85	9.81	8.51	9.01	6.25
Finland	4.13	4.25	4.36	3.81	3.91	3.15
France	17.26	17.33	18.57	17.95	18.01	17.02
Germany	44.33	40.89	43.31	44.56	41.36	29.52
Italy	16.00	15.12	17.22	16.61	15.45	10.85
Netherlands	9.30	9.01	7.95	9.60	8.96	7.19
Norway	0.00	0.00	0.00	0.00	0.00	0.00
Portugal	0.00	0.00	0.00	0.00	0.00	0.00
Spain	5.62	5.86	4.77	5.53	5.26	3.95
Sweden	0.02	0.02	0.02	0.02	0.02	0.02
UK	15.30	15.08	15.85	16.24	15.02	10.74
Other W. Europe	0.00	0.00	0.00	0.00	0.00	0.00
Turkey	5.40	4.07	5.26	4.49	4.51	1.76
Eastern Europe	30.76	29.73	30.58	30.58	27.19	24.94
CIS	0.00	0.00	0.00	0.13	0.00	0.00
Canada	8.04	9.66	7.60	7.42	9.07	6.10
Mexico	4.35	4.04	4.03	4.20	3.65	1.52
USA	12.08	11.08	11.01	10.24	9.81	6.24
Other	3.83	3.60	3.36	5.31	4.65	3.08
Argentina	5.81	6.72	6.65	6.39	6.63	4.98
Brazil	0.00	0.00	0.00	0.00	0.07	0.00
Chile	0.00	0.00	0.00	0.00	0.00	0.00
Colombia	0.00	0.00	0.00	0.00	0.00	0.00
Peru	0.00	0.00	0.00	0.03	0.00	0.00
Venezuela	0.00	0.00	0.61	0.21	0.40	0.25
Other	0.00	0.00	0.00	0.00	0.00	0.00
Mauritania	0.00	0.00	0.00	0.00	0.00	0.00
South Africa	0.55	0.61	0.50	0.49	0.29	0.22
Other Africa	6.34	6.44	6.93	6.64	6.46	5.47
China	208.08	275.23	326.32	383.70	443.56	432.01
India	2.17	1.32	0.81	0.49	0.45	0.25
Indonesia	2.14	2.02	1.88	2.07	1.70	1.49

Japan	133.77	133.63	135.16	139.16	138.38	93.90
Malaysia	2.50	2.06	2.29	2.74	3.34	3.04
South Korea	41.29	40.84	41.15	44.15	46.94	33.53
Taiwan	14.85	14.43	16.47	16.79	16.16	16.32
Middle East	14.46	14.65	12.52	13.12	15.98	14.01
Other Asia	6.56	5.61	6.53	7.49	5.94	1.84
Australia	1.93	2.27	2.77	2.55	2.56	2.26
New Zealand	0.00	0.00	0.00	0.00	0.00	0.00
Total	643.62	724.62	772.24	835.28	915.24	772.86
of which: unaccounted for trade/change in stocks	9.63	32.26	21.07	16.73	43.17	25.29
Western Europe	129.09	124.35	128.74	130.17	124.32	94.36
Other Europe & CIS	36.16	33.80	35.84	35.20	31.70	26.69
North America	28.29	28.38	26.00	27.17	27.18	16.93
South America	5.81	6.72	7.25	6.63	7.10	5.23
Africa	6.89	7.06	7.43	7.13	6.75	5.69
Asia	425.82	489.80	543.14	609.70	672.45	596.39
Oceania	1.93	2.27	2.77	2.55	2.56	2.26

*estimates

Exports of Iron Ore

(Million Metric Tons) Source: CRU

	2004	2005	2006	2007	2008	2009*
Austria	0.00	0.00	0.00	0.00	0.00	0.00
Belgium	0.00	0.00	0.00	0.00	0.00	0.00
Finland	0.00	0.00	0.00	0.00	0.00	0.00
France	0.00	0.00	0.00	0.00	0.00	0.00
Germany	0.00	0.00	0.00	0.00	0.00	0.00
Italy	0.00	0.00	0.00	0.00	0.00	0.00
Netherlands	0.00	0.00	0.00	0.00	0.00	0.00
Norway	0.60	0.63	0.62	0.74	0.62	0.52
Portugal	0.00	0.00	0.00	0.00	0.00	0.00
Spain	0.00	0.00	0.00	0.00	0.00	0.00
Sweden	16.48	16.87	17.74	19.09	21.81	16.00
UK	0.00	0.00	0.00	0.00	0.00	0.00
Other W. Europe	0.00	0.00	0.00	0.00	0.00	0.00
Turkey	0.00	0.00	0.00	0.00	0.00	0.00
Eastern Europe	0.00	0.00	0.00	0.00	0.00	0.00
CIS	30.32	36.29	37.94	36.88	33.18	27.60
Canada	23.94	25.07	28.55	28.64	27.85	14.39
Mexico	0.47	1.43	1.21	1.30	1.27	1.00
USA	8.48	11.63	8.17	9.19	11.34	7.62
Other	0.00	0.00	0.00	0.00	0.00	0.00
Argentina	0.00	0.00	0.06	0.37	0.37	0.37
Brazil	202.85	224.53	247.80	270.52	281.67	252.46
Chile	5.42	5.91	6.00	6.46	6.70	4.80
Colombia	0.00	0.00	0.00	0.00	0.00	0.00
Peru	6.23	6.04	6.52	6.44	6.29	5.27
Venezuela	9.30	7.63	5.59	6.51	6.75	4.22
Other	0.00	0.00	0.00	0.00	0.00	0.00
Mauritania	11.00	10.64	10.66	11.82	10.97	7.00
South Africa	25.74	27.69	28.00	31.42	33.20	21.60
Other Africa	0.27	0.39	0.31	0.18	0.30	0.30
China	0.00	0.00	0.00	0.00	0.00	0.00
India	68.51	83.36	87.25	91.10	101.00	80.28

Indonesia	0.36	0.84	2.16	5.23	6.77	3.77
Japan	0.00	0.00	0.00	0.00	0.00	0.00
Malaysia	0.18	0.25	0.21	0.55	0.81	0.33
South Korea	0.00	0.00	0.00	0.00	0.00	0.00
Taiwan	0.00	0.00	0.00	0.00	0.00	0.00
Middle East	4.75	5.90	7.23	7.90	8.68	6.96
Other Asia	7.48	7.44	11.03	15.72	17.70	10.81
Australia	220.36	251.10	264.62	284.65	337.16	307.00
New Zealand	0.87	0.98	0.58	0.58	0.82	0.56
Total	643.62	724.62	772.24	835.28	915.24	772.86
of which:						
Western Europe	17.08	17.49	18.36	19.83	22.43	16.52
Other Europe & CIS	30.32	36.29	37.94	36.88	33.18	27.60
North America	32.89	38.13	37.92	39.14	40.46	23.02
South America	223.80	244.11	265.97	290.30	301.78	267.12
Africa	37.02	38.72	38.97	43.41	44.47	28.90
Asia	81.28	97.79	107.88	120.50	134.96	102.15
Oceania	221.23	252.08	265.21	285.23	337.98	307.56

*estimates

Iron Ore Production by Company

Source: CRU

Country	Company	Production Volume 2009 (Million Metric Tons)
Australia	Atlas Iron	4
	BHP Billiton Iron Ore	135
	Cape Lambert Iron	1
	Gindalbie Metals	2
	Golden West Resources	1
	Hamersley Iron (Rio Tinto (100%))	138
	MidWest	2
	Mount Gibson	10
	OneSteel	7
	Portman Ltd.	8
	Robe River (Rio Tinto (53%))	58
	Savage River	0
	Territory Resources Ltd.	2
	Murchison Metals	2
	Fortescue Metals Group (FMG)	29
	Citic Pacific	0
	Grange Resources	0
	Hope Downs (Rio Tinto (50%))	28
Brazil	CSN	37
	MBR	0
	MHAG	7
	MMX	16
	Rio Tinto Brasil	6
	Samarco	23
	Vale	375
Canada	Iron Ore Company of Canada	19
	Quebec Cartier Mining Company	15
	Wabush Mines	5
USA	Cleveland Cliffs	28
India	CMP	9
	Admirality Resources	4
South Africa	Assmang Limited	10
	Kumba Iron Ore	43
	Palabora Mining	2
	Shougang Hierro Peru	8
	SNIM	14
CIS (Commonwealth of Independent States)	CVG Ferrominera Orinoco	25
	LKAB	31
Total		**1,100**

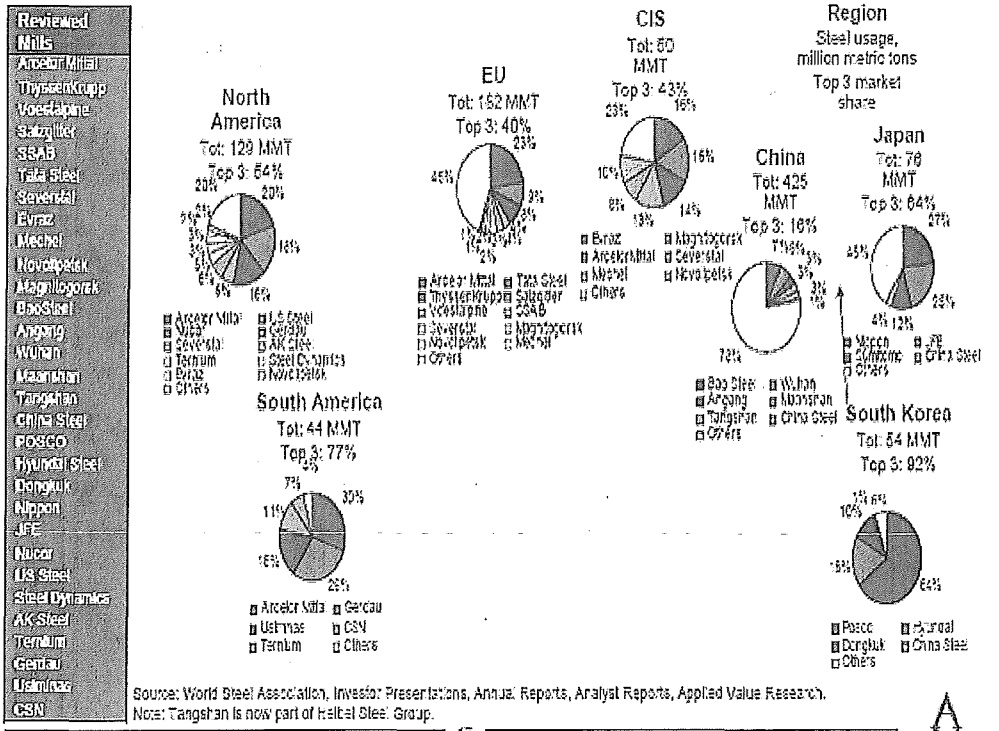
Chinese iron ore production statistics are reported in crude volume of tons mined. Due to the low iron content of Chinese ore bodies this data has to be converted to a roughly equal level as that reported in other regions to allow a comparison of production volumes. Chinese production levels have been left out of this appendix.

Iron Ore Production by Type

Iron Ore Type	Production Volume 2009 (Million Metric Tons)
Fines	558.57
Lump	224.33
Pellets	168.15
Pellet Feed	75.89
Sinter Feed	24.10
Concentrate	12.75
Sinter Fines	3.90
Pellet/Sinter Feed	1.80
Special Products	.25
Total	**1,100.00**

Chinese iron ore production statistics are reported in crude volume of tons mined. Due to the low iron content of Chinese ore bodies this data has to be converted to a roughly equal level as that reported in other regions to allow a comparison of production volumes. Chinese production levels have been left out of this appendix.

Applied Value has reviewed 30 major Steel Mills, all of which have significant market share in one or several regions.



Source: World Steel Association, Investor Presentations, Annual Reports, Analyst Reports, Applied Value Research.
Note: Tangshan is now part of Hebei Steel Group.