Steel Futures: Free for all, or Win for all?

“Safety in Numbers”

WORLD
STEEL
DYNAMICS
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Steel Futures: Free for all, or Win for all?

Joining Peter Marcus and Karlis Kirsis as a managing partner at World Steel Dynamics is a great opportunity for me. The steel industry’s dynamics are more challenging today than at any time during my prior thirty year career as a global steel buyer for a twenty billion dollar company. It is my hope to offer new perspectives to our clients about the critical developments taking place in the steel industry. At WSD, we are directing my expertise on what we call the “buyer-seller interface”.

The panel’s topic “Steel Futures: Free for all, or Win for all” is a very passionate subject for me considering the need for it at the “buyer-seller interface”. Steel market price volatility remains a very challenging issue for buyers. I believe it is also of increasing concern to sellers as China increases its exports.

My answer to the panel’s topic question is; steel futures is a win for all. I am very excited about the prospect of emerging developments in steel futures and wish to share some thoughts on the subject.
Why Financially Hedge Steel?

- Smooth-Out Price Volatility
  - Meet Financial Plans
  - Increase Predictability

- Definition of Price Volatility
  - Rapid Changes in Price Direction
  - Increase in Price Magnitude

The financial hedging of steel is the use of steel futures. If done properly, there is little difference between using steel futures or making a fixed price commitment on the purchase or sale of physical steel.

The main reason to do this is to know your cost, or to know your selling price. This allows you to reduce your company’s forward price risk from steel price volatility. Investors will also find value in using steel futures to reduce the price risk impact on their investments.

My definition of steel price volatility shown on the slide covers both rapid changes in price direction and increases in price magnitude. Simply put, surprises in price movement are good for some and bad for others. Frequent changes in price direction can quickly turn the table.

Steel futures trading will allow skilled price-risk management professionals to reduce their Company’s forward price-risk from volatile market prices.
Price Volatility is Impacted by Dynamic Changes in:

- Regional Market Structure
  - Demand Growth
  - Capacity Investments
  - Raw Material Cost
  - Imports
  - Exports
  - Level of Consolidation
  - Steel Stockholder Independence

- Currency Strength

- Buyer & Seller Market Behavior
  - Inventory
  - Production Management

I am not going to spend very much time on this slide since the market concepts are already covered in my article published in the Metal Bulletin's special edition on steel consolidation. The original article before publication follows this presentation for easy reference.

The key takeaway is that increased steel demand growth rates have added to market price volatility. It is more difficult to maintain global balances in raw material and regional steel supply in a higher demand growth environment.

It is my view that the need for steel futures is increasing since steel price volatility is increasing. A very complex combination of dynamic changes and behaviors in today's regional steel markets are driving the increase in price volatility.
Regional Hot Rolled Steel Pricing Trends Show a Divergence in Direction

This chart is also described in my Metal Bulletin special edition article and is included in the article that follows this presentation. The divergence of price trends between China, trend ‘C’ and the USA and European markets, trend ‘B’ is adding to increased market price volatility as exports arbitrage the regional pricing differences.

This is best demonstrated on the next chart which shows the % change of World HRB export pricing tracked since 1955.
World Flat Roll Steel Prices Have Increased in Volatility

HRB Price: World Export Spot fob Mill, % change

You can observe the increase in the frequency of steel price changes in the World export price over the last few years in that peaks and valleys occur each year. I believe this directly corresponds to the divergence in the pricing trends shown on the prior chart.

My conclusion is that pricing volatility is growing as a result of the divergent pricing trends. This occurrence further strengthens the need for the steel futures market to evolve quickly. Since price volatility impacts buyers, sellers, and investors, the development of steel futures trading is therefore a win for all.
What is Required to Financially Hedge Steel

1. A Reliable Market Price Index

2. A Hedge Price Agreement Between a Buyer and a Seller

3. A Process for Settlement that Meets Regulatory Scrutiny

Since I have made the case for why I believe steel futures are needed, let me now focus the remainder of my comments on what is required to financially hedge steel. I had the opportunity to pioneer the use of steel futures at my previous employer and utilized the services provided by Jeff and his Company-Koch.

The use of steel futures first requires a reliable market price index. It requires the agreement between a buyer and a seller of the steel futures contract, and the process needs to meet regulatory scrutiny.

I can not emphasize enough the importance of a robust market price index. The price index is what couples the financial futures world with the physical steel world. It is used in both the steel futures and physical steel contracts to meet regulatory “effectiveness” measurements. The price index needs to meet the requirements on the next slide.
A Reliable Market Price Index

- The Price Index is Accepted as a Fair Representation of Market Changes
- There is a Price History to Allow Correlation and Trend Analysis
- The Price Index Process is Well Understood
- Blends Market Observations from Mills, End-users and Traders

For the price index to be fair, it needs to blend the price observations from all types of market participants to avoid biased skewing of the price.

A common misunderstanding in evaluating a price index is the belief that it must equal the transaction price that a buyer or seller has historically settled on. The correct understanding is the price index needs to be a fair representation of the base price market changes over time.

There are a number of differences that can impact the correlation of historical transaction prices versus a base price index. Contract prices, among other items, may include extras for special steel qualities, may include delivery cost, and may fix the price for certain lengths of time. Market price changes continue to occur during the contract period in the price index. So the key requirement in comparing a price index to historical pricing is to take into account the aforementioned items for your specific buying or selling situation.

One of my biggest struggles at my former employer was convincing people that the price index discovery process was fair. A thorough understanding of the price discovery process and ideally participating in it are two items I strongly recommend when using a price index in physical contracts.
The top chart shows that WSD’s prior price tracking and Brand “C”’s consistently are in good agreement over time on market direction. The magnitudes and timing of the peaks and valleys match very well.

The SteelBenchmarker™ which was launched by WSD in April, 2006 is shown in the bottom graph versus Brand C. I believe the “Safety in Numbers” benefit of the SteelBenchmarker™ can clearly be observed in the smoothness of the price changes. It collects observations of market prices twice a month from market participants representing mills, end-users, traders, and stockholders.

The internet availability of the SteelBenchmarker™ also makes it a very accessible price index for all market participants. The process is clear and simple and participation is growing. We expect that the SteelBenchmarker™ price index will be used in steel futures trading.
A Hedge Price Agreement Between a Buyer and a Seller

- Each Party Needs to Understand Their Hedge Performance Objectives
  - Meet Financial Budgets
  - Establish Forward Pricing to Reduce Volatility Exposure (Cost, Profits, Investments)

- The Process and Hedge Service Provider Can Make a Difference
  - Trading Liquidity
  - Ease of Transaction
  - Traded Forward Price Curve Visibility

- Still Requires Finding the Middle Ground of Market Price Expectation

The use of steel futures to place hedges against future price risk is best served if there is a strategy behind the actions. Understanding the measurement objectives is an important step in gaining acceptance in your company for the use of steel futures.

Meeting financial budgets or reducing your forward price risk from market price volatility are strong examples of why to use steel futures trading.

There is much evolution taking place in the steel futures space. Several of today’s panelists represent some of the players.

A key point on this slide is that steel futures still require agreement between a buyer and a seller. Price volatility makes it difficult to reach agreement since the range of possible price outcomes is very large. I believe a key milestone in steel futures will be the advent of daily visibility of the forward price curve from the settlement of open interest. This information will enable better calibration of the steel futures participants to achieve more successful trades.
A Process for Settlement that Meets Regulatory Scrutiny

- Financial Hedges that Meet “Effectiveness” Criteria (FASB 133 in USA) and IAS39 Do Not Require Unrealized Gains or Losses to be Taken to Income
- Hedge “Effectiveness” is Best Achieved by Using the Same Price Index in Physical Contracts and Financial Hedges with Similar Cash Flow Timing
  - “Safety in Numbers” www.steelbenchmarker.com
- Pre-Financial Qualification of Hedge Providers is a Recommended Practice
- Trading Exchanges and Over-the-counter (OTC) Provider Additions will Likely Improve Steel Trading Liquidity
- OTC Providers can Provide Services to Simplify Accounting

My last slide and probably the most important slide is that we must satisfy the accountants. Steel futures trading is not speculation, it is price-risk management of forward pricing risk from market volatility.

The gem on this slide is that accounting “effectiveness” of a steel futures hedge is best achieved by using the same price index in your physical steel contracts that is used to settle your steel futures contracts. The “Effectiveness” measurement is a key requirement to avoid the booking of unrealized gains and losses to income.

In conclusion, while there are still limited choices today in steel futures, the need to manage forward price-risk is growing. I predict that a steel futures process that can provide trading liquidity, trading visibility on future prices, and that uses a robust steel market price index can provide significant advancement in serving a growing need for steel futures.

I look forward to its continuing evolution because steel futures is a win for all.

Thank you for your attention.
Mill Consolidation and a Buyers Perspective

The intent of this article is to discuss three major changes occurring in the global steel industry; consolidation of producers, higher rates of demand growth, and the impact on regional pricing trends.

First some background on the author. Pat McCormick recently joined World Steel Dynamics (WSD), a world-renowned steel information and consulting company. He comes to WSD with 30 years of global steel buying experience with a fortune 500 company. Pat is excited about his new role as managing partner with WSD because he sees the opportunity to add focus to the buyer-seller interface.

It is from the above vantage point that the author will explore and comment on the buyer’s perspectives of steel industry consolidation.

M&A activity sure to continue at a high rate

The rejuvenated financial positions and soaring EBITDAs of many steel companies are fueling an unprecedented wave of consolidation. EBITDAs for non-Chinese steel companies increased from $28 billion in 2002 to $118 billion in 2006 and Chinese steel companies increased from $7 billion to $15 billion over the same period. The steel mills’ huge cash flows have giving them the wherewithal to acquire others; however, if they are not careful, they may be acquired themselves. Steel company investors and investment bankers are feeding the frenzy; they are pressing management to be bold when it comes to mergers and acquisitions. In Europe, we have recently seen the large merger of Arcelor/Mittal and Tata’s intention to acquire Corus.

Overall, M&A activity seems sure to continue at a high rate no matter what the industry circumstance: WSD’s expectation is that, by 2010 there will be five to ten companies with a capacity range of 50-125 million tonnes.

Steel mill consolidation not unnoticed by the steel buying community

A positive buyer perspective on global steel industry consolidation is the appealing attributes of uniform product quality, service and supply relationship being available from a single steel company in multiple regions of the world. Automotive and appliance companies are good examples of companies that need these attributes because of their global manufacturing presence and their need for high quality steel products.

A negative buyer perspective is the concern about steel pricing and availability. Buyers are also apprehensive about their potential loss of steel buying clout as the steel producers become larger entities. A simple example is a steel buyer of 1 million tonnes per year can only be 1% of Arcelor/Mittal’s supplying portfolio assuming the buyer places all of its business with this company.

Mill consolidation concern to steel buyers is real

If we analyze recent World Steel Dynamics Steelbenchmarker price information, which is a composite of price observations from many steel market participants, we can see that a change has occurred in the pricing tendencies within and between regional markets. Price volatility has increased and the price spread between regional markets has also increased since June 2004.
The World Steel Dynamics Steelbenchmarker is a web-based steel price tracking system which has two big advantages over other market price tracking services. The advantages are the frequency of price observations and the large number of market participants who contribute price observations. The frequency is twice a month versus once a month for other services and the number of registered price providers is 250 representing steel users, traders, and mills. The Steelbenchmarker reports are available to all market participants via the internet. The sign up process is easy and can be accessed at: www.steelbenchmarker.com
What has contributed to the rise in price volatility and the increase in price spread between regions? I have added trend lines to the next SteelBenchmarker global pricing chart and offer the following explanations.

**SteelBenchmarker™ HRB Price**

USA, China, Western Europe and World Export
(WSD's PriceTrack data, Jan. 2000 - March 2006; SteelBenchmarker data begins April 2006)

1. There was a negative slope (labeled A) in the global steel pricing trend prior to 2002. A positive slope (labeled B) has occurred in the global steel price trend since the beginning of 2002. The author attributes the change in slope direction to the change in the global demand growth rate for steel. Developing country growth (i.e. China especially) and their appetite for steel has more than doubled the global steel demand growth rate in trend B versus trend A.

2. The price volatility has also increased when comparing the width of trend B to the width of trend A. Again, the author attributes the price volatility change to the change in the global steel demand growth rate. The increase in price volatility results from the time lag which occurs between increases in global demand growth and increases in global steel production. The steel demand growth increase initially strains existing global steel capacity and trade patterns until new regional production comes on line. A significant consequence of this timing lag can be observed in the pricing pattern of net importing regions like the United States where steel production is not growing much and the region needs to compete in the global market to attract imports.

3. A pricing breakout from trend B occurred in 2004. This is an example of how a net importing region like the United States went into buyer panic mode. Pricing “shot the moon” due to the time lag and pricing incentive required to attract sufficient imports from other regions. The huge price premium that occurred in the United States cascaded into the European market and eventually the Asian market as exports to the United States and then Europe became more profitable than domestic prices for steel producers.
4. The recent Chinese market price trend C appears to be moving in the opposite direction of the other regional markets in price trend B. The downward Chinese trend is being driven by the massive additions of steel capacity and production in China. Steel production in 2006 has increased faster than steel demand and has transitioned China from a large net importer to a large net exporter. As China increases its exports you can observe a decrease in prices in the other regions and observe an increase in prices in China.

5. The price spread between regions remains very large. This observation feeds the buyer concern about mill consolidation adversely impacting pricing and availability. While we know that the overall level of global mill consolidation is still limited in that the top 15 steel producers make up only one-third of world steel production, steel consolidation in the United States and Western Europe is much more advanced. The consolidating mills have adopted a “production management” approach to support pricing in their regional markets. China is quite different in that the steel producers are highly fragmented and their “production management” approach is if we will build capacity, we will operate it. In January 2006, the pricing in China fell below the cash cost of many producers and in-turn made exporting to other regional markets very attractive.

6. My conclusion is that steel consolidation is directly impacting steel pricing in the Western markets and indirectly in the Asian market. The consolidators’ quick action to cut production output during times of weaker orders is supporting prices at higher levels in these regions. Their production cuts also impact availability when increased steel orders return. These impacts eventually attract more imports which provide export opportunities to more fragmented markets such as China.

7. Buyer behavior compounds the steel pricing and availability effect from mill consolidation and will be discussed next. Markets that have a considerable consolidation and are net importing regions have the most price and availability risk.

Let me describe how buyers’ behavior can compound the pricing and availability impacts from mill consolidation. The setting is in the United States’ market where the flat-rolled steel producers are heavily consolidated and imports are required to balance market demand.

It starts with a decrease of orders from customers. Spot market prices start to reflect the lower order rates. Some customers compound the reduction in mill orders further as they decrease their inventory levels as they speculate on the depth and duration of the price decline. Concurrently, buyers will also decrease their reliance on imports since they are fearful imports will become a pricing liability in the forward market.

Mills are quick to turn down production in response to the decrease in steel orders. Since three mills have 70% share of the domestic flat rolled market, their production cuts have significant market impact. Smaller mills may be showing a rising prosperity to follow the production cuts.

The table is now set for availability issues to occur in the market. Mills have reduced their production output, buyers have reduced their reliance on imports, and some buyers have reduced their inventories. As soon as increases in orders occur, domestic mill lead times extend and spot market prices firm. As market prices revert, the benefit of reduced inventories also reverses and results in additional increases in orders. The deluge of orders results in a further extension of mill lead times and increases the occurrence of late deliveries and in some cases can lead to shortages of supply. The duration of supply concerns last until the domestic mills have increased their production output, customers have replenished their inventories, and customers have increased the flow of imports to rebalance the market.
Price speculation behavior of some buyers adds to market pricing volatility and availability risk. This is especially true in consolidated markets where mills have adopted a “production management” approach to support price and in markets where imports are required to balance demand.

In closing, the global steel market is as dynamic as I have ever seen it my 30 years of experience. The mill consolidation frenzy is still in its early stages. Steel buyers must consider how market price volatility, large pricing spreads between regions, and availability swings take an economic toll on their company and industry.

I encourage all industry participants to reassess their buying and selling approaches to achieve more stability in the steel markets. Please remember that WSD is available to be part of your team.

Very truly yours,

Pat McCormick
Managing Partner
World Steel Dynamics
SteelBenchmarker™ benefits for the individual firm:

Steel mills. Relationships with customers may become less confrontational as more pricing arrangements are based on steel benchmark prices (after adjustments for premiums and discounts). Transactions should tend to include more tonnes over a longer period of time. The steel mills at times will have the opportunity to hedge forward steel prices, and/or to buy scrap, via financially settled contracts, on a highly favorable basis. Steel companies perceived by investors to be winners in the new environment may benefit from higher enterprise values.

Steel middlemen. The ability to hedge the steel price risk – especially in today’s highly volatile steel price environment – will be “transformational” for this group. The fear that most worries the owners of these middleman companies – i.e., debilitating losses if steel prices move the wrong way – will be greatly lessened. Enterprise valuations of the companies may rise substantially. Market share will increase if customers can be offered the opportunity to purchase steel on a steady price basis and the transaction with the middleman is backed up with a supply arrangement with a leading steel mill. (Note: Middleman companies include steel traders, steel processors, steel service centers and steel scrap processors.)

Steel users. If the cost to procure steel is less volatile, steel users that make steel-intensive products will have more security in pricing their final products. Rebar fabricators will be able to bid on one-year contracts with considerably less risk. Steel buyers that manufacture steel-intensive products may have higher profits since they will less frequently be impacted by unexpected steel price increases.

We strongly encourage the readers of this report that are steel buyers or sellers to log on to www.steelbenchmarker.com and sign up as a price opinion provider. Only our “providers” receive all of the figures when they become available the second and fourth Wednesdays of each month.
Steelbenchmarker.com

- A global steel benchmarker pricing system designed to provide a reliable set of benchmark prices that will become trusted by steel buyers and sellers the world over.

- Over the next few years, it will become the foundation for an extraordinary surge in the trading of financial instruments for the hedging of steel price risks.

- Benchmark prices are published for hot-rolled band, cold-rolled coil, standard plate and rebar in each of these regions: the USA, Western Europe, China and the world export market. Also: a USA steel scrap price benchmark.

- Register to provide pricing opinion data, and receive benchmark prices the moment they are published at www.steelbenchmarker.com.
Patrick McCormick, former VP Global Steel Purchasing at Emerson, has recently joined World Steel Dynamics as a managing partner. His presence will permit us to broaden our product offerings.

To date, our Strategic Information Service has consisted largely of: a) information systems that track the steel industry’s condition; b) an “early warning system” that seeks to anticipate steel pricing developments; and c) reports that analyze and forecast changes in the industry’s structure and the mills’ “pricing power.”

WSD is now pleased to offer management consulting and price-risk-management services to those that buy and sell steel. On a confidential and hands-on-basis, Pat will advise clients on approaches that may improve their steel buying and/or selling performance, while at the same time reducing risk.

Steel Pricing Stratagems

- - - New WSD Service - - -
Direct support to buyer and sellers

- Purchasing strategies
- New market trend analysis
- Negotiation support
- Steel Financial transactions
- Best practice benchmarking

Are you buying right?

- Performance monitoring
- Buying and selling issues
- Consortium buying
- Special price hedging

Are you selling right?

Strategic Information System

- - - Traditional WSD Service - - -

“Early Warning System.” Reports include:

- Global Steel Alert
- Inside Track
- Truth & Consequences
- The Thermometer
- The Cyclone

The annual Steel Strategist
Core Reports and Monitor Reports
Steel Success Strategies

Propriety information systems include:

- SteelBenchmarker™ Prices
- World Cost Curves
- Global Metallics Balances
- Global Steel Finance
- Global Steel Alert (monthly deliveries, imports and exports by product)

- Steel PriceTrack™ database

Strategic consulting / competitive assessments
Investment banking support

Please contact Pat at 201 503-0920 or pmccormick@worldsteeldynamics.com
RE: Pat McCormick - New Managing Partner at World Steel Dynamics

Let me introduce myself. My background consists of thirty years of experience with a world renowned global manufacturing company. I started my career working with the steel industry in the development of steel products for magnetic applications. After writing most of the steel specifications I was asked to learn how to buy the steel I specified. Twenty years of global buying experience followed. My expertise is in creating and managing sourcing strategies, fostering and maintaining strategic supply relationships, developing products from mills with new mill technologies and mills in developing countries, training and building sourcing organizations and looking for the next competitive edge. I was one of the early adaptors in applying the use of steel futures in multiple markets and to multiple products to control cost. I will continue to closely follow steel futures developments.

The opportunity to join Peter and Karlis is very exciting to me. I join WSD at a time when the dynamics of the steel industry are running very fast and when our clients are facing many challenges and complex questions. It is my hope to offer new perspectives to our clients about the critical developments taking place in the steel industry. My experience coupled with WSD’s steel industry knowledge provides a unique value opportunity for our clients.

I look forward to hearing from you.

Best regards, Pat

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Pat McCormick’s Purchasing Perspectives and Strategies

“As the World of Steel Turns II”

Perspectives

• The WSD SteelBenchmarker™ shows the pricing spreads between markets are very large between the West and the East – i.e., the China price trend is of particular interest because of its dominate production volume in the East and its increasing position as a global net exporter. Historically, large pricing spreads between markets have proven to be unsustainable. Exports from the lower-priced ones are attracted to the higher-priced markets. The typical corrective behavior is a reduction in price in the higher-priced markets and an increase in price in the lower-priced markets.

• Chinese market prices continue to show very little price change over the past two months which is surprising considering exports have reached a 60 million tonne annualized rate in October. One explanation is that the apparent demand growth in China has started to slow due to seasonal factors and due to some of the credit tightening measures undertaken by the Chinese central government. We also believe that the November Chinese export rate is starting to slow as non-Chinese buyers become more cautious buying imports as their market prices weaken.

• The stickiness of market prices is another surprise considering the degree to which steel mill orders have declined as buyers reduce their inventories in search of lower steel prices. While we have reports of Tier Two mills breaking ranks by more aggressively dropping prices than Tier One mills, the rate of price decline observed in North America and Europe is much less than one would normally expect. The implication is the mill consolidation of flat rolled products in these regions is having an impact on prices. Prices do not fall as fast as they did in prior order declines presumably because mills are using more pricing discipline. In addition, prices are expected to fall for a shorter duration of time as mills make significant reductions in their production output.

• Buyers remain in a conundrum as they look into 2007 and consider their contracting needs for steel. “Should a buyer negotiate for short or long-term pricing?” remains a puzzling question. While falling prices would suggest a short-term pricing position, a buyer needs to consider the forward buying risk of mill production cuts in the Western markets and the risk that imports will diminish further as the price gap between regions narrows. Once the inventory correction runs its course and seasonal factors reinvigorate demand, tight supply will once again be facing buyers and will likely swing pricing power back to the mills.

(continued on next page)
Strategies

- The best advice I can give buyers continues to be: match the price risk of your buying portfolio to that of your company’s selling portfolio. Since the market price will continue to be volatile with potentials for price movement in both directions over short periods of time, the safe play is to avoid speculative pricing risk. In other words, your company’s ability or lack of ability to pass on steel price changes to your customers will determine the ratio of fixed and variable-price agreements in your buying portfolio.

- A key challenge for buyers today continues to be how to achieve the fixed-price portion of their buying portfolio. Many mills still do not offer fixed price agreements because of the magnitude and frequency of price volatility in their markets. While financial hedging tools for steel are still early in their development, they do offer an alternative way of fixing prices. The key requirement is to match the market price index used to settle the financial hedge contract with the price index used in the physical steel contracts.

- There will soon be some announcements coming regarding new financial hedging tools for steel. The expectation is the new financial hedging tools will be more user friendly and will use price indices that are more robust in how they determine market prices. One price index that merits buyer and seller attention is the “SteelBenchmarker™”. The “SteelBenchmarker™” collects price observations twice a month for steel products from 300 registered market participants. There is no restriction on market participant registration and participation. Everyone gets only one input per product and region. Register at www.steelbenchmarker.com.

I welcome you to give me a call to discuss the issues.

Best regards,

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