



# Price Driver #1

## Walking on Quicksand

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Perspectives from WSD's steel pricing forensic scientist

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### Definition

**Steel Pricing Forensic Scientist:**  
*A person who applies scientific knowledge and experience to the study of steel pricing and market behavior.*

### **Footing unsure for USA steel buyers and sellers**

Steel buyers and sellers in the USA are struggling to grasp the strength of their footing as they take the path forward into 2008. While buyers acknowledge that a shift of market psychology is starting to occur in favor of the mills, the continuation of relatively weak steel orders has kept the strength of the forward price outlook in question. The forward outlook is further compounded by recent developments; i.e. the impact of the sub-prime lending defaults on the economy and the general perception that the risk of recession has increased. It is not clear yet whether it is the buyer or the seller that will sink deeper into the quicksand.

At WSD, we have looked beyond the current market pricing mire. WSD has forecasted a price recovery for some time now and still expects a significant upturn in steel prices in Q4 2007 and early 2008. Our USA spot market price forecast is shown below and our view of the price drivers is detailed in this report.

### **2007 – 2010 USA Spot Market Price Forecast (\$ per net ton)**

	<b>Current*</b>	<b>2008</b>	<b>2009 – 2010</b>
Hot Rolled Band	\$519	\$580	\$580 +/- \$50
Cold Rolled Coil	604	680	680 +/- \$60

\* *SteelBenchmarker™* - September 10th

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## Price drivers

1. USA steel demand recovers as housing stabilizes in 2008 and the lower interest rates help consumers. The 1/2 % rate cut by the Federal Reserve Banking Committee on September 18, 2007 is additional evidence of proactive actions to reduce the risk of recession and to bolster the ailing housing market.
2. The US dollar remains on the weaker side as compared to the last several years. Our bias considers the large USA trade and budget deficits, the money management trend toward increased international holdings where a weaker dollar is desired, and the near-term potential for lower interest rates as the Fed tries to stabilize the economy. A weakening US dollar raises steel prices and raw material prices outside the USA and raises the pricing umbrella within the USA.
3. USA prices are significantly undervalued versus most other global markets. The September 10<sup>th</sup> *Steelbenchmarker*<sup>TM</sup> in Exhibit B shows that the USA hot rolled band price remains very close to the world export price. The lack of pricing spread confirms that the USA market is no longer attractive to imports and also shows that USA mills have the opportunity to increase their exports.
4. Raw material (iron ore & scrap) prices continue to increase as global steel production continues strong year-over-year growth. The strong global demand for metallics compounded by a weakening dollar continues to push raw material prices up. CVRD is reported to be targeting a 20 to 25% price increase in its 2008 iron ore mill contracts.
5. USA mill consolidation continues to be a factor in supporting prices. US Steel's recently announced acquisition of Stelco removes one more independent producer from the North American steel supplier chess board for buyers.
6. The Chinese Government continues to take measures to restrain exports by increasing taxation on steel exports and by adopting more restrictive measures. In addition, demand for steel in China remains strong and cost pressure from metallics is supporting the need for higher prices.

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## Higher steel prices likely

WSD remains biased toward higher steel prices in the extended outlook. We place 60% odds that prices continue on a positive trend beyond 2008. While steel prices remain cyclical our observations over the last several years are;

1. Pricing swings are occurring more frequently.
2. Higher pricing lows as the lowest price in each cycle is higher than the last.
3. An overall positive slope to the price trend.

High rates of steel demand growth continue to be forecasted by the IISI. The higher demand is largely driven by infrastructure additions in developing countries and is funded by high rates of global savings, manufacturing expansion & transfer to low cost regions and higher oil & mineral prices. Raw material prices are also enjoying a positive price trend (from the viewpoint of the owners of raw materials) as steel production continues to increase at high rates of growth globally. Rising Chinese exports have been effectively absorbed by the high rate of global steel demand growth outside of China. It now looks like a steel shortage is likely to occur if China reduces its exports too quickly. A dramatic upside impact on global steel prices is likely if this occurs.

## Analysis of recent price behavior

Steel prices in 2007 have shown a departure from recent market pricing trends. Mini mills in the USA were not able to fully collect scrap price increases in flat-rolled steel; USA market prices fell below Western European market prices; and USA imports declined as the spot price fell to world export price levels. Two market shocks (automotive and housing) reduced USA domestic steel demand and were compounded by reduced orders from steel distributors & traders as they reduced bloated inventories. The weakness in demand is believed to be the key driver of the 2007 pricing trend departure.

A new analytical approach for evaluating market price risk.

WSD's pricing algorithm can be used to determine the upside or downside market price risk for steel buyers or sellers.

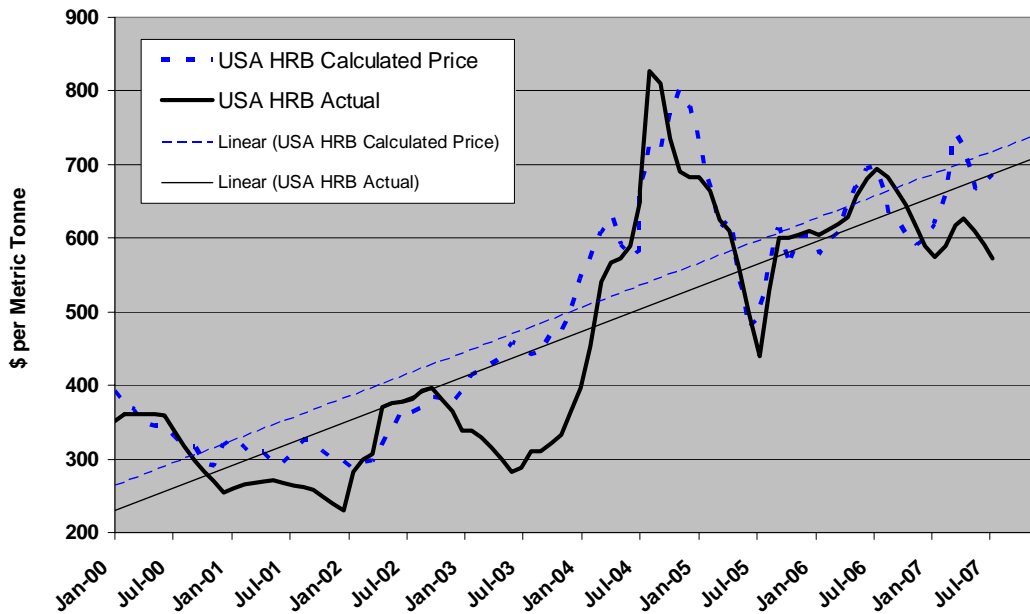
Exhibit A compares the actual spot price of hot rolled band to the theoretical price calculation over the last seven years. The calculated price is based on the US dollar to Euro exchange rate and the cost of #1 busheling scrap. These two drivers alone are used to adjust the actual January 2000 HRB spot price to calculate the forward monthly prices. The exhibit shows that the WSD algorithm is a reasonable predictor of the actual steel prices observed from 2004 through 2006. During this time period USA mini-mills had sufficient pricing power to fully collect scrap price changes and integrated mills supported the price changes. In 2007, there is a significant pricing departure between the actual HRB price and the theoretical price. One reason is attributed to the aforementioned demand shocks. While previous pricing departures can be observed in 2001 and 2003, the USA steel industry during these time periods was significantly different than today.

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USA mills were financially desperate, mill consolidation was only beginning and the mill pricing tendency was to chase the last ton in the market by lowering spot prices.

## Exhibit A

**Historical Price Driver Analysis  
USA Hot Rolled Band Spot Market Prices**



If we apply the above model to calculate the 2008 price outlook using a 1.4 US dollar to Euro exchange rate and an average scrap price of \$300 per gross ton (#1 Chicago Busheling), the result is a hot rolled band price of \$623 per net ton. The higher calculated price indicates that WSD's forecast of \$580 per net ton may be on the low side considering that steel demand may be rising again in 2008 and the inventory correction has apparently run its course.

Exhibit B shows the September 10th *SteelBenchmarker*<sup>TM</sup> hot-rolled band prices. Prices have started to recover in the USA and Europe. In contrast, the daily prices that WSD receives from Steelhome in China shows that the rapid rise in Chinese ex-works domestic prices has recently stalled over the past week with prices dropping \$13 per metric tonne to \$477 (without VAT). The extent of the current weakness in USA market prices can be observed in the lack of a normal price premium between the USA market price and the world export price (FOB the port of export). USA prices will need to rise significantly before imports can regain any momentum.

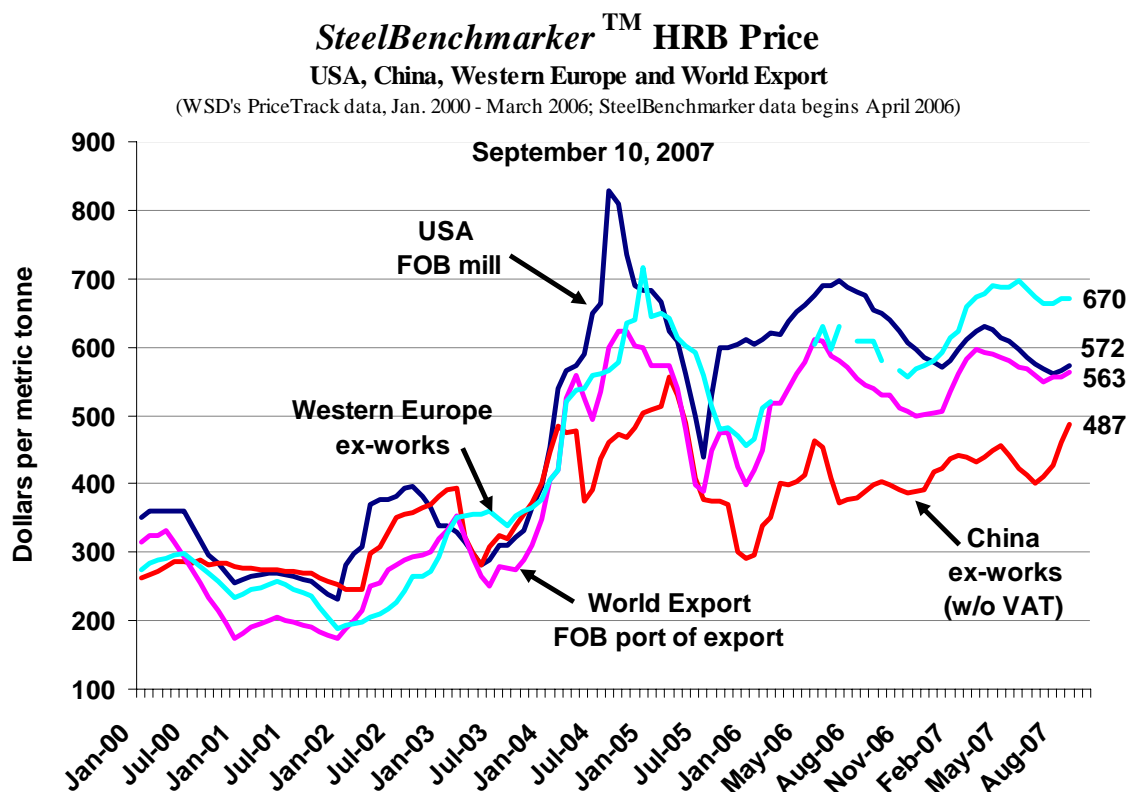
At this point in time USA imports continue to recede and distributor inventories have been brought back into line. Spot market prices for flat-rolled steel have increased \$11 per net ton for hot-rolled band and \$12 per net ton for cold rolled coil over the last four weeks based on *SteelBenchmarker*<sup>TM</sup> results. The main factor that is holding USA prices

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back from rising faster right now is weak demand from automotive, appliance and other housing related industries. Mills have announced October 1 increases ranging from \$20-30 per ton (only partially successful based on current market feedback).

Surging metallics prices are another factor driving the mills to raise prices. A senior mill executive told us recently that the expected large magnitude of global raw material price increases would be a challenge to fully collect from steel buyers in 2008. Scrap surcharges are rising again in October. Chicago #1 busheling prices have increased \$12 per gross ton in September and \$10 per gross ton in August.

## Exhibit B



The cold-rolled steel price spread versus hot rolled band has become more compressed in 2007 due to the demand shocks from weak automotive, appliance and other housing related steel consumers. We expect that the spread will increase \$10 per net ton in 2008 as demand stabilizes in these sectors.

In conclusion, my advice to USA steel buyers is to be cautious of your next step in the quicksand. While you may fend off some of the mill price increase expectations for the moment, beware that the global market cards are already stacked against you and that it is the buyers that will likely sink deeper into the quicksand. This is based on the assumption that the Fed will keep the economy from slipping into a recession.

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