

Metal Bulletin Research

Base Metals Weekly Market Tracker

Analysis, trading strategies & forecasts for the aluminium, copper, lead, nickel, tin & zinc markets

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Contents

Aluminium 2

Aluminium alloy 5

Copper 6

Lead 9

Nickel 12

Tin 15

Zinc 18

Demand indicators 21

- **Prices broke higher, but rallies faltered**
- **Long-term price trends are still upwards**
- **Weakness is providing buying opportunities**

Aluminium: The attempt to rally ran into selling pressure and aluminium prices have now retreated alongside crude oil and equity markets. With LME stocks still holding at a high level, there is little to suggest any tightness, which favours the downside overall in the short term and will keep prices under pressure in the longer term.

Aluminium alloy: Trading remains thin, prices are still consolidating, but the risk seems to lie to the downside. We would look to sell a break of \$1,650/tonne.

Copper: Prices failed to build on their break higher and with stocks steadily climbing and cancelled warrants falling, there seems little immediate reason to be too bullish, especially considering the gains already seen. The long term outlook remains bullish, especially on supply issues, but it may be too early to trade basis these.

Lead: The fact that the rebound in lead prices faltered so quickly does not suggest a particularly robust market. That said prices are high so it is not surprising the market is nervous.

Nickel: Prices continue to oscillate in a wide range, which supports our view that the market is largely balanced. However, stock rises are likely to keep the cap on prices until an underlying pick-up in demand is more tangible.

Tin: Prices attempted to push higher, but the move was short-lived. High stock levels and low stock activity suggest a subdued market, but the weaker backwardation may prompt more nearby selling. Supply concerns and disruptions continue to cloud the longer-term outlook.

Zinc: After the strong October rally it is not surprising prices are consolidating. Stock activity remains quiet, but high zinc prices and an uncertain medium term demand outlook suggests consumers are content to live hand-to-mouth and this may mean prices start to struggle.

Weekly LME cash price changes and trend indicators

		Al	Cu	Ni	Zn	Pb	Sn	BMI	CRB	\$/€
Change, week ending:	09 Oct	0.4%	1.8%	6.7%	3.0%	-0.3%	-0.3%	1.9%	1.5%	-1.0%
	16 Oct	3.4%	1.6%	1.2%	4.3%	1.8%	-0.6%	2.0%	0.8%	-1.3%
	23 Oct	1.9%	4.3%	3.7%	6.7%	4.6%	0.4%	3.8%	2.6%	-0.5%
	30 Oct	1.4%	1.3%	-2.4%	5.0%	-0.2%	2.0%	1.2%	0.6%	1.6%
Weekly average price:	30 Oct	1,937	6,543	18,695	2,259	2,309	15,252	313	389	0.678
Expected price trend:	This week	U	U	U	U	U	U			
	Three months	U	U	U	U	U	U			
	One year	U	U	U	U	U	U			

Source: Metal Bulletin Research

Prices are in \$/tonne, % changes are week-on-week, and trend indicators are basis the latest weekly average

BMI is MBR's Base Metals Price Index, which is a weighted average of the six primary LME metals, indexed to January 1999 = 100

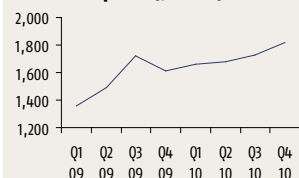
CRB Index is the Friday reading of the Commodities Research Bureau's spot index of 22 commodities, for which December 1967 = 100

Aluminium – Market trends and analysis

- US dollar stays weak, but aluminium prices tumble
- \$2,000/tonne appears to be a psychological barrier to the market
- LME inventories continue slow and steady decline

Market overview

Aluminium prices (\$/tonne)



Source: Metal Bulletin Research

Aluminium prices fell towards \$1,900/tonne after a US dollar and oil price fuelled rally faltered. MBR sees \$2,000/tonne as being a significant barrier to upward price moves as the threat of increase supply from smelters restarting capacity at this level is weighing down on the market. Furthermore, if price rises above \$1,700/tonne were difficult for

mid-stream producers to push onto their struggling consumer bases, prices above \$2,000/tonne would be even harder to pass on. On the stock side, a consistent and steady decline in LME stocks since August suggest the world market is in balance. MBR expects this trend to continue in Q4 as demand outside of Asia is not expected to surge.

After another rally attempt fizzled towards the end of last week, 3-month aluminium descended to \$1,900/tonne. This is approximately where it had been prior to US dollar driven rally that saw it peak at just above \$2,000/tonne last week.

US dollar falls out of favour

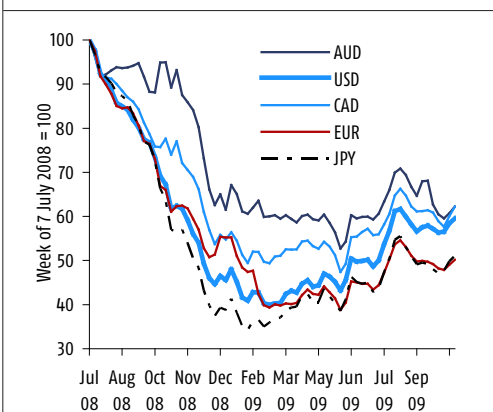
Although the US dollar remains at a multi-month low against other major currencies the aluminium market seems to have ceased focusing on it so strongly and the industry fundamentals appear to have reasserted themselves. MBR sees the lack of a pick-up in physical demand in Europe as being one of the major reasons for this. At the present time it appears that \$2,000/tonne represents a significant price ceiling for the metal and MBR suspects this ceiling is due to fundamentals. As a case in point, Century Aluminium recently suggested it would restart capacity if the price was sustained above this ceiling and it is likely other companies would do likewise. The threat of this supply increase appears to be working against price rises.

LME stocks continue to decline

Inventories at LME warehouses have been declining almost consistently since the end of August. The pace at which stocks have been declining so far suggest that the global aluminium market is in balance. In absolute terms, a 30,000-tonne decline in total LME stocks in October represents less than 1% of warranted metal. As a result, total stocks as weeks of consumption barely moved, and as of Q4 they remain at unsustainably high levels of over 10 weeks. The flows of metal by location reinforce the trend we have seen over the last few months, with stocks in Asia seeing the larger outflows and those in North America the largest net inflows. LME warehouses in Europe have also seen outflows of metal in October, but if we believe what we hear from physical players, these declines cannot be attributed to improved demand in the region.

Weekly average LME 3-month aluminium price index in AUD, USD, CAD and EUR

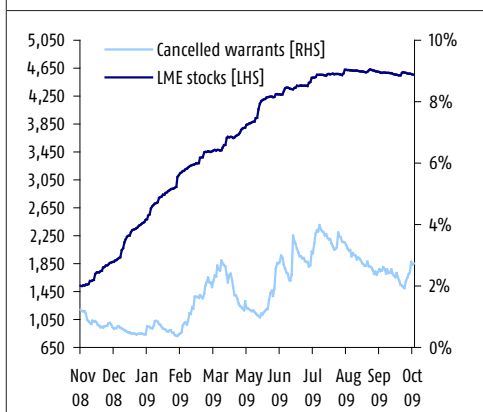
Prices higher in all currencies last week



Source: LME, Metal Bulletin Research

LME aluminium stocks ('000 tonnes) and cancelled warrants (% of total stocks)

A notable rise in cancelled warrants last week



Source: LME, Metal Bulletin Research

Aluminium continued – Fundamentals

- Overall, European demand for primary stagnates...
- ...but demand from Central/Eastern European auto makers helps the ME
- We expect to see a slow improvement in European demand

Fundamental outlook

The European market has failed to pick up significantly after the summer holiday slow period. The only premium increases we have seen, and we are likely to see, have been minor relative to gains seen in previous weeks. The automotive scrappage schemes are either ending or will end soon and even while they were full swing, vehicle production failed to reach 2008

levels. However, certain geographical regions have seen marked increases in extrusion demand and this has been helping Middle Eastern mills geared for export stand above the lacklustre performance of their peers. MBR expects a continued, but slow improvement in European demand for Q4.

Global primary aluminium supply-demand balance ('000 tonnes) and base case price forecasts, 2008-2012

	2008 Year	2009f Year	2010f Year	2011f Year	2012f Year	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3f	2009 Q4f	2010 Q1f	2010 Q2f	2010 Q3f	2010 Q4f
Production	39,337	36,735	38,884	41,581	44,972	9,685	9,983	10,103	9,566	8,723	8,796	9,379	9,835	9,531	9,655	9,823	9,876
% change year-on-year	3.2%	-6.6%	5.9%	6.9%	8.2%	7.1%	6.8%	3.5%	-4.1%	-9.9%	-11.9%	-7.2%	2.8%	9.3%	9.8%	4.7%	0.4%
Consumption	38,555	35,135	37,972	41,393	43,893	9,509	9,872	9,699	9,475	8,313	8,562	8,961	9,299	9,162	9,559	9,371	9,880
% change year-on-year	2.6%	-8.9%	8.1%	9.0%	6.0%	6.2%	4.1%	5.0%	-4.2%	-12.6%	-13.3%	-7.6%	-1.9%	10.2%	11.6%	4.6%	6.2%
Balance	781	1,600	912	188	1,079	176	111	404	91	409	234	418	536	368	96	452	-4
% of consumption	2.0%	4.6%	2.4%	0.5%	2.5%	1.8%	1.1%	4.2%	1.0%	4.9%	2.7%	4.7%	5.8%	4.0%	1.0%	4.8%	0.0%
Total stocks	4,975	6,575	7,487	7,674	8,754	4,370	4,481	4,886	4,976	5,686	6,520	6,938	7,475	7,843	7,939	8,391	8,387
Weeks of consumption	6.7	9.7	10.3	9.6	10.4	6.0	5.9	6.5	6.8	8.9	9.9	10.1	10.4	11.1	10.8	11.6	11.0
LME cash price	\$/tonne	2,575	1,614	1,848	1,965	2,065	2,729	2,941	2,792	1,836	1,360	1,488	1,806	1,802	1,760	1,860	1,910
	¢/lb	116.8	73.2	83.8	89.1	93.7	123.8	133.4	126.7	83.3	61.7	67.5	81.9	81.7	79.8	84.4	86.6

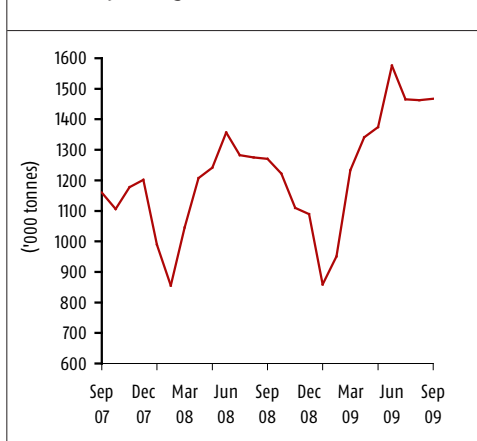
Primary aluminium alternative annual cash price forecast scenarios, 2009-2012

	2008 Year	2009f Year	2010f Year	2011f Year	2012f Year	Assumptions
High case scenario	\$/tonne	1,600	2,000	2,300	2,500	A rapid erosion of the high levels of on- and off-warrant stocks due to a quick recovery in demand in China and in other major economies. Also delays in announced smelter projects across Asia.
	\$/lb	0.73	0.91	1.04	1.13	
Low case scenario	\$/tonne	1,350	1,350	1,500	1,700	A combination of a slow recovery in demand across the world and a surge in production in China, as well of the commissioning of announced projects in India and the Middle East.
	\$/lb	0.61	0.61	0.68	0.77	

Source: LME, IAI, WBMS, Metal Bulletin Research

Chinese semis-fabricated aluminium production, Sept 2007 – Sept 2009

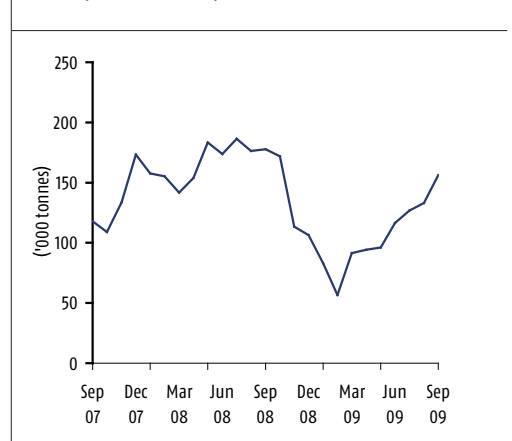
semis manufacturing at record levels...



Source: CNIA, Metal Bulletin Research

Chinese semi-fabricated aluminium product exports, Sept 2007 – Sept 2009

...but exports still below pre-recession levels



Source: GAC, CNIA, Metal Bulletin Research

Aluminium continued – Technicals

- Aluminium tried higher but ran into overhead supply
- Support at \$1,880–1,890/tonne is expected to hold
- Overall, look to range trade within the Bollinger bands

Technical analysis

Aluminium prices are broadly trading sideways with a slight upside bias. The breakout of the down channel in recent weeks has faltered with a pullback to the top of the former channel around \$1,880/tonne. This also coincides with where the uptrend line lies at \$1,890/tonne. This should provide a good area of support, but with the RSI and stochastics trending lower it does look as if support will be

tested. If it breaks, then a return towards the \$1,830/tonne area would not be surprising and this may provide a short-term jobbing opportunity. Overall, with the Bollinger bands converging again, prices look set to continue consolidating and as such we would look for range trading opportunities between the Bollinger bands, which currently run between \$1,830/tonne and \$2,000/tonne.

Moving averages and Bollinger bands: Moving sideways, but converging



Stochastics: Bearish

RSI: Bearish

Aluminium alloy – Technicals

- Alloy is trading sideways in thin conditions
- Stochastics suggest a drop towards the lower Bollinger band
- Waiting to see if prices break lower

Technical analysis

Alloy prices have been trading sideways since the start of September and there seems nothing to suggest that this is about to change with Bollinger bands and RSI generally moving sideways too. The Bollinger bands have set a narrow corridor between \$1,670/tonne and \$1,768/tonne. Last week prices nipped up over the upper Bollinger band, but the higher price level was not sustained and with the stochastics

indicators now falling sharply again further weakness looks set to follow – albeit within the Bollinger bands' range. Trading remains thin and as such the market is waiting for fresh developments. Until these appear trading is likely to remain choppy, but rangebound. An eventual break of the lower Bollinger band could lead to some further price weakness, so we would not be averse to shorting a close below \$1,650/tonne.

Moving averages and Bollinger bands: Drifting sideways again



Stochastics: Bearish

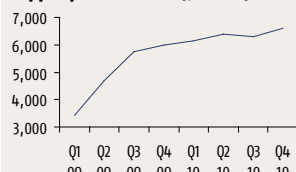
RSI: Neutral

Copper – Market trends and analysis

- Prices have been very volatile...
- ...but the weekly uptrend continued, as expected
- After recently turning net long, funds on Comex are getting more bullish

Market overview

Copper price forecast (\$/tonne)



Source: Metal Bulletin Research

Trading was very choppy last week, with month-end bookkeeping and a flurry of important economic data releases – not all of which met expectations – sending commodity, currency and equity markets one way and then another. Overall, however, we think the latest data has confirmed that the global recovery in metals demand is on track and should continue on this path into early 2010. We

had expected an up-week for prices and, despite the volatility, LME cash prices averaged 1.3% higher than the previous week, so it was a good call. With confidence in the recovery story reinforced, the dollar softer again, and mine supply disruptions continuing, we would not be surprised to see copper's overall sideways-to-higher trend continuing.

Sentiment and prices were very volatile last week, but overall we think sentiment remains positive, and copper prices should continue to reflect this. Our Q4 2009 price forecasts may be in line for another upgrade.

Slave to economic data released last week

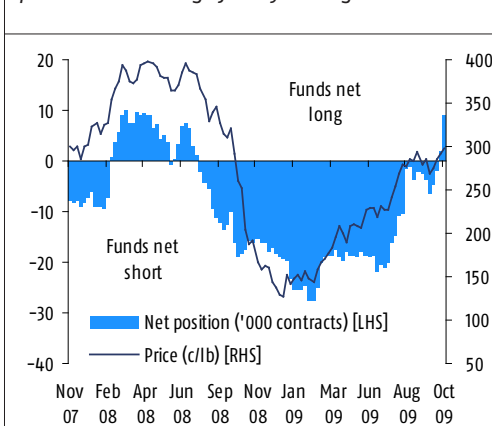
Just after our last report was published, disappointing US consumer confidence data was released, which undermined sentiment across all markets. An unexpected decline in new home sales followed on Wednesday. Traders turned risk averse, the dollar strengthened and base metal prices were sold off. A brief respite was provided on Thursday by Q3 US GDP growth coming in at 3.5%, above expectations and confirming that the US has emerged from recession. And this week started with a run of encouraging PMI data from China, then Europe and the US, all of which pleased the market (especially the now-expanding forward-looking new orders indices). They indicate that **a synchronized expansion in global manufacturing activity is set to continue into 2010. This is clearly bullish for prices of copper and the other base metals, and as confidence in the recovery grows, support for the US dollar as a safe haven should continue to wane, which would also be positive for metal prices.**

Bullish speculative sentiment growing

The latest commitments of traders report from the CFTC shows that in the week to October 27, non-commercial long positions in Comex copper increased 15%, while short positions fell 8%. This means that after turning net long for the first time in 16 months two weeks ago, the net position has increased to 9,055 contracts (equivalent to 102,682 tonnes), the highest level since April last year.

Net non-commercial position ('000 lots) on Comex and copper price (\$/tonne)

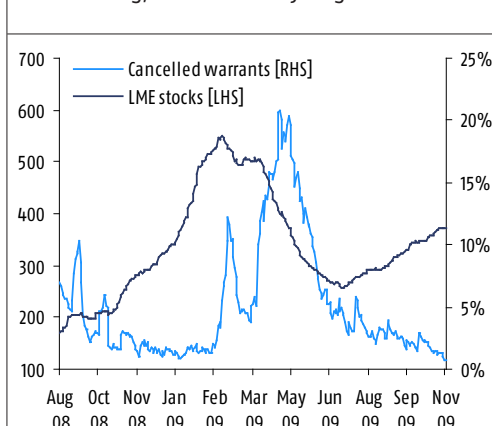
Speculators are now significantly net long



Source: LME, CFTC, Metal Bulletin Research

LME copper stocks ('000 tonnes) and cancelled warrants (% of total stocks)

Stocks still rising, cancellations still falling



Source: LME, Metal Bulletin Research

Copper continued – Fundamentals

- Q4 2009 price forecasts remain below the current average for the quarter
- We still expect to see prices tail off into the year-end...
- ...but dip buyers and supply concerns are providing support

Fundamental outlook

We had recently nudged up our Q4 2009 price forecasts, to \$6,220/tonne. We are now just over one third of the way through the quarter and LME cash prices are averaging \$6,320/tonne, though the range has been wide (\$5,886–6,696/tonne). Our forecasts remain unchanged as we still expect prices to tail off into the year end, as has been the case in recent years. Slower Chinese import demand in Q4 has been the driver of this

trend in the past, and we expect to see it repeated this year. However, dip buying on the LME remains prominent, and if we do not get a deeper correction soon, we will need to upgrade our forecasts again. Supply-side developments are also keeping prices well supported this year. The strike at the Spence mine in Chile, now three weeks long, continues and delicate labour negotiations are starting to hot up elsewhere in the country.

Global Refined Copper Supply-Demand Balance ('000 tonnes) and base case price forecasts, 2008-2012

	2008 Year	2009f Year	2010f Year	2011f Year	2012f Year	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4f	2010 Q1f	2010 Q2f	2010 Q3f	2010 Q4f
Production	18,350	18,170	18,500	19,270	19,670	4,560	4,605	4,675	4,510	4,490	4,535	4,535	4,610	4,575	4,655	4,585	4,685
% change year-on-year	1.9%	-1.0%	1.8%	4.2%	2.1%	3.2%	3.5%	2.6%	-1.7%	-1.5%	-1.5%	-3.0%	2.2%	1.9%	2.6%	1.1%	1.6%
Consumption	18,066	17,804	18,474	19,330	19,950	4,595	4,598	4,483	4,390	4,200	4,500	4,520	4,584	4,549	4,690	4,580	4,655
% change year-on-year	0.1%	-1.5%	3.8%	4.6%	3.2%	2.9%	2.0%	-0.2%	-4.4%	-8.6%	-2.1%	0.8%	4.4%	8.3%	4.2%	1.3%	1.5%
Balance	284	366	26	-60	-280	-35	7	192	120	290	35	15	26	26	-35	5	30
% of consumption	1.6%	2.1%	0.1%	0.3%	1.4%	0.8%	0.2%	4.3%	2.7%	6.9%	0.8%	0.3%	0.6%	0.6%	0.7%	0.1%	0.6%
Total reported stocks	780	1,146	1,172	1,112	832	461	468	660	780	1,070	1,105	1,120	1,146	1,172	1,137	1,142	1,172
Weeks of consumption	2.2	3.3	3.3	3.0	2.2	1.3	1.3	1.9	2.3	3.3	3.2	3.2	3.3	3.3	3.2	3.2	3.3
LME cash price	\$/tonne	6,966	5,018	6,363	6,725	7,400	7,763	8,447	7,694	3,959	3,435	4,676	5,740	6,220	6,150	6,400	6,300
	\$/lb	3.16	2.28	2.89	3.05	3.36	3.52	3.83	3.49	1.80	1.56	2.12	2.60	2.82	2.79	2.90	2.86

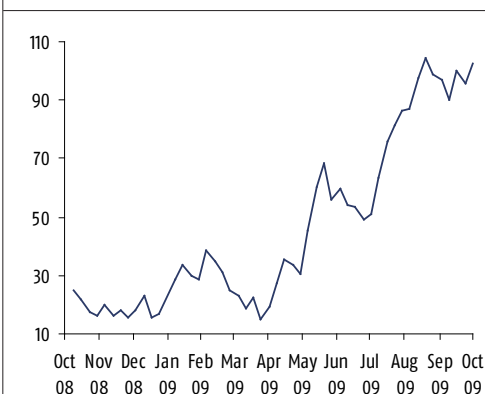
Refined copper alternative annual cash price forecast scenarios, 2009-2012

	2008 Year	2009f Year	2010f Year	2011f Year	2012f Year	Assumptions
High case scenario	\$/tonne	5,250	7,000	8,000	9,000	Assumes extensive supply cutbacks keep stocks at much lower levels than in previous downturns. Aggressive price response in a very tight market when demand returns.
	\$/lb	2.38	3.18	3.63	4.08	
Low case scenario	\$/tonne	4,600	5,500	6,000	6,500	Assumes deeper and longer recession and demand destruction. Falling production costs reduce the necessity to cut supply aggressively, allowing tightness to unwind for longer and stocks rise higher.
	\$/lb	2.09	2.49	2.72	2.95	

Source: LME, ICSG, WBMS, Metal Bulletin Research

Weekly SHFE copper stocks ('000 tonnes)

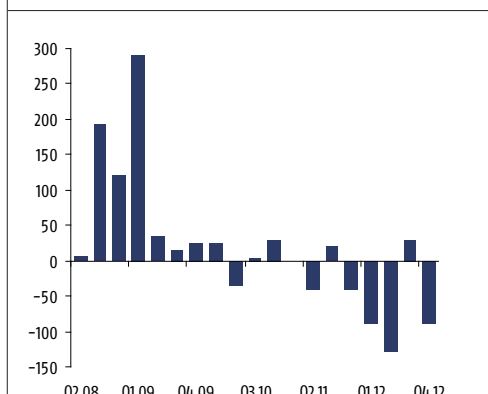
The trend remains upwards, pointing to ample supply



Source: SHFE, Metal Bulletin Research

Global quarterly copper supply-demand balance ('000 tonnes)

The market is now well past the peak period of oversupply



Source: Metal Bulletin Research

Copper continued – Technicals

- Prices start to consolidate again in a sideways range
- The October uptrend line is under test
- Would wait for a clearer picture before trading

Technical analysis

Copper broke out above its multi-month consolidation phase to reach fresh highs for the year at \$6,725/tonne, but prices have once again turned sideways and are now consolidating above the uptrend line that started in early October. The move higher turned the Bollinger bands higher too, so there may well be further gains to be seen as the overall uptrend is once again guiding prices higher. However, technical indicators

are for the most part moving sideways to lower, so the trends are not strong. Indeed any loss of momentum, or move below \$6,400/tonne could suggest the upside break above \$6,540/tonne was a false move, which in turn could see prices fall back into their longer term sideways range. Overall, we would look to buy the next cross higher in the stochastics, but conversely would short a move below \$6,400/tonne.

Moving averages and Bollinger bands: Bullish



Stochastics: Bearish

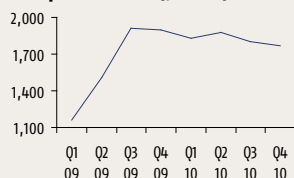
RSI: Neutral

Lead – Market trends and analysis

- Prices turn sideways again
- No sign of a seasonal demand pick-up...
- ...and if it does not arrive, near-term prices will look vulnerable

Market overview

Lead price forecast (\$/tonne)



Source: Metal Bulletin Research

This time last week the near-term direction for lead prices was uncertain. We opted for an up-week in our price trend indicator as we thought lead would be buoyed by strength in the other metals. But while it was generally an up-week for the complex as a whole, lead prices averaged out virtually unchanged. Indeed, technically

this looks like a sideways (albeit volatile) market again now and fundamentally there is little to justify fresh upward direction. In fact, we would argue that from both a demand-side and supply-side perspective, lead are increasingly starting to feel overpriced at the moment.

As we approach the high demand North Hemisphere winter replacement auto battery season, demand for lead seems ominously subdued.

The summer battery season was a disappointment

BCI data for lead battery shipments in North America was disappointing for the month of August. The Northern Hemisphere summer is usually a high demand season for replacement auto batteries, but August saw a 1.4% drop from July. **Although this sector is relatively recession resistant, it is clearly not completely immune to the economic downturn**, as vehicle owners have been deferring maintenance costs and using their cars less, thereby softening or negating the usual seasonal pick-up in demand for replacement batteries.

So far, the run-up to the winter season has been a let-down too...

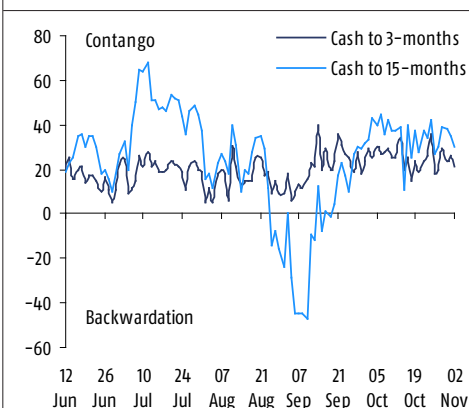
Now in the run-up to the winter battery season, the indicators are again looking disappointing. LME lead stocks have risen steadily, cancelled warrants have faded away to almost zero again, physical premiums are largely stagnant, and high prices are deterring restocking by keeping potential buyers at bay.

...but we remain cautiously optimistic on near-term demand

Vehicle production in Europe and elsewhere has ramped up in recent months, which is helping original equipment battery demand, but with consumer confidence still poor and unemployment still rising, consumers are still putting off purchases of big-ticket items like new cars. That said, we note that some weather forecasters are now starting to predict that the US East Coast will see its coldest winter in 10 years, so this could provide a boost to the replacement battery market in North America, as battery life tends to be reduced by extreme weather. **So we maintain our view that demand for lead should see a pick-up at some point between now and the year-end.**

LME lead cash to three-month and cash to 15-month spreads (\$/tonne)

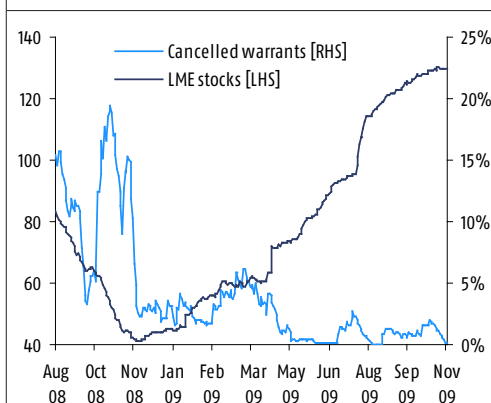
The spreads remain rangebound



Source: LME, Metal Bulletin Research

LME lead stocks ('000 tonnes) and cancelled warrants (% of total stocks)

Cancellations back to almost zero again on weak demand



Source: LME, Metal Bulletin Research

Lead continued – Fundamentals

- WBMS sees the lead market in a 6,000–tonne deficit in the year to August
- This is at odds with the ILZSG, which estimates a surplus
- The surplus may persist into 2010 if Chinese supply growth is not reined in

Fundamental outlook

Last month we noted the ILZSG's latest estimate of the global refined lead market balance. The group sees the market in surplus by 57,000 tonnes in the first eight months of this year. By comparison, the WBMS puts the market in a deficit of 6,000 tonnes, including a 4,000–tonne deficit in the month of August alone. We are skeptical about the WBMS's view of the

market, not least because reported stocks rose by 61,000 tonnes during the period in question, which is much more consistent with the ILZSG's view and our own view. We believe that the difference arises due to the treatment of Chinese trade data, with the WBMS counting the record level of imports seen this year as consumption, when in reality much went into stocks.

Global refined lead supply-demand balance ('000 tonnes) and base case price forecasts, 2008-2012

	2008 Year	2009f Year	2010f Year	2011f Year	2012f Year	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4f	2010 Q1f	2010 Q2f	2010 Q3f	2010 Q4f
Production	8,510	8,601	8,800	8,990	9,230	2,001	2,211	2,188	2,110	2,047	2,168	2,131	2,255	2,190	2,210	2,140	2,260
% change year-on-year	4.5%	1.1%	2.3%	2.2%	2.7%	1.8%	3.8%	11.2%	1.7%	2.3%	-1.9%	-2.6%	6.9%	7.0%	1.9%	0.4%	0.2%
Consumption	8,520	8,493	8,760	9,070	9,420	2,000	2,180	2,180	2,160	2,050	2,055	2,128	2,260	2,125	2,195	2,150	2,290
% change year-on-year	2.3%	-0.3%	3.1%	3.5%	3.9%	-1.8%	1.9%	6.9%	2.4%	2.5%	-5.7%	-2.4%	4.6%	3.7%	6.8%	1.0%	1.3%
Balance	-10	108	40	-80	-190	1	31	8	-50	-3	113	3	-5	65	15	-10	-30
% of consumption	0.1%	1.3%	0.5%	0.9%	2.0%	0.1%	1.4%	0.4%	2.3%	0.1%	5.5%	0.1%	0.2%	3.1%	0.7%	0.5%	1.3%
Total reported stocks	254	362	402	322	132	265	296	304	254	251	364	367	362	427	442	432	402
Weeks of consumption	1.6	2.2	2.4	1.8	0.7	1.7	1.8	1.8	1.5	1.6	2.3	2.2	2.1	2.6	2.6	2.6	2.3
LME cash price	\$/tonne	2,094	1,664	1,949	2,103	2,891	2,316	1,912	1,257	1,160	1,506	1,910	2,080	1,980	1,900	1,925	1,990
	\$/lb	0.95	0.75	0.88	0.95	1.31	1.05	0.87	0.57	0.53	0.68	0.87	0.94	0.90	0.86	0.87	0.90

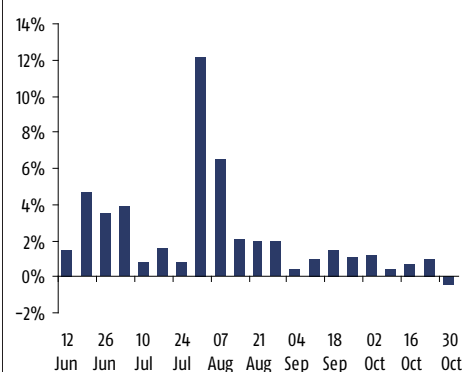
Refined lead alternative annual cash price forecast scenarios, 2009-2012

	2008 Year	2009f Year	2010f Year	2011f Year	2012f Year	Assumptions
High case scenario	\$/tonne	2,094	1,700	2,200	2,400	Assumes the sparse mine project pipeline becomes a greater constraint on supply growth. Demand from the e-bike and renewable energy markets may surprise on the upside.
	\$/lb		0.77	1.00	1.09	
Low case scenario	\$/tonne	2,094	1,585	1,600	1,800	A major downside risk is the potential for rapid growth in China's small-scale mining sector, if left unchecked. Demand may disappoint given the woes of the auto industry.
	\$/lb		0.72	0.73	0.82	

Source: LME, ILZSG, WBMS, Metal Bulletin Research

Week-on-week % change in LME lead stocks

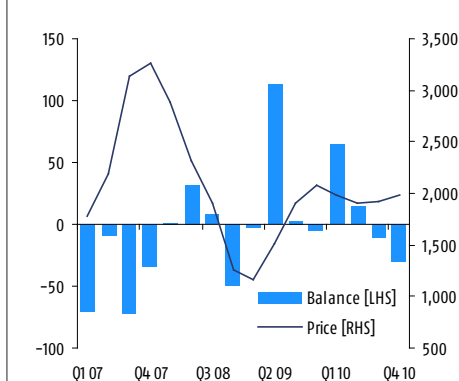
The first down-week for months, but the trend is still up



Source: LME, Metal Bulletin Research

Global quarterly refined lead supply-demand balance and price

Q1 2010 looks like a big surplus unless Chinese supply slows



Source: Metal Bulletin Research

Lead continued – Technicals

- Prices attempted a breakout on the upside
- The breakout ran for a while, but looks to be faltering now
- A move below \$2,250/tonne would be a concern

Technical analysis

After a long period of consolidation, lead prices broke higher, but the rally ran out of steam last week, with a pullback to retest the breakout levels around \$2,300/tonne. If these fail to hold, then a return to \$2,100–2,300/tonne seems likely. Technical indicators are neutral to negative, so a drop back to the former trading range would not be surprising. Bollinger bands have turned

higher again, but the lines are converging, so although the broader uptrend was resumed, the rally is not looking robust and the run up to \$2,475/tonne may turn out to be a false break. A move down below the top of the former triangle at \$2,250/tonne would not bode well, while a drop below \$2,215/tonne would signal a fall back to test the lower support line at \$2,150/tonne.

Moving averages and Bollinger bands: Edging higher, but converging

Stochastics: Bearish

RSI: Neutral

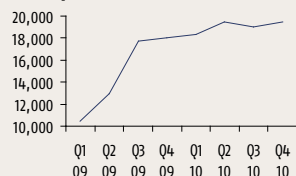


Nickel – Market trends and analysis

- Price back away from \$20,000/tonne for the time being
- Vale Inco strike continues, creating a tight market in North America...
- ...and Xstrata workers have labour contract renewals soon too

Market overview

Nickel price forecast (\$/tonne)



Source: Metal Bulletin Research

We said last week that nickel needed further weakness in the US dollar to maintain its run higher and break through the \$20,000/tonne level again. As it turned out, the dollar was stronger last week and prices pulled back, and after three consecutive weeks of robust gains, the retreat was fairly sharp. However, the overall longer-term

uptrend remains intact and if dip buyers return we would expect nickel prices to be able to strengthen again towards \$20,000/tonne in the short term, especially if the dollar softens again too. We maintain that the fundamentals of the nickel market are robust overall at the moment, and this should be supportive to prices.

The nickel market is starting to see clearer regional variations, with the greatest tightness being in North America. Asia is starting look well supplied now and Europe has a glut of material still arriving from Norilsk and now we are starting to hear that some stainless mills are planning cutbacks.

LME stock rise starting to accelerate again

LME warehouses have started to see greater inflows again recently. Last week 6,108 tonnes were warranted, with 2,706 tonnes registered on Friday alone. The weekly increase was 4.9% and the total went up to 129,528 tonnes. Furthermore, cancelled warrant as a percentage of this total remain well below 1%, indicating that there is little demand for LME metal at the moment.

Asia starting to show signs of oversupply

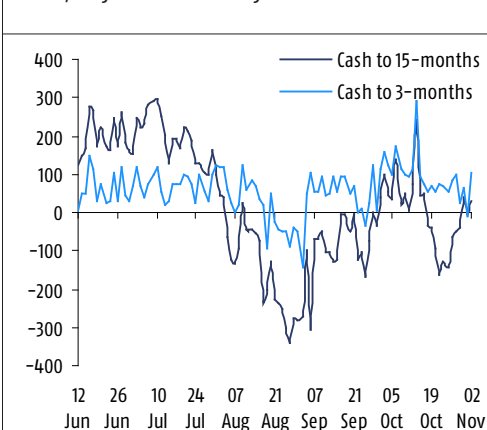
We have become used to seeing full plate cathodes arrive from Norilsk into Rotterdam, but interestingly there have also been some significant inflows into Asian warehouses, which back up concerns about easier availability in that region. **We understand that demand is slackening off as Chinese stainless steel mills are reining in output due to oversupply, and nickel production is strong in China due to the resurgent nickel pig iron sector that imported an all-time record high amount of nickel ore in September (see last week's report).**

North American premiums up on tightness

It is a different story in North America where premiums for truckloads of plating-grade nickel are now 80–85c/lb, up from 70–75c/lb two weeks ago, while melting-grade material is at 65–72c/lb, up from 60–65c/lb. The continuing strike at Vale Inco operations is the main factor contributing to tightness, **and we note that workers at Xstrata's Sudbury operations also have labour contracts up for renewal in February, so the disruptions could run well into next year.**

LME nickel cash to three-month and cash to 15-month spreads (\$/tonne)

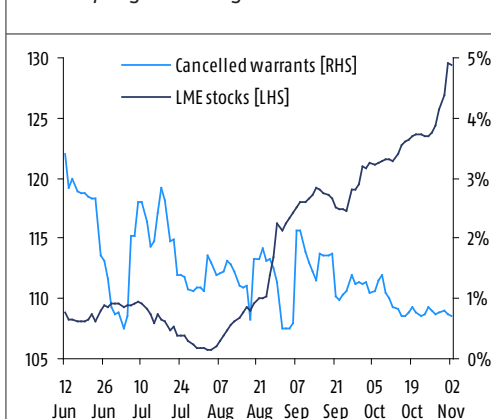
Overall, the forward curve has flattened out



Source: LME, Metal Bulletin Research

LME nickel stocks ('000 tonnes) and cancelled warrants (% of total stocks)

Another up-leg in the rising stock trend last week



Source: LME, Metal Bulletin Research

Nickel continued – Fundamentals

- Acerinox cutting stainless steel production in November and December...
- ...a worrying precedent for near-term nickel demand?
- Still expecting good nickel demand growth in 2010

Fundamental outlook

We thought a noteworthy piece of news last week was that major European stainless steelmaker Acerinox announced plans to cut production back during November and December from current levels around 70% of capacity. At a time when most producers are believed to have been ramping up again, this is concerning. The company

cites declining demand in Q4, noting that end users and stockholders want to keep inventory levels to a minimum for the start of 2010 and, as a result, little restocking is taking place. However, the company remains optimistic about the future and expects to see demand increase by 6–10% for 2010.

Global refined nickel supply-demand balance ('000 tonnes) and base case price forecasts, 2008–2012

	2008 Year	2009f Year	2010f Year	2011f Year	2012f Year	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3f	2009 Q4f	2010 Q1f	2010 Q2f	2010 Q3f	2010 Q4f
Production	1,373	1,212	1,295	1,342	1,392	356	359	332	326	307	299	295	311	317	319	322	337
% change year-on-year	-5.7%	-11.7%	6.8%	3.6%	3.7%	-0.3%	-3.5%	-9.5%	-9.4%	-13.8%	-16.7%	-11.1%	-4.6%	3.3%	6.7%	9.2%	8.4%
Consumption	1,294	1,160	1,319	1,356	1,399	353	346	325	270	258	277	300	325	324	333	320	342
% change year-on-year	-5.1%	-10.4%	13.7%	2.8%	3.2%	-6.1%	-3.1%	6.9%	-17.2%	-26.9%	-19.9%	-7.7%	20.4%	25.6%	20.2%	6.7%	5.2%
Balance	79	52	-24	-14	-7	3	13	7	56	49	22	-5	-14	-7	-14	2	-5
% of consumption	6.1%	4.5%	1.8%	1.0%	0.5%	0.8%	3.8%	2.2%	20.7%	19.0%	7.9%	1.7%	4.3%	2.2%	4.2%	0.6%	1.5%
Reported stocks	200	252	228	214	207	124	137	144	200	249	271	266	252	245	231	233	228
Weeks consumption	8.0	11.3	9.0	8.2	7.7	4.6	5.1	5.8	9.6	12.5	12.7	11.5	10.1	9.8	9.0	9.5	8.7
LME cash price	\$/tonne	21,117	14,788	19,075	20,125	22,000	28,863	25,730	18,961	10,913	10,460	12,992	17,700	18,000	18,300	19,500	19,000
	\$/lb	9.58	6.71	8.65	9.13	9.98	13.09	11.67	8.60	4.95	4.74	5.89	8.03	8.16	8.30	8.85	8.62

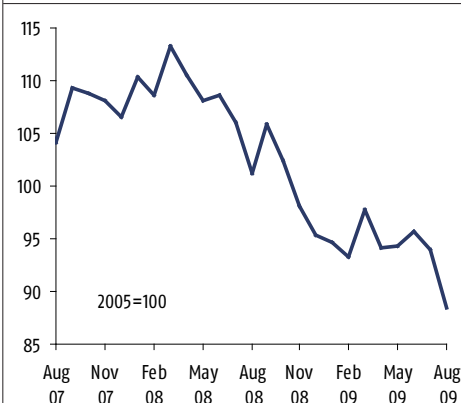
Refined nickel alternative annual cash price forecast scenarios, 2009–2012

	2008 Year	2009f Year	2010f Year	2011f Year	2012f Year	Assumptions
High case scenario	\$/tonne	15,800	22,000	24,000	25,000	Assumes more aggressive production cuts and deferrals of next generation projects. Supply pipeline unable to respond to a sharp recovery in nickel demand, leading to a faster drawdown of stocks.
	\$/lb	7.17	9.98	10.89	11.34	
Low case scenario	\$/tonne	14,000	16,000	15,000	15,000	Assumes the large stock overhang weighs heavily on prices and that Chinese nickel pig iron production is quick to ramp up on any sign of improved demand. No chance for deficits to form.
	\$/lb	6.35	7.26	6.80	6.80	

Source: LME, INSG, WBMS, Metal Bulletin Research

MBR's EU27 stainless steel demand index

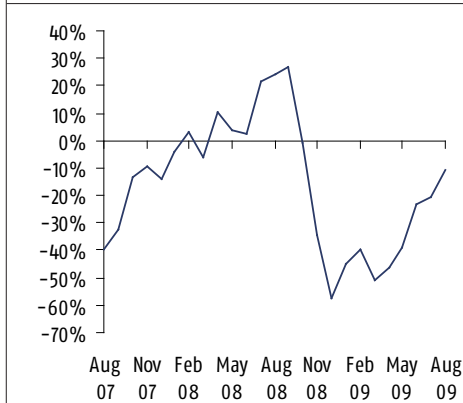
Index at its lowest in 10 years on weak summer demand



Source: Metal Bulletin Research

Year-on-year % change in European stainless steel production

Currently, output is still rising steadily



Source: Metal Bulletin Research

Nickel continued – Technicals

- The rebound seems to be stalling...
- ...but the overall trend is up, so dip buying is likely
- Look to buy into a rebound once technical indicators provide confirmation

Technical analysis

Nickel is oscillating sideways within a large triangle formation with the top line around \$19,440/tonne and the bottom line around \$17,390/tonne. Bollinger bands are converging with prices just holding above the lower band around \$17,700/tonne and with the technical indicators falling sharply, downside support looks set to be retested. Given that prices are in a long-term uptrend, the chances are good that they will find support from either the

lower Bollinger band or the bottom of the triangle, and as such we would be on the lookout for a buying opportunity once the stochastics cross higher again and the RSI turns higher too. A move below \$17,390/tonne basis a close would make the chart look vulnerable and suggest a retest of support from mid-September at \$16,625/tonne. Conversely a close above \$18,750/tonne would start to look constructive for nickel again.

Moving averages and Bollinger band: Converging



Stochastics: Bearish

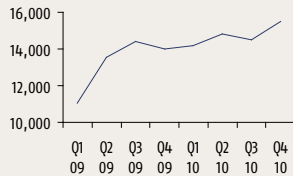
RSI: Bearish

Tin – Market trends and analysis

- Prices up as expected last week, but softer again now
- The backwardation is narrowing
- Indonesian disruptions are continuing

Market overview

Tin price forecast (\$/tonne)



Source: Metal Bulletin Research

We expected an up-week for tin last week, and this is indeed what we got, with LME three-month prices up 3% and cash prices 2%. This market has followed its peers back down from its recent highs, however, and consolidation seems to be the priority again now, although we expect volatility too. It would appear that the crackdown on suspected illegal tin mining in Indonesia – the world's largest tin exporter – has

ended. However, we are not expecting a rapid recovery in ingot output as ore is now scarce and although independent miners have returned to work, bad weather is now hampering production. Therefore, as demand continues to edge higher, we maintain that supply will remain tight as we head towards the year-end, which may finally bring an end to the relentless rise in LME stocks that we have seen this year.

Disruptions to supply in Indonesia remain an important focus of the tin market. They are continuing, which should remain supportive to prices. It is also interesting to note that the backwardation is starting to ease. But is this the start of the spreads realigning with the fundamentals or games by the dominant position holder?

Indonesian production getting back to normal, but very slowly

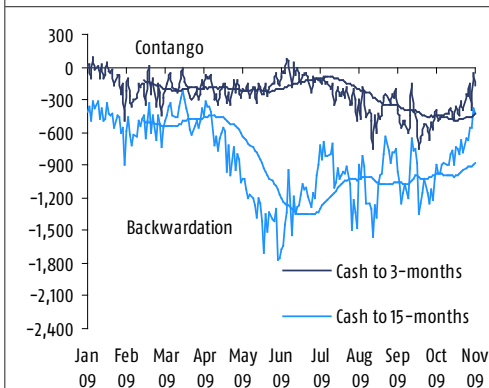
Further to our update on the situation in Indonesia last week, we now hear that most independent miners have returned to work, allowing those private smelters that have restarted to inch up capacity utilization levels. However, we understand that for many this only means utilisation rates of around 20–25%. The police crackdown on suspected illegal mining now appears to be over (until the next time), but the rainy season is hampering attempts to ramp ore production back up again. **The rains could remain a problem for the next few months and so we would expect domestic ingot output and shipments to the global market to remain constrained for some time.**

The backwardation is starting to narrow

A prominent feature of the tin market this year has been the persistent backwardation. This has not been caused by tight fundamentals, as LME stocks have risen relentlessly. Instead a squeeze by a hedge fund has created the tightness. **However, the backwardation now appears to be easing, which could suggest that the dominant position holder is finally relinquishing its grip on the market.** We await further developments on this front in the coming weeks. The cash to three-month backwardation averaged \$221/tonne last week from \$431/tonne throughout the month of October prior to that. Likewise, the cash to 15-month backwardation averaged \$559/tonne last week, from \$876/tonne previously and more than \$1,000/tonne in late September.

LME tin cash to 3-month and cash to 15-month spreads (\$/tonne)

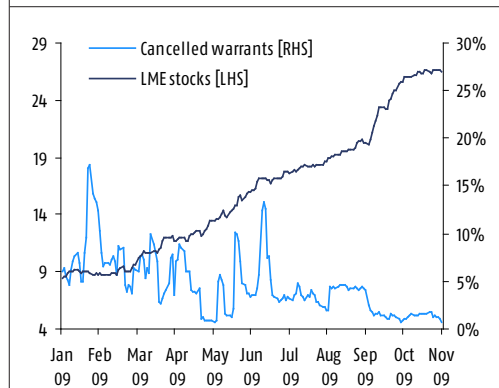
The backwardation is narrowing rapidly now



Source: LME, Metal Bulletin Research

LME tin stocks ('000 tonnes) and cancelled warrants (% of total stocks)

The plateau in stocks may reflect reduced Indonesian supply



Source: LME, Metal Bulletin Research

Tin continued – Fundamentals

- PT Timah production down 11% in the year to date...
- ...but sales rose 7%
- Demand is improving

Fundamental outlook

Indonesia's PT Timah, the largest integrated tin producer in the world, reported its quarterly results last week. Refined tin output in the first nine months fell 11.4% to 33,765 tonnes, from 38,106 tonnes in the same period last year. Interestingly, however, sales volumes rose by 7% year-on-year to 36,453 tonnes, from 34,045 tonnes in the same period

last year. The company is maintaining its sales target this year at 45,000 tonnes due to steady demand from its traditional customers such as electronics, chemical and tinplate manufacturers. These buyers account for 90% of Timah's sales, with the remainder made on a spot basis when prices are attractive.

Global refined tin supply-demand balance ('000 tonnes) and base case price forecasts, 2008-2012

		2008 Year	2009f Year	2010f Year	2011f Year	2012f Year	2008				2009				2010			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f	
Production		321	302	320	330	346	80	87	79	75	64	79	76	83	80	80	79	81
% change year-on-year		-7.4%	-6.2%	6.1%	3.1%	4.8%	1.6%	-0.1%	-8.1%	-20.9%	-20.0%	-9.5%	-3.8%	10.0%	25.0%	1.3%	3.9%	-1.8%
Consumption		330	296	323	339	353	84	92	78	76	63	76	74	83	79	81	80	83
% change year-on-year		-6.9%	-10.3%	9.1%	5.0%	4.1%	-4.3%	3.8%	-10.3%	-16.5%	-24.6%	-17.7%	-5.1%	9.2%	25.4%	6.6%	8.1%	0.0%
Balance		-5	6	-3	-9	-7	-2	-3	1	-1	1	3	2	-1	1	-1	-1	-2
% of consumption		1.4%	1.9%	0.9%	2.7%	2.0%	1.9%	3.3%	1.3%	1.3%	1.6%	3.9%	2.7%	0.6%	1.3%	1.2%	1.3%	2.4%
Total reported stocks		27	33	30	21	14	30	27	28	27	28	31	33	33	34	33	32	30
Weeks of consumption		4.3	5.8	4.8	3.2	2.0	4.7	3.8	4.7	4.7	5.8	5.4	5.9	5.1	5.6	5.3	5.2	4.7
LME cash price	\$/tonne	18,520	13,493	15,275	18,250	21,000	17,705	22,611	20,573	13,192	11,024	13,549	14,400	15,000	14,800	15,100	15,500	15,700
	\$/lb	8.40	6.12	6.93	8.28	9.53	8.03	10.26	9.33	5.98	5.00	6.15	6.53	6.80	6.71	6.85	7.03	7.12

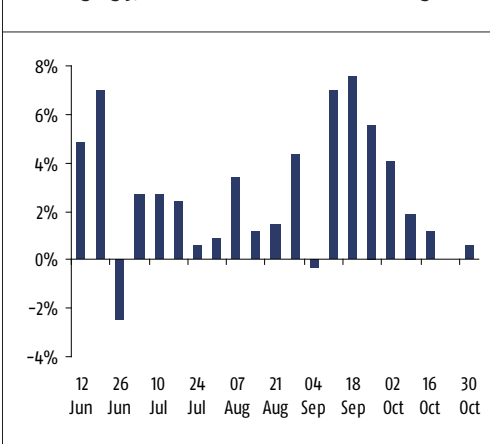
Refined tin alternative annual cash price forecast scenarios, 2009-2012

	2008 Year	2009f Year	2010f Year	2011f Year	2012f Year	Assumptions
High case scenario	\$/tonne	15,000	17,000	22,000	25,000	Assumes v-shaped recovery in the electronics sector with demand boosted by restocking. Supply constraints persist in China and Indonesia and concs market remains tight due to lack of investment.
	\$/lb	6.80	7.71	9.98	11.34	
Low case scenario	\$/tonne	13,000	12,500	14,000	15,000	A deep recession in electronics. The release of Chinese provincial government stockpiles into the recovery dampens the price response. The revival of artisanal mining in SE Asia boosts supply.
	\$/lb	5.90	5.67	6.35	6.80	

Source: LME, WBMS, Metal Bulletin Research

Week-on-week % change in LME tin stocks

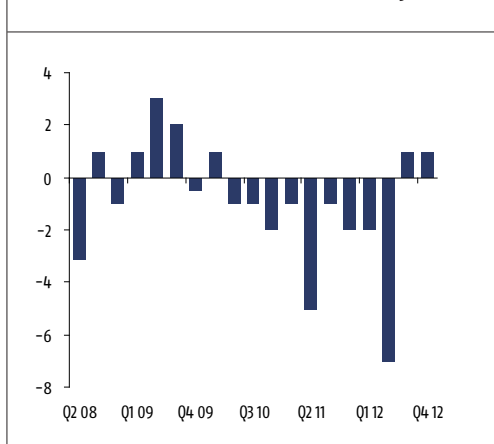
Encouragingly, the stock rise seems to be slowing now



Source: LME, Metal Bulletin Research

Global quarterly refined tin supply-demand balance ('000 tonnes)

An end to the LME stock rise now tallies with our forecasts



Source: Metal Bulletin Research

Tin continued – Technicals

- Prices attempted to break higher, but ran out of steam
- Expect further volatile trading
- Look to range trade around the Bollinger bands

Technical analysis

Tin's move out of the \$13,500–\$15,000/tonne range saw prices reach \$15,425/tonne, but the stronger trend was short-lived and prices soon pulled back into the trading range. Our set up to go long was not triggered last week so we remain on the sidelines. The Bollinger bands continue to extend sideways and the technical

indicators are broadly neutral to negative. The market remains thin and directionless, so until that changes we would look for jobbing opportunities to range trade between the Bollinger bands. If other markets become more directional then tin is likely to follow, but overall we feel tin prices are likely to remain range bound.

Moving averages and Bollinger bands: Moving sideways



Stochastics: Neutral to negative

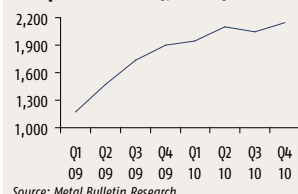
RSI: Neutral

Zinc – Market trends and analysis

- The high prices were not supported by the fundamentals...
- ...but anticipation of better fundamentals is a key supporting factor
- SHFE stocks jump to new record highs

Market overview

Zinc price forecast (\$/tonne)



We have noted previously that the recent zinc price rally to more than \$2,300/tonne appeared to run ahead of the fundamentals. It still seems the case that premiums, stocks, cancelled warrants and spreads are not yet showing any significant increase in tightness. In that regard, it is not surprising that prices eased back from their highs last week, though it was probably

more to do with a general deterioration in sentiment across the base metals on the back of a stronger dollar and weaker equity markets. Technical selling after the recent strong rally was also a factor. Zinc now appears to be in consolidation mode below its recent highs, but above the psychologically-important \$2,000/tonne landmark price level.

Stock trends – and the implication of these – are the main focus of our zinc market analysis this week after SHFE stocks soared to an unprecedented high.

LME stocks continue to flat-line

LME stocks continue their remarkable flat-lining pattern, with the total staying in the 426,000–438,000 tonne range since August. The total was last at 428,075 tonnes. Indeed, if we discount the sudden jump in stocks in late July and early August, which was an anomaly due to a warehousing deal, the flat stock pattern goes back as far as June. Cynics would say it is unnatural and is being engineered. However, in the absence of evidence to support this view, the implication is that the global zinc market has been closely balanced for the last five months. **This is in line with our forecasts, but we do note that physical premiums remain soft and LME spreads are rangebound, so these indicators are not signalling any increase in physical tightness yet.**

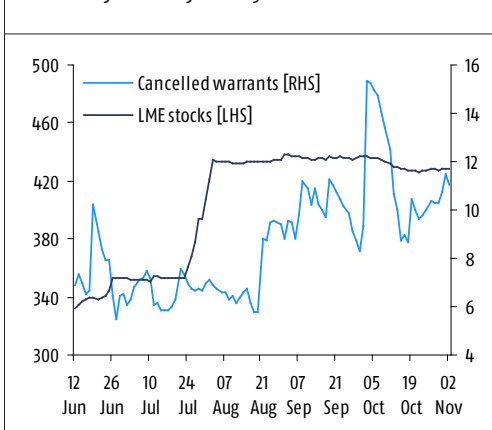
Whether this apparent balance in the market continues depends on the trade-off between two key underlying trends as they evolve over the coming months: rising zinc production (now that smelters are restarting) versus rising zinc demand (now that galvanized steel mills are stocking up to raise output and zinc usage).

SHFE stocks leap

SHFE stocks had been on a steady downwards trend since early September, with only one up-week in the last eight up to October 23. Last week, however, witnessed the largest weekly rise in the history of the Shanghai contract, which undid all the good work of the previous two months to take the headline total to a new record high. Stocks jumped to 27,830 tonnes to 145,536 tonnes.

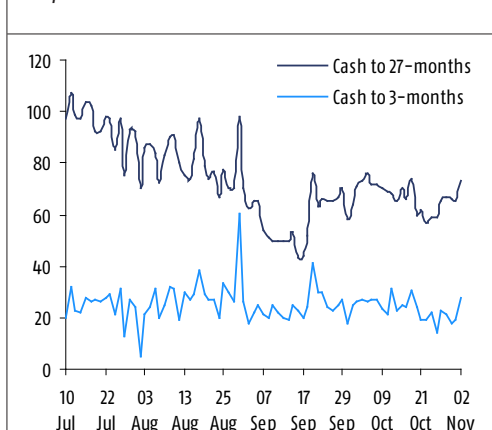
LME zinc stocks and cancelled warrants ('000 tonnes)

Stocks have flat-lined for many months now



LME cash to three-month and cash to 27-month zinc prices (\$/tonne)

The spreads weakened last week



Zinc continued – Fundamentals

- Soaring Chinese production is behind last week's jump in SHFE stocks
- Output stayed close to record highs in September
- Apparent supply of zinc concentrate in China is also at a record high

Fundamental outlook

We noted previously the sharp rise in SHFE stocks last week. In the context of record high production data recently, it should be little surprise that the domestic market appears to be getting oversupplied. Refined zinc production was reported by the NBS to have been 410,413 tonnes in September, only fractionally down from August's record high, reported at 415,000 tonnes. Production has now risen by nearly 70%

since January's low, as previously idled smelters have been quickly restarted and as new capacity has been commissioned. Moreover, with concentrate imports up 38% this year and domestic mine output having more than doubled since the start of the year, apparent supply of zinc concentrate in China is also at a record high, which will continue to fuel high refined metal output.

Global refined zinc supply-demand balance ('000 tonnes) and base case price forecasts, 2008-2012

	2008 Year	2009f Year	2010f Year	2011f Year	2012f Year	2008 Q1	Q2	Q3	Q4	2009 Q1	Q2	Q3f	Q4f	2010 Q1f	Q2f	Q3f	Q4f
Production	11,538	10,888	11,255	11,590	11,960	2,815	2,993	2,850	2,880	2,583	2,805	2,739	2,761	2,770	2,810	2,800	2,875
% change year-on-year	2.4%	-5.6%	3.4%	3.0%	3.2%	1.8%	5.3%	3.3%	-0.8%	-8.2%	-6.3%	-3.9%	-4.1%	7.2%	0.2%	2.2%	4.1%
Consumption	11,147	10,721	11,311	11,815	12,260	2,707	2,920	2,820	2,700	2,423	2,768	2,730	2,800	2,746	2,875	2,790	2,900
% change year-on-year	-0.7%	-3.8%	5.5%	4.5%	3.8%	0.8%	1.2%	4.1%	-8.3%	-10.5%	-5.2%	-3.2%	3.7%	13.3%	3.9%	2.2%	3.6%
Balance	391	167	-56	-225	-300	108	73	30	180	160	37	9	-39	24	-65	10	-25
% of consumption	3.5%	1.6%	0.5%	1.9%	2.4%	4.0%	2.5%	1.1%	6.7%	6.6%	1.3%	0.3%	1.4%	0.9%	2.3%	0.4%	0.9%
Total reported stocks	1,026	1,193	1,137	912	612	743	816	846	1,026	1,186	1,223	1,232	1,193	1,217	1,152	1,162	1,137
Weeks of consumption	4.8	5.8	5.2	4.0	2.6	3.6	3.6	3.9	4.9	6.4	5.7	5.9	5.5	5.8	5.2	5.4	5.1
LME cash price	\$/tonne	1,876	1,592	2,150	2,675	2,426	2,115	1,773	1,191	1,174	1,475	1,740	1,980	1,950	2,200	2,150	2,300
	\$/lb	0.85	0.72	0.98	1.21	1.10	0.96	0.80	0.54	0.53	0.67	0.79	0.90	0.88	1.00	0.98	1.04

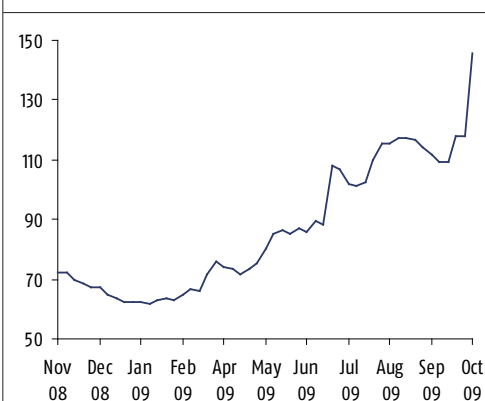
Refined zinc alternative annual cash price forecast scenarios, 2009-2012

	2008 Year	2009f Year	2010f Year	2011f Year	2012f Year	Assumptions
High case scenario	\$/tonne	1,650	2,200	3,000	4,000	Slow recovery in mine output post-recession holds back refined supply growth for longer. Government stimulus spending surprises on the upside in both developing Asia and the west.
	\$/lb	0.75	1.00	1.36	1.81	
Low case scenario	\$/tonne	1,500	1,600	1,800	2,200	Chinese government quick to release stockpiles built up in 2008, and recently-idled mining capacity quickly restarted. Both would dampen attempts by prices to recover. Stimulus packages disappoint.
	\$/lb	0.68	0.73	0.82	1.00	

Source: LME, ILZSG, WBMS, Metal Bulletin Research

Weekly SHFE zinc stocks ('000 tonnes)

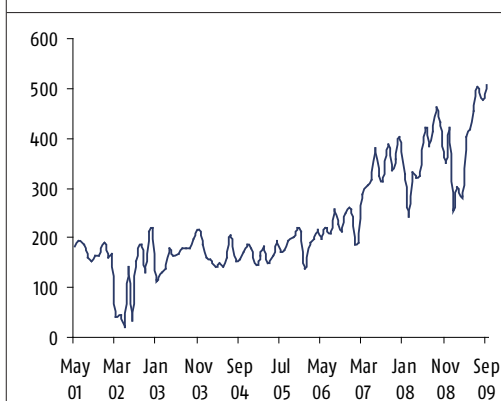
Stocks jumped to new all-time highs last week



Source: SHFE, Metal Bulletin Research

Chinese monthly apparent supply of zinc in concentrate ('000 tonnes)

Record high concs supply is driving record smelter output



Source: NBS, GAC, Metal Bulletin Research

Zinc continued – Technicals

- Prices are consolidating at lower levels
- The move lower triggered our shorting opportunity
- We would run with the short, but not be surprised to see rallies follow

Technical analysis

After the strong gains in October, zinc prices are consolidating in a flag formation. The Bollinger bands are starting to converge again, but are still some \$450/tonne apart, so there is considerable room for consolidation. Likewise with the technical indicators dropping sharply, consolidation at lower levels does look likely, before the overall rally is ready to advance again. We were on the lookout to short a negative cross on the stochastics and downturn in

the RSI last week, which we saw at \$2,300/tonne, so would now put a profit stop in at \$2,220/tonne and look to run with this stance until the stochastics cross higher again. In addition, should prices gain downward momentum, we would run a \$100/tonne trailing stop. If prices break higher out of the flag, then \$2,800/tonne may be the next upside target as this level is a 50% correction of the entire 2006–2008 bear market.

Moving averages and Bollinger bands: Converging



Stochastics: Bearish

RSI: Bearish

Selected Demand Indicators											
	2007	2008	Q3 08	Q4 08	Q1 09	Q2 09	April	May	June	July	August
Asian Indicators											
Japanese industrial production ⁴	107.6	103.0	102.0	95.7	71.3	72.0	72.2	71.9	81.3	82.6	84.1
Japan passenger vehicle prod. (000s)	9,945	9,886	2,483	2,226	1,366	1,484	416.0	470.0	597.9	643.6	493.7
Japan commercial vehicle prod. (000s)	1,652	1,648	430	367	244	228	69.6	72.2	86.0	98.7	78.1
Japanese construction activity index	85.4	86.3	84.9	87.2	86.7	85.7	87.3	86.0	83.8	81.0	79.7
S.Korean total vehicle prod. (000s)	4,454	3,823	757	989	688	842	269.3	256.3	315.9	310.3	232.6
Indian vehicle production (000s)	10,878	11,119	3,078	2,471	2,777	3,070	989.1	1,044.1	1,036.7	1,130.2	1,133.8
Chinese vehicle production (000s)	-	-	-	-	2,696	3,533	1,181.2	1,147.6	1,204.3	1,136.9	1,133.8
Chinese construction sector loans (6-mma) ¹	13.9%	-3.0%	-8.7%	-3.1%	0.9%	4.3%	3.26%	4.19%	5.40%	5.82%	6.18%
Chinese construction survey ²	139.9	127.3	128.6	107	105.6	115.9	-	-	-	-	-
Chinese real estate index	103.9	102.2	101.8	98.2	95.2	95.8	94.8	95.9	96.6	98.0	100.1
American Indicators											
US Leading Economic Indicator Index	-	-	100.9	99.4	98.2	100.0	98.9	100.2	101.0	101.9	102.5
ISM manufacturing index ⁴	51.1	45.5	47.4	36.1	35.9	42.6	40.1	42.8	44.8	48.9	52.9
US industrial production	113.4	110.1	108.8	104.5	99.1	96.2	97.1	95.9	95.5	96.7	97.4
US car production (000's)	3,914	3,782	981	820	409	331	157.9	143.7	173.1	147.5	225.8
US truck production (000's)*	6,846	4,899	1,025	973	765	673	290.4	215.8	166.6	225.0	327.7
US residential house starts (000's) ¹	16,127	10,805	2,654	1,982	1,583	1,620	479.0	551.0	590.0	589.0	598.0
US non-residential spending (\$bls) ¹	4,185	4,920	1,260	1,244	1,197	1,199	401.5	400.0	397.9	384.6	372.6
US building permits issued (000's)	16,438	10,555	2,599	1,892	1,592	1,586	498.0	518.0	570.0	564.0	580.0
Canadian car production (000's)	1,318	1,187	295	282	158	138	72.8	56.0	65.2	51.1	79.4
Canadian truck production (000's)	1,254	865	192	154	129	127	56.0	35.2	35.8	49.0	62.3
Canadian house starts (000's) ¹	2,732	2,552	631	557	419	384	118.5	127.4	137.8	134.2	150.4
Mexican vehicle production (000's)	2,234	2,135	543	377	247	247	101.1	39.6	106.1	116.1	137.4
Brazilian industrial production	121.8	125.5	135.9	119.9	101.3	112.0	106.4	114.0	115.5	123.0	125.4
Brazilian vehicle production (000's)	2,974	3,220	930	591	664	807	253.7	268.9	284.4	282.0	295.0
European Indicators											
Euro-zone manufacturing PMI	54.2	46.5	46.7	36.9	40.0	34.0	36.8	40.7	42.6	45.7	49.9
EU27 industrial production ⁴	108.4	105.7	105.1	98.9	92.1	89.9	90.0	90.0	89.8	89.8	89.9
German industrial production ⁴	111.2	111.9	112.8	107.2	89.4	91.3	89.2	89.2	95.6	96.6	85.3
German total vehicle production (000's)	6,199	6,056	1,457	1,278	1,050	1,279	397.4	384.6	497.1	430.6	341.5
German construction orders index	69.6	73.0	70.6	78.4	76.5	84.9	83.2	85.0	86.7	87.0	-
French industrial production ⁴	102.4	100.1	93.8	98.3	89.1	85.5	84.2	79.3	92.9	89.2	66.2
French total vehicle production (000's)	3,150	2,509	549	581	555	506	168.3	140.0	197.7	-	-
French housing starts (000's)	432	333	25.4	26.8	-	-	-	-	-	-	-
UK industrial production ⁴	100.7	97.5	95.3	96.1	87.2	86.1	86.6	83.6	88.2	86.6	86.8
UK total vehicle production (000's)	1,616	1,654	408	301	205	205	75.9	72.4	100.3	116.1	61.6
Spanish industrial production	106.2	98.6	93.1	91	83	83	79.8	81.9	86.0	91.4	61.5
Spanish vehicle production (000's)	2,854	2,483	513.7	452.2	453.1	564.4	186.7	181.6	196.1	213.3	77.4
Spanish house starts (000's) ²	593.3	359.6	76.0	81.8	47.1	49.3	16.7	17.0	15.7	-	-
Italian industrial production	106.0	102.7	94.3	96.2	85.9	85.5	83.4	85.9	87.3	97.6	-
Italian vehicle production (000's)	1,415	1,023	217.6	172.6	187.6	233.8	78.0	80.7	75.1	85.4	26.3
Russian industrial production	115.5	117.9	120.1	116.8	99.7	100.2	100.1	98.0	102.4	107.2	104.0
Russian Passenger Car Production (000's)	-	1,470	402	362	123	166	60.0	47.3	58.7	60.4	19.0
African and Middle Eastern Indicators											
South African construction starts (000's)	81,437	76,784	20,265	16,313	13,734	17,642	6,321.5	6,496.4	4,824.3	4,047.7	-
South African vehicle sales (000's)	612.7	489.0	123.4	103.2	93.3	79.9	24.1	25.8	30.0	30.7	29.7
Turkish industrial production	115.2	114.3	115.5	104.9	89.7	103.2	97.4	102.3	109.9	110.3	104.2
Turkish vehicle production (000's)	1,133.0	1,171.9	261.9	181.6	136.4	254.5	76.5	88.1	30.0	88.2	50.4
Turkish construction permits issued	203,618	176,656	54,417	70,156	16,625	33,411	-	-	-	-	-
Lebanese construction permits issued (sq m)	9,044	11,020	3,214	2,721	2,264	77,124	972.0	1,006.0	2,028.0	557.0	863.0
Jordan construction permits	24,918	21,649	5,220	5,242	6,871	7,432	2,573.0	2,553.0	2,306.0	2,125.0	2,135.0
Bahrain construction permits	9,830	10,843	2,567	2,529	2,962	2,787	-	-	-	-	-
Israeli industrial production	119.0	127.3	129.3	122.1	120.7	115.7	102.5	116.7	127.8	117.6	-
Israeli house starts	9,883	10,524	2,703	2,501	2,895	2,636	586.0	763.0	990.0	970.0	-
Australasia Indicators											
Australia construction orders index	165.7	133.7	126.9	117.7	94.6	125.7	36.8	52.2	36.7	37.8	33.5
New Zealand building permits	25,590	18,456	4,398	3,468	2,962	3,320	1,009.0	1,212.0	1,099.0	1,148.0	1,168.0

Sources: Metal Bulletin Research & Official Trade Statistics, AA, Census Bureau, Wards, Appliance Magazine, JAMA, S.Korea NSO, China NBS, PBOC, METI, Eurostat, INSEE, Bundesbank, SMMT, Chinese Statistics Bureau & Various

Notes: * denotes total heavy and light truck production (1) 6-month moving average % change year-on-year (RMB bn.) (2) >100 indicates net positive sentiment, <100 indicates net negative sentiment (quarterly) (3) Spain's 2007 annual figure is only for the months April - December. (4) These indices have been discontinued from our normal source, so may differ from previous reports. If backdata is required please contact the editor.

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