

# World Steel Dynamics



**WSD Steel Strategems**



**ISRI Convention & Expo  
Steel Indexing &  
Price Transparency**

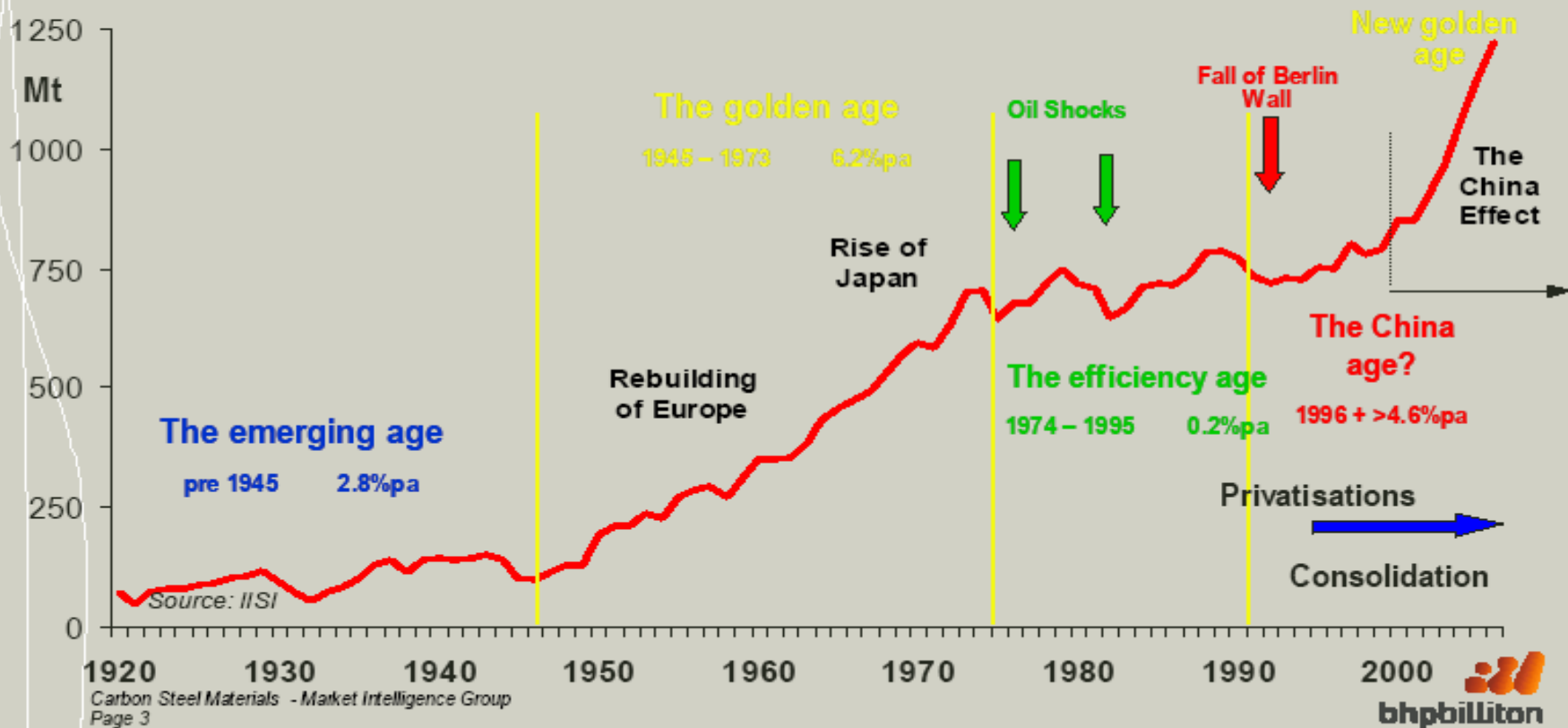
**Patrick A. McCormick  
Managing Partner**

**April 20, 2007**

# Price Indexing & Price Transparency New Tools for A New World Economy

The global steel industry continues to power on

Global steel production has maintained strong growth since the "pick up" ~2000, with growth rates of 5%pa from 1996 and 7.6%pa from 2001



High Rates of Steel Demand Growth Are Likely to Continue

# Price Indexing & Price Transparency

## Why Is It Needed?



- Customers Want to Know Their Cost
- Businesses Want to Know that Margins are Secure
- How can This be Accomplished in Volatile Markets?
  - Requires a Measurement of Market Value Over Time

### Price Transparency

- Indexing prices in Physical Contracts and Financial Contracts Can Achieve Stable Pricing/Cost

### Price Indexing

# The *SteelBenchmarker*<sup>TM</sup> Process

## Achieving Price Transparency



- Easy internet access
- All market participants can become a price opinion provider
- Collecting price opinions from mills, end-users, traders, distributors, scrappies, etc.
- WSD has experience in collecting price opinions
  - WSD PriceTracker series initiated in 1981
  - *SteelBenchmarker*<sup>TM</sup> carried on in April 2006
- Steel products include HRB, CRC, Plate, and Rebar
- Steel scrap prices for #1 HM, shredded, and #1 busheling

**You Too Can Become a Price Opinion Provider at**  
**[www.steelbenchmarker.com](http://www.steelbenchmarker.com)**

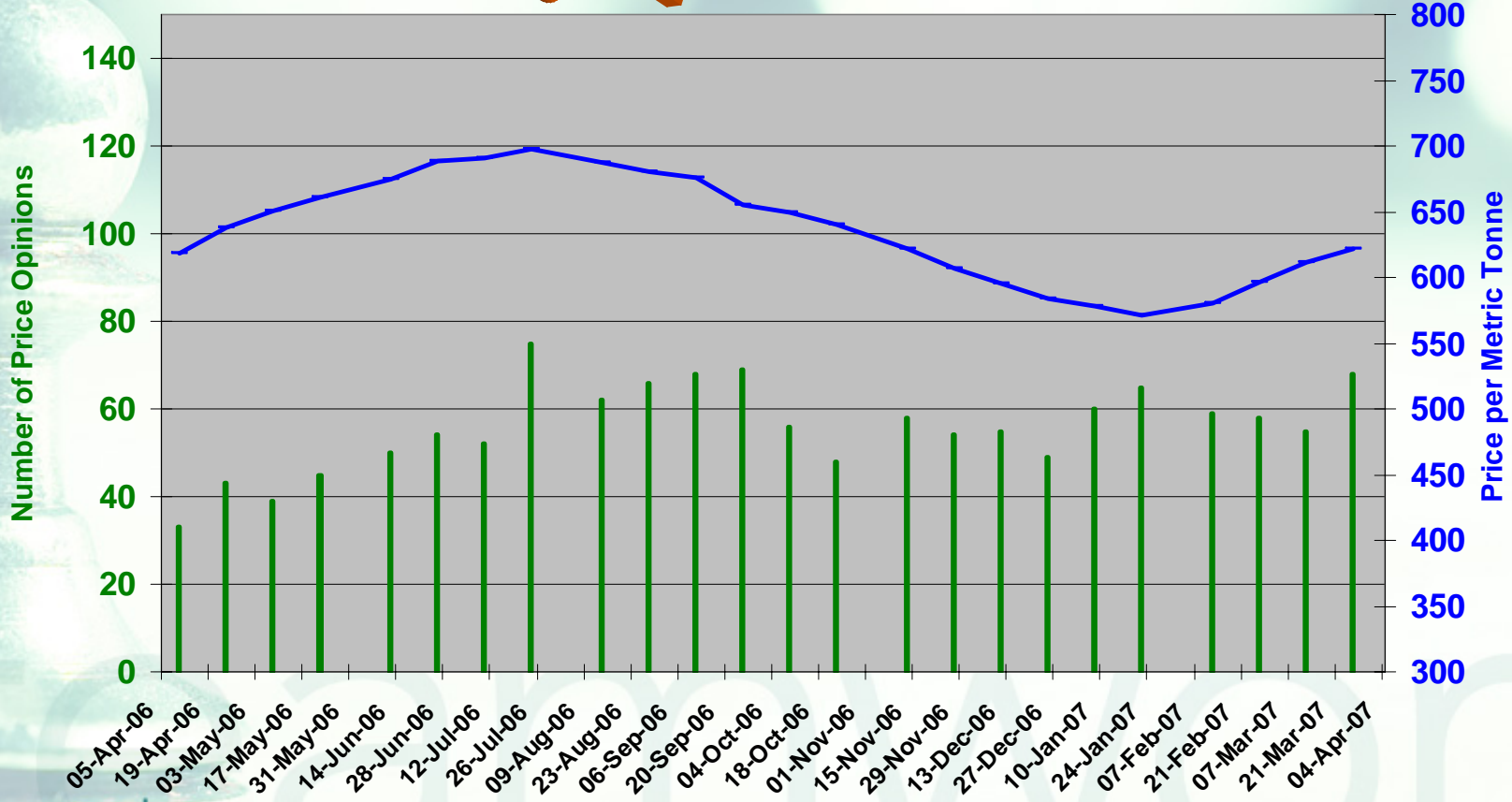
World  
Steel  
Dynamics

# Robust SteelBenchmarker™ Prices Will be Used to Settle Steel Futures Contracts



SteelBenchmarker Hot Rolled Band

**Safety in Numbers**



# World Steel Dynamics

## Hot Rolled Band Prices

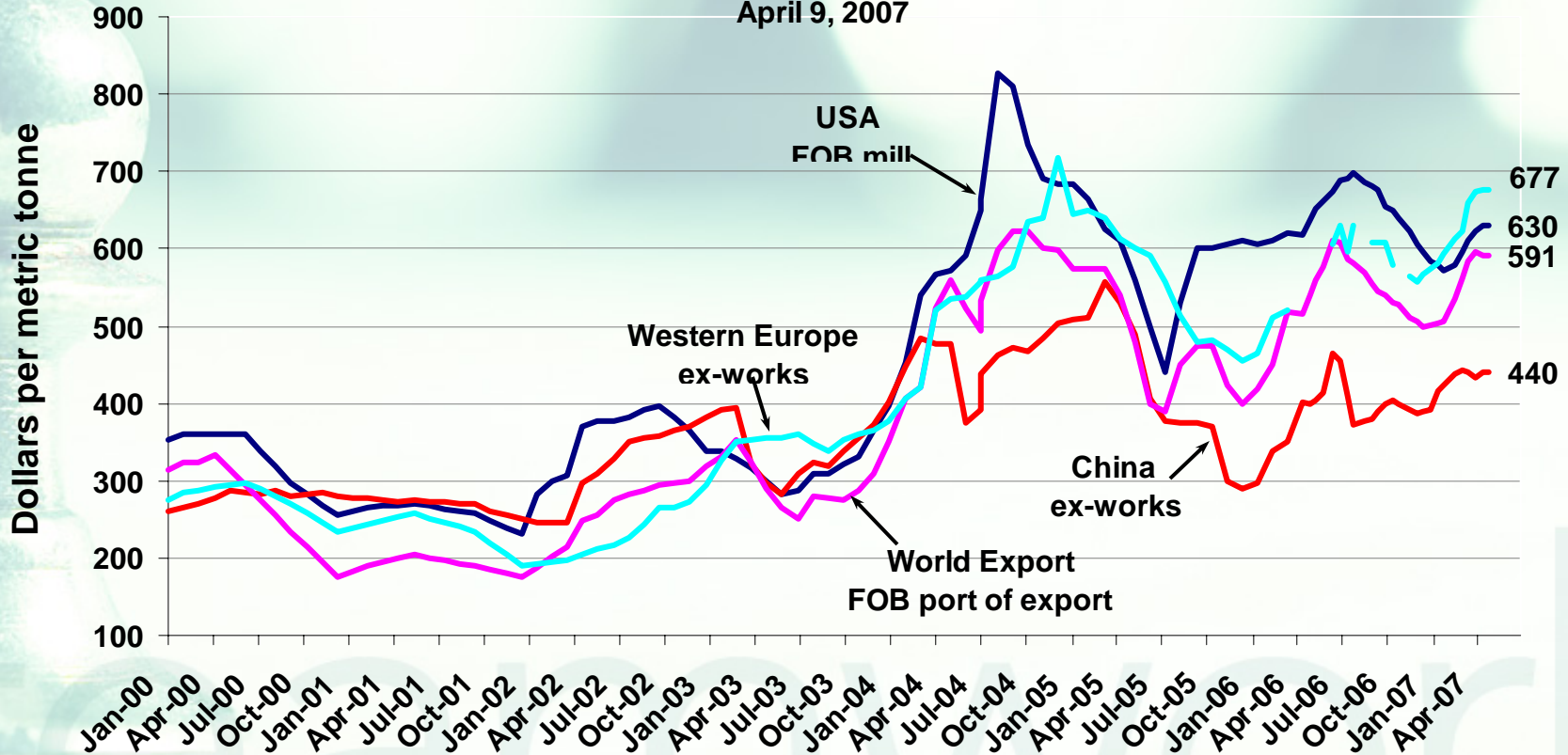
### Larger Price Spreads Between Regions



### SteelBenchmarker™ HRB Price

USA, China, Western Europe and World Export

April 9, 2007



# The ABC's of Price Indexing and Financial Hedge Accounting

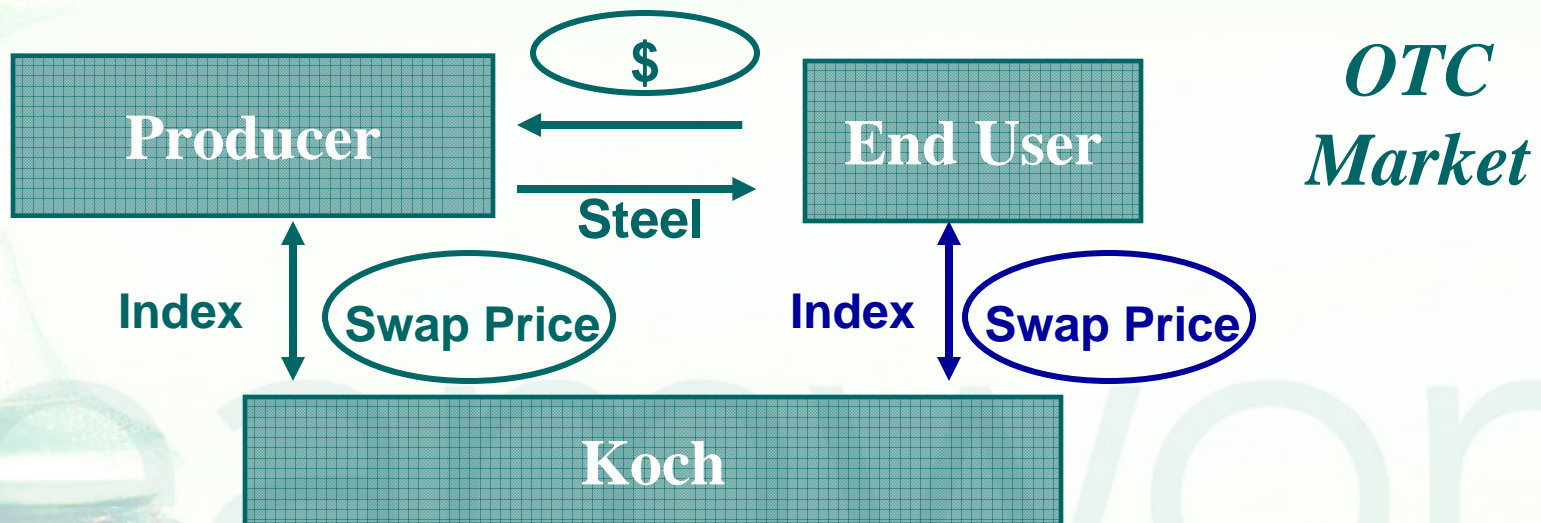
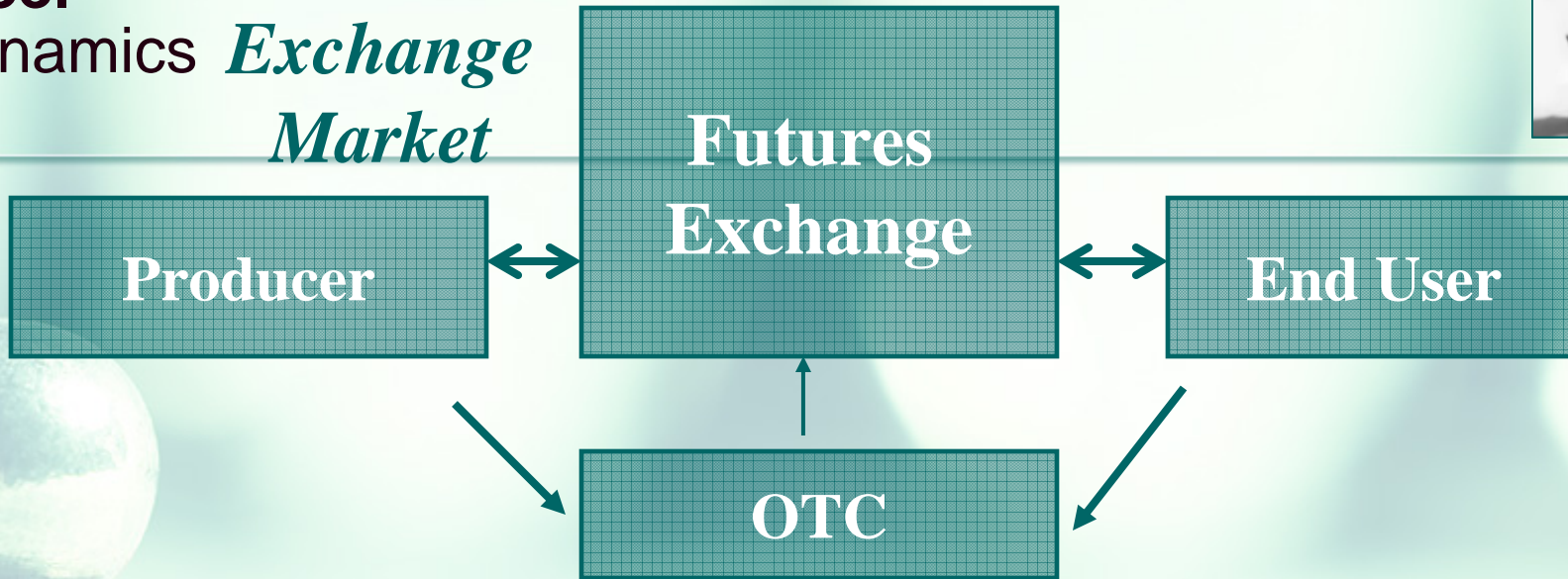


- A. The buyer and seller agree to use a price index such as the *SteelBenchmarker™* in their supply contract
  - Base price adjustments are driven by index changes
  - Adders/deducts are negotiated and are typically held constant in the price calculation
  
- B. Use OTC or trading exchanges to achieve fixed pricing via financial swaps or futures contracts
  
- C. FAS 133 “effectiveness” measurement must be met to avoid booking unrealized future gains and losses to income
  - Use the same settlement index in the physical and financial contracts

# Trading Market Structure



*Exchange  
Market*

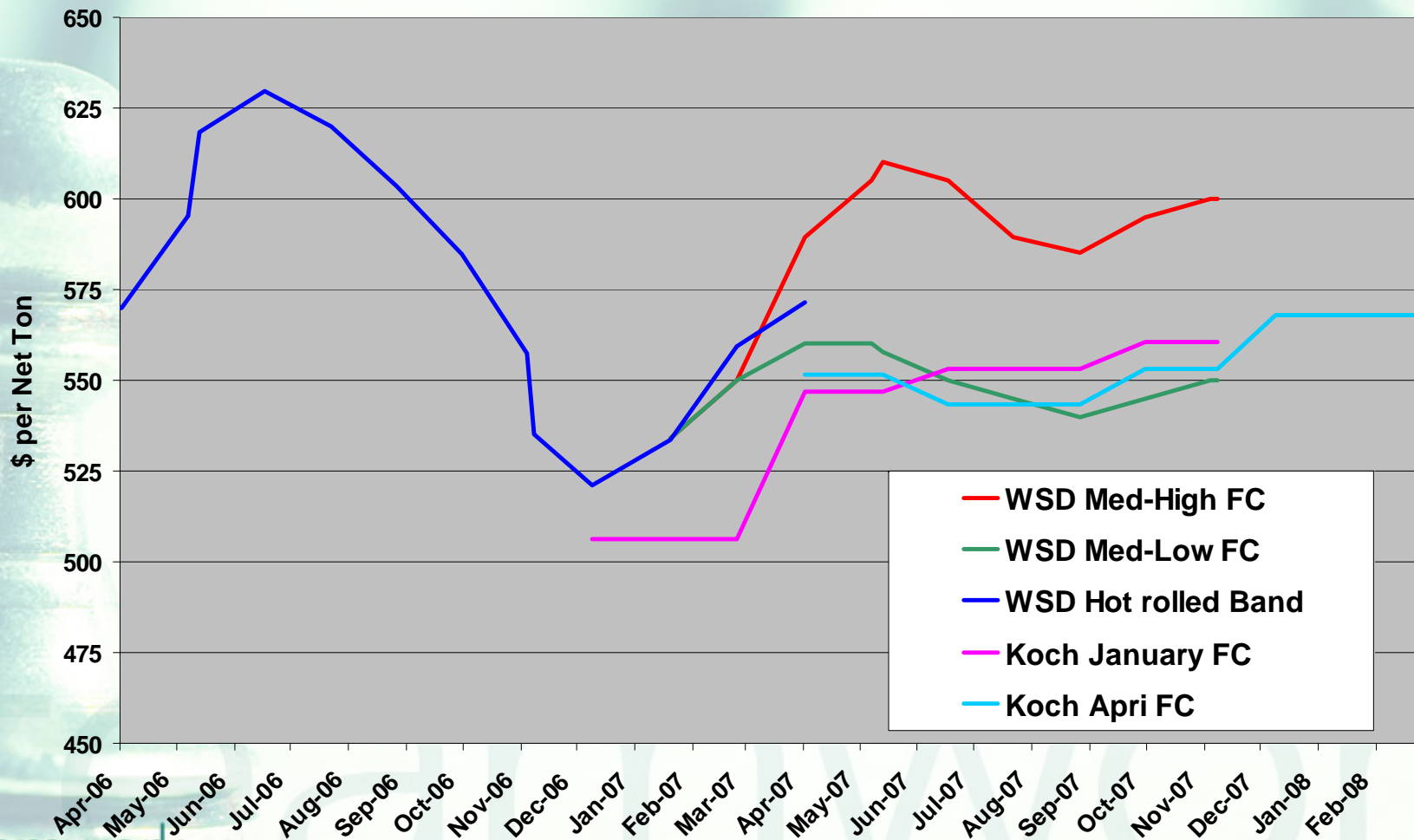




# OTC Financial Swaps The Opportunity and The Math



USA Hot Roll Prices & Forecast



## OTC Financial Swap Calculation (Buyer)

### Med High Market Forecast

	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Market Price</b>	\$605	\$610	\$605	\$590	\$585	\$595	\$600	\$600
<b>Steel Cost</b>								
<b>Base Price</b>	\$605	\$610	\$605	\$590	\$585	\$595	\$600	\$600
<b>Budget price</b>	\$559	\$559	\$559	\$559	\$559	\$559	\$559	\$559
<b>Variance (Pos = Bad)</b>	\$46	\$51	\$46	\$31	\$26	\$36	\$41	\$41
<b>Financial Swap Cost</b>								
<b>Market Price</b>	\$605	\$610	\$605	\$590	\$585	\$595	\$600	\$600
<b>Swap Price</b>	\$559	\$559	\$559	\$559	\$559	\$559	\$559	\$559
<b>Variance (Pos = Bad)</b>	(\$46)	(\$51)	(\$46)	(\$31)	(\$26)	(\$36)	(\$41)	(\$41)
<b>Net Variance</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

### Med Low Market Forecast

	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Market Price</b>	\$560	\$558	\$550	\$545	\$540	\$545	\$550	\$550
<b>Steel Cost</b>								
<b>Base Price</b>	\$560	\$558	\$550	\$545	\$540	\$545	\$550	\$550
<b>Budget price</b>	\$559	\$559	\$559	\$559	\$559	\$559	\$559	\$559
<b>Variance (Pos = Bad)</b>	\$1	(\$1)	(\$9)	(\$14)	(\$19)	(\$14)	(\$9)	(\$9)
<b>Financial Swap Cost</b>								
<b>Market Price</b>	\$560	\$558	\$550	\$545	\$540	\$545	\$550	\$550
<b>Swap Price</b>	\$559	\$559	\$559	\$559	\$559	\$559	\$559	\$559
<b>Variance (Pos = Bad)</b>	(\$1)	\$1	\$9	\$14	\$19	\$14	\$9	\$9
<b>Net Variance</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0



### Med High FC May – Dec'07

- \$599 ST MKT
- \$559 ST Swap

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- \$40 ST Savings
- 8 Mo Fixed Price

### Med Low FC May – Dec'07

- \$550 ST MKT
- \$559 ST Swap

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- \$9 ST Cost
- 8 Mo Fixed Price

# New Steel Financial Hedging Tools Are Coming



- NYMEX, LME and CME are all considering launching steel futures contracts
- The NYMEX has signed a letter of intent to use the WSD/AMM/MB *SteelBenchmarker*<sup>TM</sup> price series to settle steel futures contracts on its “Clearport” system
- Expected advantages
  - Electronic visibility of the forward traded price curve
  - Smaller contract size allows for more sophisticated hedging strategies
  - Exchange trading is expected to improve trading liquidity

**Steel Futures contracts will not have the same exposure to speculative financial trades. Steel futures will be settled with a physical transaction price index, e.g. *SteelBenchmarker*<sup>TM</sup>**

## Lets Talk About Scrap Serving the Supply-Chain



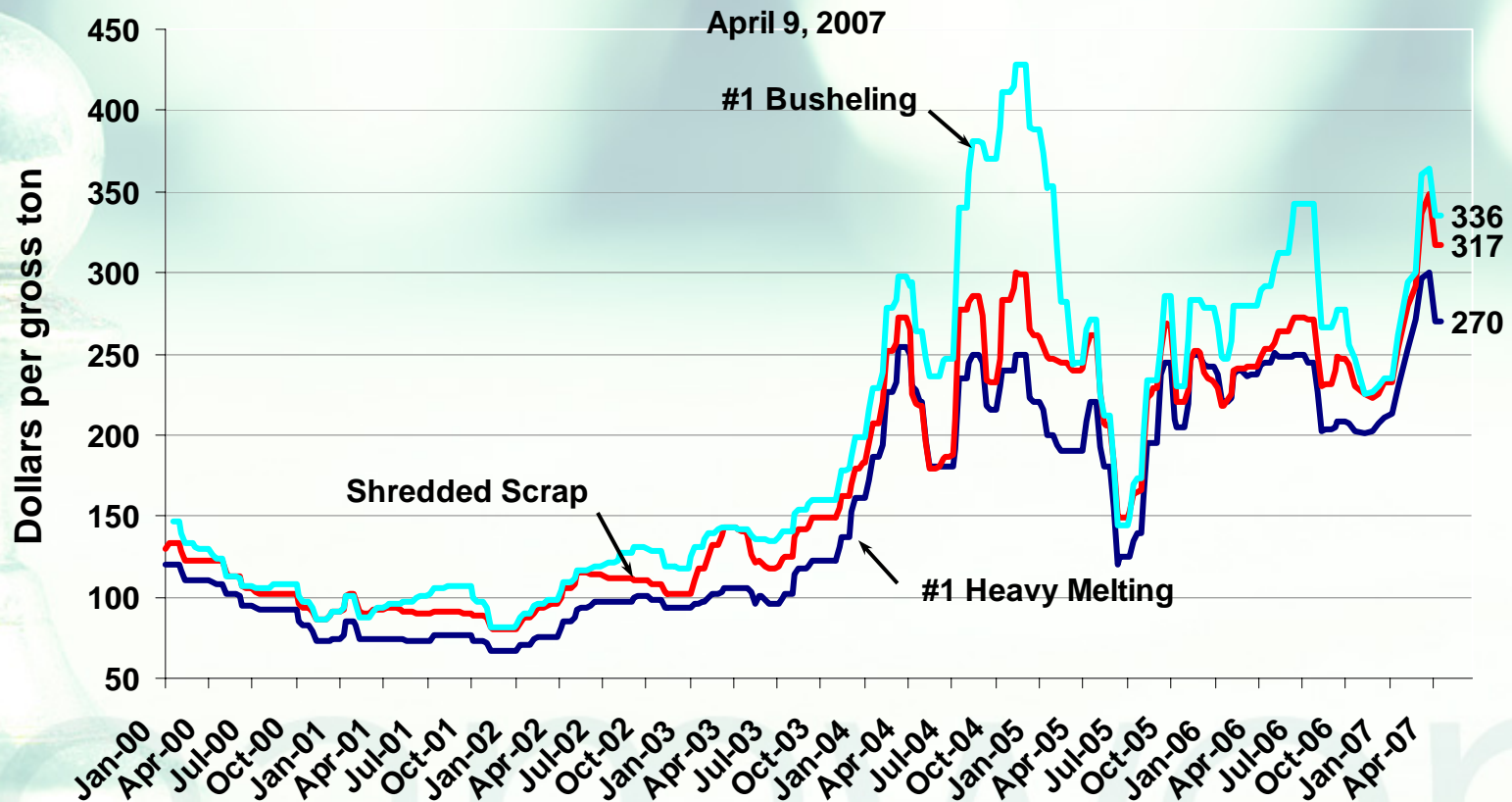
- Scrap price volatility has increased in price magnitude and frequency of price change
  - Scrap exports seek to find the highest priced markets
  - EAF expansion in CIS is impacting scrap exports
  - Higher global growth rates of steel production have tightened metallics supply capabilities
- Customers Want to Know Their Cost
- Businesses Want to Know that Margins are Secure

**Are Scrap Collectors and Processors Ready to Provide Fixed Price Solutions to Their Customers?**

# AMM – WSD USA Scrap Prices Record Prices for #1HM & Shredded



*SteelBenchmarker*<sup>TM</sup> Scrap Price  
USA, delivered to steel plant



# SteelBenchmarker™ – AMM Scrap Prices Already Achieving Close Agreement

Composite Prices (\$/GT)



	WSD #1 HM	AMM #1 HM	WSD Shred	AMM Shred	WSD #1 Bush	AMM #1 Bush
12 Feb 07	253	250	280	283	294	293
26 Feb 07	271	252	292	288	300	297
12 Mar 07	297	294	337	340	361	365
26 Mar 07	300	298	349	354	364	368
9 Apr 07	270	291	317	343	336	359

# WSD Does Not Believe China Will Return to Large Imported Quantities of Scrap



China Scrap Net Imports



- China's obsolete scrap reservoir doesn't increase much until after 2010
- Over the cycle, iron based steelmaking cost remains lower than scrap based EAF steelmaking cost
- China is developing capabilities that allow greater use of low concentrated ores
- Large steelmaking capacity additions are best served by iron based steelmaking

## Price Indexing & Price Transparency Key Takeaways



- The world has transitioned to a higher economic growth
- Market price volatility is likely to continue
- Price series, such as the *SteelBenchmarker*<sup>TM</sup>, are needed to track the rapid market changes  
Sign up at [www.steelbenchmarker.com](http://www.steelbenchmarker.com)
- Customers and businesses want predictable cost and margins
- Emerging price risk management tools can provide a viable solution  
provided that:
  - Market participants understand price risk management tools
  - Price risk management strategies are tied to business objectives
  - Sufficient financial liquidity is available to make timely trades