

# Key Factors Affecting Copper/Brass & Nickel/Stainless Markets & PVF Prices

## Copper and Nickel's Fundamentals are in Stark Contrast.

- ❑ Demand for copper is outpacing supply as evidenced by the first half's 281,000 MT deficit for refined copper.
- ❑ Global exchange stocks are projected to be at historical lows during Q1 of 2011 which is eliciting prognostications for prices to challenge record levels.
  - Copper inventories were at 6 year highs as recently as February but have since dropped by nearly 33%.
    - ❖ This has taken many analysts by surprise since Q3 is historically a time of reduced demand.
    - ❖ Q4 traditionally brings strong demand which should place even more pressure on global inventories.
- ❑ LME Nickel inventories moved off of their historical highs in February but remain at more than 5 weeks of global consumption.
- ❑ Due to their inability to generate adequate supplies of 18-8 (304) scrap, China continues to increase production volumes of pig iron.
  - China's supply and quality of refined nickel pig iron will go a long way towards establishing a ceiling and a floor to international nickel prices.
    - ❖ Beijing's pace and scale of clampdowns against energy intensive and polluting industries should be a key factor in nickel's mid-term price path.
- ❑ Copper's demand is comparatively much larger and broader based than nickel's and not as susceptible to speculative influences.
- ❑ Nickel appears to be benefiting from copper's (the bellwether metal) strength in the eyes of commodity traders and prices have risen for little or no rational reason.
  - As speculative positions increase, so does the risk of yet another radical price correction.



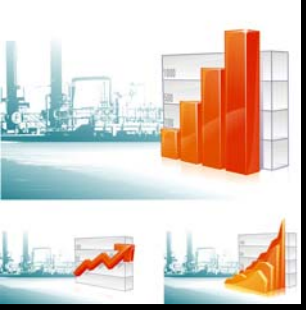
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## **Major Stainless Steel Consumers Remain Apprehensive.**

- ❑ Over just the past two years, major mills have experienced numerous quarterly swings from profit to loss due primarily to nickel's extreme volatility.
- ❑ The broad consensus is that the unprecedented 44% global output increase in H1 2010 vs. H1 2009 was due mainly to widespread re-stocking following the worldwide economic crisis and China's infrastructure-gearred stimulus program - which is coming to an end - and not healthy demand from prime end-use sectors.
  - Some analysts believe the sharp increases to re-stocking were more speculative than compulsory.
  - Actual Y-T-D PVF demand in the U.S. appears to defy this thinking.

## **Stainless steel surcharges are crucial to demand sentiment.**

- ❑ October's surcharges are approximately 45% higher than January's *but* 20% lower than June's.
  - Nickel's surge in April proved to be too much too soon and subverted consumer confidence levels for a sustained recovery of demand.
  - Major stainless inputs – Chromium and Molybdenum – are on the rise and helping to drive surcharges higher.
    - ❖ Surcharges have increased every month since August through at least November.
      - This bodes well for price stability and the potential for global purchasing activity to become more consistent and less reactionary.



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## **The U.S. Dollar Being at its Lowest Level Since February and Commodities Being at their Highest Levels Since February is not Coincidental.**

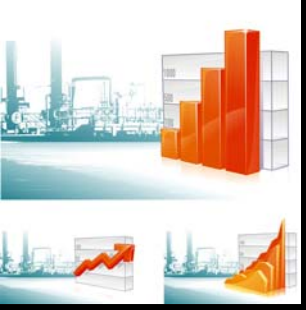
- ❑ A weaker dollar makes the full gamut of commodities cheaper for non-U.S. currency holders and enhances the appeal of base metals as an alternative investment.
- ❑ Base metals prices are closely aligned to the dollar's changes against a basket of six major currencies.
  - The Euro has been an astoundingly accurate gauge of copper and nickel's price paths throughout 2010.
- ❑ The pace and rate at which the yuan strengthens against the dollar will be an important aspect of Chinese manufacturers' costs.

## **An Inherently Paradoxical Relationship Between Major Oil Price Moves and Price and Demand Levels for PVF Exists.**

- ❑ Spiking of oil prices increases PVF demand and in turn, material price levels; the inevitable price corrections are horrific.
- ❑ This was not lost among most major PVF market participants during the feast then sudden famine era of 2006 through Q3, 2008.
- ❑ The more than ample supply of oil foretells stability for crude oil prices over the next several months which could help usher in a period of relative tranquility for PVF demand and cost/price levels.

## **BRIC Nations will Continue to Drive Global Demand Levels for Nickel and Copper.**

- ❑ China is now the world's second largest economy and currently consumes more than 1/3 of the world's output of refined copper and nickel.
  - 2009 consumption levels of copper in China were up about 20% over 2008's.
  - 2009 production levels of stainless steel in China were up about 25% over 2008's.
    - ❖ IF and when China's industrial growth slows, it will be imperative for developed nations to pick up the slack.
- ❑ While their current demand totals absolutely pale in comparison, Brazil, Russia and India have the potential to more than offset any cooling growth in China - especially if the pace of these nations' modernization efforts picks up.



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## **Price Outlook for Copper and Nickel Based PVF Products**

- ❑ Despite the fact that macro economic data is not as strong as earlier in the year, investors appear to be ruling out the possibility of a double-dip recession. Still, the global economic recovery looks to be a long, slow process, particularly in industrialized nations. But, U.S. Federal Reserve policymakers stand poised to further ease monetary policy to support continued economic recovery which should support base metals prices.
- ❑ The stainless steel price volatility experienced throughout 2010 will most likely continue through the end of the year and into next year as many market participants remain on the sidelines looking for a pick up in real demand before committing to building inventories. We expect 2011 material costs to be underpinned by higher costs of key alloying ingredients, chromium and molybdenum. Another bullish sign for forward prices is the intent of the Russian government to raise nickel export tariffs from 5% to 10%. This move would certainly have an important effect on stainless steel costs/prices as Norilsk Nickel of Russia is the world's largest nickel producer.
- ❑ Price increases across the entire spectrum of copper-based PVF and plumbing lines appear to be inevitable. The supply constraints are real and market focus is clearly concentrated on fundamentals, which combined with a weak dollar promises to continue driving costs/prices higher. The only potential impediment would be prolonged bad news from the housing and property sectors since copper is widely used in construction.