RISK MANAGEMENT IN IRON ORE MARKETS

8th December 2009

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Safe Harbour Statement

Forward-Looking Statements

This presentation may contain "forward-looking statements" made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Statements regarding our business that are not historical facts are forward-looking statements that involve risks, uncertainties and assumptions that are difficult to predict. These statements are not guarantees of future performance and actual outcomes and results may differ materially from what is expressed or implied in any forward-looking statement. For a discussion of certain risks and uncertainties that could cause actual results to differ from those contained in the forward-looking statements see our filings with the Securities and Exchange Commission (the "SEC"), including, but not limited to, the "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2008, as filed with the SEC on February 11, 2009. SEC filings are also available in the Investors & Media section of our website. All forward-looking statements in this presentation are based on information known to us on the date hereof, and we undertake no obligation to publicly update any forward-looking statements.

WELCOME: TODAY'S EVENT

Mike Davis
Director of Market Development
ICE Futures Europe

- Introduction
- Our first event of its kind in Iron Ore; event rationale, global scope
- Content-driven and interactive, ICE and industry presentations
- Driven by desire to inform, entertain, educate
- Networking opportunity, lunch & ICE party this evening
- Programme summary and structure, Q & A
- Housekeeping: Exits, phones, feedback forms, reporting policy
- Next up

ANNOUNCING THE ICE IRON ORE SWAP

ICE FUTURES U.S.

ICE Futures U.S.
Nov 26, 2009

Iron Ore Swap (Platts) 62% Fe

Contract Specifications

Description	Iron Ore Swap (Platts) 62% Fe **Launch Date:** December 2, 2009
Contract Symbol	ORE
Contract Size	Per Lot: 1,000 dry Metric Tonnes
Units of Trading	Contract Size will be expressed as "lots".
Currency	USD and cents
Minimum Price Flux	One cent (USD 0.01) per Dry Metric Tonne

Settlement Prices	One tenth of one cent ($0.001) per Dry Metric Tonne
Last Trading Day	First Business Day following the Settlement period
Fixed Price	The traded price or the previous day's settlement price
Floating Price	In respect of daily settlement, the Floating Price will be determined by ICE using price data from a number of sources including spot, forward and derivative markets for both physical and financial products.
Final Settlement	In respect of final settlement, the Floating Price will be a price in USD and cents per Metric Tonne based on the average of the relevant High/Low daily quotations published in 'Platts Metal Alert' (PMA) under the heading 'IODEX: Iron Ore fines 62% Fe CFR North China' for each day during the determination period. ICE will use an average of the daily published prices over the calendar month to derive the final cash settlement price. If a Singapore public holiday should fall on what would otherwise be the final monthly publication day, the final day's quotation will be published on PMA on the last

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ICE OVERVIEW:
DIVERSE MARKETS, PRODUCTS AND TECHNOLOGY

ICE Regulated Futures Exchanges

U.S. & Canada

Agricultural
- Cocoa
- Coffee
- Cotton
- Sugar
- Orange Juice
- Barley
- Canola Oil

Financial
- FX
- US Dollar Index
- Russell Equity Indexes

Europe

Energy
- Brent Crude
- WTI Crude
- Sour Crude
- Gas Oil/Heating oil
- Natural gas
- Electricity
- Coal
- Emissions

ICE OTC

OTC Iron Ore

OTC Energy
- Oil and refined products
- Physical/Financial gas
- Physical/Financial power
- Natural gas liquids

OTC Credit – Creditex
- CDS – indexes, single names, structured products

ICE Data & Services

Market Data
- Real-time prices/screens
- Indices and end of day reports
- Tick-data, time and sales
- Market price validations

Services
- ICE eConfirm
- Coffee & cocoa grading facilities

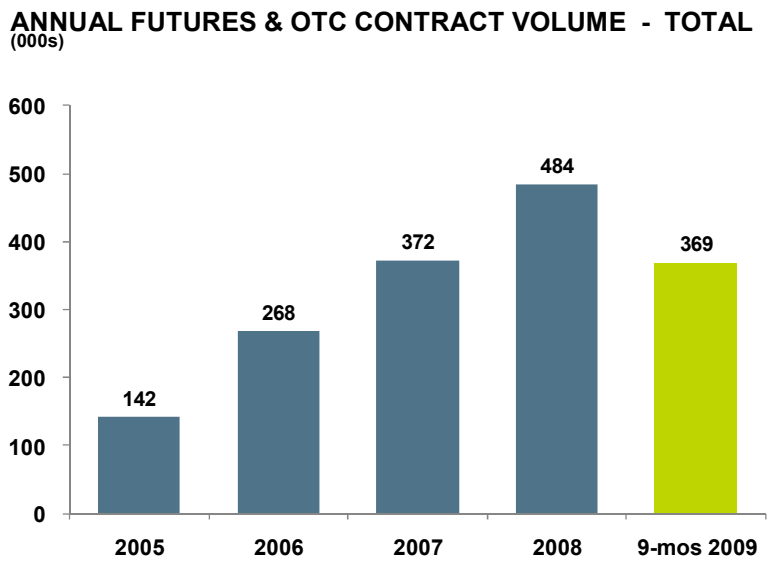
ICE Clear U.S., ICE Clear Canada

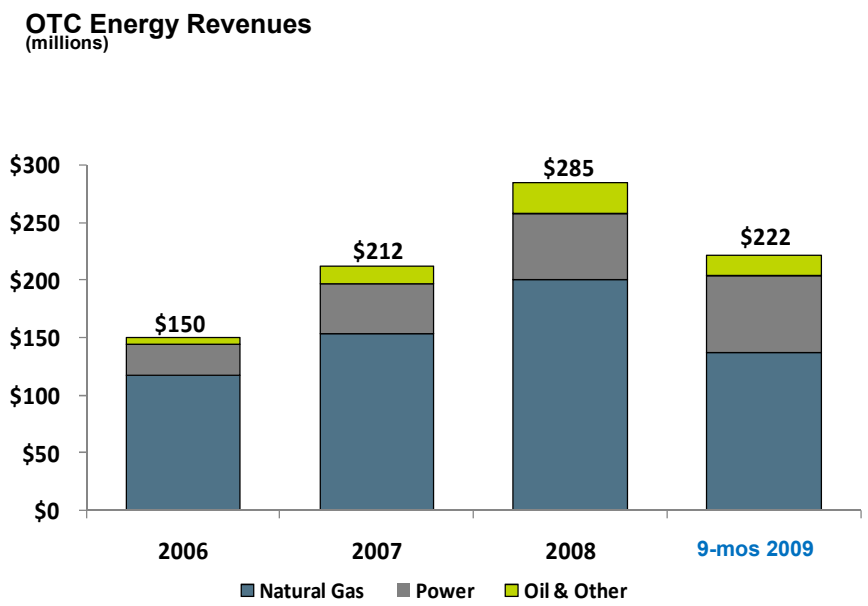
ICE Clear Europe

ICE Trust – CDS Clearing

Integrated Markets, Clearing and Technology

ICE FUTURES & OTC GROWTH:
ENERGY & CREDIT MARKETS





ENERGY PRODUCTS

- Electronic Markets
- Over 800 products listed for natural gas, power and refined oil products
- Approximately 280 cleared products

- Commercial energy companies 53%
- Banks/Financial institution 21%
- Liquidity providers (prop/algo/funds) 26%

BENCHMARKS AND PRICING: ONE VISION FOR IRON ORE

8th December 2009

Mike Davis, Director Market Development, ICE Futures Europe

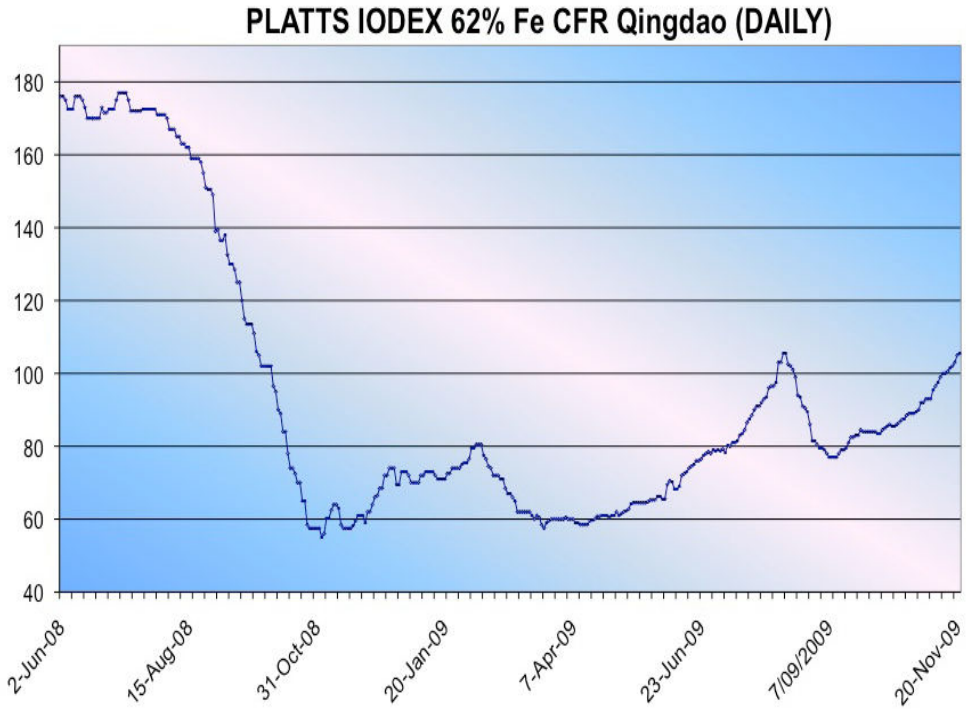
WELCOME:
TODAY'S PRESENTATION

- Introduction: Contexts around discussion, ICE role
- Where do 'marker' prices or 'benchmarks' come from?
- What function do they serve?
- Some comparisons in marker price structures
- Benchmark fundamentals: How judge their effectiveness?
- Derivatives and Underlying reference pricing
- Liquidity, correlation, hedging and investment
- The status quo, trends and pricing evolution
- Marker price candidates
- Market driven new benchmarks in Iron Ore & Steel

INTRODUCTION:
CONTEXTS AROUND BENCHMARK DISCUSSION

- The 'benchmark' and index marker prices or benchmarks
- Exchange role
- Spot price volatility, benchmark & index divergences
- Spot and forward curve price transparency, trends & linkages
- Local and global impacts
- Term structure and intermonth spreads
- Comment and debate around alternatives

Platts' 62% Iron Ore CFR N.China: Longest-running and first daily 62% Iron Ore price quotation



BENCHMARKS: DEFINITION TO RECOGNISE THEM BY

WHAT ARE THEY, WHAT FUNCTION DO THEY SERVE?

- Benchmarks provide a standard industry reference point which is fair, market related, transparent and understood by all participants

- Benchmarks facilitate business by providing a focal point for differential pricing of related commodities

- Benchmarks enable :

  Hedging
  (offsetting a price exposure with an equal and opposite exposure)

  Price transparency
  (discovery/dissemination of prices in real-time)

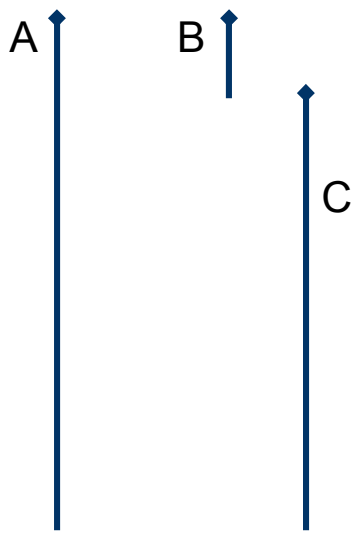
BENCHMARKS AND RELATIONAL PRICING:
A CRUDE OIL EXAMPLE

- Market develops around a single physical grade
- Other grades trade as a diff to the main contract
- Benchmark sets the underlying market price
- Differentials are agreed due to quality, location, availability
- Liquidity & transparency of core benchmark means pricing discussion can move to differentials

A - Forcados (Dated Brent plus $2.65)

B - Dated/ Forcados diff. $2.65

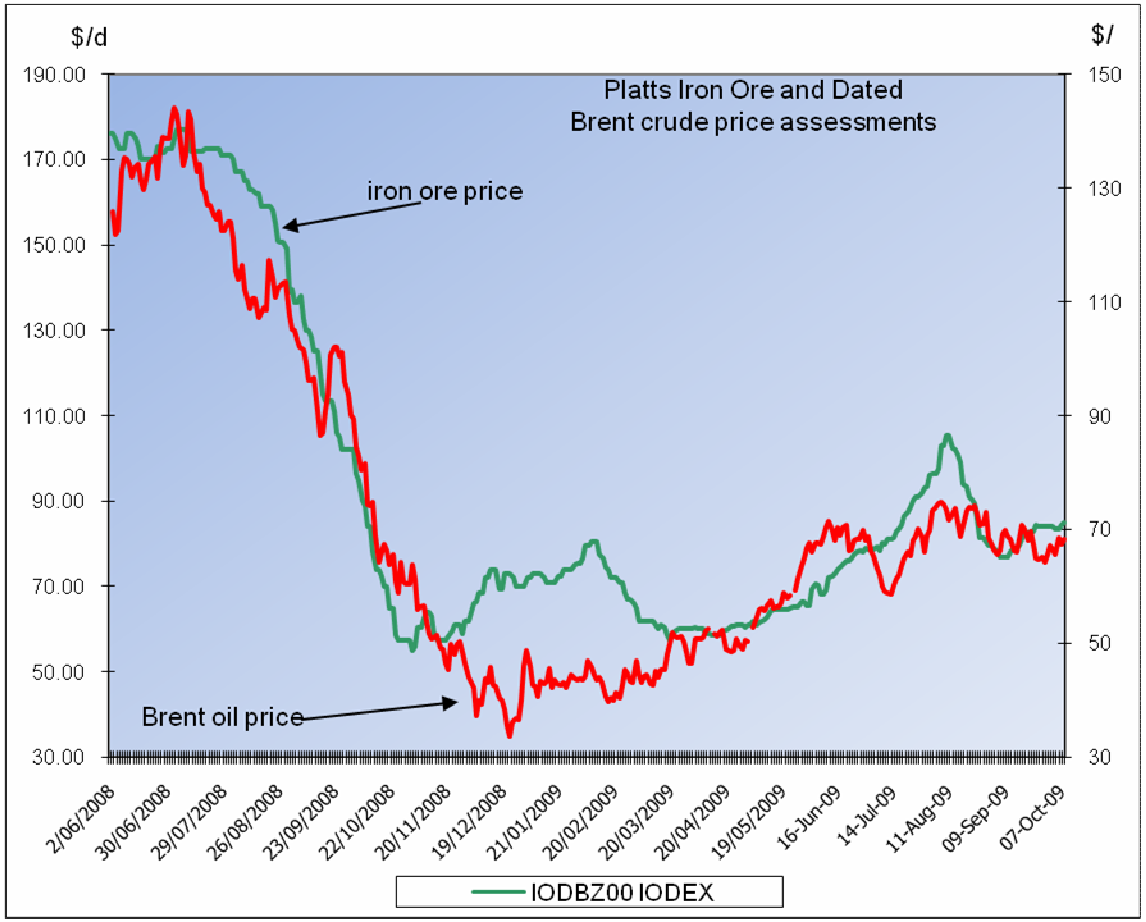
C - Dated Brent $48.54



- Risk management tools develop around the benchmark
- Used for hedging and risk mgmt volume and transparency grows
- Benchmark is a pool of core liquidity for trading of a wide range of physical grades
- Conditions: benchmark must be liquid, transparent, fair, represent the true value of the commodity methodology clearly understood

BENCHMARK PRICING: WHY THEY MATTER

BENCHMARK BEHAVIOURS & CORRELATIONS



Source: Platts

Price relationships

Iron ore has a close price relationship with:

- Steel
- Energy, Coal especially
- Freight
- Emissions

Growth of benchmark credibility pools liquidity, enables cross-market margin capture and hedging.

As a host to 2 key commodity benchmarks logic of ICE clearing Iron Ore is clear.

WHAT MAKES A PRICE BENCHMARK?

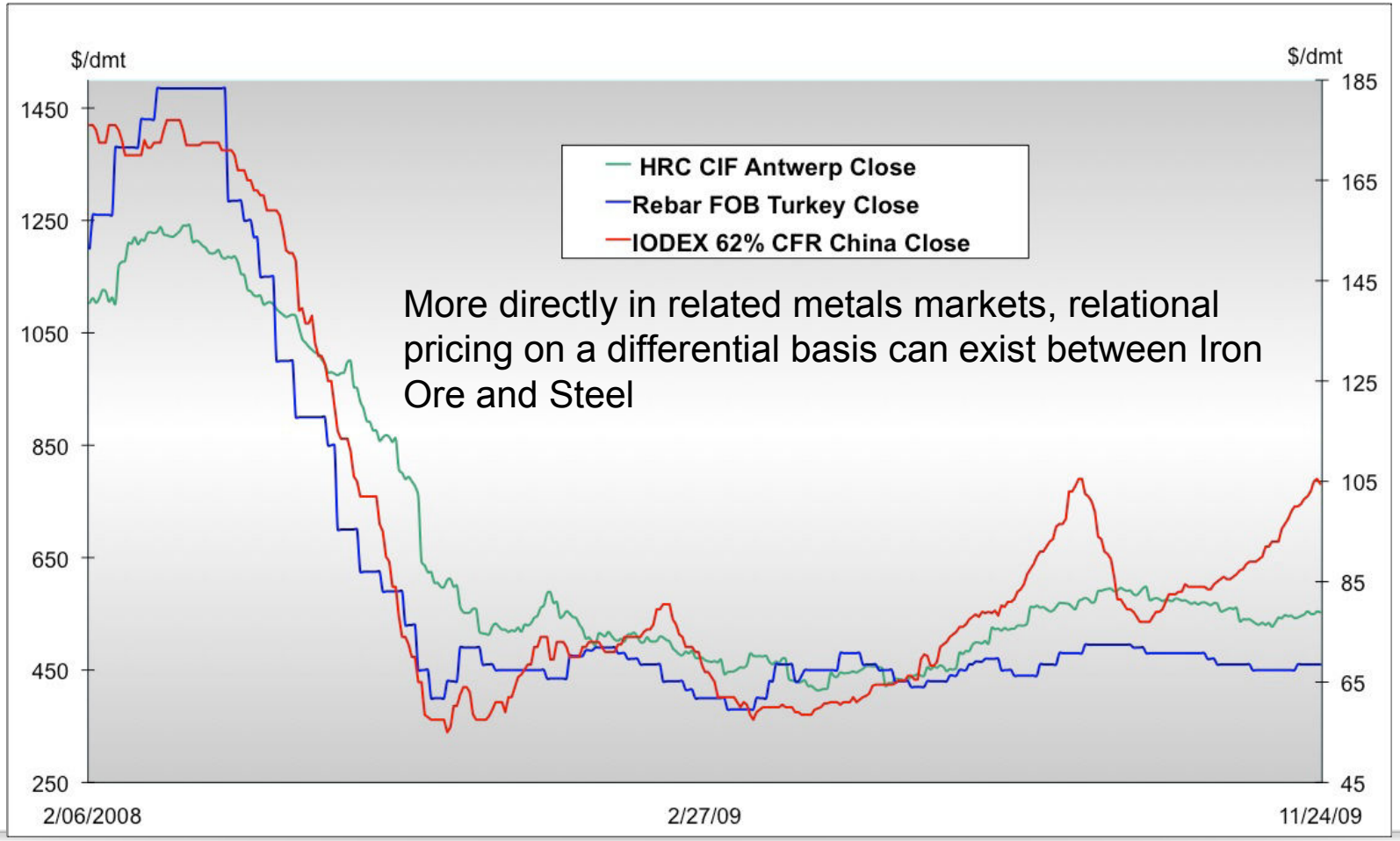
- Oil and Steel comparisons - not single commodities
- Benchmarking a pricing solution to lack of homogeneity
- 550 crude oil grades - how many can be benchmarks?
- Largest grades?– No
- Begs question - Why Brent and WTI price more than 60 mil b/day of 85 mil b/day – what is special about these two grades?

SO WHAT MAKES AN EFFECTIVE BENCHMARK?

Some Criteria for (Global) benchmarks:

- (Globally) representative grade with substantial production/consumption volume
- Reflective of underlying global Iron Ore & Steel economics
- Diversified production and consuming bases - existence of intermediaries
- Market liquidity and price transparency – early stages in Iron ore
- Relative stability to other less economically or more economically-valuable crudes
- Openly and actively traded by a critical mass of varied parties, free of logistical bottlenecks
- Wide acceptance by the industry as representative
- Benchmarks become embedded via long-term contract pricing, financial instrument innovation, related pricing
- Standardised Terms and Conditions
- Fungible or Interchangeable with equivalent grades, relational pricing
- Adherence to international/standardised norms of trading
- Confidence in contract stability, execution and risk transfer, hybrid to indexed

BENCHMARKS:
ENABLING MARGIN TRADING: IRON / STEEL SPREAD

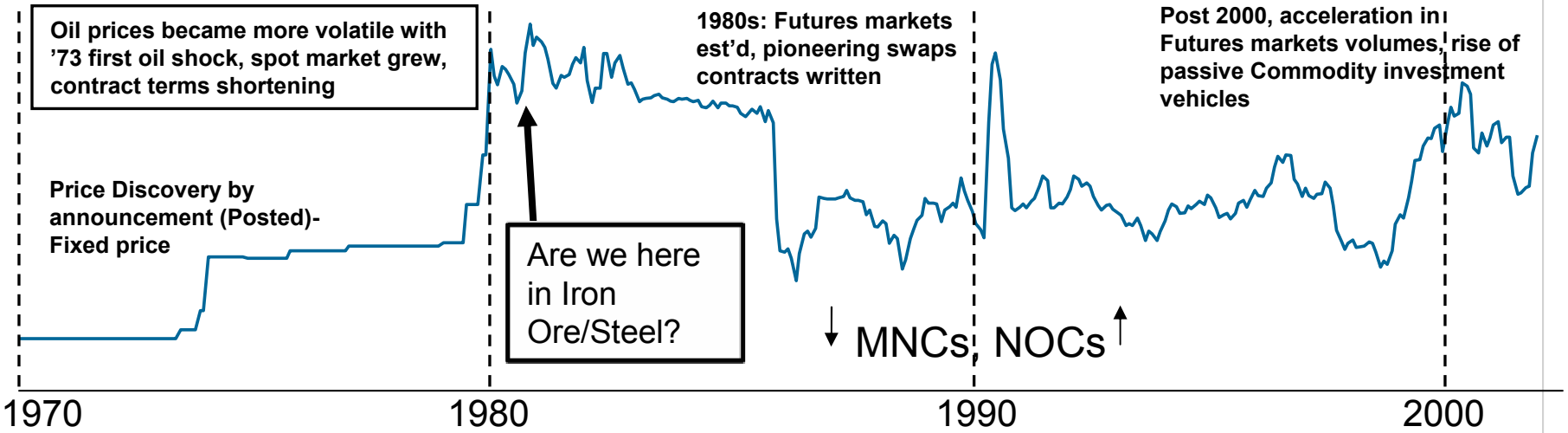


HOW DID MODERN CRUDE OIL MARKETS EVOLVE?
A TEMPLATE FOR IRON ORE & STEEL?

Before 1970s crude oil & products were priced on long term fixed price contracts (Posted prices from MNC, transfer pricing between them not openly disclosed)

Early 1980's, more crude oil and products trading via spot market. Uncertainty and high prices encouraged more volume to trade on this ad hoc basis (Gap between OSPs and Spot targeted by NOCs)

Mid-1980s onwards 'Wall St refiners' dominate in financial innovation, bring capital market-derived swap and option instruments and risk techniques to energy



Fixed term contract prices give way to more Spot cargoes as a balancing mechanism; reflecting forces of supply & demand

Rise of Non-OPEC supply. Spot market compliments higher volatility environment, sets the price for the whole market, floating prices (formula around markers) gain dominance post '86 in term and spot trade, reporting agencies

Post 1991 Gulf War, Spot hubs in Rotterdam, Singapore dominate regional pricing. Reference pricing common. Financial innovation grows basis swaps, pricing matrix deepens & broadens

HOW DO THEY COME ABOUT?
HOW DID WE GET HERE?

How to create a benchmark - not easy to design from scratch - Market finds its own solutions.

Then tends to find contractual accommodations if/when necessary, rather than move to a new benchmark

- A benchmark is a price used as a "proxy value" by market participants – 550 crudes, priced by three main ones - see price ranges, hundreds of ore grades – a handful will be key
- Markets typically use their most liquid commodities as benchmarks for less liquid ones.
- **Liquidity** is a function of number of trades and number of players, both in original spot markets, <u>and for forward markets</u>
- <u>Liquidity attracts liquidity - momentum is key to benchmark growth</u>
- Good benchmarks are created where the relationship between commodity X & Y is stable and predictable.
  - ➢The reliability of those relationships extend the core benchmark's reach

HOW DO THEY COME ABOUT?
HOW DID WE GET HERE?

Central elements of a benchmark's success: continuing Industry engagement:

- Meets key liquidity criteria
- What are the key trade flows? Where does production and consumption take place? Are they still relevant to a **global** iron ore benchmark – **62% versus 63.5%**
- Price discovery mechanisms – are they sufficient, do we know what we're trading and what drives its price? What are the key pricing points?
- Why is liquidity coalescing around 62% Ore to China?

Futures - OTC nexus

- Benchmark evolution has varied in different regions - Asia, Europe and US
- Futures may take on part of benchmark role in very developed markets
- Futures underpin many other instruments – EFP, EFS, Futures based 'Lookalike' calendar swaps

HOW DOES A BENCHMARK BEHAVE:
PRICE MECHANISM

Benchmark behaviours:

- Benchmarks should react to changes in market fundamentals of supply and demand, or price signals will be anomalous
- Price level signals trigger exploration, production and investment decisions, storage, transportation, consumption and reserve depletion/accretion levels. FC effects multiply the effect.
- Sustained manifestation of price instability or non-alignment can have a very serious effect on arbitrage economics, cracks, hedging, reference pricing, transfer prices, or taxation

Efficient functioning of a Benchmark price mechanism via the signals it gives matter because:

- Relative price movements and levels put oil on the water or in pipe, flowing to the US from multiple International destinations in North America, Europe, the MidEast and Africa
- Relative prices decide which refined products are worth processing (from which crudes), which are worth selling or storing, and decide whether long-term investments in refining, pipelines or fields go ahead
- A high level of liquidity in the benchmark product, especially at times of market stress, ensures efficiency in the price mechanism – there is no liquidity ‘strike’ when the chips are down

HOW DOES THE MARKET USE THEM;
WHY DO THEY MATTER?

- Their power comes from how much their price is leveraged for other prices, be that for other physical grades or derivatives
- Benchmarks are visible and identifiable because they are traded or quoted openly, and generally on an outright or 'flat' price basis
- They represent the core price of crude oil regionally or globally
- They possess the deepest liquidity pools, most advanced forward maturities in tenors, and geographical dispersion of usage in pricing terms away from their core benchmark location
- Tradable crude quality basis, geographical basis, and product 'cracks' can then be 'sliced and diced' by tenor and towards less-liquid differentials
- Transparency and price discovery
- Increasing role of futures in benchmark price discovery as spot volumes generally decline worldwide, index providers monitoring futures or swap-related differentials

WHY USE A BENCHMARK?

Quick Answer – Easier to go with the flow…?

- Consumers - want price transparency
- There are tangible benefits for them
- Margins are protected via spread relationships (Most trading)
- Facilitate price risk management

What a benchmark <u>won't</u> do:

- NOT attempt to capture the price of every grade/size of a commodity, but then it doesn't have to, just anchor the wider relational community
- NOT oblige producers to supply only one grade of a commodity – Acceptance of this benchmark as a standardised representative of the generic commodity plus or minus key index differentials is the critical condition
- NOT attempt to capture the price of that commodity in every location – locational basis differential instruments or EFPs can achieve that
- NOT remove the need to establish bilateral business relationships – OTC market can supplement a futures-related or spot flat-price benchmark

FORWARD MARKET TRANSPARENCY, PRICE DISCOVERY

- Since inception in late 70's Forward markets in oil have contributed to physical spot trade in outright price discovery, as production trends have evolved and spot liquidity varied.
- Operational and logistical bar to forward markets is less onerous
- Forwards/futures in most developed commodity markets have near 24/7 trading, liquidity means often far more responsive in price discovery than less frequently traded spot underlyings
- Forwards/futures markets forward tenors discount the likely duration of fundamental trends and changes beyond the short-term reach of near-term spot markets 4/6 weeks out
- Spot assessments have used forwards/futures +/- diffs or seen the creation of synthetic futures-like instruments to enable assessments via Partials:
- E.g. Oil: Futures +/- EFP = Forward +/- Diff (CFD) = Spot Outright Products: Futures +/- EFP Diff = Spot Outright
- Innovation in bolting on additional grades to maintain pool of spot cargoes

WHERE ARE IRON ORE MARKETS NOW AND WHERE ARE THEY HEADING?

- Some comparisons in benchmark structures
- What a benchmark is, ICE approach compared to some others
- Where Iron Ore markets are heading in pricing terms…
- What kinds of choices might there be – have some Steel futures which have been successful, but many exchanges & products
- Is Asia now friendlier to futures- growth in some markets (China) although breadth of acceptance still low

FUTURE INDEX AND BENCHMARK SCENARIOS:
SPREADS AND THE OIL EXAMPLE

- Hints that Iron ore looks similar in structure to the evolving Oil markets of the late 1970's/early 1980's
- The iron/steel spread is similar in concept to oil 'crack spreads' - both represent a pricing and processing differential between basic/raw and finished products
- Many integrated producers are more concerned with processing margin than flat price inputs in themselves
- Those circumstances chime with oil pricing and markets
- Traders favour quality, processing and timing spreads
- Volatility & direction considered more predictable than outright prices

IRON ORE AND BENCHMARKS

- If Iron Ore follows a similar path to other commodity (and energy) markets, the 62% Fe grade may become an important benchmark for relational pricing of other Iron Ore grades or even of finished products that relate to it.
- If that is the case, 58% and 65% Ore may trade at negative and positive differential respectively to 62%, and steel may trade as a positive differential to it in time.
  - 62% Core benchmark
  - 58%: 62% minus a differential e.g. -$2/dmt
  - 65%: 62% plus a differential e.g. +$2/dmt
  - Lump: 62% plus a differential e.g. +$1/dmt
  - Steel: 62% plus a differential e.g. +$X/dmt (Red Hot spread)

BENCHMARK TRANSPARENCY ENABLES RISK MANAGEMENT

Benefits of Risk Management: Summary (More after the break)

The value of forward prices and financial contracts:

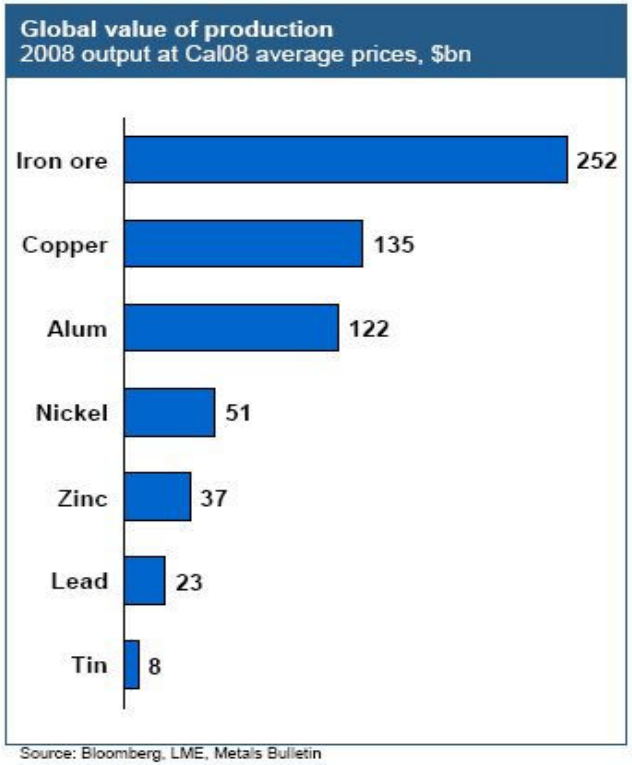
- The development of Risk Management systems and processes enable identification, measurement and adjustment of risk and forward price exposure in particular according to an entity's chosen and agreed degree of risk appetite
- Transparency in forward pricing and achievable investment returns, improves predictability of long term access to capital
- Can adjust the relative impact of price volatility
- Enables more predictable planning and budgetary control
- Protects margins, smoothes revenue and cost flows
- Locks in future cash flow, reduces need for capital reserves against shocks
- Can reduce the cost of capital via improved credit rating
- The ability to manage short-term price fluctuations can make long-term contracts more stable
- Risk management can become value added and management control tool vs. cost centre

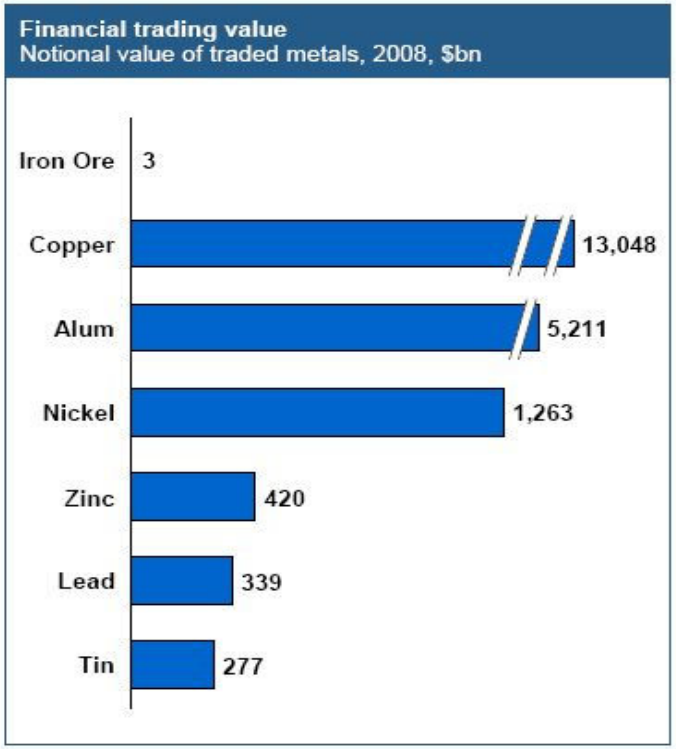
RISK MANAGEMENT AND MARKET DEVELOPMENT

- This is the core of the ICE issue – can frame in terms of a number of questions to potential market participants
- All about the predictability of costs and revenue, about replacing forecasts with achievable forward prices, measuring risk, increasing forward price transparency and predictability, measuring and controlling risk, capital efficiency
- Key is linking physical price commitments/scheduling to financial constraints and opportunities

IRON ORE FINANCIAL MARKET POTENTIAL

Financial iron ore has significant potential





Source: Bloomberg, LME, Metals Bulletin

Credit Suisse