

# Fortis metals monthly

March 2007



Gold, silver, platinum,  
palladium, aluminium, copper,  
nickel, lead & zinc, tin, plastics.

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Fortis Metals Monthly is an exclusive precious and base metals research joint venture between Fortis Bank SA/NV and Virtual Metals Research and Consulting.



## Metals and plastics – Strategic view

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**Introduction**

The late-February shudders in global stock markets – a case of China sneezing and the rest of the world catching a cold – dented what had otherwise been a month of strong recovery across most metals. However, Asian holidays now being over, we will be able to see more precisely how the fundamental picture develops; we expect strong underlying global economic growth to reassert itself.

**Gold**

\$700/oz – deferred in the wake of China market fall-out.

**Silver**

Saved by super-bugs? Lots more supply headed this way.

**Platinum**

New emissions regulations for Europe's cars, supply-side stumbles – both spell strength.

**Palladium**

Investor support dribbles away – again.

**Aluminium**

LME stocks rebuild to mid-2004 levels.

**Copper**

China's refined imports surged in January – a sign of things to come?

**Nickel**

Super-scorching red-hot metal: and with good reason.

**Lead and zinc**

Lead gets its day in the limelight on supply disruptions; China's zinc exports step up a notch.

**Tin**

Arrests, smelters close, production crumbles – the Indonesian saga rumbles on.

**Plastics**

As crude oil prices drift, so do plastics'.

## Forecasts

Price forecasts		End-February	1-month	2-month	3-month	12-month
<b>Gold</b>	\$ per oz	664.20	600-670	>670	650	650
<b>Silver</b>	\$ per oz	14.31	12.00-14	>14	15	13
<b>Platinum</b>	\$ per oz	1,239	1,150-1,250	1,300	1,300	1,400
<b>Palladium</b>	\$ per oz	350	320-360	340	380	300
<b>Aluminium (3-month)</b>	\$ per tonne	2,830	2,700-3,000	2,700	2,700	2,700
<b>Copper (3-month)</b>	\$ per tonne	6,070	5,500-6,500	6,000	6,500	5,800
<b>Nickel (3-month)</b>	\$ per tonne	40,905	>40,000	>40,000	>40,000	30,000
<b>Lead (3-month)</b>	\$ per tonne	1,855	1,700-2,000	1,600	1,400	1,200
<b>Zinc (3-month)</b>	\$ per tonne	3,441	3,200-3,600	3,300	3,000	3,000
<b>Tin (3-month)</b>	\$ per tonne	13,400	13,000-14,500	>13,000	>13,000	>11,000
<b>Plastic: LL (front)</b>	\$ per tonne	1,130	1,100-1,150	1,200	1,200	1,200
<b>Plastic: PP (front)</b>	\$ per tonne	1,140	1,100-1,050	1,200	1,200	1,200
		2-years	3-years	4-years	5-years	6-years
<b>Gold</b>	\$ per oz	550	490	450	450	400
<b>Silver</b>	c per oz	12	11	10	10	10
<b>Platinum</b>	\$ per oz	1,400	1,300	1,200	1,100	1,100
<b>Palladium</b>	\$ per oz	280	280	250	230	230
<b>Aluminium (3-month)</b>	\$ per tonne	2,000	2,000	2,000	1,900	1,900
<b>Copper (3-month)</b>	\$ per tonne	5,000	5,000	4,000	4,000	3,500
<b>Nickel (3-month)</b>	\$ per tonne	25,000	20,000	15,000	14,000	13,000
<b>Lead (3-month)</b>	\$ per tonne	1,000	900	900	800	800
<b>Zinc (3-month)</b>	\$ per tonne	2,800	2,000	2,000	2,000	2,000
<b>Tin (3-month)</b>	\$ per tonne	10,000	10,000	9,000	9,000	8,000
<b>Plastic: LL (front)</b>	\$ per tonne	1,300	1,300	1,200	1,200	1,100
<b>Plastic: PP (front)</b>	\$ per tonne	1,300	1,300	1,200	1,200	1,100

Source: Virtual Metals

## Analysis

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### The super-bug menace ...

In today's Britain you are more likely to die from an infection picked up following a stay in hospital than from a car crash, according to the latest official government figures. About 3,000 people die in road accidents every year in Britain, but deaths in which the so-called 'super-bug' MRSA (meticillin-resistant *Staphylococcus aureus*) highly resistant to a wide range of antibiotics, either played a primary or secondary role are now running at 3,807 a year; the incidence of such superbug-related deaths in Britain is rising by almost 70%/year. MRSA is a bacterium that can live completely harmlessly on the skin and in the nose of about one third of healthy people without causing any problems. However it can lead to serious infection if it enters the blood stream. Another bug commonly picked up in hospital, *Clostridium difficile* (C diff), can be treated relatively easily, but because it forms spores it can survive for long periods outside a body.

Some campaigners claim the real mortality rate from such hospital-borne infections is perhaps four times higher, because doctors are not obliged to mention MRSA/C diff on a death certificate as a secondary cause of death, and there is thought to be a great deal of under-reporting. The incidence of such 'super-bug' infections and deaths is much lower in other European countries, such as the Netherlands and Norway, where levels of hospital cleanliness are considered to be much higher, and where patients are not crammed into wards like sardines. Perhaps even more alarming is the apparent rise of 'super-bug' infections in normal healthy people outside of hospital, in the ordinary community, although data for such infection rates is currently very scanty.

### ... and the silver lining

One solution of course is to raise the standards of hygiene in British hospitals and therefore try to eliminate the 'super-bugs' from causing havoc among the already sick, the elderly and the physically vulnerable. And in this respect a whole new avenue of demand for the poor relation of the precious metals, silver, looks like it might finally get opened up. Sticking plaster manufacturers have in the past few years begun to use silver's (long-established) biocide properties as an extra selling-point, producing plasters with minute quantities of silver and advertising them as helping minor cuts and wounds to heal faster and more cleanly.

Dr Peter Wilson, a Consultant Microbiologist at the London NHS (National Health Service) Trust, is now taking this one step further. He is leading a clinical trial at two hospitals where 300 patients, who have tested positive for carrying MRSA on their skin, will be recruited from the hospital's general medicine and elderly care departments. They will all continue to receive their normal infection control care but 150 patients will also be given silver-lined pyjamas and linen, while the other 150 will receive standard materials. At the end of the trial, in approximately six to twelve months, the results of the two groups will be compared to see if the silver pyjamas led to increased MRSA eradication than traditional methods.

Silver is already being used in a wide variety of hygiene applications – the USA army impregnates its soldiers' socks with silver to keep them fresher for longer – and this latest idea is likely to show some success; the ancient Greeks, after all, used silver to treat illnesses and diseases. Silver-impregnated hospital linen is never going to become a major demand source; we estimate that currently silver global offtake for medical applications is no more than 2 Moz/year, rising on current trends to 6 Moz by 2013. But the beauty of this small additional demand is that at least it will not come back to the market as scrap; or at least, we hope not.

## Focus

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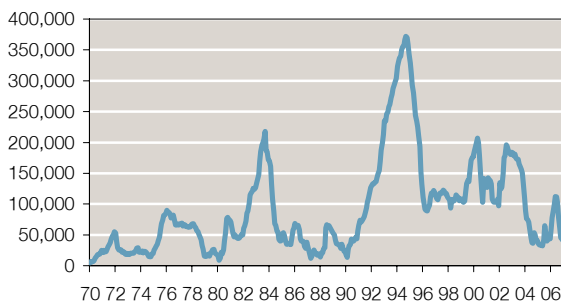
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### This lead balloon should burst, eventually

*Lead prices have touched fresh all-time nominal highs on the London Metal Exchange – yet one of the major demand sources for lead, electronics' soldering, has taken a bashing from the decision by the European Union to eliminate lead from many products either made or imported by the EU. This decision came into force on 1<sup>st</sup> July 2006, under the Restriction on Hazardous Substances (RoHS) Directive. The background to lead's recent rise therefore owes almost everything to supply-side problems which we believe should be short-lived. Prices should fall back later this year – if there are no more hiccups.*

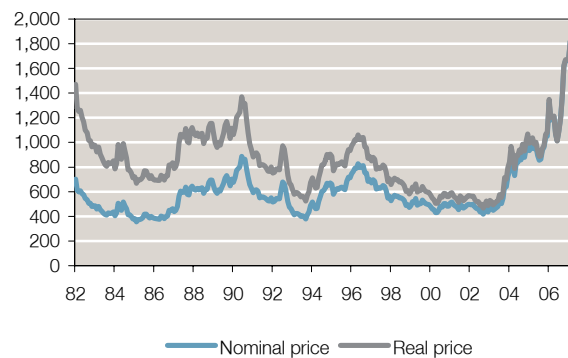
The LME's 3-month lead contract rose to a fresh record of \$1817.50/t on 19<sup>th</sup> February, having risen steadily since the start of the year, a trend which started mid-2006. The lead price on the LME gained 59% year-on-year in 2006, with a low of \$940/t and a peak of \$1,770/t, an unusually wide range for the metal. Within this overall gain however is a story of two halves – the lead price actually fell 6% in 1H 2006 but recovered dramatically in 2H 2006, gaining 70% in just six months.

LME stocks (tonnes)



Source: Reuters Ecowin

LME 3-month lead price, nominal and real dollars per tonne



Source: Reuters Ecowin

This latter-half 2006 gain coincided with a steady decline in LME lead stocks, a decline that has continued to the point where LME stocks are today at their lowest level since mid-2005; as of 19<sup>th</sup> February there were no lead stocks in LME-registered warehouses in Europe. Falling stocks on the LME are often taken as an indicator of a degree of physical tightness in the market. This collapse of European LME stocks has, naturally, pushed prices higher. On 19<sup>th</sup> February the LME's stocks overall fell by 825t to 32,475t, their lowest since June 2005. By the close of trade on 19<sup>th</sup> February lead had gained 6.9% since the start of the year, outpaced by only nickel and tin out of the metals traded on the LME. Lead stock levels have fallen 81% since May 2003, and although they recovered in the middle of last year they soon dramatically fell off again, declining 54% in the last 12 months.

### Supply-side headaches

Why have LME stocks fallen so precipitously? The core problem has been that in 2H 2006 and into this year there have been a number of supply-side mine disruptions in Australia and elsewhere, which have interrupted deliveries of ore concentrate to smelters in Europe. The global lead market was in deficit in 2005 by 171,000t according to the International Lead and Zinc Study Group (ILZSG), and in 2006 it was widely expected that the market would return to surplus. In the event however, in February this year the (ILZSG) reported that the global lead market in 2006 continued to show a deficit, albeit much narrowed, at 10,000t, with consumption at 8.059 Mt for 2006, up from 7.807 Mt in 2005. This suggests a physical shortage of new metal, due to various supply-side problems

among Australian producers. At BHP Billiton's Cannington mine in north-west Queensland, the world's single largest mine provider of silver and lead, production has been lost as a result of the temporary closure of the southern zone of the operation. Lead and zinc output at another Australian producer, Zinifex, fell 10% in the six months to the end of December 2006, compared with the same period a year earlier. This was attributed to planned maintenance shut downs at its Rosebery mine and its Port Pirie and Clarksville smelters, as well as an unplanned shut down at the company's Century mine. The ramping-up of production at Ivernias's Magellen operation, again in Australia, is taking longer than anticipated.

But the final straw came in the first week of February, when Xstrata declared force majeure on lead deliveries from Northfleet, on the back of lower ore deliveries from its Mount Isa smelter in Queensland, Australia, which feeds the Northfleet refinery, near London. Mount Isa produced 159,557t of lead in bullion in 2006, while Northfleet produced 161,350t of refined lead. This is not comparable however to the physical shortages of other base metals, notably copper last year and nickel in 2006 and during 2007 so far. The supply-side interruptions in lead should resolve themselves quite rapidly (certainly by 2H 2007), and prices should consequently fall back – although whether they will fall this year all the way back to below \$1,000/t, is an open question.

Xstrata has been noticeably tight-lipped as to what is wrong at Mount Isa and this lack of clarity has created an uneasy limbo. In its half-yearly results Xstrata said it was having difficulties integrating ore from its Black Star open pit, an expansion, with ore from the George Fisher-Hilton zinc and lead mine, from which it appears that recoveries have fallen significantly.

#### **Demand-side fragility**

Xstrata's difficulties have therefore exacerbated what was already a situation of short-term physical tightness, and while supplies from other sources – notably China – might be tempted to step into the breach, prices have needed to rise (and may need to rise still further until Mount Isa is sorted out) to encourage Chinese producers to deliver to Europe. China currently exports about 500,000t/year of refined lead but its domestic consumption is high, largely because China has become (almost without anyone outside the business realising it) the world's dominant producer of car batteries, still the biggest end-use by far for lead. Back in October 2006 the International Lead and Zinc Study Group (ILZSG) anticipated world lead mine output in 2007 would rise by 8.8%, with Chinese and Australian mines producing the bulk of the new ore. It also saw European lead production rising by 17.2%, although this is now unlikely, given the difficulties at Northfleet. China, the largest producer of lead ore and metal, is expected to export nearly 500,000t of metal this year and import about 500,000t of lead concentrate.

But lead demand is vulnerable in the very long term, as it is over-reliant on one big consumer – car batteries. While lead demand has risen strongly in recent years on the back of the world's rapidly-expanding car market – about 80% of lead consumption is now in lead-acid batteries and some 70% of this is used to manufacture so-called SLI batteries (Starting, Lighting, Ignition) used in vehicles – this mainstay of lead demand will eventually peak and decline rapidly, if hybrid gasoline-electric or diesel-electric cars prove to be more than a passing fad. These types of vehicle use (more expensive but longer-lasting) nickel-metal-hydride and not lead-acid batteries. Electric cars – still a fantasy as far as mass marketing is concerned but a reality in terms of technological breakthrough do not require lead acid batteries. The SLI battery market is almost guaranteed to expand significantly for the rest of this decade, posited not least on a Chinese new car sales market currently expanding about 30%/year; but if climate change policy initiatives and consumer concern for the environment rise higher up the global agenda then hybrid and electric cars will eventually become more common, to the detriment of demand for lead-acid batteries. Lead is also

used in alloys such as pewter and bronze and has other applications in ammunition and pigments for glass. “Industrial” batteries are used in a variety of ways from providing emergency and back-up power, or being a key part of telecom and power networks, to starting the engines of vehicles such as fork-lift trucks. But these end-uses are marginal in overall terms.

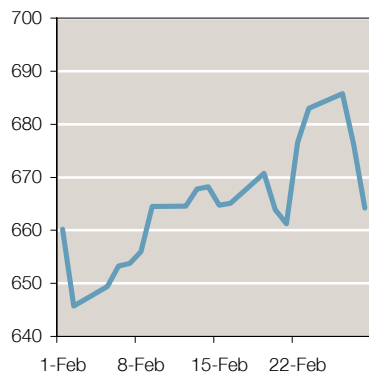
### **Prices should soften**

Last year’s deficit may persist longer through 2007, depending on how speedily the current supply-side problems become resolved, and contingent upon no others popping up. Fundamentally, while demand for lead has been growing at an annual rate of about 2.5 % for the last couple of years, demand remains flat or negative in many developed economies. The ILZSG sees lead usage increasing by 2.6% in 2007, and while European demand is seen steady, buying from the USA is seen falling 3%. About 75% of all the USA’s annual lead consumption in any case comes from recycled metal. Chinese demand on the other hand is expected to grow by 10% this year, and China remains the main growth area for future lead consumption.

In the last eight months lead has therefore benefited from a steady flow of bullish information; it is this news of the current physical tightness in the market which is holding prices at these high levels. We believe that as soon as this price-supportive supply-side news dissipates, the current level will begin to look vulnerable. And there is significant new lead production, and production of lead as a by-product of silver and zinc, coming on-stream from 2H 2007. The additional capacity, in the main, is planned in Australia, coming from new projects, the reopening of mothballed operations and higher output as a result of the resolution of earlier production problems. Apex Silver’s new mine in Bolivia will also provide an important new source of supply. Additionally, there will be incremental production increases in other countries. Already in this cycle we have seen prices dip below \$1000/t, with fundamentals that were not so different to those we see today. We expect lead prices to weaken in 2H 2007 with the fall continuing into 2008, perhaps retreating all the way back to below \$1000/t. That would still leave a fair profit margin, given today’s production costs of around \$700/t. When prices do begin to slip, the drop may be sharp, but it is unlikely that they will fall to anywhere near levels of \$550/t to \$600/t seen in the 1990s.

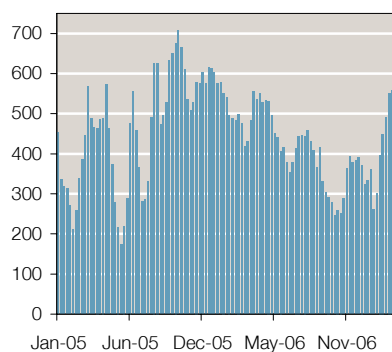
## Gold

Gold price (\$/oz)



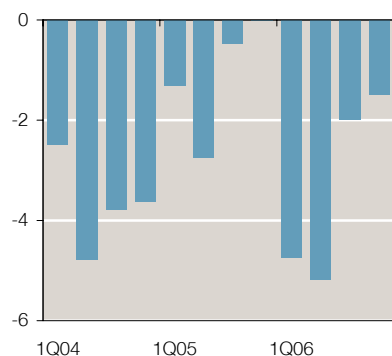
Source: London Bullion Market Association

Comex: Non-commercial net position (tonnes)



Source: Virtual Metals

Quarterly dehedging (Moz)



Source: Virtual Metals, Haliburton Mineral Services, Mitsui Precious Metals

### News

- Feb 27<sup>th</sup>: Newcrest Mining, Australia's biggest independent gold producer, reported gold output of 763,986 oz for the first half of its financial year to end-December 2006, compared to 767,514 oz for the same period of the previous year.
- Feb 23<sup>rd</sup>: Goldcorp estimated its 2007 production will be 2.6 Moz, 200,000 oz lower than its forecast made in December; total 2006 output was 1.69 Moz.
- Feb 22<sup>nd</sup>: Barrick said it expects output of 8.1 Moz-8.4 Moz in 2007, against 8.64 Moz in 2006.

### Analysis

- \$700/oz still the target: but perhaps a bumpy road

Our latest estimates for gold dehedging show that gold mining companies reduced their collective hedge book by 1.5 Moz in Q4 2006, the slowest rate of dehedging since Q4 2005. Together with Haliburton Mineral Services and Mitsui Global Precious Metals, we assessed 118 companies, 48 of them with hedging programmes; the biggest reduction was by Barrick, of 1.2 Moz in Q4 2006. Total dehedging for 2006 was 13.2 Moz. Barrick plans to cut a further 1.3 Moz in Q1 2007. This will have the effect of stepping up overall dehedging in this quarter; and although the pace of dehedging is slowing, we anticipate that this year will see dehedging of 7-9 Moz as a whole.

South Africa's Treasury department released a report which irked the country's gold and other mining companies. The report (on taxation of synthetic fuels) *en passant* advocated a progressive tax on the mining industry; a new royalty Bill is currently the focus of tension between the government and the mining sector and the possibility of an additional 'windfall' tax would set the cat among the pigeons. The government played down suggestions that it was contemplating any such measure – but stranger things have happened. The country's official statistics agency, Statistics South Africa, reported that gold production fell by 12.4% year-on-year in December, while overall mining production fell by 1.1% in 2006 (the first annual decrease in seven years); gold production last year dropped 7.7% compared with 2005. As South Africa declines, China rises; China's gold output in 2007 is expected to increase to 260t, with 700t of new mineral reserves added, according to China's National Development and Reform Commission, against production of 240.07t in 2006.

### Outlook

Expectations that gold would break through \$700/oz seemed entirely justified in February – but they were thwarted by the market shivers emanating from China, which drove gold below \$650/oz in the first days of March, although the daily London pm fix fell below \$650/oz only twice in February. Jewellery offtake still appears vulnerable above \$650/oz, but investment interest will probably push gold through \$700/oz (although not much higher) at some point this year. London daily pm fix, short-term: \$600/oz-\$670/oz.

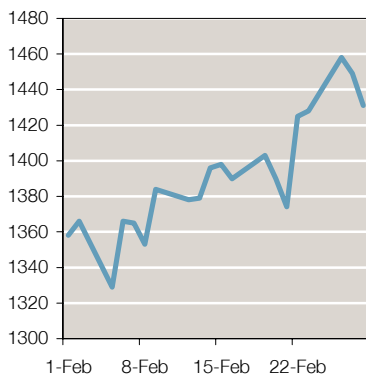
Market data (February unless stated)

Prices	US\$/oz	Euro/oz	Rand/kg	ETF investment	Ounces	Lease rates	1m	3m	6m	12m	Option volatility (end month, %)	
Average	665	508	152,744	US	1,194,558	Average	0.10	0.13	0.17	0.19	1-month	21.25
High	686	520	156,448	UK	19,130	High	0.11	0.14	0.18	0.21	3-month	20.00
Low	646	498	148,754	Aus	20,287	Low	0.09	0.11	0.16	0.13	6-month	19.60
				S.Africa	15,754						12-month	19.20

Source: Prices: London Bullion Market Association, Others: Virtual Metals

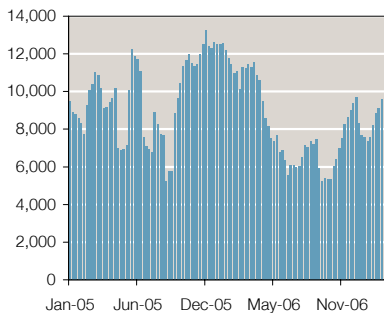
## Silver

Silver price (cents/oz)



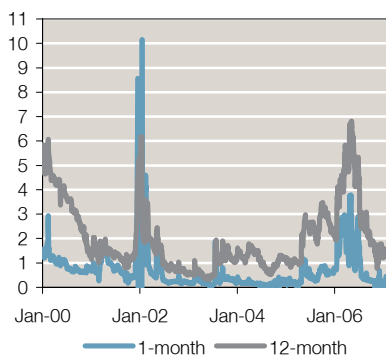
Source: London Bullion Market Association

Comex: Non-commercial net position (tonnes)



Source: Comex

Silver lease rates



Source: Reuters Eco

### News

- Feb 22<sup>nd</sup>: Coeur d'Alene Mines reported Q4 earnings more than doubled to \$23.2m on higher silver and gold prices, despite lower production. Coeur currently expects its existing mines to produce about 13 Moz of silver in 2007 with a cash cost of about \$2.35/oz.
- Feb 16<sup>th</sup>: Pan American Silver updated its resources, saying that it replaced 100% of reserves mined during 2006 and adding 20%, or 35.4 Moz to its proven and probable reserves. It reported net income of \$58.2m for 2006, against a net loss of \$28.6m in 2005. Output was also a record in 2006, at 13 Moz, 4% higher year-on-year.

### Analysis

- Holding above \$12/oz

Silver exploration in Russia could begin to expand rapidly if reports emanating from Ovoca Gold, listed in London, are to be credited. Ovoca suggested it will become the world's fifth-largest primary silver miner when it starts production at the Goltsovoye deposit in Magadan region in northeast Russia by the end of 2008. According to a pre-feasibility study cited by the company the deposit contains 78 Moz of silver and silver-equivalent. The results of a bankable feasibility study are expected to be ready by the end of May. Ovoca intends investing \$70m in developing its resource with a view to producing 5.9 Moz/year, at an average cash cost of \$3.67/oz over the mine's 9.2-year life. Ovoca's largest shareholders are (respectively) Mikhail Mogutov, former chairman of coal firm Vostsibugol; Yuri Radchenko, who discovered Polymetal's Lunnoye deposit; and Leonid Skoptsov, former chairman of oil firm Volganef.

Silver Wheaton's CEO, Peter Barnes, said the company was in talks with "many different companies" about acquiring long-term silver purchase contracts and silver assets. Silver Wheaton specialises in acquiring silver production from mining companies focused on other metals. "More than half of the silver production comes from base-metal mines and they're not focused on the silver. 15% of silver production comes from gold mines and they're not focused so much on the silver either," he said. Silver Wheaton expects its silver sales to reach 20 Moz (against 13.5 Moz in 2006 and 9.7 Moz in 2005) by 2009 "without any further capital expenditures, and assuming no further acquisitions," added Barnes.

### Outlook

**Silver only briefly dipped below \$13.50/oz on the daily London fix and held above \$14/oz for six of February's trading days. Yet the end-February chilly wind from China help drag silver back below \$13/oz. We still view the long-term fundamental prospects as dominated on one hand by growing new mine supply, and on the other by relatively few demand-side innovations of any great magnitude. London daily fix, short-term: \$12/oz-\$14/oz.**

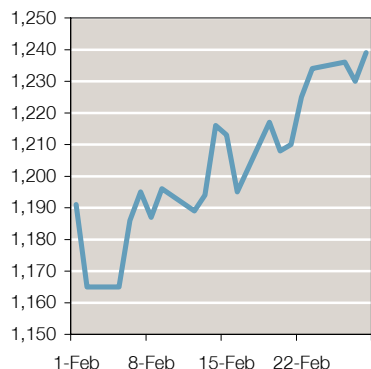
Market data (February unless stated)

Prices	c/oz	e/oz	p/oz	Imports	kg	Lease rates	1m	3m	6m	12m	Option volatility (end month, %)	
Average	1,391.0	1,062.8	710.2	USA (Dec)	422,354	Average	0.08	0.23	0.68	1.41	1-month	30.00
High	1,458.0	1,106.1	742.7	Japan (Dec)	241,010	High	0.44	0.34	0.76	1.54	3-month	30.75
Low	1,329.0	1,028.5	678.2	China (Dec)	363,829	Low	-0.02	0.18	0.60	1.26	6-month	31.25
											12-month	32.00

Source: Prices: London Bullion Market Association, Others: Virtual Metals

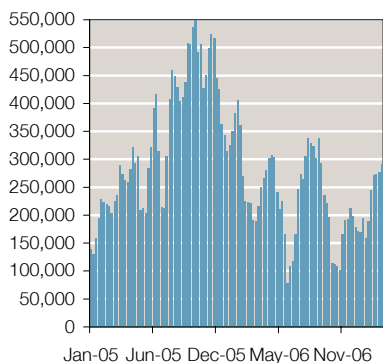
# Platinum

Platinum price (\$/oz)



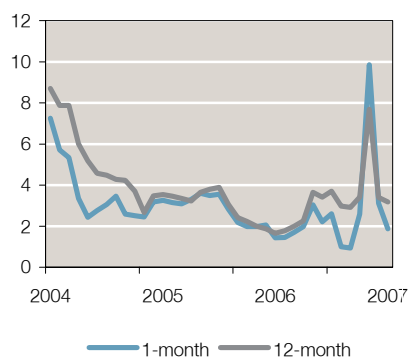
Source: London Platinum & Palladium Market

Nymex: Non-commercial net position (ounces)



Source: Nymex

Platinum lease rates



Source: Reuters Ecowin

## News

- Feb 14th: Impala Platinum (Implats), the world's second biggest platinum producer, made an initial approach and later in the month a friendly takeover was agreed valuing African Platinum (Afplats) at \$584m. In December 2006 Implats had agreed to acquire 29.9% of Afplats' flagship Leeuwkop platinum project for the equivalent of \$147.9m. Leeuwkop is expected to produce 300,000 oz/year of pgms by 2010, with reserves of 6.9 Moz. By buying all Afplats, Implats could add 36 Moz of attributable platinum resources (and in total 60 Moz of four pgm resources – platinum, palladium, rhodium and gold); the company is to go ahead with the construction of its third refinery, in Rustenburg.
- Feb 12th: Anglo Platinum, which accounts for some 40% of global platinum production, reported that output for its full year (end-Dec 2006) rose 15% to 2.82 Moz, slightly above its forecast of 2.7-2.8 Moz. The higher output was partly due to a release of pipeline stocks built up during repairs to the Polokwane smelter in 2005. Production for 2007 was forecast at 2.8-2.9 Moz.

## Analysis

- Price rises on supply-side nerves

Spot platinum prices rose to \$1,259/oz by the end of February, its highest for more than two months, with underlying autocatalyst demand remaining strong and a wave of jitters concerning possible supply disruptions over upcoming labour contract negotiations in South Africa. African Rainbow Minerals reported that a three-week strike in Jan-Feb this year at its Modikwa mine (a joint venture with Anglo Platinum) cost it production of 10,500 oz – a drop in the ocean but there are worries that similar labour disputes in South Africa might continue popping up this year. A further factor underpinning the price strength was news of Lonmin's continuing problems in getting its platinum matte smelter back up and running. The company said on 22<sup>nd</sup> February that the earliest re-start date might now be end-April 2007, some six weeks later than originally estimated. In order to mitigate this delay, Lonmin says it has accelerated the start up of its newly re-commissioned Merensky furnace and expects the first matte tap from this furnace around 9<sup>th</sup> March. Lonmin reiterated its previous full-year sales forecast of between 980,000-1 Moz of platinum, consisting of some 835,000 oz of refined platinum from its own metallurgical facilities, 125,000 oz of toll refined platinum and 20,000-40,000 oz of semi refined platinum sales.

## Outlook

The London daily pm fix for platinum touched a low of \$1,165/oz in February early in the month and thereafter began slowly rising to end on a high note at \$1,239/oz. The fundamental outlook for platinum remains very healthy, with industrial demand – autocatalysts for diesel engines – still buoyant and, as seen at the start of this year, a propensity for the untoward event to disrupt supply. London pm fix, short-term: \$1,150/oz-\$1,250/oz.

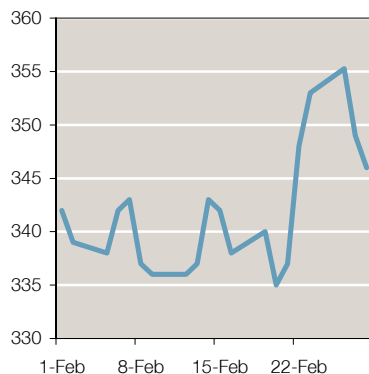
Market data (February unless stated)

Prices	US\$/oz	Lease rates	1m	3m	6m	12m	Trade (kg)	Imports	Exports	Option volatility (end month, %)	
Average	1,205	Average	1.6	2.4	3.0	3.7	USA (Dec)	3,650	10,435	1-month	23.0
High	1,239	High	2.1	2.6	3.2	4.2	Japan (Dec)	6,384	1,954	3-month	26.0
Low	1,165	Low	0.9	1.9	2.9	3.3	Hong Kong (Dec)	2,032	193	6-month	27.0
							Switzerland (Jan)	2,071	3,125	12-month	30.0
							China (Dec)	3,180	2,613		

Source Price: London Platinum and Palladium Market, Others: Virtual Metals

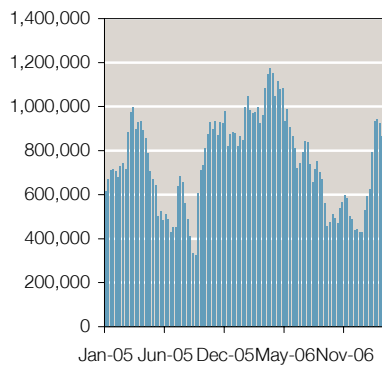
## Palladium

Palladium price (\$/oz)



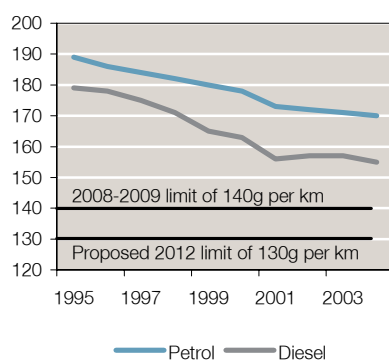
Source: London Platinum & Palladium Market

Nymex: Non-commercial net position (ounces)



Source: Nymex

CO<sub>2</sub> emissions by EU cars (g per km)



Source: Virtual Metals from EU Commission data

### News

- Feb 27<sup>th</sup>: North American Palladium said its palladium production in Q4 of its 2006 fiscal year almost doubled that of Q4 2005, at 73,242 oz, versus 36,833 oz. For the full year palladium production rose 34% to 237,338 oz, on improved grades. Palladium revenues in 2006 rose by 74% to almost \$76m and the net losses in Q4 were reduced to \$7.4m against \$11m in the comparable quarter last year.

### Analysis

- Tight trading range

Stillwater Mining said in February that it will focus on three main areas of growth: increasing PGMs production from both mining and recycling; growing palladium demand; and extending its reserve base. The company plans to increase production 615,000oz-645,000 oz of pgms in 2007 and build up its recycling to between 200,000oz-300,000 oz. Stillwater's production has been increasing steadily and in 2006 was 601,000 oz, against 554,000 oz in 2005. Stillwater is continuing to place a lot of hopes on Chinese palladium jewellery demand, seeing it rise to increase to 1.25 Moz in 2007 from 1.05 Moz in 2006, at the cost (to some extent) of China's appetite for platinum jewellery, which it expects to decline to 700,000 oz this year. The company also returned to the black in 2006, reporting in February a full-year profit of \$7.9m against losses of \$13.9m in 2005, on revenue 21% higher, at \$613.1m.

The European Commission announced plans to impose binding limits on average CO<sub>2</sub> emissions by manufacturers of new cars to 120g/km by 2012. This evoked a wail of protest from some manufacturers but the voluntarily-agreed target, of 140g/km by 2008-2009 now looks certain to be missed. Currently the average emission in the EU 15 is 163g/km, having fallen from 186g/km in 1995. Manufacturers of larger-engine cars and those who do not produce many diesel-engine vehicles will have a hard time meeting the new target, if it passes into law. To hit their target it is likely that more manufacturers will turn to diesels (with much lower CO<sub>2</sub> emissions), hybrids, and also a novel development, diesel-hybrids. The USA automotive consultancy JD Power estimates that diesel-hybrids will begin coming to market in 2010 and account for 150,000 units by 2013. The implications of the EC's latest foray into emissions' control from cars is long-term quite bullish for platinum, used in diesel-engine autocatalysts but less so for palladium offtake – lower emissions in petrol engines will ultimately spell smaller catalysts, requiring less metal.

### Outlook

**The daily London pm fix for palladium scarcely moved in February, pinned to a tight \$18/oz trading range, weighed down in part by investors scaling-back their positions such that net investment on Nymex and Tocom was down by 58,066 oz in the week ending 13<sup>th</sup> February. London daily pm fix short-term: \$320/oz-\$360/oz.**

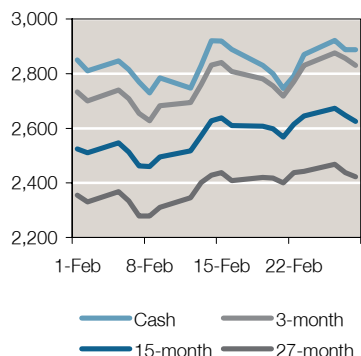
Market data (February unless stated)

Prices	US\$/oz	Lease rates	1m	3m	6m	12m	Trades (kg)	Imports	Exports	Option volatility (end month, %)	
Average	341.8	Average	- 0.32	0.09	0.23	0.38	USA (Dec)	7,305	12,575	1-month	24.8
High	355.3	High	0.07	0.11	0.35	0.69	Japan (Dec)	331	4,359	3-month	29.5
Low	335.0	Low	- 0.80	0.06	0.12	0.08	Hong Kong (Dec)	2,108	316	6-month	35.0
							Switzerland (Jan)	6,376	1,558	12-month	38.0
							China (Dec)	1,176	60	24-month	40.0

Source: London Platinum and Palladium Market, Others: Virtual Metals

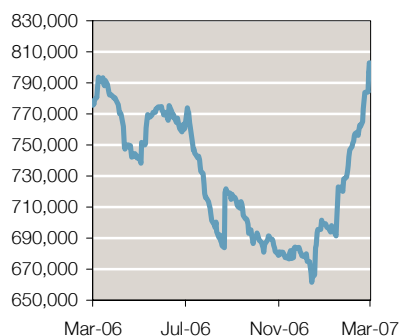
# Aluminium

Aluminium price (\$/tonne)



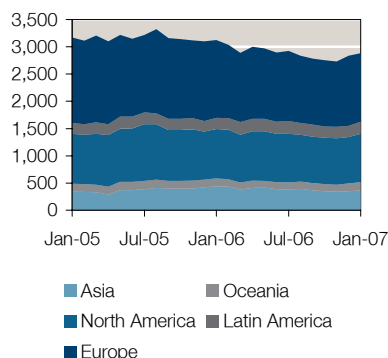
Source: London Metal Exchange

Aluminium stocks (tonnes)



Source: London Metal Exchange

Global stocks aluminium (000 tonnes)



Source: Reuters Ecowin

## News

- Feb 22<sup>nd</sup>: Russia's aluminium production rose 2.1% in January compared to January 2005, according to the Federal State Statistics Service, Rosstat.
- Feb 15<sup>th</sup>: Brazil's primary aluminium output rose 2.9% to 136,900t in January compared to the same month of 2005, according to the Brazilian Aluminium Association (Abal). Brazil's total 2006 output rose 7.1% to a record 1.60 Mt.
- Feb 15<sup>th</sup>: The UAE of Ras al-Khaimah agreed with India's state government of Andhra Pradesh to develop an alumina refinery and an aluminium smelter at a cost of \$2bn. The refinery will have a 1 Mt/year capacity to produce alumina from Andhra Pradesh's 550 Mt of bauxite. The planned smelter will have a capacity of 250,000t/year, with the possibility it could be doubled later.

## Analysis

- More Mid-East output planned

The Middle East's drive to expand aluminium production accelerated further in February with the announcement by Abu Dhabi's government investment agency, Mubadala Development, and the state-owned Dubai Aluminium (Dubal) to build what will be the world's largest aluminium smelter, at a cost of \$8 billion. Mubadala and Dubal are setting up Emirates Aluminium, a joint venture company to develop a 1.4 Mt/year in the United Arab Emirates. "There is ample room for additional capacity on the back of strong international demand," according to Abdullah Kalban, Dubal's CEO. "Demand is growing at an annual rate of 4% or 1.3 Mt/year. This demonstrates the need to establish a smelter or two every year which is not happening in the world right now," he added. Currently the world's biggest smelter is Rusal's, at Bratsk, with capacity of 976,000t/year. Dubal expects primary metal production in the Gulf region will be 4.5 Mt/year by the end of this decade, which may narrowly undershoot regional demand which, according to some estimates, could be 5 Mt/year by the same date. The Middle East has become a global centre for aluminium production partly because of its readily-accessed and relatively cheap energy resources; but this may have a limit. Aluminium Bahrain (Alba) said in February it would like to increase its output from 872,288t in 2006 to 1.2 Mt/year but domestic gas supplies are currently insufficient. The International Aluminium Institute (IAI) reported that daily average primary aluminium output in January, including China, was 96,400t, against 95,200t in December 2006 and higher than 87,200 in January 2006. Total global production in January, also including China, was 2.987 Mt versus a 2.951 Mt in December 2006.

## Outlook

**The current prospect of a balanced global market has restricted the scope for significant price movements; the LME 3-month contract traded in a tight \$247.50/t band in February, and more of the same is likely. LME stocks ended February back above 800,000t, the first time that level has been reached since August 2004. LME 3-month short-term: \$2,700/t-\$3,000/t.**

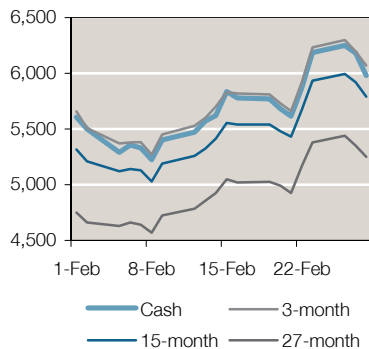
Market data (February unless stated)

Prices (\$/t)	Cash	3-month	15-month	27-month	LME stocks	Tonnes	Prod (kt)	Nov	Dec	LME Open Interest (contracts)
Average	2,831	2,760	2,573	2,386	Jan-07	736,875	Europe	720	716	Aluminium 813,699
High	2,920	2,876	2,673	2,468	Feb-07	802,750	Americas	670	673	
Low	2,725	2,628	2,460	2,278			Asia	309	313	
							Other	358	355	
							Total	2,057	2,057	

Source: London Metal Exchange, except Production: International Aluminium Association

## Copper

Copper price (\$/tonne)



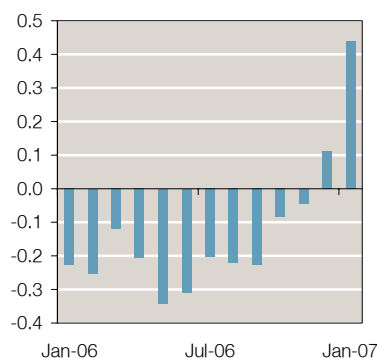
Source: London Metal Exchange

Copper stocks (tonnes)



Source: London Metal Exchange

Chinese unwrought copper imports (% change yoy)



Source: Reuters Ecowin

### News

- Feb 28<sup>th</sup>: China's imports of copper concentrates rose 11% in January compared with the same month in 2006, to 329,479t, according to the General Administration of Customs. Copper cathode imports in January rose 86%, year-on-year, to 130,782t.
- Feb 23<sup>rd</sup>: Peru expects its copper production to rise 10% this year to 1.15 Mt, buoyed by a wave of fresh investment which is likely to total more than \$12bn, according to the country's energy and mining ministry.
- Feb 1<sup>st</sup>: Antofagasta's output rose 4% in Q4 2006 over the previous quarter, to 131,200t. Full-year production was almost static, at 465,500t.

### Analysis

- China's imports rise strongly

The world's top copper consumer returned to buying with a vengeance in January; China's refined copper imports ballooned by 60,000t more than for the same month in 2006 and was the highest figure since June 2005, continuing a rising trend from December 2006, when its refined copper imports were 95,831 tonnes, the highest monthly inflow in 2006. It is widely expected that its refined copper imports will have been about 150,000 tonnes in February. Partly this is a response to the recent price differential prevailing between the Shanghai Futures Exchange (SHFE) price and LME prices, which in February widened at one point to a \$1,214/t premium for SHFE metal. But there are also indications of a revived appetite from Chinese copper end-users.

Debate continues over the supply-demand balance in the global refined copper market. The International Copper Study Group (ICSG) reported in February that between Jan-Nov 2006 there was a surplus of 207,000t, but this takes no account of stockpile sales from China's State Reserve Bureau, which are estimated to have been as high as 200,000t through the course of last year. These unreported stock movements inevitably hang over the market. Bloomsbury Minerals Economics, copper market specialists, considers the global market to have been in a 220,000t deficit in 2006, arguing this shift to a 164,000t surplus in 2007. The ICSG also said apparent usage in the USA fell to its lowest level for 2006 in November, 21% below that of November 2005.

### Outlook

**2007 is shaping up to be almost as interesting for copper as 2006, as one key variable – Chinese imports versus its rising domestic production – remains a mystery wrapped inside an enigma. The final quarter of 2006 saw global exchange stocks rise by some 94,000t, a bearish signal which helped cut some froth from the price. But the slump in Chinese demand in Q4 2006 seems to be lifting in Q1 2007, and exchange stocks have stabilised. Much depends also on the extent to which consumers re-build depleted stocks. With the increasing likelihood of a global market more or less in a supply-demand balance this year, there seems less scope for prices to rise significantly higher, yet uncertainties as to China could prevent further falls. LME 3-month, short-term: \$5,500/t-\$6,500/t.**

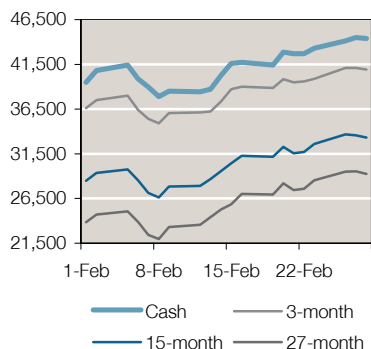
Market data (February unless stated)

Prices (\$/t)	Cash	3-month	15-month	27-month	LME stocks	Tonnes	LME Open Interest (contracts)
Average	5,676	5,718	5,450	4,940	Jan-07	211,825	Copper 376,638
High	6,251	6,299	5,995	5,440	Feb-07	207,975	
Low	5,226	5,270	5,030	4,570			

Source: London Metal Exchange

## Nickel

Nickel price (\$/tonne)



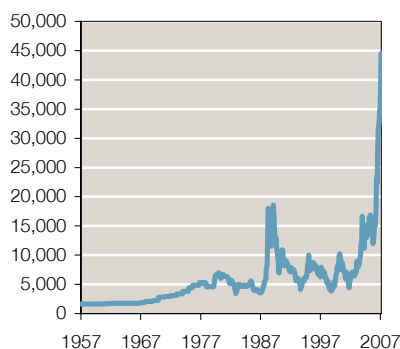
Source: London Metal Exchange

Nickel stocks (tonnes)



Source: London Metal Exchange

Long-run nickel price (\$/tonne)



Source: Reuters Ecowin

### News

- Feb 23<sup>rd</sup>: Consumption of stainless steel in the USA between Jan-Nov 2006 rose by 15% against the same period in 2005, to more than 2.39 Mt, according to the Speciality Steel Industry of North America (SSINA).
- Feb 15<sup>th</sup>: Xstrata Nickel is to invest an additional \$95m and begin a pre-feasibility study to advance its joint venture (with Barrick Gold) Kabanga nickel project in western Tanzania. It now estimates the indicated resource at 9.7 Mt with 2.37% nickel, and an estimated inferred resource of 36.3 Mt with 2.8% nickel.

### Analysis

- LME price rips through \$40,000/t

Nickel prices strode through the \$40,000/t barrier (3-month contract) in February, as LME stocks fell to fresh lows and physical buyers struggled to source metal. The 3-month price traded as high as \$41,500/t on 26<sup>th</sup> February as available LME stocks fell to half a day's global consumption. Stainless steel producers suggest demand for their product is still very strong and South Korea's Posco raised its prices of stainless steel products by the equivalent of \$255.7/t, about 6%, as a consequence of high nickel costs, with effect from 5<sup>th</sup> March, its second increase this year and the ninth since the start of 2006. Mining companies are embarking on new nickel projects but the time-lag will be agonising. Rio Tinto revealed it may invest \$2bn in developing its first refined nickel project in Indonesia, which could eventually have output of some 46,000t/year. Discussions with the Indonesian government are underway and, if successful, could lead to a feasibility study. Indonesia's Energy Minister said Rio Tinto and the government will sign a contract in March for a 20-25 year minelife, setting out the operational conditions for the miner, as well as taxes, royalties and provisions for sale of ownership to local groups. BHP Billiton might invest as much as \$1.5bn on a nickel project in the Philippines. The proposed BHP project would not start production before 2012, if all went well. BHP's other big nickel project, Ravensthorpe in Western Australia, with a scheduled 50,000t/year, is due to come on-stream in Q1 2008, but it acknowledged in February that it was having to look for specialist staff outside Australia to finish the job. Meanwhile China will increase substantially its imports of low-grade nickel ore from the Philippines; Atlas Consolidated Mining plans to ship 45,000t of low-grade nickel ore from the Philippines to China in February, more than doubling January's figure. This type of nickel is most suitable for lower-grade stainless steel and will thus take a bite out of China's overall nickel ore imports, but may not ultimately do much to alleviate the current physical tightness of refined nickel.

### Outlook

**The story is unchanged for nickel as yet – supply is seriously lagging demand, and new supply sources are distant. Having settled three times at the end of February above \$44,000/t, prices could go much higher in the near term, but we are in uncharted territory now. LME 3-month contract short-term: >\$40,000/t.**

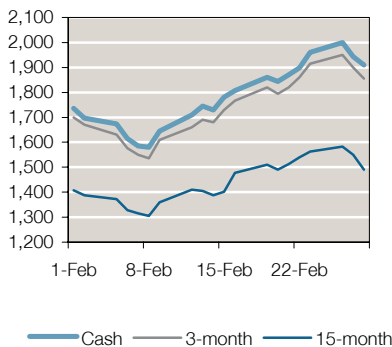
Market data (February unless stated)

Prices (\$/t)	Cash	3-month	15-month	27-month	LME stocks	Tonnes	LME Open Interest (contracts)
Average	41,184	38,132	30,267	25,912	Jan-07	3,972	Nickel 63,829
High	44,500	41,100	33,650	29,550	Feb-07	3,294	
Low	37,900	34,895	26,625	21,950			

Source: London Metal Exchange except Option volatility: Virtual Metals

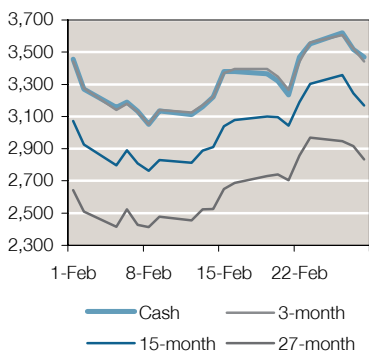
## Lead and zinc

Lead price (\$/tonne)



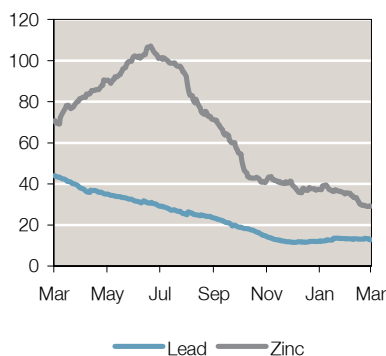
Source: London Metal Exchange

Zinc price (\$/tonne)



Source: London Metal Exchange

Stocks on LME (Jan 1st 2004 = 100)



Source: Virtual Metals from LME

### News

- Feb 22<sup>nd</sup>: Global refined zinc consumption in 2006 was 11.064 Mt, against production 10.732 Mt (10.640 Mt in 2005), giving an implied deficit of 332,000 t, according to the International Lead and Zinc Study Group (ILZSG). The ILZSG also said the global lead market in 2006 showed an implied deficit of 10,000t, with consumption at 8.059 Mt for 2006, up from 7.807 Mt in 2005.
- Feb 6<sup>th</sup>: Zinifex, the Australian zinc-lead producer, reported that an explosion in a blast furnace at its Port Pirie smelter in south Australia would mean lost production of about 6,00t of lead. Port Pirie produced 206,000t of refined lead and 33,300t of refined zinc.
- Feb 2<sup>nd</sup>: Chelyabinsk Zinc, Russia's largest producer of the metal, increased its production of zinc and zinc alloys by 27.5% in 2006 to 148,384t. It expects output in 2007 to be about 165,000t.

### Analysis

- Lead shifts higher on *force majeure* declaration

News on 12<sup>th</sup> February that Xstrata had declared *force majeure* on deliveries from its Northfleet refinery near London played into a variety of other supply-side blips that have been around since late 2006, and helped push LME prices to unheard-of nominal heights. The LME spot price actually settled at \$2,000/t on 26<sup>th</sup> February (and \$1,950/t for the 3-month), a remarkable feat for a base metal that only a year ago was perpetually poised on the brink of going below \$1,000/t. In real terms, lead still has far to go before it achieves its all-time peak of \$3,800/t, in 1979. Xstrata's difficulties stem from as yet unspecified problems at its Mount Isa smelter in Australia, which delivers feedstock to Northfleet. Mount Isa produced some 150,000t of lead in 2006 and with 4% of annual global production what happens there is not negligible. Further news on Mount Isa is expected during Xstrata's annual results in March. More bearish news for zinc traders came with the publication at the end of February of figures from China's customs agency, which reported a sharply widening gap between zinc exports and imports. According to this source, China exported 71,377t of refined zinc in January, against 11,000t for the same month in 2006 and 81,000t in December 2006. But China's zinc metal imports in January plunged to 14,485t, against 42,000t in December 2006; 56,892t/month of net metal exports is perhaps not a sustainable level – a new 5% export tax on low-grade refined zinc will dent exports – but China's rapidly growing zinc smelting capacity plus growing zinc concentrate supplies hints that it might eventually do to zinc what it is doing to the global steel market; dominate.

### Outlook

**The surge in lead prices may push higher in the short-term, depending on how soon Xstrata resolves its Mount Isa troubles; longer-term its prospects are for a return to much lower levels. Zinc currently looks very vulnerable to China's slowing imports/growing exports – but it is too early to regard the January figures as confirming a fixed trend. LME 3-month, short-term: Lead \$1,700/t-\$2,000/t; Zinc \$3,200/t-\$3,600/t.**

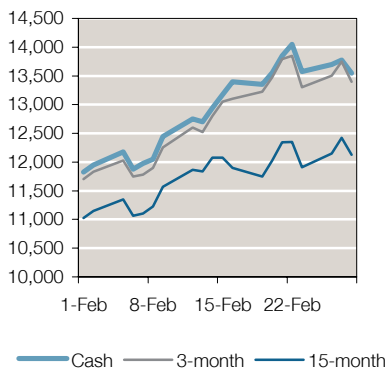
Market data (February unless stated)

Prices (\$/t)	Cash	Cash	3-month	3-month	LME stocks	LME Open Interest (contracts)			
	Lead	Zinc	Lead	Zinc		Lead	Zinc		
Average	1,736	3,310	1,736	3,311	Jan-07	39,050	97,675	Lead	80,937
High	1,950	3,620	1,950	3,606	Feb-07	32,100	94,250	Zinc	208,064
Low	1,536	3,050	1,536	3,051					

Source: London Metal Exchange except Option volatility: Virtual Metals

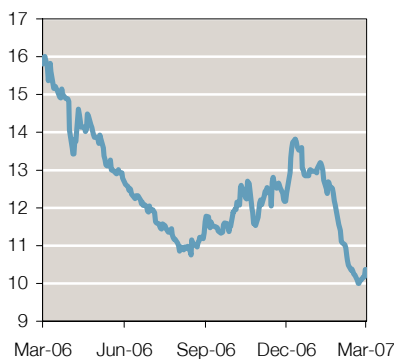
# Tin

Tin price (\$/tonne)



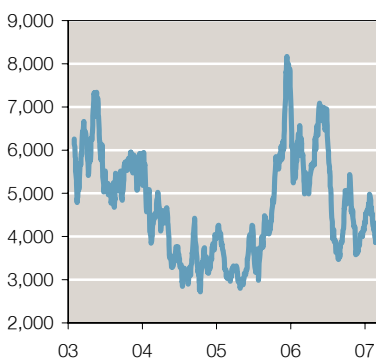
Source: London Metal Exchange

Tin stocks (000, tonnes)



Source: London Metal Exchange

Tin, LME, contracts volume traded (Monthly moving average)



Source: LME

## News

- Feb 23<sup>rd</sup>: Indonesia's tin output may fall to 80,000t in 2007 in the wake of smelter closures, following action (which started in late 2006) against illegal operations, according to Thobrani Alwi, president of state mining firm PT Timah.
- Feb 15<sup>th</sup>: PT Timah said it had scrapped plans to build a second, 7,000t/year capacity smelter on Kundur island.
- Feb 9<sup>th</sup>: Bolivia nationalised the Vinto tin smelter, the country's only operating smelter; its owner, Glencore, said it would seek compensation through international arbitration. The smelter was privatised under a previous government in 2000.

## Analysis

- Price rockets on continued Indonesian turmoil

Uncertainty persists about the all-important supply from Indonesia, second-biggest source of tin after China. If the head of PT Timah is right, then overall Indonesian output could drop as much as 33% this year against 2006, but it's too early to tell if this is a sound prognosis, or is (if anything) rather optimistic. PT Timah itself has been granted an export licence under new export rules – not too surprising perhaps for a state-owned producer. The new regulations set much tougher rules for tin exports, including verification of the source of tin ore by a government-appointed surveyor and checks on the purity of the ingots. As of 23<sup>rd</sup> February, eight companies in Indonesia had applied for registration as tin exporters but only Timah's had been approved. PT Koba Tin also submitted an application, along with six other applicants. The outlook for Koba is less clear, even though 25% of it is owned by Timah – the rest is owned by the Malaysian Smelting Corporation. Koba, which is (under normal circumstances) expected to produce about 17,000t of tin this year, is under police scrutiny for allegedly sourcing tin ore illegally and for mining outside its allocated areas. On 15<sup>th</sup> February police detained three Koba Tin directors, including president director Anuar Sidek, at the National Police HQ jail in Jakarta, in connection with suspicions of illegally sourcing tin ore and operating outside its mining area. Police have accused Koba Tin of violating a mining law on exploration and smelting, which carries a maximum penalty of six years imprisonment. Export licences for tin is one thing, smelting on the Bangka-Belitung province is another; Indonesia has allowed five smelters to resume operations and may issue permits for another two but when they will re-start operations is unclear. Locla estimates suggest that, even if they are granted permits immediately they may not be able to 're-boot' their operations before May. Adding to the upward price pressure, Chinese exports of tin may fall 10% in 2007, having dropped 12% in 2006, as Chinese demand for its electronics' sector continues growing.

## Outlook

**The question for tin in 2007 is not if there will be a global deficit, but by how much. That all depends on how low Indonesia's production slumps and how much extra China sucks in. LME stocks are already 20% down since the start of the year. LME 3-month short-term: \$13,400/t-\$14,500/t.**

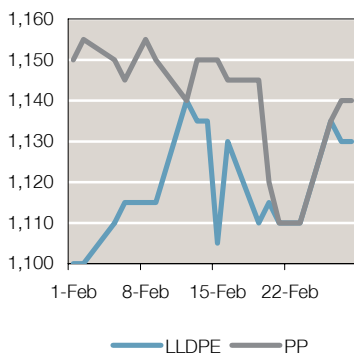
### Market data (February unless stated)

Prices (\$/t)	Cash	3-month	15-month	LME stocks	Tonnes	LME Open Interest (contracts)
Average	12,933	12,781	11,766	Jan-07	11,400	Tin 21,416
High	14,050	13,850	12,425	Feb-07	10,360	
Low	11,825	11,705	11,025			

Source: London Metal Exchange except Option volatility: Virtual Metals

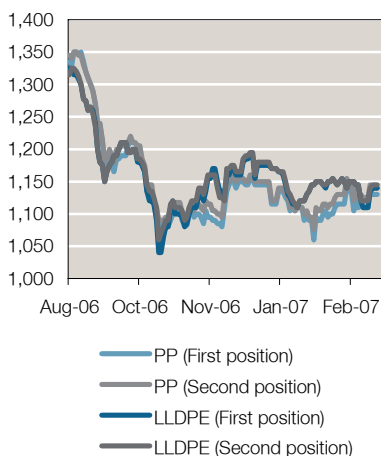
## Plastics

Plastics prices, nearest contract, LME (\$/tonne)



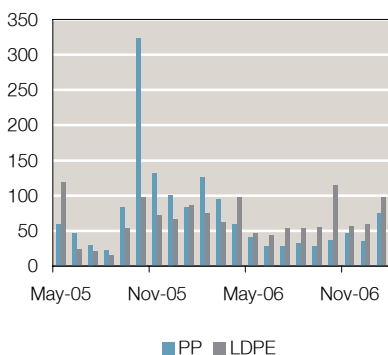
Source: Virtual Metals from LME

Plastics prices, various contracts, LME (\$/tonne)



Source: Virtual Metals from LME

Volume traded (contracts)



Source: Reuters Ecowin

### News

- Feb 26<sup>th</sup>: Dow Chemical sold its South African plastics producing subsidiary Safripol, citing changing strategic objectives in the Middle East and China as underlying the disposal. A consortium backed by Absa Capital bought Safripol, which manufactures high-density polyethylene and polypropylene. Part of Dow’s thinking behind the decision is suspected to be plans by the South African government to push through a ‘windfall’ tax on synthetic fuel producers, notably Sasol.

### Analysis

- Tight trading range for LME futures

Prices on the LME for LLDPE and PP were largely adrift in February, trapped within a narrow \$35/t and \$45/t trading range respectively. This largely reflected the relatively becalmed crude oil price, itself a consequence of indications that global crude production was higher than previously anticipated, as a promised cut by OPEC failed to materialise. The USA’s Energy Information Administration (EIA) now expects crude oil prices to average \$59.90/barrel this year and \$62.50/barrel in 2008, a reduction for both years from previous EIA estimates. A further dampening effect on the market was the almost complete cessation of business in China during its New Year holidays. The front-month price for LLDPE ended February at \$1,130/t, that of PP concluded at \$1,140/t, \$30/t higher and \$10/t lower, respectively. Crude oil prices could drift still lower in the coming weeks as the northern hemisphere winter recedes and demand abates somewhat. Prices in Asia were subdued in mid-February, spot PP prices at \$1,220-\$1,230/t and LLDPE at \$1,250-\$1,270/t. There was a similar story for spot prices in the USA and Europe, where end-users have ample stocks currently and producers have had difficulty in trying to raise prices even marginally.

Plastics demand in Asia in 2006 probably rose some 6% year-on-year, far outstripping much lower growth rates in the USA and Europe of perhaps 4%. The trend is growing for a displacement of plastics production to lower-cost (both in labour and energy) Asian producers, away from Europe. Part of the changing face in USA and European plastics’ demand is the strong growth in bioplastics, which is slowly eroding conventional plastics’ market share. The USA-based research group Freedonia Group estimates demand in the USA for natural polymers (such as cellulose ether and starch-based polymers) is currently growing by 5.9%/year. This would see total demand by value rise to \$3.59bn in 2010 from \$2.70bn in 2005.

### Outlook

**It was yet another low-volume month for trading of the LME’s plastics contracts and the almost complete absence of volatility both reflected and contributed to that sense of stasis. We anticipate that, without inspiration from higher crude prices (and little on the horizon indicates that) or a post-New Year holiday surge in Asia, then the short-term outlook is for little change. LME short-term PP: \$1,100-\$1,150/t, LLDPE: \$1,100-\$1,150/t.**

### Market data (February unless stated)

Contract	Average prices		Volumes (December)		Open Interest (contracts) (End Jan)		
	LLDPE	PP	LLDPE	PP	LLDPE	PP	
First position	1,118.25	1,140.00	Daily average	74	97	393	447

Source: London Metal Exchange

## Indices

### Precious and base metal prices

(1999 Avg.=base 100) 28 <sup>th</sup> February 2007	Current	Change from					
		1 M	1 Yr	5 Yr			
Gold (spot)	238	2% ↑	233	19% ↑	199	125% ↑	106
Silver (spot)	274	7% ↑	256	48% ↑	186	224% ↑	85
Platinum (spot)	327	6% ↑	309	18% ↑	278	162% ↑	125
Palladium (spot)	96	5% ↑	91	21% ↑	79	-8% ↓	104
Aluminium (cash)	212	2% ↑	207	22% ↑	174	111% ↑	101
Aluminium (3m)	204	4% ↑	197	18% ↑	173	105% ↑	99
Aluminium (15m)	183	4% ↑	176	14% ↑	161	83% ↑	100
Aluminium (27m)	166	3% ↑	161	10% ↑	151	67% ↑	99
Copper (cash)	380	6% ↑	359	24% ↑	308	283% ↑	99
Copper (3m)	378	7% ↑	355	27% ↑	297	283% ↑	99
Copper (15m)	345	8% ↑	320	34% ↑	258	251% ↑	98
Copper (27m)	306	9% ↑	280	36% ↑	225	212% ↑	98
Nickel (cash)	738	14% ↑	650	198% ↑	248	636% ↑	100
Nickel (3m)	673	13% ↑	599	173% ↑	247	586% ↑	98
Nickel (15m)	562	16% ↑	485	132% ↑	242	460% ↑	100
Nickel (27m)	503	22% ↑	414	117% ↑	231	393% ↑	102
Zinc (cash)	322	1% ↑	320	51% ↑	214	350% ↑	72
Zinc (3m)	315	0% ↓	316	48% ↑	212	334% ↑	73
Zinc (15m)	290	2% ↑	285	45% ↑	199	273% ↑	78
Zinc (27m)	259	6% ↑	245	45% ↑	178	221% ↑	81
Lead (cash)	380	10% ↑	344	60% ↑	237	298% ↑	95
Lead (3m)	364	9% ↑	333	57% ↑	232	279% ↑	96
Lead (15m)	283	4% ↑	272	33% ↑	212	198% ↑	95
Tin (cash)	251	10% ↑	228	68% ↑	149	263% ↑	69
Tin (3m)	247	10% ↑	225	70% ↑	146	256% ↑	69
Tin (15m)	224	5% ↑	213	57% ↑	143	212% ↑	72

### LME base metals stocks

(1999 Avg.=base 100) 28 <sup>th</sup> February 2007	Current	Change from					
		1 M	1 Yr	5 Yr			
Aluminium	94	5% ↑	89	4% ↑	91	-14% ↓	109
Copper	28	16% ↑	24	121% ↑	13	-75% ↓	113
Lead	29	-5% ↓	30	-35% ↓	44	-71% ↓	99
Nickel	7	-40% ↓	12	-89% ↓	68	-84% ↓	45
Tin	123	-12% ↓	140	-29% ↓	173	-67% ↓	368
Zinc	33	10% ↑	30	-74% ↓	126	-79% ↓	159

### USD exchange rates

(1999 Avg.=base 100) 28 <sup>th</sup> February 2007	Current	Change from					
		1 M	1 Yr	5 Yr			
European euro	82	1% ↑	81	-7% ↓	89	-32% ↓	121
Canadian dollar	79	1% ↑	78	3% ↑	77	-26% ↓	108
Great British pound	83	0%	83	-9% ↓	91	-27% ↓	113
Japanese yen	106	1% ↑	104	3% ↑	103	-9% ↓	117
South African rand	121	4% ↑	117	19% ↑	102	-36% ↓	190
Australian dollar	84	2% ↑	82	-2% ↓	86	-33% ↓	125

Source: Virtual Metals & London Metal Exchange

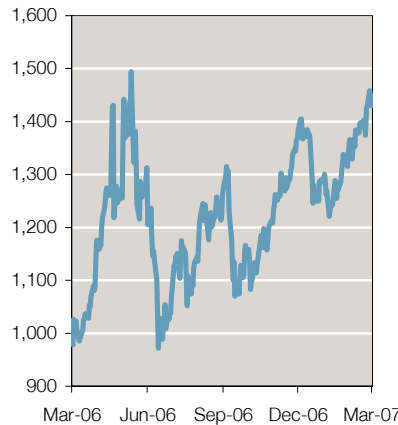
# Prices

**Gold (\$/oz)**



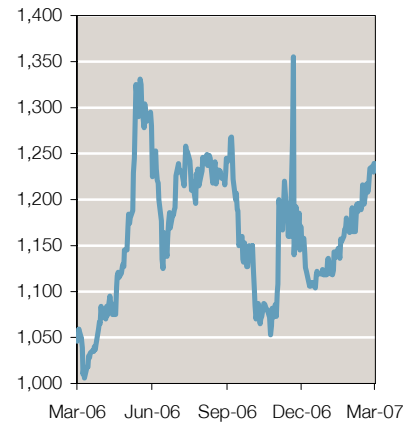
Source: London Bullion Market Association

**Silver (cents/oz)**



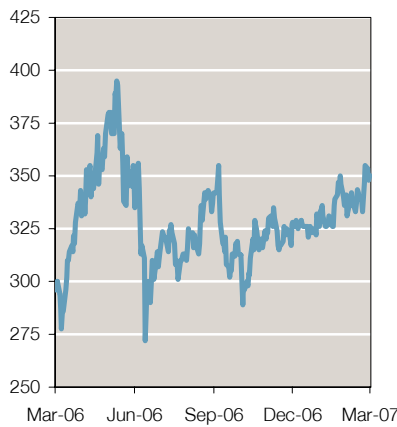
Source: London Bullion Market Association

**Platinum (\$/oz)**



Source: London Platinum & Palladium Market

**Palladium (\$/oz)**



Source: London Platinum & Palladium Market

**Aluminium (\$/tonne)**



Source: London Metal Exchange

**Copper (\$/tonne)**



Source: London Metal Exchange

**Nickel (\$/tonne)**



Source: London Metal Exchange

**Lead & zinc (\$/tonne)**



Source: London Metal Exchange

**Tin (\$/tonne)**



Source: London Metal Exchange

## Notes

## Notes

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