Merchant Banking

INVESTMENT RESEARCH

Fortis metals monthly

March 2008

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

VM Group

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Contents

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
Plenty of negative data from the US economy has been elbowed aside so far this year in the rush of investors to plunge into just about every commodity, base and precious metals included. Partly this is a changed perception as to what today, in these uncertain times, constitutes a safe haven, while to some extent it is simply a reflection of the very weak US dollar making a host of dollar-denominated assets much cheaper. At some point this year shrinking US (and maybe European) demand for base metals must be reflected in lower prices – but not yet, it seems.

Gold
Minor corrections here and there tripped gold up a few times in February but, understandably, the overall positive sentiment remained very strong. It is just a matter of time before the four-digit hurdle is history.

Silver
Silver finally began to catch up with gold in February, rising to a 27-year peak and crossing the $20/oz barrier. The gold/silver ratio has thus come back more into line with the historic average, which for most of the last century was 1:47.

Platinum
Another year of deficit is ahead in 2008 (thanks to South Africa's creaking power supply network) and, with industrial end-users over a barrel, platinum even at $2,500/oz might look reasonable. South Africa's power supply – or lack of – will continue to drive prices and as such wild swings can be expected.

Palladium
Palladium has obviously benefited from hanging onto platinum's coattails, but there are some solid reasons why its fortunes have altered so dramatically – not the least of which are apparently diminishing Russian stock sales. Moreover, the wider platinum pulls away from it, the more tempting it is to work palladium into substitutions.

Aluminium
Aluminium prices jumped in the month on anticipation of a medium-term shortfall in the supply of the metal – not least because China emerged in January as a net importer. More bullish news is likely however, as the costs of production are rising.

Copper
Copper has got beyond itself once more. Are the underlying supply-demand conditions really as attractive as they were two years ago? No - but investors are currently impervious to logic. This situation might persist a little longer before harsh reality (tumbling US demand for copper) spoils the party.

Nickel
The same might also be said for nickel as for copper. A single industrial stoppage is not in itself sufficient cause to see nickel break through $30,000/t, especially when a comfortable global surplus is likely this year; but in a tidal wave of investment money, all boats float higher.

Lead and zinc
Both lead and zinc recorded decent price gains in February, although the fundamentals for zinc are still very poor for the longer-term.

Tin

Fresh records for tin prices on the LME, as the main producer regions – Bolivia, China, Indonesia – all gave some cause for concern with regard to whether or not supply problems might once again occur this year.

Steel

There was a softly-softly start to the LME's latest addition to its portfolio, and with little trading data to go on, it is too soon to make any predictions for the exchange's steel futures. But the steel world itself is seeing some very strong price rises and as yet little gloom from a US-led recession.

Plastics

LME contracts persistently disappoint with limited volumes and very low price volatility. The strong crude oil price may give some scope for upward pressure in the coming weeks, but the LME's contracts may not be reflecting the true strength of the plastics' markets.

Forecasts

Price forecasts

		End-January	1-month	2-month	3-month	12-month
Gold	$ per oz	971.50	950-1,100	980-1,200 (r)	1,000-1,400 (r)	1,500 (r)
Silver	$ per oz	19.62	18-22 (r)	19-23 (r)	20-25 (r)	27 (r)
Platinum	$ per oz	2,150	2,000-2,500 (r)	2,000-2,500 (r)	2,000-2,500 (r)	2,200
Palladium	$ per oz	568	450-650 (r)	450-650 (r)	450-650 (r)	450-650 (r)
Aluminium (3-month)	$ per tonne	3,121	3,100-3,300 (r)	3,100-3,300 (r)	3,100-3,300 (r)	3,500 (r)
Copper (3-month)	$ per tonne	8,460	7,800-8,300	7,500-8,000 (r)	7,500 (r)	6,000
Nickel (3-month)	$ per tonne	31,700	25,000-30,000	27,000-30,000 (r)	27,000-30,000 (r)	25,000
Lead (3-month)	$ per tonne	3,381	2,900-3,200	>3,000 (r)	>3,000 (r)	>3,000 (r)
Zinc (3-month)	$ per tonne	2,745	2,500-2,800	2,400 (r)	2,400 (r)	2,000
Tin (3-month)	$ per tonne	18,725	19,300-20,300 (r)	19,300-20,300 (r)	19,300-20,300 (r)	17,000 (r)
Plastic: LL (Global)	$ per tonne	1,445	1,460-1,470	1,480	1,480	1,500
Plastic: PP (Global)	$ per tonne	1,440	1,430-1,440	1,450	1,470	1,500

		Average/2009	Average/2010	Average/2011	Average/2012	Average/2013
Gold	$ per oz	1,000 (r)	800 (r)	650 (r)	600 (r)	500
Silver	$ per oz	23 (r)	15 (r)	13 (r)	13 (r)	10 (r)
Platinum	$ per oz	1,800 (r)	1,700 (r)	1,700 (r)	1,500 (r)	1,300 (r)
Palladium	$ per oz	500 (r)	500 (r)	500 (r)	450 (r)	300 (r)
Aluminium (3-month)	$ per tonne	4,000	3,500	3,500	3,000	2,500
Copper (3-month)	$ per tonne	6,000 (r)	5,000	5,000	5,000	4,000
Nickel (3-month)	$ per tonne	25,000	25,000	15,000	14,000	14,000
Lead (3-month)	$ per tonne	2,500 (r)	2,000 (r)	1,300	1,200	1,000
Zinc (3-month)	$ per tonne	2,200	2,200	2,500	2,500	2,500
Tin (3-month)	$ per tonne	14,000	13,000	13,000	12,000	10,000
Plastic: LL (Global)	$ per tonne	1,300	1,200	1,200	1,200	1,200
Plastic: PP (Global)	$ per tonne	1,250	1,250	1,250	1,250	1,250

Source: VM Group *[r] = revised from previous month.*

Market Update

Prices and stock levels (as of March 10th)

Prices		**Most recent price**	**Average over past 12 M**	**High**	**Low**	**Price 1 week ago**	**WoW (%)**	**Price 1 month ago**	**MoM (%)**	**Price 12 months ago**	**YoY (%)**	**Average 2007**	**Average 2006**
Gold	$/oz	972.5	747.4	988.5	642.1	971.5	0.1	916.3	6	647.75	50	696.5	604.0
Silver	$/oz	2,022	1,411	2,080	1,167	1,962	3.1	1,695	19	1297	56	1,338	1,157
Platinum	$/oz	2,082	1,429	2,273	1,202	2,150	(3.2)	1,860	12	1202	73	1,305	1,142
Palladium	$/oz	506.0	372.4	582.0	320.0	568.0	(10.9)	432.5	17	350.5	44	354.7	320.4
Aluminium: 3-m	$/tonne	3,211	2,656	3,212	2,376	3,121	2.9	2,709	19	2735	17	2,662	2,593
Copper: 3-m	$/tonne	8,560	7,440	8,810	6,175	8,460	1.2	7,560	13	6175	39	7,096	6,671
Lead: 3-m	$/tonne	3,140	2,784	3,880	1,846	3,381	(7.1)	2,885	9	1846	70	2,558	1,282
Nickel: 3-m	$/tonne	33,400	34,602	51,000	25,495	31,700	5.4	27,605	21	43595	(23)	36,217	23,266
Tin: 3-m	$/tonne	19,300	15,475	19,300	13,200	18,725	3.1	16,950	14	13790	40	14,532	8,766
Zinc: 3-m	$/tonne	2,670	3,037	4,106	2,201	2,745	(2.7)	2,361	13	3265	(18)	3,243	3,252
PP	$/tonne	1,440	1,310	1,450	1,135	1,440	0.0	1,435	0	1160	24	1,220	1,176
LLDP	$/tonne	1,445	1,282	1,465	1,140	1,445	0.0	1,465	(1)	1155	25	1,255	1,213

LME Stocks		**Most recent stocks**	**Average over past 12 M**	**High**	**Low**	**Stocks 1 week ago**	**WoW (%)**	**Stocks 1 month ago**	**MoM (%)**	**Stocks 12 months ago**	**YoY (%)**	**Average 2007**	**Average 2006**
Aluminium	Tonnes	951,225	880,889	957,900	797,700	948,225	0.3	953,300	0	798,275	19	842,573	723,253
Copper	Tonnes	130,250	151,518	201,000	97,550	138,150	(5.7)	164,125	(21)	199,725	(35)	158,899	119,593
Lead	Tonnes	46,150	39,221	49,325	20,850	46,175	(0.1)	49,050	(6)	30,900	49	37,218	76,115
Nickel	Tonnes	47,298	26,297	48,156	3,564	47,592	(0.6)	46,968	1	3,876	1,120	18,110	17,324
Tin	Tonnes	9,800	11,880	16,065	7,995	9,910	(1.1)	11,410	(14)	9,440	4	11,891	13,187
Zinc	Tonnes	123,900	84,293	123,925	58,100	122,500	1.1	116,100	7	94,125	32	81,377	218,452

Source: VM Group

Analysis

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Zambia and DRC want more for their copper

Anyone banking on a rapid expansion of copper production from the ore-rich belt that spans the Zambian and Congolese borders is in for a big surprise. In the first two months of 2008 Zambia has gone from being one of the destinations of choice for African mining investment, to a country that is now being roundly criticised for what many see as extortionate new tax levels levied on mining operations. For its part, the Democratic Republic of Congo (DRC) may now be able to convince investors of security of life, after two civil wars that left 5.4m people dead – but, on current developments, security of cash flow planning still looks highly uncertain.

The new national budget passed by the Zambian government in late January this year delivered a nasty shock for miners. The government plans to raise the effective tax rate on miners to 47% (from a previous 31%), including a 25% surcharge on copper sales when the price is between $2.50-$3/pound ($5,510/t-$6,612/t), rising to 50% of additional revenue between $3-$3.50 ($6,612/t-$7,714/t) and 75% above that level. Miners will also pay tax on profits of 15% when they earn a return on investment of over 8%, corporate tax of 30% and royalties of 3% of sales. That compares with earlier corporate tax levels of 25% and royalties of 0.6%. Predictably, the raised taxes have resulted in a chorus of outrage, especially since the new taxes override earlier agreements.

Zambia's new tax plans are, inevitably, forcing several mining companies to reassess projects. The constantly shifting goal posts in the DRC, with a still unresolved review process of licenses granted under previous governments, is stoking uncertainty there. The potential of the two countries as a source of the copper is undeniable. Zambia has long held the rank of Africa's biggest copper producer while the Congo holds a tenth of the world's copper reserves, with deposits boasting some of the richest grades ever discovered. But decades of neglect in the DRC have suppressed the flow of metal, while the relatively benign dictatorship of President Kenneth Kaunda ruined Zambia's economy in the early 1970s, by nationalising the copper mines, established by Anglo American, a decision that halved the country's annual copper production to less than 250,000t/year. The more rapacious regime of President Mobutu Sese Seko of the DRC saw its copper production collapse from 450,000t in 1987 to just a few tens of thousands of tonnes today.

Bold expansions

Expansion plans in the two countries could account for 40% of the growth in global copper production over the next three years. The re-privatisation of Zambia's copper industry in 1999, through a sale of the biggest mines to Anglo American (although those were later sold back to the government before being transferred to Vedanta Group in 2004), has led to a rapid recovery. Production was 523,435t in 2007 and the government has forecast production at over 1 Mt/year by 2010.

That ambition is now looking highly optimistic. Chisanga Phuta-Chekwe, Zambian country manager for the copper producer First Quantum Minerals, reportedly takes a very dim view of the new tax proposals. In his view they nullify the motivation that "provided the incentive to invest in Zambia in the first place." First Quantum plans to lobby Zambia's parliament in protest. Some copper explorers in Zambia have now banded together under the umbrella of the country's Chamber of Mines of Zambia, making counter proposals to government that effectively halve the proposed new tax levels.

These counter proposals are likely to fall on stony ground. Zambia's President, Levy Mwanawasa, and several of his ministers have already said that the mining taxes are non-negotiable. Zambia's government has watched the copper price rise almost fivefold over the last eight years, with copper on the London Metal

Exchange for delivery in three months trading as high as $8,661/t on 3rd March. Two-thirds of Zambia's population live in rural areas and 80% of those people have incomes of less than $1 a day. From the government's point of view the potential for a "windfall" tax on high copper prices to plough into social and economic development is very tempting, although there is naturally some scepticism as to the use to which such windfalls might be put. In any case, this cuts little ice with small to mid-tier miners like First Quantum and Metorex, who regard the new tax levels as not just punitive but as threatening to kill the goose that laid the golden egg – they might just pack up and head further north, to the Democratic Republic of Congo (DRC), although that prospect is also decreasingly enticing, thanks once again to heavy-handed government interventions.

Congo may not be the answer

Post-colonial Zambia has been free of armed conflict, aside from the occasional incursion by Rhodesian forces pursuing guerrillas in the 1970s. In sharp contrast, the Congo has been the site of some of Africa's bloodiest wars. The first democratic elections in 40 years in the DRC were held as recently as 2006. Tensions are still high in the east of the country, where frequent outbreaks of violence flare up.

There is a tragic aspect to this, because the country's mineral wealth potential is so vast. Today the DRC's copper mining industry is on the cusp of real expansion, with its "elephant" deposits – so-called because of their huge size – attracting the attention of some of the global giants of mining, such as Freeport-McMoRan and BHP Billiton. Forecasts for production in 2010 exceed 700,000t, nearly 20 times that of 2003. But a review of mining contracts initiated last year has culminated in Victor Kasongo, the country's deputy minister of mines, telling an international mining conference in Cape Town on 5th February that all mining contracts looked at contained "significant flaws" and resulted in "massive" under-valuation of the country's assets. Companies are now being informed of the faults found with their licenses. While a quick appeal process has been promised it seems that many projects may be delayed or shelved. After all, as Kasongo says, mining in the Congo is "not for everybody".

Bridging the gulf between the two sides in the DRC's mining sector – between the government and miners – will not be easy, not least because there are merits on both sides of the tussle. There are clouds over many of the deals signed by officials of the government of Mobutu Sese Seko, and the flaws and inconsistencies in many of the contracts are legion. Compounding this, the current government has been anything but clear and consistent in its statements on mining policy to date and some of its pronouncements have been questionable. From the perspective of today's mining companies who are interested in the DRC, the delays and inconsistencies are not just time consuming and costly but also jolt their confidence in the long term prospects of working in the DRC.

Focus

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China's steel consolidation – slow but sure?

Amid accusations by the EU and the US that China is "dumping" its steel cheaply on world markets, the Chinese political authorities are doing their best to enforce consolidation on a highly fragmented industry. Beijing is keen to slim down the number of steel producers not because it wishes to bow to pressure from foreign competitors, but because the way the country's steel industry is currently structured, with a myriad of small to mid-scale producers and a handful of big players, is inefficient. The disparate nature of the industry undermines Beijing's aim of cutting greenhouse gas emissions and – above all – is hugely wasteful of scarce energy resources. Despite considerable pressure however, the Chinese steel industry looks like staying very fragmented for some time to come.

Back in 2005, Beijing's economic planners set a demanding target for the country's mammoth steel industry. By five years' time it wanted 50% of China's steel output to be consolidated within the 10 biggest companies. By 2020, the percentage was to hit 70%. This ambition has signally failed. By August 2007 less than half of the 55 Mt target for reductions in capacity in 2007 had been achieved. Today, the top 10 Chinese steel makers accounted for slightly less than 40% of total crude steel production in 2006, against almost 50% in 2001.

Rather than consolidating, China's steel production has become even more fragmented, as more small-scale producers have entered a market where the rewards can be relatively high and the barriers to entry are extremely low. According to the ratings agency Fitch, 2007 saw China's small and medium sized steel mills continue expanding; output from steel plants with annual capacity of <2Mt of steel rose by almost 30% year on year. By comparison, production of steel outside China is already very consolidated. The world's top steelmaker, ArcelorMittal, combined with the second largest, account for about 13% of the global steel market.

In 2005, as part of its programme to spur consolidation, China's government introduced a regulation requiring smaller production facilities (blast furnaces of <300cm, basic oxygen converters of <20t and electric-arc furnaces of <20t) to be phased out. By the middle of 2007, 8.1 Mt of capacity at 62 operations had been removed as a result, but this still isn't enough to meet Beijing's goal. Some consolidation is taking place but just not at the pace Beijing would like. The Chinese Iron & Steel Association (CISA) estimates that the country's 20 largest steel companies produced 250 Mt in 2007, slightly more than 50% of China's total output of 489Mt. In 2007 Chinese steel plants made almost 569 Mt of steel products. The National Bureau of Statistics said in February that China consumed a record 520 Mt of steel products in 2007, up 17.4% year on year. Such demand may make it difficult for Beijing to push through consolidation. CISA expects crude steel consumption in the country this year to rise by between 44 Mt-50 Mt, an increase of 11% year on year.

China's 20 biggest steel producers, 2007 output in Mt

Rank	Company	2007	Change 07/06 (%)
1	Baosteel Group	28.58	9.3
2	Jiangsu Shagang Group	22.89	16.7
3	Tangshan Iron & Steel Group	22.75	19.4
4	Wuhan Iron & Steel Group	20.19	12.8
5	Anshan Iron & Steel Group	16.17	6.0
6	Maanshan Iron & Steel Group	14.17	26.9
7	Shougang Group	12.86	22.0
8	Jinan Iron & Steel Group	12.12	7.8
9	Laiwu Iron & Steel Group	11.7	8.4
10	Hunan Valin Iron & Steel Group	11.12	12.3
11	Taiyuan Iron & Steel Group	9.29	48.4
12	Anyang Iron & Steel Group	9.00	28.0
13	Baotou Iron & Steel Group	8.84	18.1
14	Handan Iron & Steel Group	8.33	5.2
15	Tangshan Jianlong Industry Co	7.61	26.2
16	Benxi Iron & Steel Group	7.42	1.6
17	Jiuguan Iron & Steel Group	7.37	11.0
18	Panzhihua Iron & Steel Group	6.64	(2.0)
19	Beitai Iron & Steel Group	6.41	22.1
20	Rizhao Iron & Steel Group	6.18	72.4
21	Nanjing Iron & Steel Group	5.95	21.5
22	Liuhou Iron & Steel Group	5.80	8.4
23	Xinyu Iron & Steel Co	5.64	10.9
24	Tangshan Guofeng Iron & Steel Co	5.23	0.9

Source: www.chinamining.org

Central planning – or regional autonomy?

The rapid growth of China's steel production since the start of the new century has been remarkably resistant to centralised planning and oversight. In the early 2000s private entrepreneurs began setting up small mills, despite the fact that the necessary skills were often lacking and planning approval was absent. To a degree, this reflects the relative political autonomy of provincial and local governments, some of which have provided subsidies in an effort to put their own industrial enterprises on the map, as well as providing employment and garnering additional tax revenues. This political autonomy remains an obstacle to the imposition of central government's will to bring some order into the national steel sector. Such small-scale mills are now, however, slap-bang in central government's firing line, being labelled as polluters, energy-wasters and economically primitive – all of which is true but is not necessarily going to put them out of business any time soon. Consolidation and reduction of capacity in the steel sector is strongly backed by government in Beijing but local and provincial governments are not so keen and have their own methods – including unreported incentive payments – to help them elude Beijing's mandates. Global steel prices remain strong and this carrot is a powerful incentive, far outweighing Beijing's rather weakly applied stick, for the bigger (and more technologically advanced) Chinese steel producers to export, which in turn encourages smaller producers to keep on churning out steel to meet local demand.

CISA considers that there are nearly 500 mills in China, but this may be too conservative an estimate; others suggest the real number is closer to 800 mills. Not only do many of these pay scant regard to health, safety and environmental standards; they are also operating with wafer-thin margins and as a consequence have little scope to invest in new technology. This ultimately might be their downfall; a kind of steel Darwinism may be on the cards for China, whereby the least efficient mills eventually go to the wall, as customers increasingly seek better quality and more sophisticated products at a price the smaller mills cannot match.

In any case it is clear that exhortations from Beijing for voluntary closure have not worked. Now a fresh gambit is being used, the fairly crude device of raising the cost of exporting. In 2007 the government ended value added tax rebates on more than 80 types of steel products, as well as introducing a 5%-10% export tax on products such as steel sections, wire and plate. Companies in China now require an export licence for steel exports, and these licences are only valid for three months. This is partly a nod to anti-dumping complaints from the US and EU, but Beijing also hopes it will help achieve its main aim, of coercing the country's hundreds of small producers into consolidation.

And the market outside China will perhaps play the biggest role in forcing the country's steel producers to amalgamate to survive. The disappearance of smaller capacity Chinese mills may accelerate as raw material costs, notably iron ore, and energy costs, too, become more expensive. In late 2007 CISA formally requested central government to introduce steps to speed up consolidation. At the time this was seen as a logical response to BHP Billiton's proposal to take over Rio Tinto; the world's three biggest iron ore producers, BHP Billiton, Vale and Rio Tinto, control about 75% of global iron ore production, and a merged Rio and BHP would control much of the seaborne iron ore market, making it very difficult for China's fragmented steel industry to present a united front in annual negotiations for contracted iron ore prices. China's domestic iron ore output has been rising strongly in recent years, up by about 150 Mt in 2006 alone, a 7% year-on-year increase, and this to some extent has helped cushion Chinese steelmakers from inexorably rising contract prices (up for six successive years) for imported iron ore. However, Chinese iron ore is very low grade, with about 10% iron content compared to a global average closer to 60%, and it is unclear to what extent Chinese iron ore producers can maintain their strongly rising production. At the same time Chinese companies are securing future supplies of iron ore through overseas acquisitions. Last year Sinosteel Corporation, China's second largest iron ore trader, bid for Australia's Perth-based iron ore miner Midwest.

Snail's pace evolution

A recent indication that the provinces are taking Beijing's threats more seriously came in January this year, when Shaanxi Provincial Government held meetings to consider plans for the closure of outdated iron and steel capacity in the province. The cities of Weinan, Hanzhong, Baoji, Tongchuan, Yan'an and Shangluo and the Longgang Group agreed they would move to close some inefficient iron and steel capacities. Zhao Zhengyong, an official of Shaanxi Province, told reporters at the time: "Shaanxi is in a period of quick development, and also in a critical period of boosting the plan of energy saving and emission decreasing. Shaanxi Province has promised to demolish 2.98 Mt of outdated iron melting capacities from 2007 to 2010, and 880,000t of outdated steel melting capacities, which will save 1.25 Mt of standard coal and 2.49 Mt of water, and decrease emissions of sulphur dioxide by 9,961t each year."

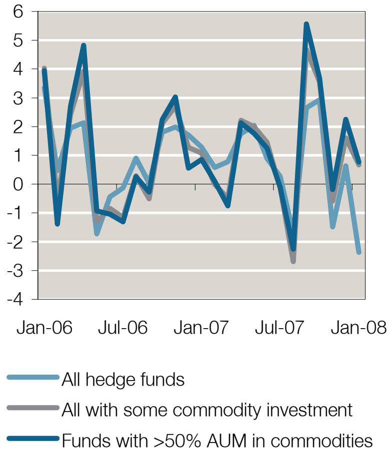
But this evolution is still proceeding at a snail's pace; what consolidation there has been to date is fairly marginal. Shagang, the largest privately owned steel group, has bought controlling stakes in three other mills, Anyang Yongxing Iron and Steel, Jiangsu Xinrui Special Steel and Jiangsu Yonggang Group. Anshan and Benxi merged in 2005, joining their raw materials purchases, marketing, foreign trade and financial statements to form Anben Iron and Steel Group. The Shandong provincial government has said it intends to merge Jinan and Laiwu mills, to form a group that will be named Shandong Iron and Steel Group. Baosteel Group, China's biggest steel producer, plans to lift capacity to 80 Mt a year by 2012 through acquisitions. In April 2007 it acquired a stake of 48.5% in Xinjiang Bayi Iron & Steel and in July last year it entered an alliance with Baotou Iron & Steel in northern China. It is also working with Handan Iron & Steel in the northern province of Hebei. The state-owned Wuhan Iron & Steel Group, the fourth largest producer in China, also intends to grow through acquisitions. The leaders of the big wave of consolidation, which is yet to come but may kick in towards the end of this decade, will be the top half dozen current producers. As well as Baosteel and Wuhan, Anshan Iron & Steel (China's fifth biggest steel group) Jiangsu Shagang Group will be on the acquisition trail.

International companies are also likely to play a greater role. In February this year the London-listed steel producer Evraz said it would buy 10% in Singapore-listed Delong Holdings, a Chinese steel company. Last year ArcelorMittal, a very acquisitive steelmaker, bought Hong Kong-listed China Oriental Group, which makes 3 Mt of steel a year in Hebei and Guandong provinces. Such moves may prompt other Chinese steel companies to seek out appropriate foreign shareholders who are likely to bring along funding and technology, both when it comes to the steel making process and to improving environmental standards. These types of acquisitions will also have their part to play in consolidating the sector.

Eventually, Beijing would no doubt like to see the 500-plus steel mills grouped into perhaps a dozen major companies which can compete globally and which would make central economic planning, especially over the thorny issue of future power requirements, a much simpler process. To that end Beijing's central economic planners have proposed that the country's steel production should be grouped into four centres: in Northeast China, comprising Anshan Iron and Steel Group and Benxi Iron and Steel Group; North China, with Shougang Group and Tanggang Group; East China, with Baosteel Group and Magang Steel Group; and Southwest China, with Wuhan Iron and Steel and Panzhihua Iron and Steel Group. Whether the inevitable consolidation will actually fall in line with these nicely defined steel hubs is debatable. Even more difficult to forecast is when this ideal scenario might come about. All that can be said with any certainty right now is that, if private mills want to survive, they will have to get bigger and better – and that means joining forces with some of their bigger brothers.

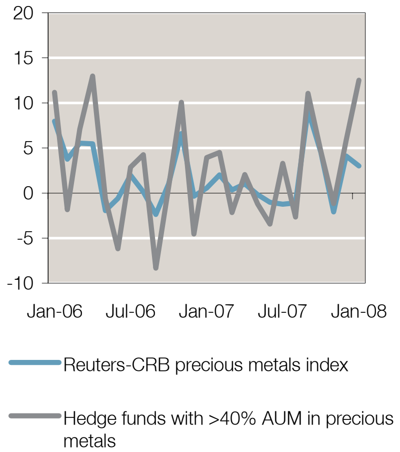
Hedge funds activity

Hedge fund returns, monthly (%)



Source: VM Group from Barclay Hedge Fund Database

Precious metals hedge funds and Reuters-CRB precious metals index, monthly returns



Source: VM Group

News

- Mar 9th: EPFR Global, the US-based company which tracks investment fund flows, said commodity funds it monitors had since the start of 2008 and up to 5th March had gained \$3.6bn, compared to \$495m during the same period of 2006, with returns of 18%.
- Feb 28th: Congressional investigators have declared that hedge funds, despite improvements in their management and disclosure practices, pose a "systemic risk" to the economy. No new legislation was proposed as an outcome of the findings, although hedge funds will likely be under greater scrutiny than previously.
- Feb 22nd: UK private investors will be allowed to invest in hedge funds directly, the Financial Services Authority announced. Consultations on the new proposals will be ongoing until 22nd May and should come into force by April 2009.

Analysis

- Mixed performance in January

An analysis of the Barclay hedge fund database, our preferred source of industry-wide data concerning hedge funds, helps shed some light on this secretive industry. The number of hedge funds that invest in commodities varies from month-to-month, but currently we estimate there are about one thousand funds with some commodity investment. The vast majority of those funds, perhaps 80%, invest in all commodity categories, including energy, softs and metals. Far fewer, in February 2008 just 186, invest only in a single commodity. Of these, 128 are pure energy funds, whilst 31 are metals funds and 27 softs.

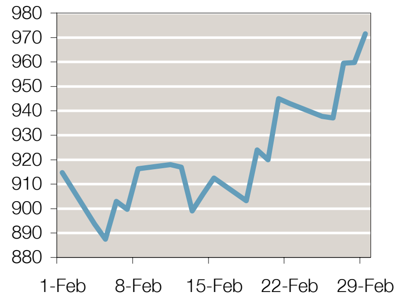
In terms of AUM, the hedge fund investment in commodities, estimated at about \$55bn, splits like this: \$14.6bn is in soft commodities, of which grains (\$6.3bn) are the largest component; next biggest is energy, with \$14.4bn; that is followed by general commodity investment, with \$11bn; next is base metals, with \$7bn, precious metals \$5.6bn, and undefined metals, \$1.7bn.

How are these funds performing? Overall, all the hedge funds surveyed had a poor January, losing 2.4% on average (unweighted). Hedge funds with some commodity exposure did better, returning a gain of 0.7%, whilst those with more than 50% of their AUM in commodities did slightly better, with a 0.8% gain. This translates into a 31% return since the beginning of 2006 for hedge funds with more than 50% of their AUM in commodities, compared with 29% for hedge funds with any commodities' exposure and 22% for those with none (see the first chart).

Focusing on the hedge funds that have more than 50% of their AUM in precious metal-related investments shows that they returned 3% in January 2008, much more than those focused on other commodities. This can be explained by trends in the precious metals market – the second chart shows the returns for those hedge funds compared with the Reuters-CRB precious metals index. Although the hedge fund returns are less volatile, as you might expect given their mandate and as they invest in other financial products as well as energy, the trends are very similar.

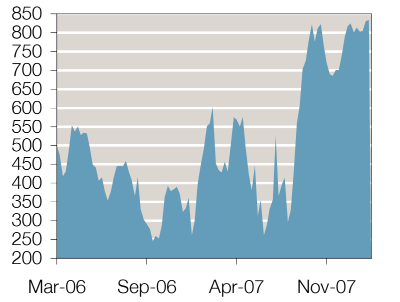
Gold

Gold price ($/oz)



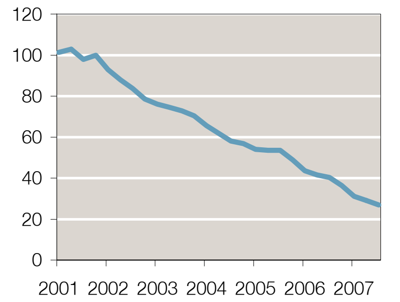
Source: London Bullion Market Association

Comex: non-commercial net position (tonnes)



Source: VM Group

Global gold hedging, (Moz)



Source: VM Group/Haliburton Mineral Services from the "Fortis Hedging and Financial Gold Report"

News

- Feb 27th: Global gold dehedging fell by 2.3 Moz in Q4 2007, the 23rd consecutive quarterly decline, with total dehedging last year at 13.5 Moz. The global hedge book is now less than 27 Moz. We expect dehedging this year to slow to a total of 6-8 Moz.
- Feb 25th: Gold Fields said it may have to cut 6,900 jobs, or 13% of its South African workforce, because of the country's current power shortages.

Analysis

- $1,000 beckons, but expect sharp swings

Gold hit a new high for the London afternoon fix of 3rd March of $988.50/oz and $1,000/oz now seems inevitable. At times during February it looked as if the 'correction' that much of the market is expecting was beginning, but on each occasion the price fall was checked and gold's ascent continued after only a few days, testament to the underlying strength in the market. Nevertheless, as the $1,000/oz mark is approached, price gyrations are becoming more common, an indication both that investors are getting less comfortable at these levels, as well as triggering various sell-signal points at and around $980/oz for some large-scale investment funds. The gold market is now firmly in the hands of investors, with their sentiment (and the price) being driven by global macro-economic trends. Every bit of bad US economic data boosts gold in two ways – first because it reinforces the return of its role as a 'safe-haven' asset, and second because the dollar falls on expectations of further Federal Reserve rate cuts. It is no coincidence that gold's new high on 3rd March saw the US dollar fall to its lowest level against other major currencies since the Federal Reserve's index began in 1973. The largest one-day fall in the gold price so far this year came on 25th February when David McCormick, US undersecretary for international affairs, said that the Administration backed the IMF's plans to sell as much as 13.0 Moz of its 103.4 Moz of gold reserves and that he thought Congress – long seen by the gold market as opposed to IMF gold sales – would back it too. Physical demand at these prices is dismal. Indian imports in February were 10.2t, following 5t in January. This compares to 110t in the first two months of 2007. Indian imports have been weak at times of high price volatility often over this bull market, but if demand does not return when the price stabilises it would suggest we are nearing the top of what the market can bear.

Outlook

For the gold price *not* to break through $1,000/oz in March, some clear signs are needed that US fiscal measures to avert recession are working. Of that there is zero hope – such measures will take months to have any impact. Looking further ahead, once $1,000/oz topples the forward price slope is likely to get vertical very quickly. However, in these uncharted waters we must expect more large one-day swings. Short-term London daily pm fix: $950/oz-$1,100/oz.

Market data (February unless stated)

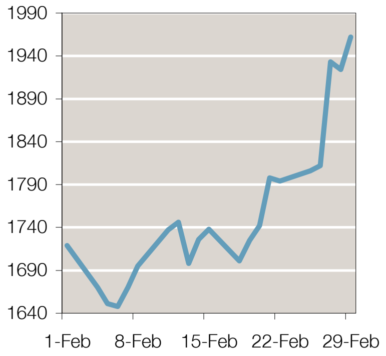
Prices	$/oz	€/oz	Rand/kg	ETF investment	Tonnes holdings	Monthly change	Lease rates	1m	3m	6m	12m	Option volatility (end month, %)	
Average	920	624	225,988	US (2)	699.4	16.0	Average	0.21	0.28	0.46	0.45	1-month	26.40
High	960	638	236,223	UK (2)	133.2	9.6	High	0.27	0.40	0.58	0.58	3-month	27.40
Low	888	603	214,364	Aus	19.0	2.4	Low	0.17	0.17	0.33	0.36	6-month	27.65
				S. Africa	27.0	0.7						12-month	57.75
				Swiss	31.1	1.0						24-month	27.70
				India (4)	4.2	0.1							
				German	4.8	1.3							
				Turkish	1.3	-							

Source: Prices: London Bullion Market Association, Others: VM Group

Note: Indian ETF holdings calculated from rupee amounts and thus are approximations only.

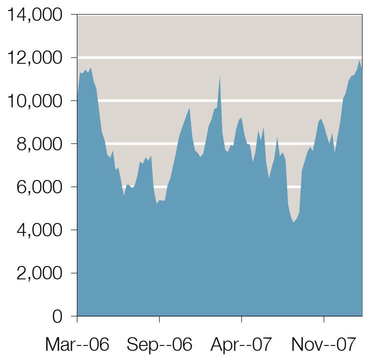
Silver

Silver price ($/oz)



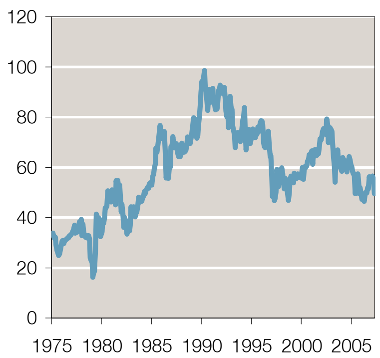
Source: London Bullion Market Association

Nymex: non-commercial net position (ounces)



Source: Comex

Gold/Silver ratio



Source: VM Group

News

- March 4th: Ecu Silver, the Toronto-listed mining company, expects its Velardeña mill at its Mexican operations to be processing 300t/day in Q2 2008, against 200t previously.
- Feb 29th: Mexico, the world's second-biggest silver producer, saw its output fall 5.9% in December against the previous month, to just over 193t.
- Feb 29th: Apex Silver, which operates the vast San Cristobal deposit in Bolivia, reported net income of $11.6m for 2007, against a net loss of $513.5m in 2006, thus notching up its first annual profit in a decade.
- Feb 29th: Coeur d'Alene, the US-based silver producer, said Q4 2007 silver sales fell 8% to 3.04 Moz; it estimates 2008 production will rise 39%, to 16 Moz.
- Feb 29th: Peru's Buenaventura expects its 2008 output will rise slightly, year-on-year, to about 14 Moz.
- Feb 22nd: Pan American Silver said its Q4 2007 production rose 63% to 5.1 Moz.

Analysis

- Silver begins to catch up

Silver seriously lagged behind gold's rise much of last year but has now begun to catch up – in a general flood of investor enthusiasm all boats will rise and silver is doing just that. In February the silver price rose by 17%, ending the month at $19.62/oz. By 4th March it had climbed to a 27-year high, fixing in London that day at $20.32/oz. Like gold it has benefited from the concern about the US economy and is being boosted as investors, looking for a safe haven from inflation concerns and the withering dollar, pile into this cheap and often underestimated alternative to its more lustrous cousin, gold.

As with gold, however, this is a rally based on strong investor rather than physical demand and some very big physical end-users are beginning to feel the pinch as a result of the higher price. Belgium's Agfa-Gevaert, which is Europe's biggest maker of health-care imaging systems and uses 800t of silver a year, reported on 27th February an unexpectedly large Q4 2007 loss of €27m, which it attributed in part to the strong silver price, as well as rising prices for aluminium. The spot price for silver in Q4 2007 averaged 13% more than the same quarter of 2006; this is hurting industrial end-users and will accelerate the demise of consumer mass market film photography.

Outlook

The same fundamental factors as those of gold are underpinning silver's rise – the bad shape of the US economy and the dollar, and the need of investors to find some safer havens to ride out the storms ahead. The silver:gold ratio has been recovering swiftly and by the end of February was 49.5 (the number of silver ounces that would buy one ounce of gold). We would expect more healthy gains in March as silver looks toward $25/oz. Short-term London daily fix: $18/oz-$22/oz.

Market data (February unless stated)

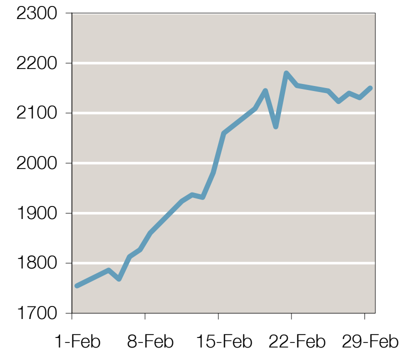
Prices	c/oz	e/oz	p/oz	Lease rates	1m	3m	6m	12m	Trade (kg) (Dec)	Imports	Exports	ETF offtake (tonnes)	Holdings	Change	Option volatility (end month, %)	
Average	1,746.7	1,184.8	889.8	Average	(0.00)	(0.01)	0.25	0.37	USA	310,703	201,672	US	5,365.0	245	1-month	41.0
High	1,933.0	1,278.4	975.7	High	0.05	0.02	0.36	0.56	Japan	391,786	826,505	UK*	299.6	(99)	3-month	39.5
Low	1,648.0	1,126.5	840.9	Low	(0.04)	(0.04)	0.13	0.13				Swiss	403.1	45	6-month	38.0
															12-month	37.0

Source Price: London Platinum and Palladium Market, Others: VM Group

** Includes 'basket' ETF*

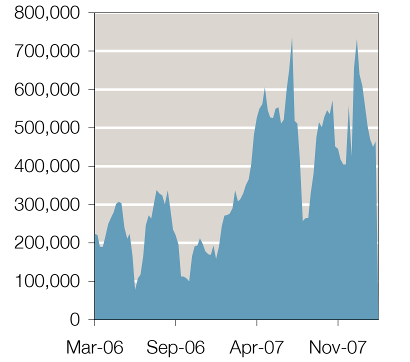
Platinum

Platinum price ($/oz)



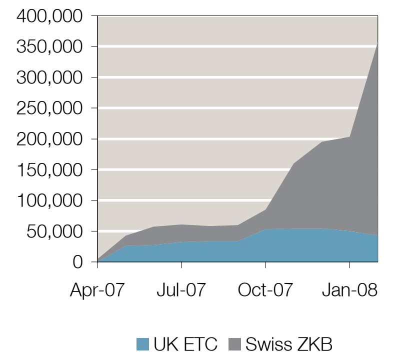
Source: London Platinum & Palladium Market

Nymex: non-commercial net position (ounces)



Source: Reuters Ecowin

Platinum ETF offtake, end-month (oz)



Source: VM Group from company data

News

- Feb 22nd: Xstrata agreed to buy the De Wildt project in South Africa from Nkwe platinum for $12m.
- Feb 19th: Platmin said it won the rights to develop the Pilanesberg deposit in South Africa, which would be its first mine.
- Feb 15th: Anglo Platinum said a leak at its Polokwane smelter will take four to six weeks to repair.
- Feb 14th: Impala Platinum expects its fiscal 2008 production to fall below 2 Moz from the 2.03 Moz produced in fiscal 2007. It forecasts a global platinum deficit of 620,000 oz this year.

Analysis

- South Africa's power problems still key

Eskom's announcement on 6th March that it would increase (over two weeks) the power available to mining companies from 90% of their normal usage to 95% produced a swift reaction from the market – the platinum price plummeted by more than $130/oz to $2,020/oz. The expectation of such a move had already seen it fall from its all-time high on the London pm fix, set only two days before, of $2,230/oz. The platinum price soared in February from its end of January close of $1,731/oz, as it became increasingly apparent that the meltdown of South Africa's power network is a long-term problem, one that threatens to keep the platinum market in deficit for years to come. The initial agreement that mines would use only 90% of their normal power consumption was assumed by most to be a temporary measure, while alternatives were sought. South Africa's state-run power company, Eskom, said then that the restriction could last until 2012. Now it is supplying 95%, the extra 5% being squeezed out at the expense of other consumers.

The most frustrating aspect of South Africa's power crisis is the lingering and inevitable uncertainty. Electricity demand is variable and, at the extreme margins of unusual weather conditions, unpredictable. No one knows how long the new regulations will remain in place, whether they will get more or less stringent and as such it is very difficult to plan ahead.

Outlook

Eskom's ability to supply a consistent and high level of power to the mines is really the only factor affecting the market at the moment. The increase to 95% has knocked the price, but it is yet to be tested, and the winter peak season for electricity is approaching fast. More bad news about South African power supplies will propel the price yet higher again, and the uncertainty of what the next few months will bring will keep the price bubbling along at these very high levels. Given Eskom and the South African government's previous poor planning records we feel there is considerable scope for further mishaps, more surprises. London daily pm fix short-term: $2,000/oz-$2,500/oz.

Market data (February unless stated)

Prices	$/oz	Lease rates	1m	3m	6m	12m	Trade (kg)	Imports	Exports	ETF offtake (oz)	Holdings	Change	Option volatility (end month, %)	
Average	2,000	Average	4.1	5.0	5.8	7.0	USA (Dec)	5,593	3,943	UK*	313,996	112,507	1-month	41.0
High	2,180	High	6.2	6.9	7.1	7.9	Japan (Dec)	6,118	1,899	Swiss	43,240	(6,430)	3-month	39.0
Low	1,755	Low	2.6	4.1	4.6	5.3	Hong Kong (Dec)	1,131	185				6-month	37.3
							Switzerland (Dec)	7,250	4,414				12-month	35.8
							China (Dec)	2,998	9					

Source Price: London Platinum and Palladium Market, Others: VM Group

** Includes 'basket' ETF*

Palladium

News

- Mar 7th: The Palladium Alliance International, under the auspices of the International Platinum Group Metals Association, announced a plan to market palladium jewellery. The scheme will be funded by Norilsk Nickel, the largest producer, and supported by Anglo Platinum, Impala Platinum, and Lonmin from South Africa, and Stillwater of the US.
- Feb 27th: Aquarius Platinum said it may buy small companies in South Africa that are short of power for their projects.
- Feb 26th: Stillwater forecast 2008 production of 550,000-565,000 oz compared with 537,500 oz in 2007.

Analysis

- New jewellery initiative

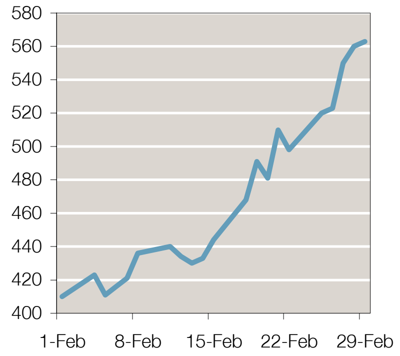
Palladium prices have taken off with the realisation that power cuts in South Africa will curtail supplies and at the same time the surging price of platinum may well push jewellery makers and autocatalyst manufacturers toward the metal. Already there are reports of palladium rings attracting more interest from consumers scared off by the heavy price tag platinum jewellery now sports, something the new push to promote palladium jewellery is likely to capitalise on. The scope for automakers to switch is more limited, given the already high use of palladium in gasoline-fuelled cars and the technological problems in diesel-fuelled cars, but any possible substitution will be made.

On the supply side there are few alternatives to South Africa. During February both Stillwater and Norilsk said they may produce more of the metal this year. Together, their pledges wouldn't amount to much more than another 95,000 oz of metal. This is small change when February's Swiss import data showed no Russian stock sales, suggesting that January's figure of less than 500,000 oz might be it for the year, a much smaller level than in previous years. Investors have taken note, pushing the price of palladium to an afternoon fix of $568/oz on 29th February, the highest level since July 2001 and representing a 46% surge in just one month. The degree of confidence is demonstrated in the buying of the metals through the two exchange traded funds, whose combined holdings in February rose by 61%, or 203,591 oz.

Outlook

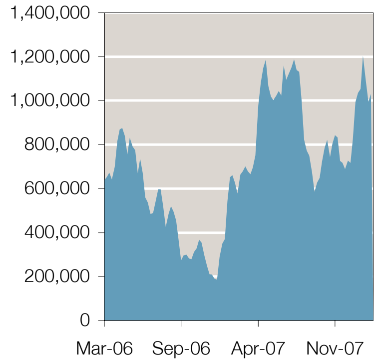
Palladium prices fell sharply in line with platinum when Eskom announced extra power to the mines and that remains the key factor, unless March sees any signs of further Russian stock sales. For now, few of the fundamentals driving palladium are expected to change and, with platinum now so expensive, the allure of this metal can only grow. London daily pm fix short-term: $450/oz-$650/oz.

Palladium price ($/oz)



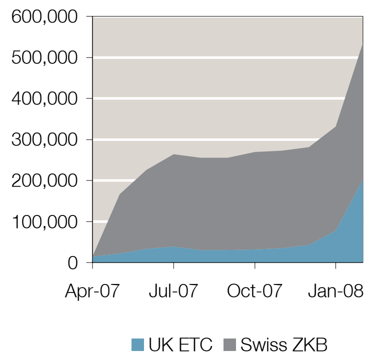
Source: London Platinum & Palladium Market

Nymex: non-commercial net position (ounces)



Source: Reuters Ecowin

Palladium ETF offtake, end-month (oz)



Source: VM Group from company data

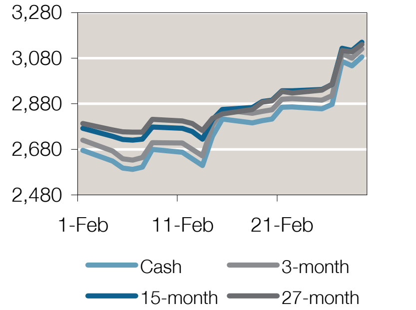
Market data (February unless stated)

Prices	$/oz	Lease rates	1m	3m	6m	12m	Trade (kg)	Imports	Exports	ETF offtake (oz)	Holdings	Change	Option volatility (end month, %)	
Average	469.6	Average	0.22	0.37	0.53	0.63	USA (Dec)	9,557	4,978	UK*	202,301	124,462	1-month	45.0
High	563.0	High	0.55	0.69	0.82	1.05	Japan (Dec)	563	2,176	Swiss	333,120	79,969	3-month	43.0
Low	410.0	Low	0.02	0.18	0.20	0.03	Hong Kong (Dec)	2,128	787				6-month	41.5
							Switzerland (Dec)	19,303	2,919				12-month	39.8
							China (Dec)	1,566	250					

Source: London Platinum and Palladium Market, Others: VM Group ** Includes 'basket' ETF*

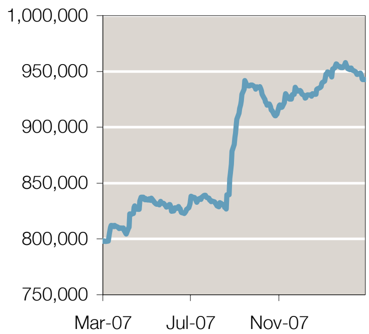
Aluminium

LME aluminium price ($/tonne)



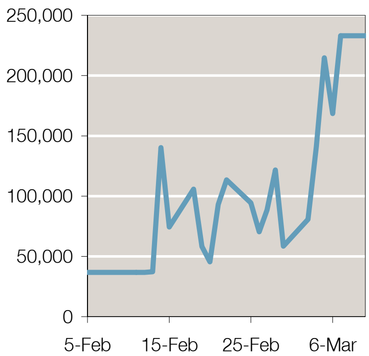
Source: Reuters Ecowin

LME aluminium stocks (tonnes)



Source: Reuters Ecowin

SHFE volume traded, contracts per day



Source: Reuters Ecowin

News

- Feb 28th: Japanese aluminium products' shipments fell for the fifth successive month in January, down 2.6% from a year earlier at 176,301t, according to the Japan Aluminium Association.
- Feb 28th: Italy's non-ferrous metals association, Assomet, said output of aluminium and alloy semi-finished products in 2007 rose 6.8% (year-on-year) to 1.006 Mt.
- Feb 23rd: Oman's Sohar Aluminium smelter project, with annual capacity of 350,000t, is expected to start up in June. Rio Tinto has a 25% stake in the project.
- Feb 22nd: Russia's United Company Rusal, the world's biggest aluminium producer, has restarted Nigeria's sole smelter, which had been idle since 2000. It plans to modernise the Alscon smelter in southeast Nigeria so that it can reach full capacity of 197,000t/year in 2010.
- Feb 22nd: Total primary aluminium production, including China, was 3.23 Mt in January compared with 3.30 Mt in December, the International Aluminium Institute (IAI) said. Daily average primary aluminium output, including China, was 104,200t in January from 106,700t in December 2007.

Analysis

- China the key factor

Supply disruptions in China, the result of power shortages in January, together with power-related disruptions in South Africa, are encouraging investors to look on aluminium futures with much greater favour than for many months. BHP Billiton said in February that operating its three southern African aluminium smelters on lower power because of a shortage was "unsafe and unsustainable" in the long run. China's power problems could mean a reduction in the country's primary aluminium output of about 600,000t this year. As a result China, which remains the world's biggest aluminium producing nation, was a net importer of primary aluminium in January for the first time since 2000, since when the country's aluminium smelter capacity has risen dramatically. In January, China's primary aluminium imports climbed 46.5% (against January 2007) to 14,443t, while its exports fell 75.5%, to 5,521t. China's exports of primary aluminium are likely to slip further this year, as Beijing takes action to enforce the elimination of power subsidies it can no longer afford, and increases levies on power intensive industries such as aluminium production.

Outlook

The LME's three-month price for aluminium closed very strongly at the end of February, settling on 29th at $3,121/t. It has since fallen back moderately in early March but given the probability of China becoming a bigger net importer this year the metal looks almost certain to remain on an upwards trajectory. LME 3-month short-term: $3,100/t-$3,300/t.

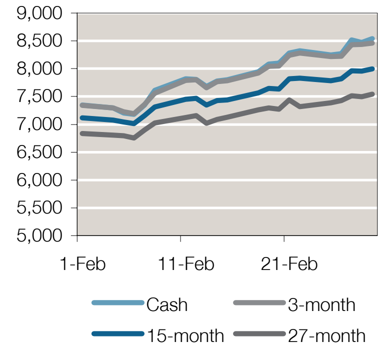
Market data (February unless stated)

Prices ($/t)	Cash	3-month	15-month	27-month	LME stocks	Tonnes	Prod (kt)	Dec 07	Jan 08	LME Open Interest (contracts)	
Average	2,776	2,816	2,866	2,877	Jan-08	956,475	Europe	765	782	Aluminium	703,807
High	3,086	3,121	3,150	3,140	Feb-08	947,425	Americas	718	721		
Low	2,591	2,632	2,720	2,755			Asia	317	320		
							China	1,147	1,060		
							Other	351	346		
							Total	3,298	3,229		

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

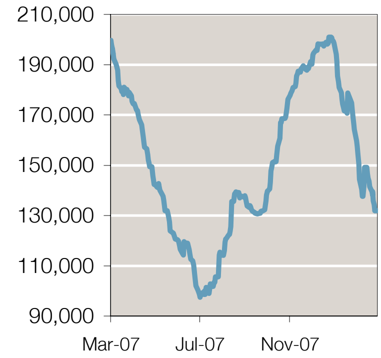
Copper

LME copper price ($/tonne)



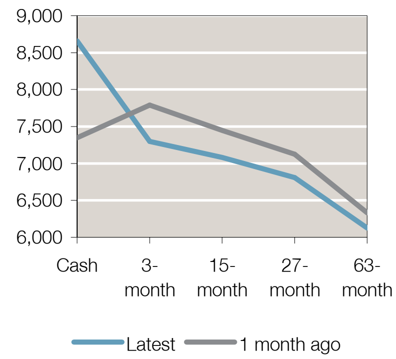
Source: Reuters Ecowin

LME copper stocks (tonnes)



Source: Reuters Ecowin

LME copper yield curve (cash price = 100)



Source: Reuters Ecowin

News

- March 3rd: Peru's copper output in January rose 3.8% (compared to January 2007) to 86,255t.
- Feb 28th: Italy's output of copper and alloy semi-finished products fell 5.1%, year-on-year, to 1.354 Mt in 2007.
- Feb 29th: Mexican copper output fell 38.6% in December, to 18,730t, against the same month in 2006 as a result of industrial action.
- Feb 28th: Japan's exports of refined copper in January rose about 4% from a year earlier to 34,125t.
- Feb 27th: Zambia and foreign owners of its copper mines agreed a 35% power tariff increase, effective from January this year. The government has warned of possible power cuts to the mines due to a power generator fault.
- Feb 13th: Kazakhstan's refined copper output in January 2008 fell 12.9% to 29,489t compared to the same month in 2007.

Analysis

- Worries over Chilean supply help keep prices firm

Copper prices have sustained their early year rally on the back of surprisingly strong supply-demand signals. Chile's state-owned Codelco, the biggest copper miner in the world, saw its full production for 2007 slip 6.6% year-on-year to 1.67 Mt, including its 49% stake in the El Abra mine. This is the third successive year Codelco has reported decreased output and 2008 does not appear to be getting much better. Codelco's production was hit by strikes in June and July last year but the problem seems to be recurring low grades. Added to that are growing concerns over Chilean power supply. The country's public works ministry said in early March that Chile was experiencing its worst drought in a century and that this means hydroelectric reservoir levels are critically low, and would need a year to recover to normal levels, even if rainfall this year is average. Chile's President Michelle Bachelet said on 6th March that electricity rationing might have to be implemented later this year. Were that (currently remote) possibility to happen it would be bound to impact the country's copper miners, which account for around a third of global production.

Outlook

LME copper stocks have fallen by about one third since the start of 2008 and by 6th March were down to 135,800t, equivalent to about three days of current global consumption. The net speculative long position in copper futures on Comex has been increasing in recent weeks and, in the week to 4th March, rose by 63%, to a net 9,096 contracts. On the other hand, copper stocks held by the Shanghai Futures Exchange more than doubled in February to more than 48,000t by the end of that month. China's authorities are determined to rein-in economic growth this year, cutting it by more than 3%, to 8%. If they succeed that will dent copper demand there, while a worsening outlook for the US economy will also take its toll on copper consumption. Currently, copper is still a bull market, but basing long-term hopes on more supply-side problems could prove a risky strategy. LME 3-month short-term: $7,800/t-$8,300/t.

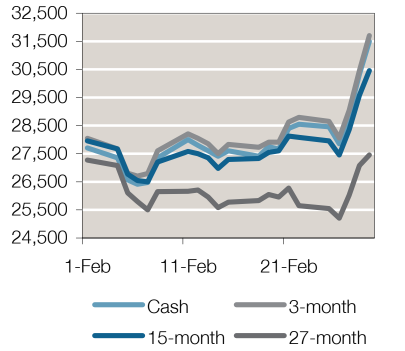
Market data (February unless stated)

Prices ($/t)	Cash	3-month	15-month	27-month	LME stocks	Tonnes	LME Open Interest (contracts)	
Average	7,888	7,857	7,517	7,171	Jan-08	177,800	Copper	278,377
High	8,541	8,450	7,995	7,545	Feb-08	141,375		
Low	7,181	7,189	7,015	6,755				

Source: London Metal Exchange

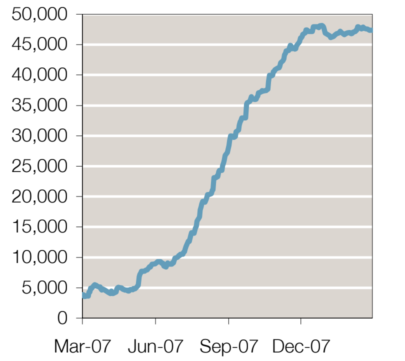
Nickel

LME nickel price ($/tonne)



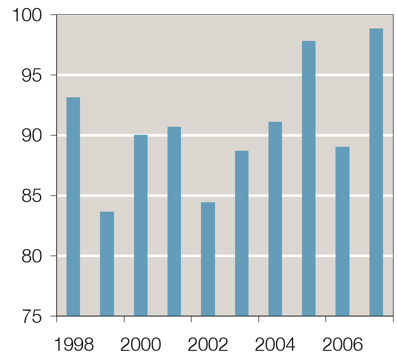
Source: Reuters Ecowin

LME nickel stocks (tonnes)



Source: Reuters Ecowin

Nickel producer stocks (000 tonnes)



Source: International Nickel Study Group

News

- Feb 29th. China imported 12,400t of nickel in January, against 9,700t in December.
- Feb 26th: Norilsk Nickel said it would make an additional listing of its shares on the London Stock Exchange in Q2 2008. Earlier in the month Norilsk's board agreed to sell $7bn of energy assets through separate tenders, after a row between its top owners blocked what it had described as a more appealing spin-off.
- Feb 5th: Peter Hambro Mining, which produces gold from its Russian deposits, said it is considering adding nickel and platinum to its assets. Its Antares subsidiary won an auction for three deposits in the Russia's far eastern region.

Analysis

- Investors dabble with nickel again

Is there any obvious reason why the price of three-month nickel on the LME poked its nose above $30,000/t at the end of February? The short answer is – no. LME warehouse stocks are once again ample, comfortably above 47,000t by the end of February, and there was nothing remarkable by way of supply-side disruptions, nor indications of rapidly increasing demand. Those scouting around for physical justification for the rise in price pointed to a strike at BHP Billiton's Cerro Matoso ferronickel mine in Colombia, which has annual output of 55,000t, but this was a thin explanation. Rather, the explanation is to be found in a fresh burst of investment-led buying, a kind of dipping the toes back in the water to test the temperature. There is certainly no evidence to suggest there is any short to mid-term physical tightness on the horizon. Sumitomo Metal Mining in February increased its nickel production outlook at two plants in the Philippines by 10%, to 22,000t a year; PT International Nickel Indonesia said its nickel output in 2007 rose 7% year-on-year to 76,675t; PT Aneka Tambang Tbk (Antam), a state-owned Indonesian company, said its nickel production rose to 6,274t in the Q4 2007, against 4,551t in Q4 2006; and Vale's long-awaited Goro nickel project in New Caledonia is scheduled to start producing in Q4 2008.

Outlook

Either LME warehouse stocks are good indicators of fundamental situations or not. We still tend to consider them a very reliable pointer towards the underlying realities of the market and in nickel they are firmly suggesting that there is no physical tightness. For that reason alone we tend to think that any attempt to push the nickel price above $30,000/ will be met with plenty of sellers. It's true that Vale's Goro project has again run into local opposition, and that this might mean yet more delays to the envisaged start-up – but all this does is simply defer delivery of metal, rather than create an actual shortfall. This year the nickel market is likely to be in a healthy global surplus, which is not surprising given that even at $25,000/t nickel producers are reaping handsome profits. There might be a surge of irrational investor enthusiasm, but a darkening macro-economic picture in the US and elsewhere should throw a dose of cold water over it. LME 3-month short-term: $25,000/t-$30,000/t.

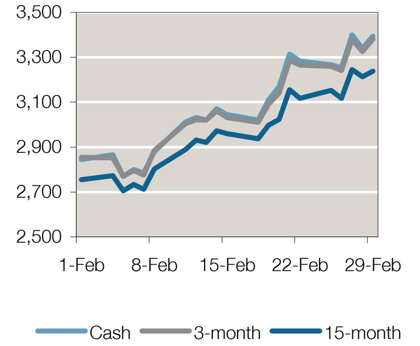
Market data (February unless stated)

Prices ($/t)	Cash	3-month	15-month	27-month	LME stocks	Tonnes	LME Open Interest (contracts)	
Average	27,955	28,164	27,705	26,124	Jan-08	47,052	Nickel	65,099
High	31,505	31,695	30,450	27,450	Feb-08	47,712		
Low	26,410	26,700	26,500	25,200				

Source: London Metal Exchange

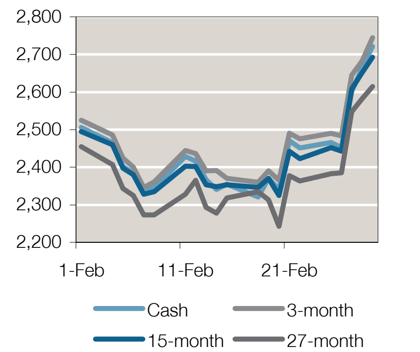
Lead and zinc

LME lead price ($/tonne)



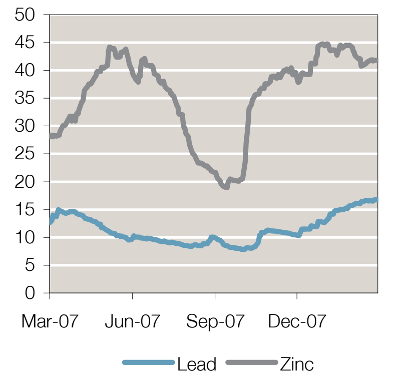
Source: Reuters Ecowin

LME zinc price ($/tonne)



Source: Reuters Ecowin

LME stocks (Jan. 1st 2004 = 100)



Source: VM Group from LME

News

- March 3rd: Australia's Oxiana and Zinifex announced they are to merge, forming what will be the world's second-largest producer of zinc, after Xstrata. The merged company, which should be a single entity by mid-2008, will account for about 10% of global zinc production, about 1.2 Mt/year, and 250,000t of lead/year.
- March 3rd: Peru's zinc output rose in January 12.4% compared to the same month of 2007, to 29,752t.
- Feb 29th: Mexico's lead output rose 3.4% to 9,966t in December compared to the same month in 2006, while its zinc production fell 19.7%, to 29,520t.
- Feb 28th: Japanese exports of refined zinc in January rose year-on-year by 32% to 7,378t.
- Feb 27th: In China, Chihong Zinc and Germanium resumed lead and zinc production following a 12-day stoppage after severe snowstorms in January. Luoping Zinc also re-started operations.
- Feb 13th: Kazakhstan's zinc output in January fell 4.7%, year-on-year, to 30,967t.

Analysis

- Small zinc deficit in 2007 says ILZSG

The International Lead and Zinc Study Group's latest assessment of the global market put the refined zinc market in a deficit of 15,000t in 2007. This was perhaps one factor that encouraged investors to give a boost to zinc futures in February, the LME three-month price rising by almost $200/t between the start and the end of the month, settling on 29th February at $2,745/t. This trend is unlikely to be sustainable however – barring irrational investor enthusiasm – as the outlook is increasingly for a substantial refined metal surplus by the end of 2008. Almost 2 Mt more zinc a year is lining up to hit the global market by 2010 and this looming surplus will inevitably depress prices.

The compelling logic behind the Oxiana-Zinifex merger is to meet this challenge by being able to strip out unnecessary costs and create a more efficient company, better able to survive what will be a rocky road in the medium term. A similar trend, towards greater zinc mining consolidation, is likely to be seen elsewhere this year. China's biggest zinc producer, Hunan Nonferrous Metals, is reportedly putting aside the equivalent of more than $700m to fund acquisitions not just in zinc but also lead, tungsten and molybdenum projects in Australia, Canada and China. China remained a net refined zinc exporter in January, albeit at a very modest level – the latest set of trade data shows the country exported a net 7,164t.

Outlook

While the prospects for zinc prices look pretty dim over the mid term, those for lead still look strong, given the continued low level of Chinese exports of refined metal and its acceleration towards greater self-sufficiency in lead. Such high prices however will quicken the pace towards finding substitutes for lead. LME 3-month short-term zinc: $2,500/t-$2,800t. Lead: $2,900/t-$3,200/t.

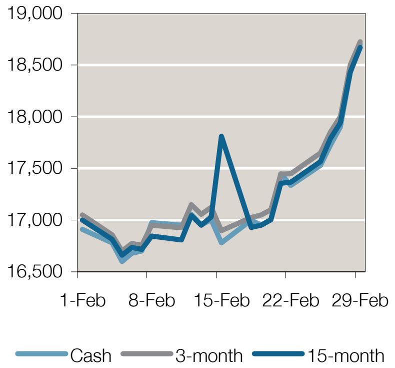
Market data (February unless stated)

Prices ($/t)	Cash Lead	Cash Zinc	3-month Lead	3-month Zinc	LME stocks	Lead	Zinc	LME Open Interest (contracts)	
Average	3,080	2,438	3,069	2,462	Jan-08	48,525	111,350	Lead	67,548
High	3,400	2,721	3,381	2,745	Feb-08	45,825	122,525	Zinc	195,038
Low	2,770	2,321	2,770	2,346					

Source: London Metal Exchange

Tin

LME tin price ($/tonne)

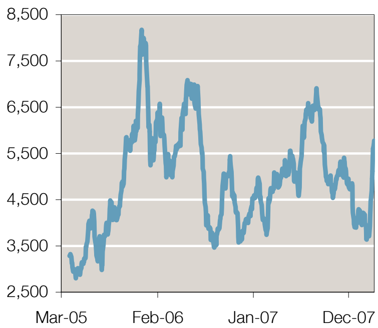


Source: Reuters Ecowin

LME tin stocks (tonnes)

Source: Reuters Ecowin

LME contracts, volume traded (Daily, 1-month moving average)



Source: Reuters Ecowin

News

- Feb 28th: Indonesia issued its 17th tin export licence, which was granted to PT Bangka Timah Utama Sejahtera.
- Feb 27th: Bolivia's Empresa Metalurgica Vinto (EMV) agreed with Australia's Ausmelt to build a tin smelter, with annual capacity to produce 18,000t of refined tin at EMV's Oruro plant.
- Feb 27th: China's Yunnan, the world's largest tin producer, produced 61,129t of refined tin in 2007, fractionally more than provisional figures from Indonesia's PT Timah, showing its production was 58,000t.
- Feb 4th: China's two main tin producing provinces, Hunan and Jiangxi, which account for more than 20% of the country's annual tin output, were badly hit by the worst snowstorms in 50 years. Operations were briefly suspended in many small smelters.

Analysis

- Supply-side concerns push prices sky high

The three-month price for tin on the LME ended February at $18,725/t having climbed fairly steadily throughout the month from its starting point of $17,050/t. By 4th March the contract had put on another $650/t with ease, touching a fresh record of $19,375/t, although it settled that day slightly down at $19,225/t. The wave of investment interest in tin has some solid fundamental backing – the severe weather in China has wiped out an as yet unspecified volume of tin production, meaning that China – which has already emerged as a net importer of refined tin late last year – will in all probability be taking even more imported tin than anticipated. Further disruptive news came from the Democratic Republic of Congo (DRC), which banned tin mining in the Walikale district of North Kivu, the largest tin-producing region of the country. The export of cassiterite – which is processed into tin – will fall this year as a result. The continued close watch by the Indonesian authorities and police over tin mining there will inevitably mean lower Indonesian exports this year – probably 85,000t, 7,000t less than in 2007, according to the most recent Indonesian government estimates. In February, Indonesian police impounded a barge of tin that belongs to PT Timah Tbk, on suspicions that the tin had been illegally produced. Pt Koba Tin, another leading Indonesian producer, was instructed to stop using sub-contractors to mine tin, as investigations continued into alleged illegal mining.

Outlook

The supply side hiccups plaguing three of the main tin producers – the DRC, China and Indonesia – have given investors all they need to perpetuate their already very positive view of the outlook for tin. Given that LME stocks are down 40% since August last year and are threatening to drop below 9,000t sometime soon, it's highly likely that $20,000/t will be breached this month. Demand is still growing strongly and supply is very constrained; tin production has been dogged for the past two years with niggling problems that have yet to be resolved. LME 3-month short-term: $19,300/t-$20,300t.

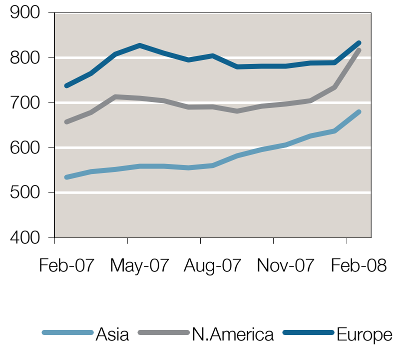
Market data (February unless stated)

Prices ($/t)	Cash	3-month	15-month	LME stocks	Tonnes	LME Open Interest (contracts)	
Average	17,210	17,288	17,258	Jan-08	11,590	Tin	18,519
High	18,700	18,725	18,670	Feb-08	10,045		
Low	16,600	16,700	16,660				

Source: London Metal Exchange

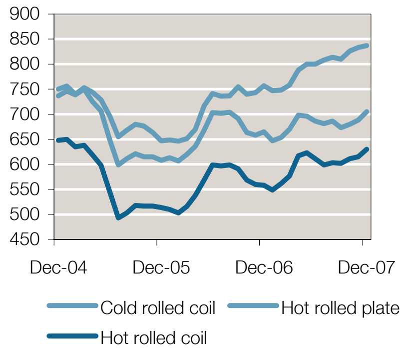
Steel

Composite steel price ($/tonne)



Source: London Metal Exchange

Steel products, world prices ($/tonne)



Source: MEPs, Reuters Ecowin
Note: "World" is average of Asia, N.America, and Europe

News

- Mar 5th: The Tangshan Iron and Steel Group, China's third biggest steel producer, said it plans to increase its output this year by 10%, to 25 Mt.
- Mar 5th: China's National Development and Reform Commission, the country's main state-run central planning agency, plans to force the closure of 6 Mt of what it calls obsolescent steel-making capacity during 2008, as well as eliminate 14 Mt of the country's iron production capacity. The aim is part of a much wider scheme under which 78 Mt of steel production capacity, about 14% of the current total, would be closed by 2010.
- Mar 4th: The Australian Bureau of Agricultural and Resource Economics forecast the country's iron ore production in 2008-2009 would rise to 354.8 Mt, 35.9 Mt higher than 2007-2008, while iron ore exports would rise to 325.5 Mt, up by 35 Mt.
- Feb 25th: The London Metal Exchange made a low-key launch of its new steel billet contracts, via telephone and electronic trading; full ring trading will start at the end of April.

Analysis

- Substantial rise in contract iron ore prices

Vale, the Brazilian mining company and the world's biggest iron ore producer, set a new benchmark for contract iron ore prices for 2008-2009 in late February, striking a 65% rise, the sixth successive year of price increases, with Asia's three biggest steel producers – JFE Holdings and Nippon Steel of Japan, and South Korea's Posco. The three agreed to pay $78.88/t from 1st April. A similar rise was also agreed to by China's steel producers. This is a significant rise over last year's 9.5% contract increase, but is justified by iron ore producers who point to spot prices having risen by about 150% in the past year. The substantial increase in iron ore contract prices has already begun to feed through into announcements of higher steel prices. The price rise was immediately criticised by Eurofer, the European Confederation of Iron and Steel Industries, as too high and indicative of what it argues is too great a consolidation among iron ore producers. Eurofer is highly critical of BHP Billiton's desire to take over Rio Tinto, which, together with Vale, control some 75% of globally traded iron ore. "Imagine the pricing power which these suppliers will have when trade is dominated by just two companies," said Gordon Moffat, director general of Eurofer. The China Iron and Steel Association (CISA) estimated that the country's consumption of crude steel this year will rise by around 11%, year-on-year, to as much as 485 Mt. CISA also forecast China's production would rise more than 6% in 2008, to around 520 Mt.

Outlook

Steel prices are set to rise strongly across the world this year, as producers pass on much higher contract iron ore prices to their customers. Continued strong demand growth for steel is currently expected this year and next, although this may be negatively impacted by the deteriorating economic outlook for the US and slower growth in China.

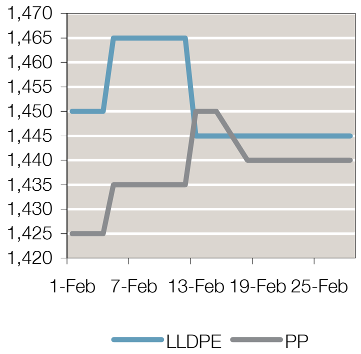
Market data (February unless stated)

Prices ($/t)	Asia Composite	N. America Composite	Europe Composite	World Composite
Dec-07	626	704	788	706
Jan-08	637	734	789	720
Feb-08	680	817	833	776

Source: MEPs: VM Group

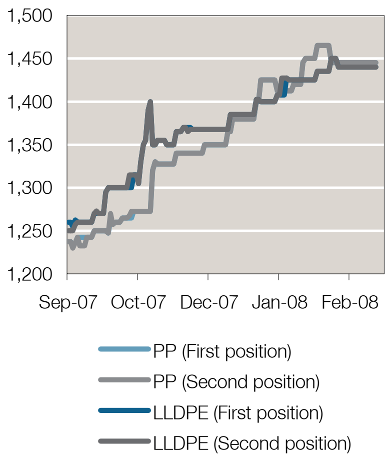
Plastics

Plastics prices, front month Global contracts, LME ($/tonne)



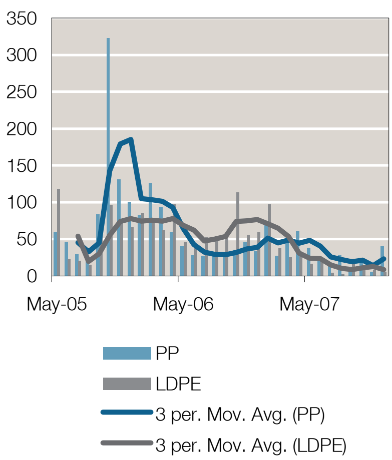
Source: Reuters Ecowin

Plastics prices, first two months Global contracts, LME ($/tonne)



Source: Reuters Ecowin

Plastics volume traded, front month, LME ($/tonne)



Source: Reuters Ecowin

News

- Feb 26th: Dow Chemical said it may sell some of its non-core operations and is studying whether some of its speciality plastics businesses should become part of joint ventures or be sold.
- Feb 20th: NCT Group, a global distributor of plastic raw materials, and Japan's Itochu Corp, a plastics trading company, will form a joint venture polymer distribution business based in Europe. Itochu will take a minority stake in NCT Holland in Breda. Itochu has the option of acquiring majority control of the venture at a later date.
- Feb 8th: The German trade association GKV said turnover at German plastics processors in 2007 rose to €53bn, an increase of 7.5% year-on-year. GKV expects growth to fall to between 3.5%-4% in 2008, as input costs rise.

Analysis

- Acquisitions on the rise

February proved to be a month of acquisitions in the plastics sector, with companies looking to consolidate to compete in a marketplace where input costs are rising fast. Perlos Corporation, a maker of plastic parts for mobile phones and part of Taiwan-based Lite-On Group, said it would buy 25% of the Hong Kong-based CIM Precision Moulds, bringing its holding to 100%. The Danish packaging group Superfos increased its stake in Tunisia's Galion to 45%, as it moves to increase business in North Africa. The German based plastics and glass producer Gerresheimer said it would buy Brazil's Allplas Embalagens. The changed nature of the plastics market, now increasingly one of global competition, was highlighted by the announcement by Tenma, a Scottish-based injection mould company, that it is to close its plant because it can no longer compete with eastern European based companies, whose prices can be as much as 30% lower than Tenma's.

On the LME the price of four of the eight regional plastics contracts all recorded modest gains in February. The PP global contract added $10 over the month to $1,430/t; PA Asia gained $5, to $1,435/t; LA Asia added $65, to $1,580/t; and LN North America rose by $35, to 1,475/t. Around the middle of the month PP Global rose to $1,445/t for a few days but soon slipped back to $1,430/t. LL Global rose to $1,450 for a few days at the start of the month but by 13th February was back down at $1,430/t, where it remained for the rest of February.

Outlook

The inexorable rise in crude oil prices will inevitably be reflected in strengthening plastics' prices, as producers seek to pass on their higher input costs to consumers. Oil prices are now apparently firmly established at above $90/barrel, and so far the indications of a slowing US economy have done nothing to bring that down. The crude oil price is now as much a factor of perceived probable continued strong growth in Asian demand, and that should both offset any weakening of US demand and also keep crude high. LME Global contracts short-term: PP $1,430/t-$1,440/t, LL $1,460/t-$1,470/t.

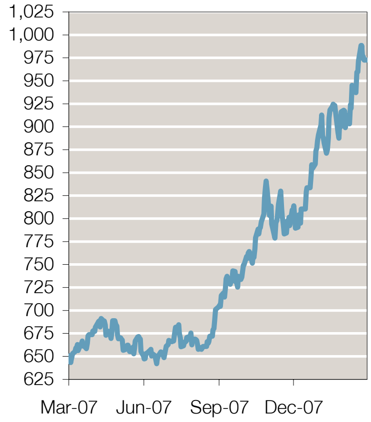
Market data (February unless stated)

Average prices			Volumes (January)			Open Interest (contracts) (End January)	
Contract	Global LLDPE	Global PP		All LLDPE	All PP	All LL contracts	All PP contracts
First position	1,451.19	1,438.57	Daily av.	18.285714	0	15	71

Source: Reuters Ecowin

Prices

Gold ($/oz)



Source: London Bullion Market Association

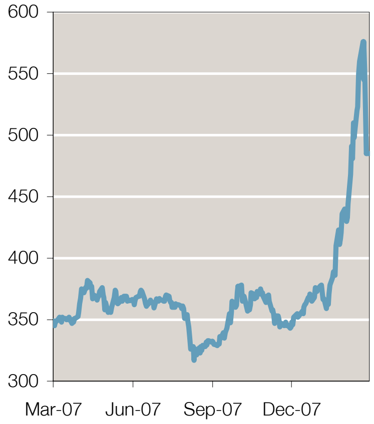
Silver ($/oz)

Source: London Bullion Market Association

Platinum ($/oz)

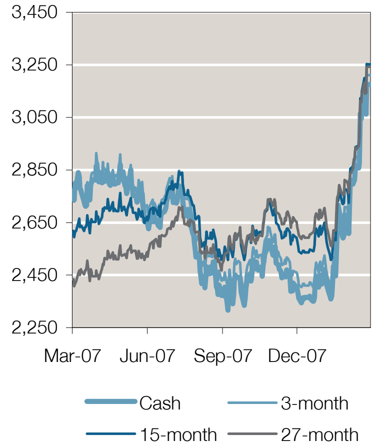
Source: London Platinum & Palladium Market

Palladium ($/oz)



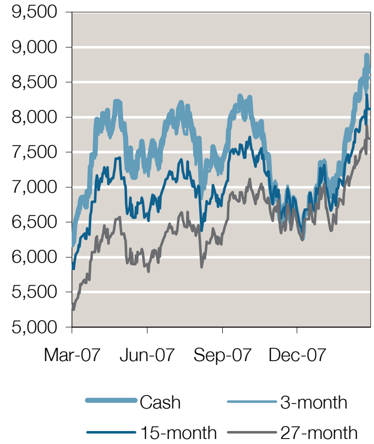
Source: London Platinum & Palladium Market

Aluminium ($/tonne)



Source: London Metal Exchange

Copper ($/tonne)

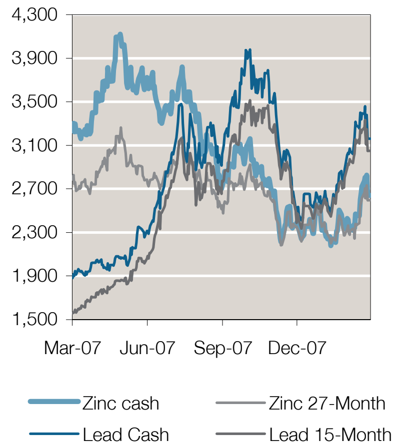


Source: London Metal Exchange

Nickel ($/tonne)

Source: London Metal Exchange

Lead & zinc ($/tonne)



Source: London Metal Exchange

Tin ($/tonne)

Source: London Metal Exchange

Quantitative research

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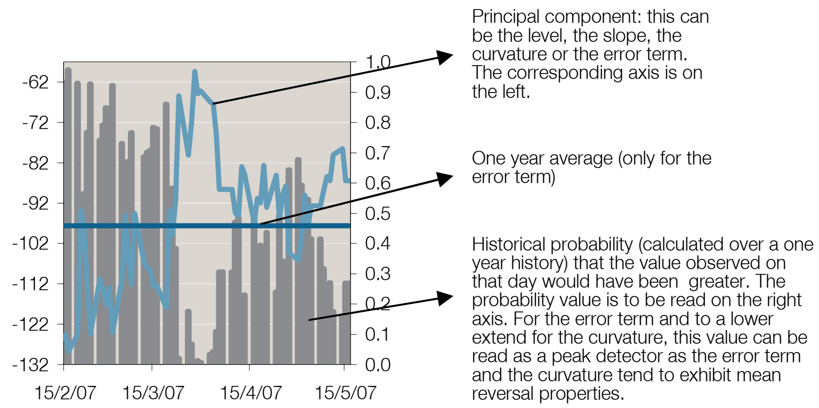
PCA background

PCA stands for Principal Component Analysis. It is a standard technique used for the study of forward curve dynamics. At any point in time, a future curve can be represented by three values known as the level, the slope and the curvature. Each of these values has a physical meaning. A variation of the level represents a parallel shift of the curve, while a variation of the slope represents a rotation. An increasing slope indicates a clock-wise rotation and therefore reveals a backwardation of the curve. By contrast, a decreasing slope indicates a curve that shows a contango. We can therefore expect the slope to respond to market events associated with supply, demand, and stocks. Furthermore, the curvature gives an insight into prices during the particular month. A rising curvature indicates that during the first and the last third of the contract month the price increases, while the second third decreases. This provokes a distortion, or a sharper bend of the curve.

Provided charts

For each metal there are five graphs. The first, at the top of the page, displays the forward curve for a number of dates. These are selected in order to demonstrate specific evolutions of the curve during the last month, and also to illustrate some particular features of the curve. The vertical axis displays the price of each contract (in USD) as provided by Bloomberg. The horizontal axis gives the future's settlement date. The used contracts are known as generic and are constructed by using successive contracts which always expire "in N months", as appropriate.

Demonstration of PCA graph



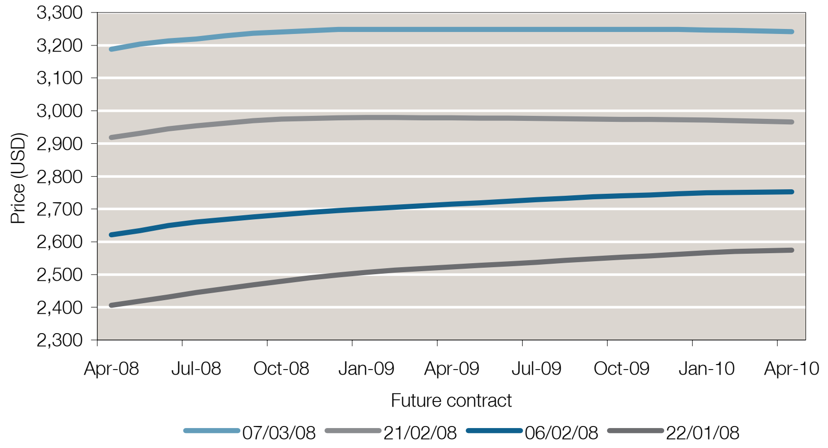
Source: Fortis Modelling

Aluminium
Future curve analysis

Fundamental outlook

Aluminium futures have perked up in recent weeks on growing indications that China's aluminium demand is not only still growing strongly, but that it is beginning to find it difficult to meet that demand from its own production. Power problems in South Africa – which are unlikely to be resolved in the next few years – may well damage output from that country. And energy prices are continue to rise strongly, pushing production costs up even for those regions – the Middle East, former Soviet republics – that are well-endowed with energy resources. As yet, economic slowdown in the US and worries of the same in the EU have not fed through into lowered demand. While that is a concern over the next six months, aluminium is poised to make further gains as investment support gathers strength. LME three-month contract short-term: $3,100/t-$3,300/t.

Future contract



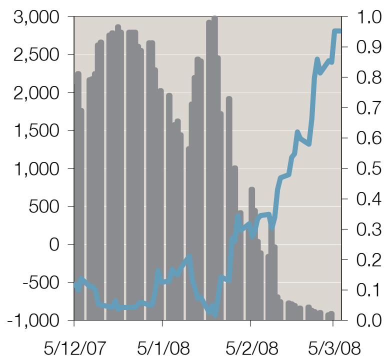
Source: Fortis Modelling, Bloomberg

The futures curve movement for aluminium has been mainly level driven during the past month. Supply disruptions caused by power shortages resulted in a global curve price rise.

A significant drop in slope and curvature occurred mid February. Between FEB13 and FEB14 the curve tilted completely with a drop in long term and a rise in short term contracts on the back of news on supply disruptions caused by power outages.

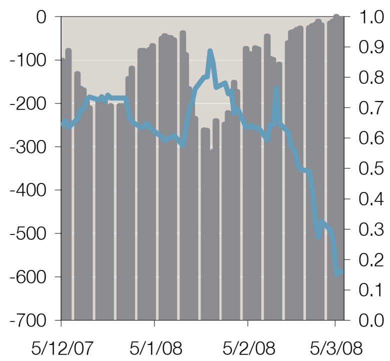
Principal component analysis (arbitrary units)

Level (t)



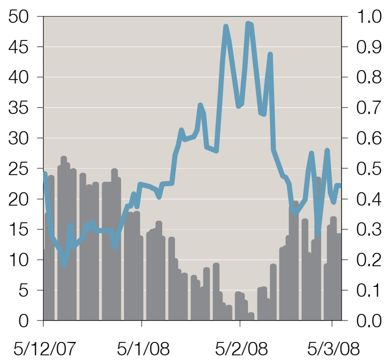
Source: Fortis Modelling

Slope (t)



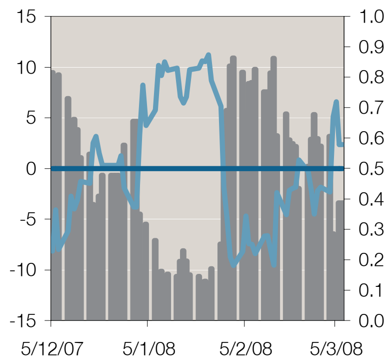
Source: Fortis Modelling

Curvature (t)



Source: Fortis Modelling

Error (t)

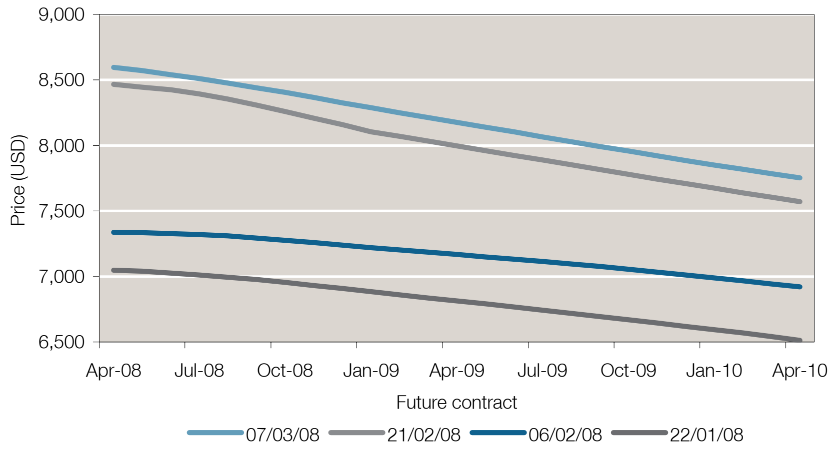


Source: Fortis Modelling

Copper
Future curve analysis

Fundamental outlook
Copper prices have sustained a relatively high level thanks to some strong supply-demand signals. Chile's state-owned Codelco, the biggest copper miner in the world, saw its full production for 2007 slip 6.6% year-on-year to 1.67 Mt, the third successive year Codelco had decreased output. LME copper stocks have fallen by about one third since the start of 2008 and right now are equivalent to about three days of current global consumption. On the other hand, copper stocks held by the Shanghai Futures Exchange more than doubled in February to above 48,000t. Copper's outlook will be determined partly by the efforts of China's authorities to slow the country's growth rate to 8% this year; if they succeed, that will dent copper demand, while a full US recession will also lower consumption. Currently, copper is still a market in a bull phase, but basing long-term hopes on more supply-side problems could prove a risky strategy. LME 3-month short-term: $7,800/t-$8,300/t.

Future contract

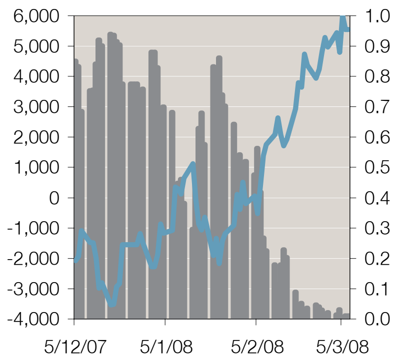


Source: Fortis Modelling, Bloomberg

Principal component analysis (arbitrary units)

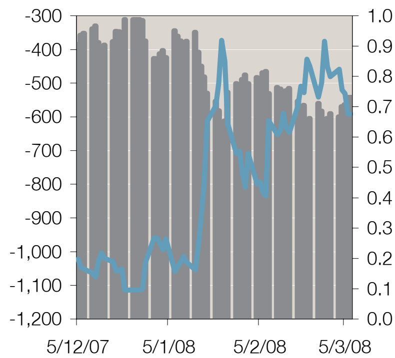
The past month, copper's future curve movement has been mainly level driven, based on a parallel increase in price.

Level (t)



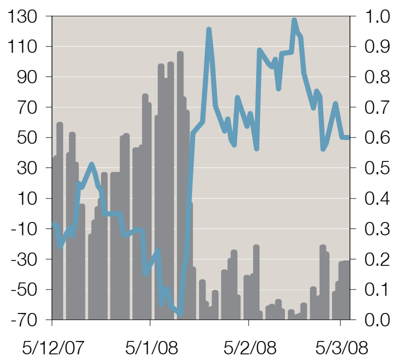
Source: Fortis Modelling

Slope (t)



Source: Fortis Modelling

Curvature (t)



Source: Fortis Modelling

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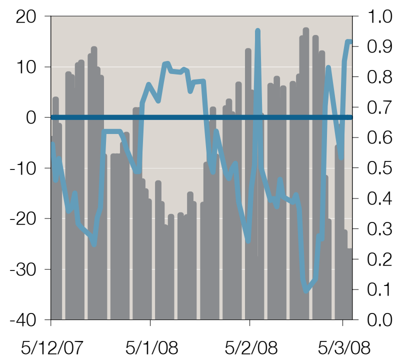


Source: Fortis Modelling

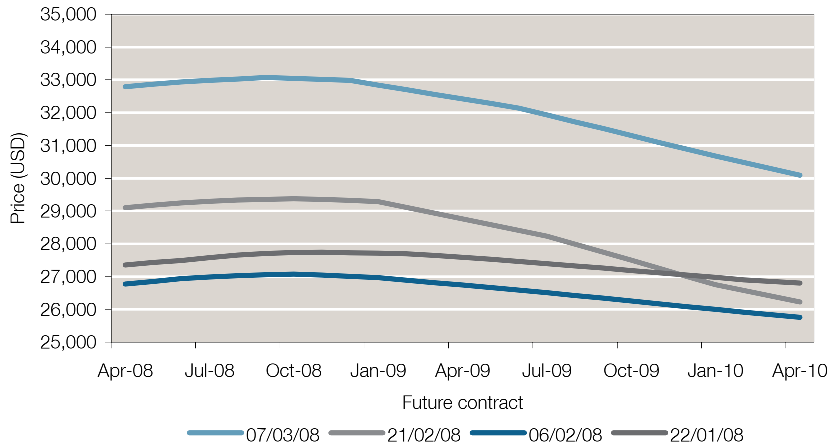
Nickel

Future curve analysis

Fundamental outlook

The three-month nickel price on the LME rose above $30,000/t at the end of February, but this mini-rally is not really justified on any reasonable fundamental, supply-demand perspective. LME warehouse stocks are once again ample, comfortably above 47,000t by the end of February, and there was nothing remarkable by way of supply-side disruptions, nor indications of rapidly increasing demand. Some bullish views were voiced concerning a strike at BHP Billiton's Cerro Matoso ferronickel mine in Colombia, which has annual output of 55,000t, but this is unlikely to be a serious stoppage. This year the nickel market is likely to be in a healthy global surplus, and a darkening macro-economic picture in the US and elsewhere should throw a dose of cold water over any irrational exuberance from investors. LME 3-month short-term: $25,000/t-$30,000/t.

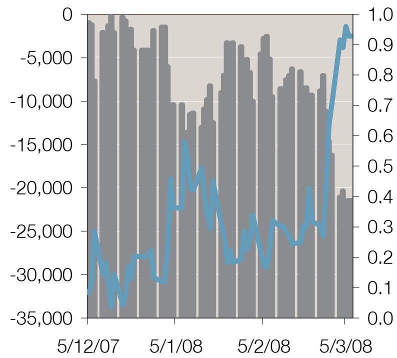
Future contract



Source: Fortis Modelling, Bloomberg

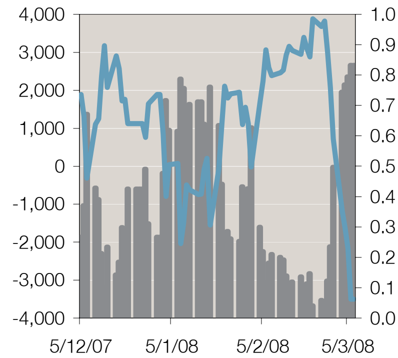
Principal component analysis (arbitrary units)

Level (t)



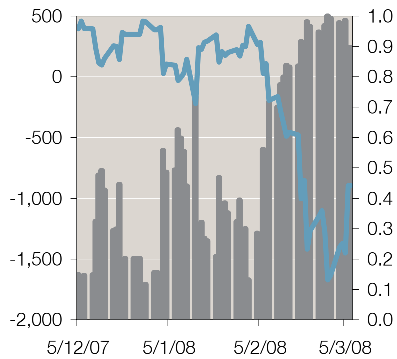
Source: Fortis Modelling

Slope (t)



Source: Fortis Modelling

Curvature (t)



Source: Fortis Modelling

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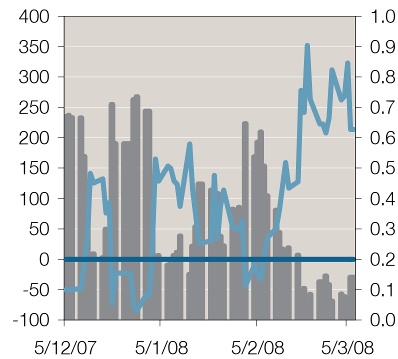


Source: Fortis Modelling

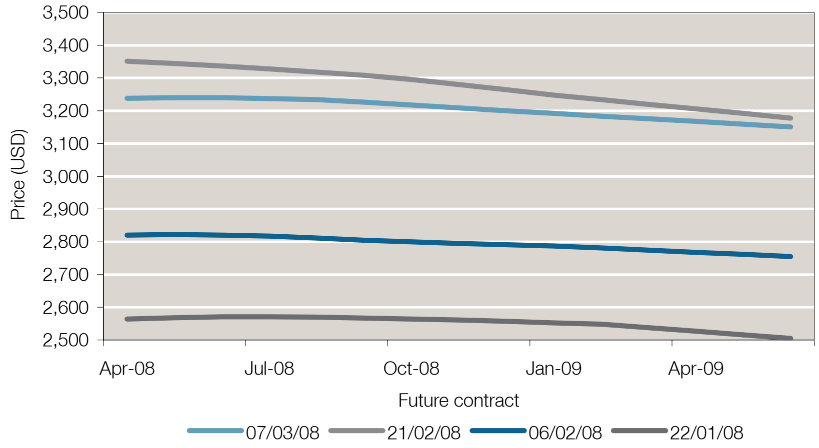
Lead

Future curve analysis

Fundamental outlook

As with nickel, there is a degree of optimistic investment ebullience in lead right now, which is unjustified by a closer attention to the supply-demand outlook. It's certainly true that Chinese exports of refined lead remain far lower than normal, but little has changed since lead dropped below $3,000/t late last year. Moreover, demand for car batteries in the northern hemisphere should be entering its weakest period of the year, as warmer weather returns. So all in all we would expect lead to retreat marginally in the short-term, with the LME three-month contract trading in a range of $2,900/t-$3,200/t over the next month.

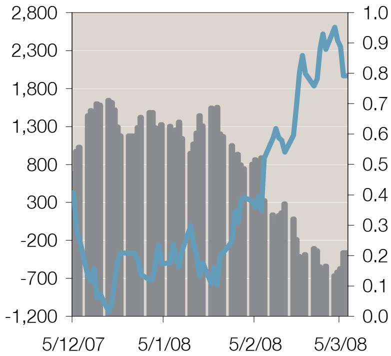
Future contract



Source: Fortis Modelling, Bloomberg

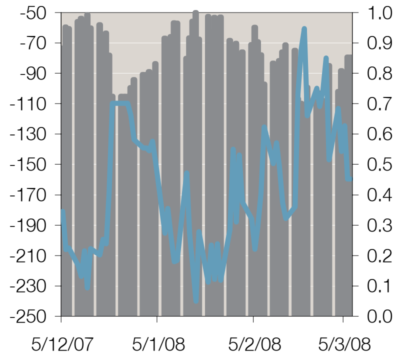
Principal component analysis (arbitrary units)

Level (t)



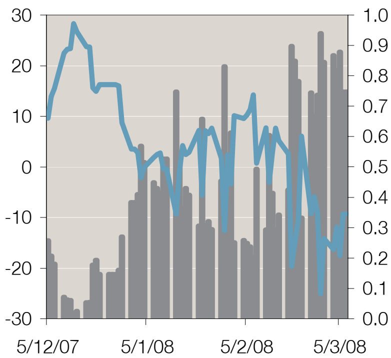
Source: Fortis Modelling

Slope (t)



Source: Fortis Modelling

Curvature (t)



Source: Fortis Modelling

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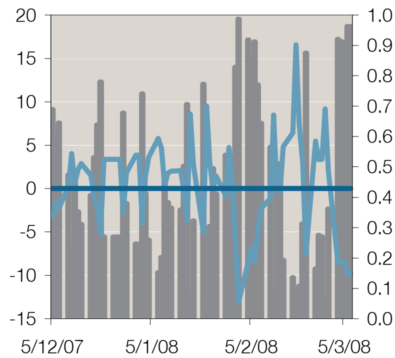
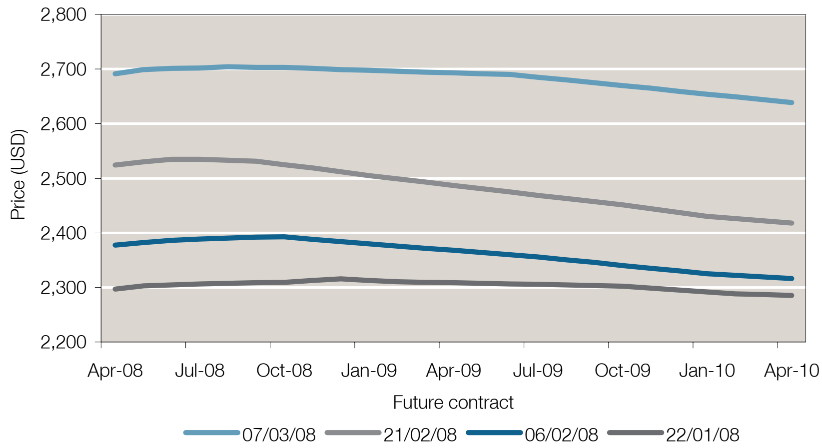


Source: Fortis Modelling

Zinc

Forward curve analysis

Future contract



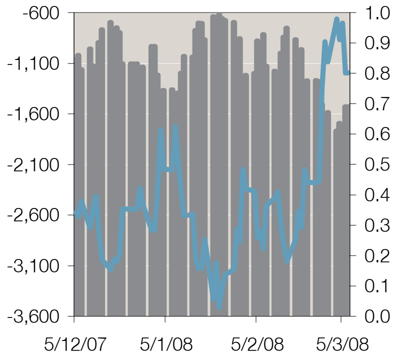
Source: Fortis Modelling, Bloomberg

Fundamental outlook

Zinc remains our least favoured base metal, from an investment standpoint. The global market could be facing a tidal wave of new zinc supply over the next two years, with perhaps as much as 2 Mt/year extra over today. This should spell much weaker prices over the mid-term, although the wild card (as ever) is China, which may act to curtail exports of high-grade zinc at some point in the future. LME three-month short term: $2,500/t-$2,800/t.

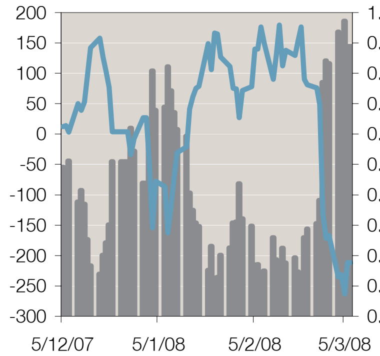
Principal component analysis (arbitrary units)

Level (t)



Source: Fortis Modelling

Slope (t)



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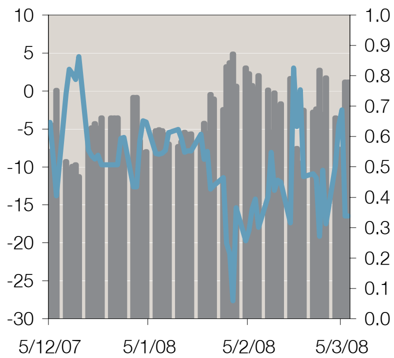

Source: Fortis Modelling

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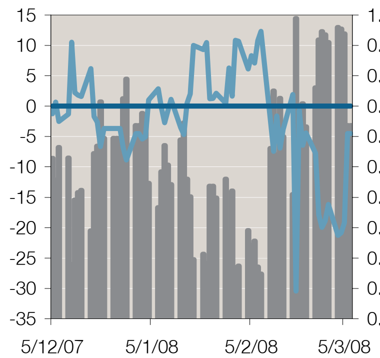


Source: Fortis Modelling

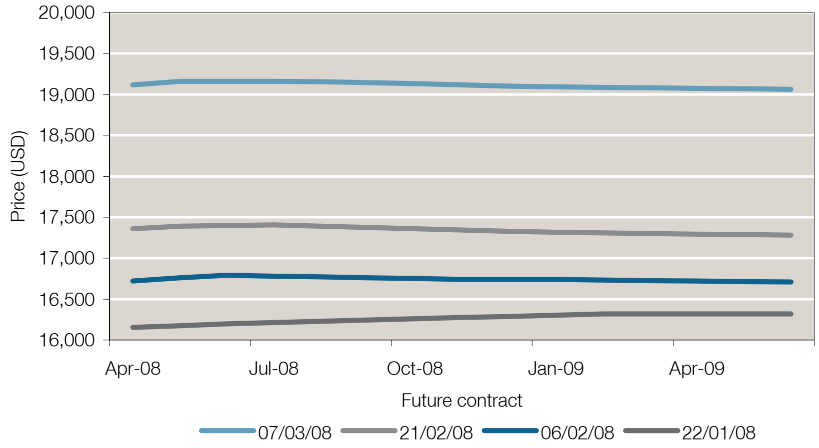
Tin

Future curve analysis

Fundamental outlook

A fresh record for tin prices on the LME was set in February, as the market took note of some very promising supply-demand fundamentals – China emerging as a net importer of refined tin, Indonesian production this year likely to be 7,000t lower than last, a suspension of tin concentrate exports from the Democratic republic of Congo, and yet more violent conflicts around Bolivia's main tin mine, at Huanuni. None of these supply-side pressures are likely to ease in the immediate future. This picture has inevitably attracted stronger investment interest and it can only be a matter of time before the psychologically key barrier of $20,000/t is breached. LME three-month short term: $19,300/t-$20,300/t.

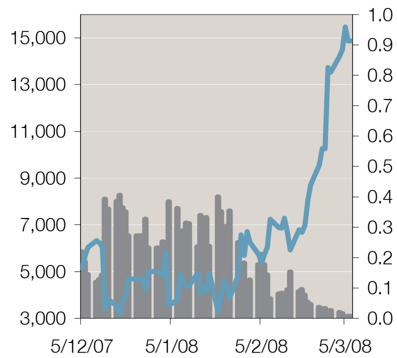
Future contract



Source: Fortis Modelling, Bloomberg

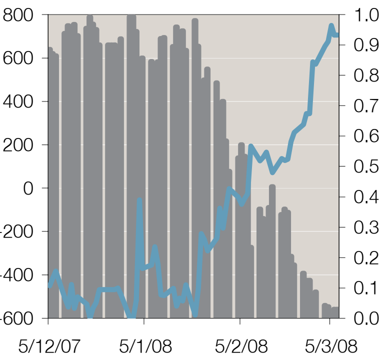
Principal component analysis (arbitrary units)

Level (t)



Source: Fortis Modelling

Slope (t)



Source: Fortis Modelling

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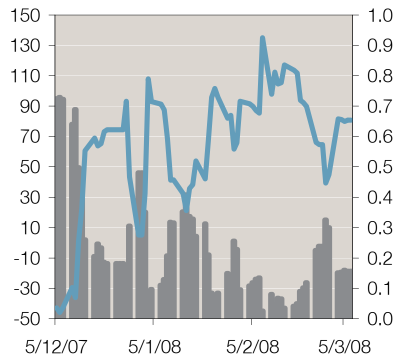

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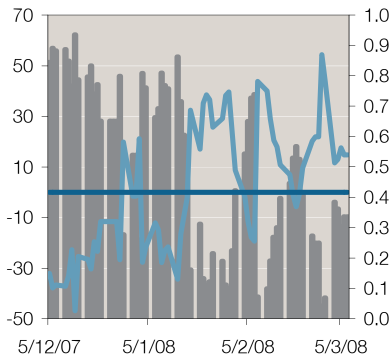

Source: Fortis Modelling

Notes

Notes

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