

A Pricing Perspective written by Aptium Global, Inc.

Non-Ferrous Price Trends for Q3 and Beyond

MetalMiner™ is the creation of Lisa Reisman and Stuart Burns, the co-founders of Aptium Global Inc. Both Reisman and Burns have sourced and traded metals products around the world. The authors of dozens of articles, sourcing tools, and white papers, Reisman and Burns write their award-winning blog MetalMiner™ to share strategies, insights, and trends for cost avoidance and cost savings opportunities for metals related purchases. MetalMiner™ is available online at:

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A note from the authors and founders

This may sound sad, but it's true: We lie awake at night thinking about how manufacturers could save or avoid spending money on their metal purchases. It's a strange thing to think about, but alas, someone has to do it. Through MetalMiner™, we take a global perspective on the issues, trends, strategies, and trade policies that will impact how you source and/or trade metals and related metals services. From aluminum and steel to rhodium to gallium, from the thinnest gauge foils to the largest castings and forgings available today, we'll cover a wide range of diverse topics—including green sourcing, lean sourcing, global pricing trends, capacity constraints, supply market M&A activity, and more. As always, you can reach us at info@agmetalminer.com to share comments and ideas.

Continue reading for our cost-cutting ideas.

Lisa Reisman and Stuart Burns



Copper Prices: After the Drop Which Way Next?

by Stuart Burns on May 20, 2010

Copper has fallen dramatically this month and particularly over the last few days. A Reuters article reprinted in Mineweb asks the question is “Copper a Buy or a Sell?” – a similar conundrum faced by many copper consumers at the moment – should I take advantage of these lower prices and book forward now or wait in the expectation prices have further to fall?

The drop in oil and metals prices has been in response to two main drivers as a Financial Times article explains. The sharp correction in commodities came as the US dollar surged to a four-year peak against the euro. As most commodities are priced in dollars, the appreciation of the US currency tends to lower their price of the commodity. The article quotes Kevin Norrish, a commodities analyst at Barclays Capital who when referring to Europe’s debt problems and concerns about a Chinese economic slowdown said, “People are getting very worried about the macroeconomic landscape, but the reality is there is no sign of a real impact on economic growth and commodities demand.” The speed of the fall was driven more by investors liquidating long positions than by those shorting the market. As the prices came off and risk aversion took hold investors liquidated positions indiscriminately the paper said.

Analysts appear split as to whether the metals market has further to fall. The chartists are seeing continuing weakness and say the greatest risk is to the downside. Certainly many including HSBC are expecting the euro/dollar exchange rate to fall to 1.20 in the coming weeks which will push the dollar higher and further depress prices, but the fundamentals medium to longer term are looking strong. Rio Tinto along with many other miners are predicting lower copper production this year than last due to falling ore grades. Andrew Harding, chief executive of the group’s copper unit, is quoted in a Reuters article as saying mined copper output would fall to about 680,000 tons in 2010 from 804,700 tons last year. Rio’s main copper mines are Bingham Canyon in the United States and stakes in Escondida in Chile and Grasberg in Indonesia. “The global copper market would likely see a small surplus this year, but the market balance would flip into a strong deficit in 2011”. Harding is quoted as saying, “ We will probably end up this year in a little bit of a surplus, but probably with a very strong deficit next year and that is likely to be sustained.”

Standard Bank in an investors report today saw the highest correlation between copper prices and the equity markets. Saying if equities stabilize and move higher, so will copper. The issue is with risk aversion in charge both Asian and western stock markets have been headed downwards, but it could be a useful pointer going forward.

The answer is no one knows which way prices are going next. In all probability there will be continued weakness at least for the next few weeks as the consequences of Europe’s debt problems are evaluated. Much will also depend on perceptions of future growth in China. So far the authorities have engaged in low key quantitative tightening, raising reserve requirements and lending criteria. But inflation is likely to become an issue in China this year and if the authorities have to step on the brakes fears that growth could drop sharply and with it metal demand could have a profound impact on copper prices possibly driving them down to US\$ 2.50/lb. On balance a wait and see approach is probably best, the most likely scenario being prices will trade sideways or fall going forward rather than rise from current levels. ●

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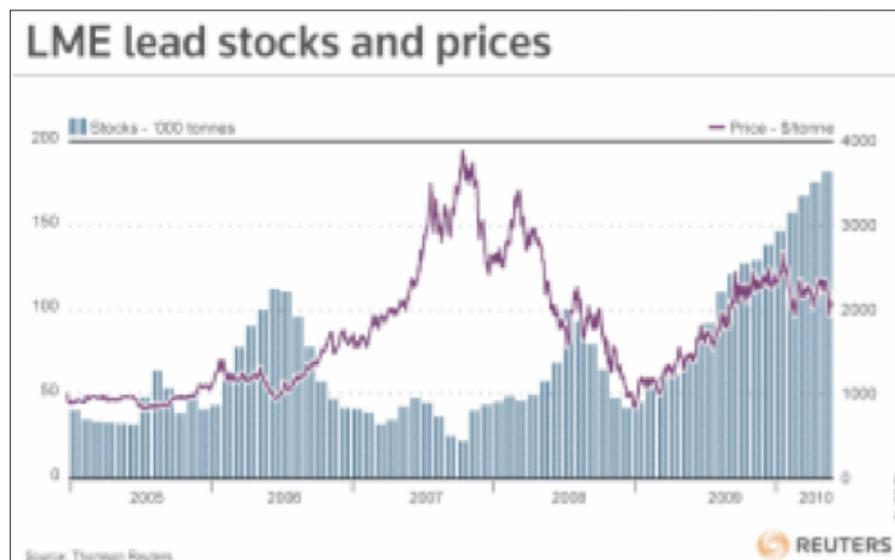
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Lead, Production, Demand and Prices – Part One

by Stuart Burns on May 19, 2010

At the end of 2009, we wrote on the strength of the lead market and reported predictions from several quarters that saw lead prices as high as US\$2700 per ton by the middle of the year. Well five months later and the lead market is looking a little different. Prices have dropped from \$2500 per ton to a low of \$1875 per ton although they have recovered a little to around \$1975 per ton today. Meanwhile stocks have continued to rise as this Reuters graph shows to around 185,000 tons on the LME and western world commercial stocks reached 408,200 tons according to Reuters report.



The lead market is undoubtedly in surplus. The International Lead Zinc Study Group ILZSG reported last month that they expected the market to be in oversupply to the tune of 100,000 tons this year. At the same time, Chinese production is expected to rise. Reuters reported that dozens of small producers in China's main production center around Geiju are expected to come back into the market in June when power and water supplies improve, potentially adding up to 33,000 tons per month of production, equivalent to a boost of 14% to China's production.

Around the world producers are continuing to bring capacity back on stream or to increase production from existing facilities. In Japan smelters are reported to have increased production by about 8% from Q3, 2009 and some 17% from 12 months ago.

Although lead was caught up in the euphoria of rising copper prices last year and in Q1 this year, the fundamentals of over-supply are becoming more and more compelling as this year has unfolded. ●

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Lead, Production, Demand and Prices – Part Two

by Stuart Burns on May 20, 2010

Consumption has been robust with rising automotive and e-bike production adding to a strong replacement battery market. North American shipments of replacement automotive batteries increased by 27.14% in March from February, and were up 6.35% from year-ago levels according to this Reuters article. The Battery Council International said in its monthly report that for the year through March, replacement battery shipments rose by 3.08% to 24,218,000 units from 23,494,868 units for the first three months of 2009.

The Chinese e-bike market is also continuing to grow strongly. Sales will reach US\$11 billion this year with some 22 million e-bikes produced in 2009 plus millions more of additional kits to convert ordinary bicycles to electric. Although the e-bike manufacturing sector (like much of China) is plagued with over capacity – there are some 2600 firms with licenses to build but only about 1000 firms are thought to be using them – firms are still ramping up production for further growth. According to an Economist article, the biggest manufacturer, Jiangsu Xinri Electric Vehicle Co, produced 1.8m e-bikes last year. One rival, Tianjin Aima Science and Technology Co, says it is gearing up to make more than 5m bikes a year; while another Jiangsu Yadea Technical Development Co hopes to triple its sales to 3m this year. Having seen how Chinese manufacturers in other industry sectors set themselves these incredible growth targets and within 12 months achieve them there is every probability manufacturers will continue to grow as anticipated. The main threat for lead demand comes from research and trials the larger producers are doing to convert to lithium batteries. As we have seen in the power tool market, lithium batteries can make rapid inroads into the existing technology – in that case NiCd – with devastating effects on demand. Each e-bike usually carries 4 batteries weighing some 35-60 lbs in order to achieve any reasonable range (which can be prolonged when driving at night by switching all the lights off!!). More power and/or lighter weight would be attractive selling features in high specked models.

So demand is at least currently solid and although the market is in oversupply, it has been for some time and hasn't come as a shock so why have prices dropped back so much and where are

they likely to go looking forward? The 20-25% drop in prices has been due to a sharp correction in all metals prices, particularly copper, due to the Greek sovereign debt crisis and investors taking flight at a tightening of bank lending in China. The situation in Europe is rumbling on in spite of the immediate problems of default having been avoided. Markets are now worried about long term prospects for growth if member states are having to cut deficits so severely and so early in the recovery cycle. Credit tightening in China is likely to continue, possibly even an increase in interest rates so while the surplus is not going away and production and growth are in reality likely to continue on current trends, sentiment has changed and with it the expectation of ever rising prices, at least for now. As such, lead prices probably represent fair value for fixing forward at anything below \$1900 per ton. Reuters seems to feel there is good support for lead at \$1850 and certainly the price bounced back from its early May low of \$1875 rather promptly. For the time being the metal is likely range bound from \$1950-2100 and will require a considerable increase in the general risk appetite to see prices moving above that level in Q3. ●

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The State of Metals Markets – A Conversation With Casimir Capital’s Wayne Atwell

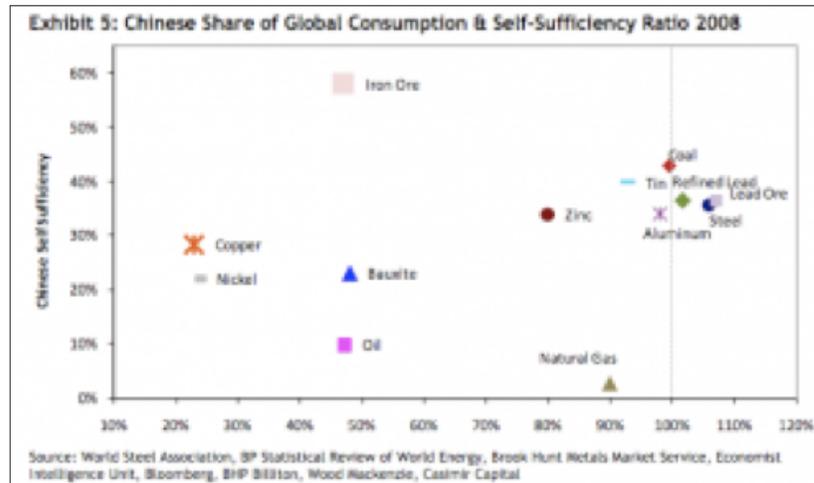
by Lisa Reisman on May 6, 2010

Last week, I had the opportunity to speak with Wayne Atwell, Managing Director of Casimir Capital. Wayne has toured over 500 mines and mills on six continents. He has over 35 years of experience in the field of investment analysis for Metals and Mining industries. He was selected as one of the ten best buy side stock pickers by Institutional Investor magazine several times and was rated as one of the top analysts in metals and mining by Institutional Investor and Greenwich Associates for more than twenty years. We wanted to hear Wayne’s perspectives on metals markets and in particular if he saw any trends that we may have missed on MetalMiner.

Wayne had a few things to say about copper, “Metals are pretty much ahead of themselves. Sometimes folks think all metal fundamentals are the same but that’s not true. Copper has a steep cost curve but zinc doesn’t. The zinc cost curve is much flatter – all of the producers are pretty much at the same level. China only supplies 22% of its own copper. China is investing all over the world to lock in supply.” In terms of nickel, Wayne suggested that it had the best fundamentals of all of the base metals running a small surplus this year and a deficit next year.

We spent a fair amount of time discussing China. We found two pieces of data in particular quite interesting. The first involves “intensity of use” which relates to the amount of metal consumed by an individual (measured on a per capita basis). We have seen an analysis of this before, primarily from the steel industry. But specifically some of Casimir’s research suggested, “China’s share of global metal consumption has risen from 3-5% 25 years ago to 30-40% today.” The reasons for that growth all relate to rising living standards and the general urbanization of the Chinese economy. Casimir

suggests the intensity of metal use will continue to grow for another ten to fifteen years. The second piece of data that intrigued us involves China's share of global consumption and its self-sufficiency ratio. Wayne suggested that some of the run-up in certain metals likely relates to where China lacks commodity self-sufficiency particularly copper, nickel, zinc and aluminum. The chart below from Casimir's research highlights this in greater detail:



Though we haven't plotted China's self-sufficiency in other commodities, Wayne mentioned a couple of additional metals in which China relies upon imports including molybdenum and metallurgical coal.

Finally, we asked Wayne to comment on price trends. He pointed to momentum as an important factor in the psychology of prices, "Eventually, the metals will trade on their fundamentals. In the next month or two we'll see a correction – but we're in a secular bull market." ●

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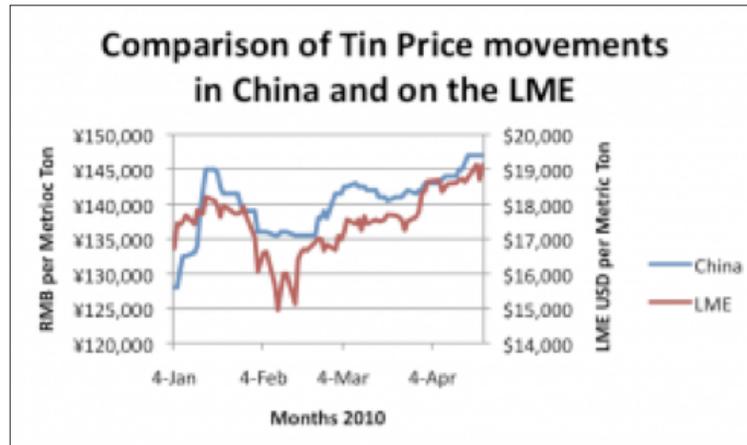
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Tin Prices Strong on Supply Market Concerns

by Stuart Burns on April 26, 2010

Tin is not a large market compared to copper or aluminum or indeed most of the other base metals. Nor is it as tied to the major industrial activities such as automotive or construction – some 60% goes into solders and for tin plate. It is however, along with copper, the oldest metal traded on the LME with the official contract launch in 1877. With the demise of many western mines, tin is now almost solely mined in Asia and South America. Recently, prices have been on the up, more so than other industrial base metals and so we thought it would be interesting to take a look and see why this often overlooked metal is suddenly becoming so popular.

Prices have risen on the LME by some 20% in the last two months but by less than 10% in China as this graph with data taken from the MetalMiner IndX illustrates:



The price increase is not, as with so many other metals, driven by investor demand or ETF's. In this case it appears to be supply fundamentals – doesn't that restore your faith in markets? Although tin has and does often track copper and other metal prices, this year the tin price has been influenced by falling LME inventories down 18.6% so far this year according to Standard Bank. At the same time, exports from Indonesia, one of the key swing suppliers, have declined since last year due to a combination of falling onshore grades requiring miners to move more into offshore dredging and the monsoon period in Asia disrupting operations in January and February. Exports in February are down 18% on the same month a year ago in stark contrast to every other metal where production is up.

Adding to Indonesia's woes, the drought in south-western China is raising concerns that producers in the region will not be able to secure sufficient water supplies for the smooth running of the concentration process and that low water levels could impact electricity production needed for smelting. Strangely, Chinese imports have fallen from 5727 tons in Q4 to 1506 tons for the first two months of this year but this probably reflects tight concentrate supplies. The fall in concentrate consumption could explain the draw down on finished inventory taken from the LME. Net refined imports into China are up 54% in February from January and 104% year over year.

All in all tin looks to be supported by some sound fundamentals and even if we were to see a sell off in some of the other metals like aluminum, tin is unlikely to follow. ●

Chinese Aluminum Smelter Costs Set to Rise

by Stuart Burns on May 18, 2010

China's aluminum smelters have a problem – power, or to be more precise, power costs. Coming fast on the heels of an electric power cost increase announced last week in Henan, the industry has now heard that all subsidized power deals are to be withdrawn.

The announcement last week was a result of rising thermal coal prices pushing up the price for generators in Henan – home for a fifth of China's production. Spot prices of thermal coal in China's top coal port Qinhuangdao rose by about 2% last week and are expected to rise further as Chinese power plants buy more coal to build stocks ahead of the peak consuming period in the summer.

Generators have pushed up electricity prices by 6% to compensate for a series of rising coal costs and have also advised smelters that they will face rationing if power consumption reaches 75-80% of total capacity. The Henan hike would increase the cash production cost for aluminum smelters in Henan to around 15,500 yuan per ton, compared to the average cost of about 15,000-15,700 yuan for other smelters in China according to a ChinaMining article.

Meanwhile market prices for aluminum have fallen in line with softer demand and a fall back in world prices. Currently domestic China prices are 15,350 yuan per ton according to MetalMiner's IndX but smelters said they could see capacity being closed if prices dropped to 14,500 yuan per ton. That was before the announcement last week in a Reuters article by the National Development and Reform Commission to the effect that power costs for energy hungry industries such as aluminum, cement, steel, zinc, ferro-alloy, calcium carbide and sodium hydroxide would double from June 1st. For firms that fall into the restricted category, power surcharges will rise to 0.1 yuan per Kw-hr from 0.05 yuan previously and any preferential power rates in the name of direct trade between power generators and power users but without any approvals must be halted immediately, the report said. In the past, calls by Beijing to remove preferential power deals have been ignored by regional governments keen to protect revenue and local employment, but now the authorities have issued a direct edict.

Smelters use 13,000-15,000 kilowatts of electricity to produce one ton of primary aluminum in China so a doubling of electricity costs from 0.05 to 0.10 yuan per Kw-hr would add 700 yuan or US\$100 per ton to smelter costs. This is enough to nearly bring the spot price of 15,350 back to the 14,500 point at which the industry was saying smelters could close. With the market in oversupply a trimming of capacity would be no bad thing but if played out in any volume would likely support LME prices at or above current levels going forward. ●

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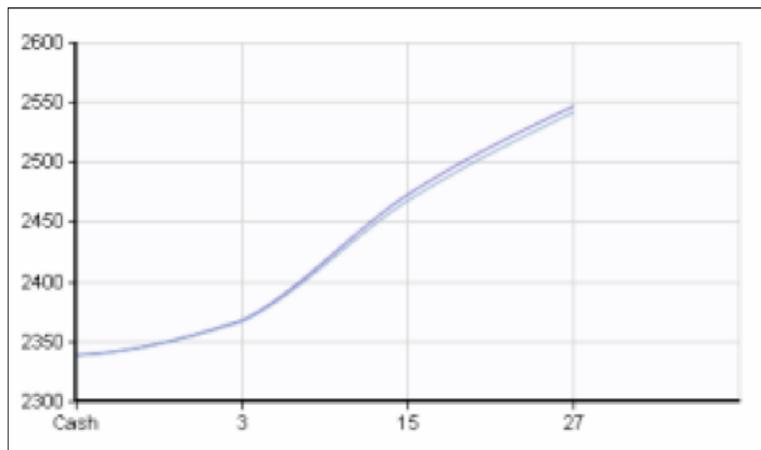
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Is Aluminum Headed for a Fall?

by Stuart Burns on April 21, 2010

Aluminum is looking vulnerable. Although the market has been in oversupply for at least the last two years and exchange traded stocks have risen to record numbers, prices have been supported by a financing game that goes like this. Banks and large trading houses can buy or take delivery of primary aluminum ingot at spot or up to three months forward prices and sell that metal for delivery 15 months out on the LME. The 15 month forward price has been consistently higher than prices for shorter time frames, by virtue of a strong forward price curve or contango, as the following graph courtesy of the LME shows:



For much of the first half of 2009, the difference between 3 month seller and 15 month buyer prices was 8-9% of the 3 month price, leaving room for a little profit after warehousing costs, insurance and finance if you can access the ultra low interest rates that have been available based on Fed/ Central bank rates of 0.25% or so – as the banks and major traders can. Major central bank rates have not crept up yet although there is expectation that Fed rates will have to rise later this year in the US if the economy continues to sustain its current promise. But the forward price curve has been flattening as the metal price has risen such that now the difference between 3 month seller and 15 month buyer is just 4%. Even after this weeks drop and compared to the cash or spot price the difference is only 5%. As the margin has narrowed investors have kept the ball rolling by taking metal out of comparatively higher priced LME approved warehouses to store it in cheaper off market premises. The approx US\$ 45-50 per ton reduction in costs sustained the trade through the third quarter but towards the end of last year and early this year it would seem the game was winding up.

Signs of spot market weakness are beginning to show with Japanese physical premiums down 5% quarter on quarter to US\$ 122-124/ton according to a World Aluminum review of the second quarter contract negotiations. With the US dollar looking much firmer this year than last there is less of an incentive to invest in metals as a hedge against a falling dollar, not that aluminum was a principal beneficiary of that trade, copper rose on dollar weakness more as a result of its stronger fundamentals. Even Rusal's announcement this month that they are looking to park 1 million tons of aluminum into a physically backed electronic exchange traded fund can be seen in light of the closing of the long term finance window as an attempt to find ways of maintaining production rates in an over supplied market.

Some analysts now predict an easing of aluminum prices this year, a position we took in our Price Perspectives report in Q1. That would be welcome for consumers but a blow to the nascent recovery in the distributor market which has just been getting accustomed to a few months of gradually rising prices and volumes. A drop now would bring demand from distributors to a halt as buyers up and down the supply chain revert to wait and see. ●

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