

ABN AMRO Metals Monthly

Investment Research by VM Group July 2010

- Precious metals
- Base metals
- Steel

Price forecasts

		14 July	1-month	2-month	3-month	12-month
Gold	\$/oz	1,207	1,150-1,260	1,275	1,175	1290
Silver	\$/oz	18.29	17.40-19.20	20.00	19.50	16.00
Platinum	\$/oz	1,534	1,500-1,600	1,600	1,600	1,700
Palladium	\$/oz	463	450-500	500	520	472
Aluminium (3-month)	\$/tonne	2,019	1,875-2,050	1,925	2,050	2,800
Copper (3-month)	\$/tonne	6,713	6,050-6,750	6,700	6,800	7,750
Lead (3-month)	\$/tonne	1,834	1,700-1,925	1,835	1,895	2,400
Nickel (3-month)	\$/tonne	19,550	18,000-20,250	18,500	19,000	27,500
Tin (3-month)	\$/tonne	18,050	16,750-18,750	17,500	17,500	19,500
Zinc (3-month)	\$/tonne	1,844	1,725-1,925	1,825	1,925	2,750
Steel: (3-month) Med	\$/tonne	441	390-490	460	500	700
		2010 av	2011 av	2012 av	2013 av	2014 av
Gold	\$/oz	1,194	1,269	1,165	921	900
Silver	\$/oz	18.53	20.83	19.00	17.20	16.50
Platinum	\$/oz	1,609	1,755	1,883	2,058	1,950
Palladium	\$/oz	445	553	639	720	600
Aluminium (3-month)	\$/tonne	2,062	2,652	2,500	2,667	2,900
Copper (3-month)	\$/tonne	6,980	7,908	8,168	8,525	7,950
Lead (3-month)	\$/tonne	2,059	2,463	2,142	1,825	1,820
Nickel (3-month)	\$/tonne	19,805	24,792	26,875	30,667	31,525
Tin (3-month)	\$/tonne	17,880	19,521	19,708	18,167	19,326
Zinc (3-month)	\$/tonne	2,048	2,825	3,575	3,483	3,321
Steel: (3-month) Med	\$/tonne	495	800	950	1,000	1,100

Source: VM Group

italics denote revision from previous month

The Metals Monthly is produced as part of a joint venture between ABN AMRO Bank N.V. and VM Group

Analysts:

- **Carl Firman**
E-mail: carl@vmgroup.co.uk
- **Gary Mead**
E-mail: garymeadgary@gmail.com
- **Marina Loterijman**
E-mail: marina@vmgroup.co.uk
- **Laila Manji**
E-mail: laila@vmgroup.com

Contents

Prices and stocks	2
Feature	3
Gold	9
Silver	11
Platinum and palladium	13
Aluminium.....	15
Copper.....	16
Nickel.....	18
Zinc	20
Lead	22
Tin	24
Steel	27
Fund activity	28
About VM Group.....	30
VM Group disclaimer and copyright.....	31
ABN AMRO disclaimer and copyright.....	32

Prices and stocks

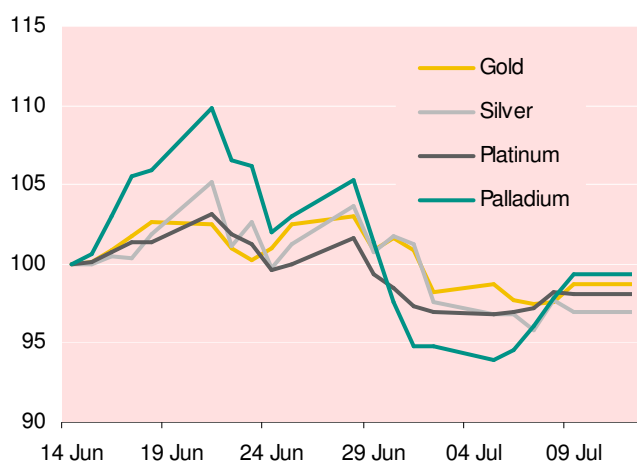
Historical prices & base metal stocks

Prices		14 July 2010	Past 12 months		1 week ago	WoW (%)	1 month ago	MoM (%)	12 months ago	YoY (%)	Av. 2009	Av. 2008	
			Average	High									Low
Gold	\$/oz	1,207	1,101	1,261	931	1,194	1.1%	1,220	(1.1%)	938	28.7%	973	873
Silver	\$/oz	18.29	17.06	19.64	13.16	18.0	1.6%	18.3	(0.1%)	13.3	37.8%	14.7	15.15
Platinum	\$/oz	1,534	1,466	1,752	1,158	1,528	0.4%	1,539	(0.3%)	1,158	32.5%	1,205	1,599
Palladium	\$/oz	463	396	571	246	447	3.6%	449	3.1%	246	88.2%	264	357
Aluminium	\$/tonne	2,019	2,064	2,482	1,649	1,993	1.3%	1,964	2.8%	1,649	22.4%	1,703	2,659
Copper	\$/tonne	6,713	6,780	7,971	5,175	6,671	0.6%	6,494	3.4%	5,175	29.7%	5,186	7,030
Lead	\$/tonne	1,834	2,128	2,620	1,581	1,826	0.5%	1,703	7.7%	1,635	12.2%	1,738	2,136
Nickel	\$/tonne	19,550	19,640	27,595	15,880	19,325	1.2%	19,400	0.8%	15,910	22.9%	14,762	21,689
Tin	\$/tonne	18,050	16,263	19,185	12,975	17,700	2.0%	16,825	7.3%	13,225	36.5%	13,382	18,766
Zinc	\$/tonne	1,844	2,113	2,660	1,534	1,852	(0.4%)	1,757	5.0%	1,540	19.7%	1,687	1,924
Steel (Med)	\$/tonne	441	424	620	325	530	(5.7)%	612	(18.3)%	340	47.1%	500	424
Steel (Far East)	\$/tonne	441	469	610	350	550	(1.8)%	610	(11.5)%	360	50.0%	540	469

LME Stocks		14 July 2010	Past 12 months		1 week ago	WoW (%)	1 month ago	MoM (%)	12 months ago	YoY (%)	Av. 2009	Av. 2008	
			Average	High									Low
Aluminium	Tonnes	4,375,900	4,563,654	4,640,750	4,375,900	4,398,000	(0.5%)	4,486,225	(2.5%)	4,512,525	(3.0%)	4,037,328	1,231,093
Copper	Tonnes	428,500	437,605	555,075	260,875	436,900	(1.9%)	463,175	(7.5%)	260,875	64.3%	388,201	176,337
Lead	Tonnes	188,150	151,881	193,000	94,300	189,025	(0.5%)	193,000	(2.5%)	94,300	99.5%	94,440	62,174
Nickel	Tonnes	119,796	137,519	166,476	105,684	120,660	(0.7%)	133,320	(10.1%)	107,988	10.9%	111,852	51,857
Tin	Tonnes	16,160	23,345	27,905	16,160	16,475	(1.9%)	20,725	(22.0%)	17,825	(9.3%)	17,440	7,314
Zinc	Tonnes	616,025	498,119	620,475	352,475	616,525	(0.1%)	617,350	(0.2%)	353,525	74.3%	379,530	150,777

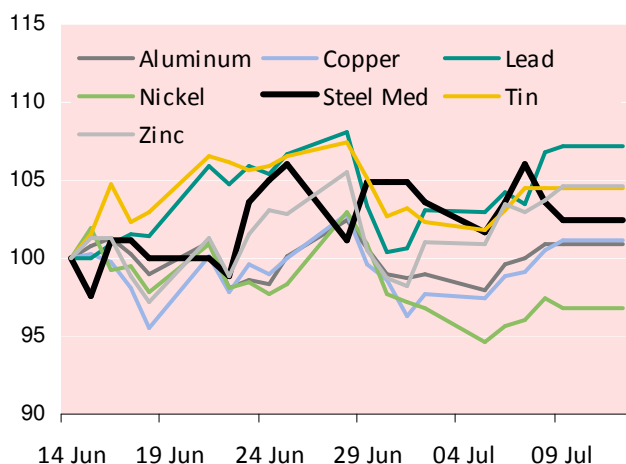
Source: VM Group

London fix precious metal prices, over past month: re-based to 100



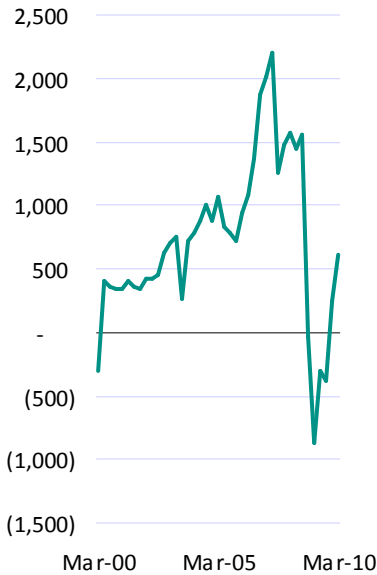
Source: VM Group

LME 3-month base metal prices, over past month: re-based to 100



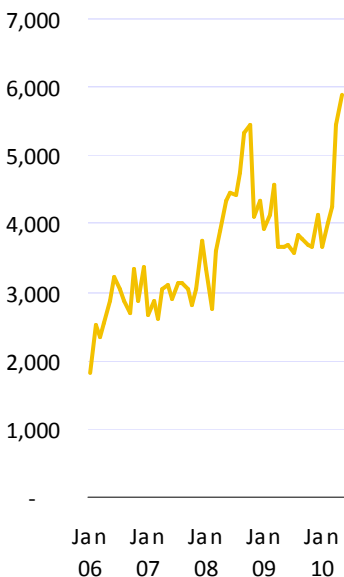
Source: VM Group

Australian mining company pretax profits, quarterly from Q1 2000- Q1 2010, million A\$



Source: Australian Bureau of Statistics

Australian exports of metal ores and minerals, monthly Jan 2006-May 2010, million A\$



Source: Australian Bureau of Statistics

Feature

The return of resource nationalism?

Australia's mining tax tornado has raised a number of questions about the direction of mining regimes worldwide, the possible return of resource nationalism and the power of the mining giants to respond to sovereign risk. These risks put enormous stress on the success or failure of mineral exploration and development, not least because the profitability of any given present or planned mining operation is affected but also because credit facilities in the first instance will be that much harder to obtain. Australia's recent mining tax fiasco is a case in point.

Australia's political establishment and the international mining industry have spent most of the past two months engaged in a ferocious battle of wills. The biggest casualty so far is former Prime Minister Kevin Rudd, deposed by his own party because of his clumsy handling of the 40% Resource Super Profit Tax (RSPT). Not only was the RSPT released without sufficient consultation, but Rudd also authorised an A\$38.5m (\$33m) advertising campaign in support of the tax that constituted a clearly aimed political attack on the sector. The industry response to this was fast and furious.

The mining industry retaliated by announcing wide reaching investment reviews of Australian projects, and in some cases suspending exploration completely. Rudd came in for bitter personal attacks and much was made of the risks to the Australian economy if one of its biggest employers – the extractive sector – was damaged by his tax proposals. Rio Tinto CEO Tom Albanese said in May that the introduction of the tax in Australia was his “number one sovereign risk issue on a global basis” – a quote that ricocheted around the world and saw stocks for all the big mining companies fall.

So the bosses of the Australian Labor Party kicked out Rudd and replaced him with his deputy, Julia Gillard, on 24 June. Gillard was urged to end the war with the mining industry and to negotiate an outcome that everybody could live with. Gillard significantly softened the government's position, replacing the original RSPT with an entirely new policy – the Mineral Resources Rent Tax (MRRT).

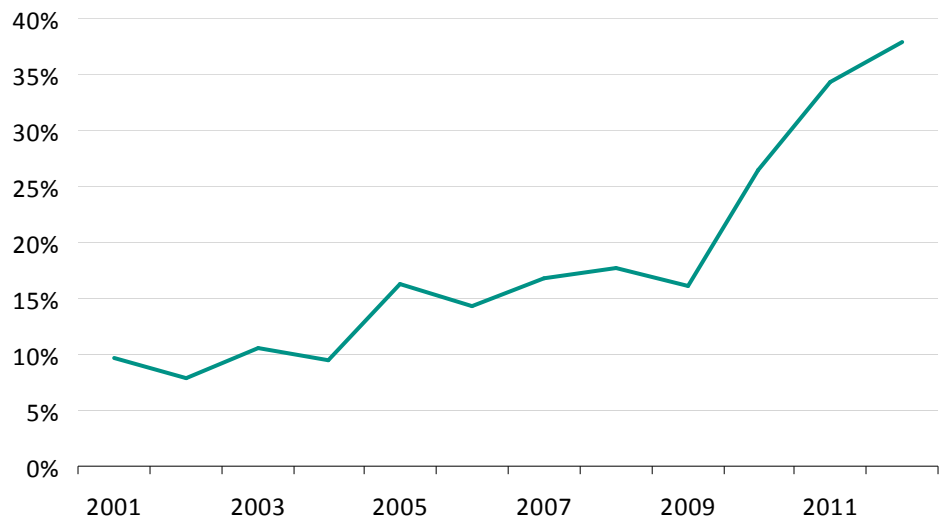
Far smaller in scope and application than the original, it proposes to take only a 30% tax on iron ore profits – not a 40% tax across a broad spectrum of metals as first envisaged. Coal, offshore and onshore oil and gas are all liable to 40% profit taxes under the Petroleum Resources Rent Tax, which replaces an old, state-based royalties tax system. The threshold is higher too, kicking in at 12%, and

will now only encompass 320 companies rather than the more than 2,500 companies previously affected.

It is worth noting though that the original RSPT came about because of an industry wide review that was charged with streamlining taxation. The IMF evaluated the RSPT and found that “it shifts the whole Australian resource tax system strongly in the direction of neutrality”. In the long term, the IMF found that the RSPT would have incorporated “large risk bearing by government” due to loss and exploration rebates. Others argue that the industry has already internalised the 40% RSPT costs in prices.

Nevertheless, the winners in the new look tax regime are the big mining companies, RioTinto, BHP Billiton and Xstrata – unsurprisingly, the main negotiators in the deal. The details of the deal contain a 25% extraction allowance that reduces the proportion of profits that are taxable. Mines will be valued at market rather than book values, allowing claims for capital and other asset depreciation. Base metals producers not covered by the MRRT will also be relieved, as will those involved in the slate of mergers and acquisitions in the industry that have been put on ice since the uncertainty of the tax proposals first came to light.

Cumulative Australian metals production growth (*), 2001-2011 (forecast)



Source: ABARE, VM Group, other data sources

**includes primary aluminium, alumina, bauxite, iron ore, manganese ore, gold, copper, lead, zinc and nickel*

And although any company with profits less than A\$50m (\$42m) annually is exempt from the MRRT, junior and mid-size mining companies will now not see the 40% resource exploration rebate that the RSPT would have conferred. The

lowered rate of 30% also means the government will have a A\$1.5bn shortfall on its expected tax revenues of A\$9bn over four years, which it plans to make up by freezing industry company tax rates, rather than cutting them as originally proposed.

So Gillard replaced a deposed Prime Minister, took on the mining industry and made a deal that seems, for now at least, palatable to everybody. The bulk of the mergers and acquisitions that were put on hold during the crisis are back on track, and stocks have recovered. But Gillard still faces her biggest test. A general election must be held within the next six months, and Gillard has said herself she will not have a mandate to govern unless she wins that election convincingly. If she does, the tax will come into force in July 2012. If she fails to carry the country, the opposition Liberal party has said they will cancel the tax immediately.

The lesson is that introducing the perception of sovereign risk is enough to get you thrown out of office. Although nobody believed that Australia posed the same kind of risk as perhaps Greece in terms of the potential for government default, the mining companies balked at what they took to be arbitrary and inconsistent tax laws. These laws, had they come into force in the form of the RSPT, could have seen as much as 100,000t/year of committed copper mine expansions and projects, 90,000t/year of lead, 60,000t/year of nickel, 67,000t/year of zinc and at least 45 Mt/year of iron ore production being cancelled.

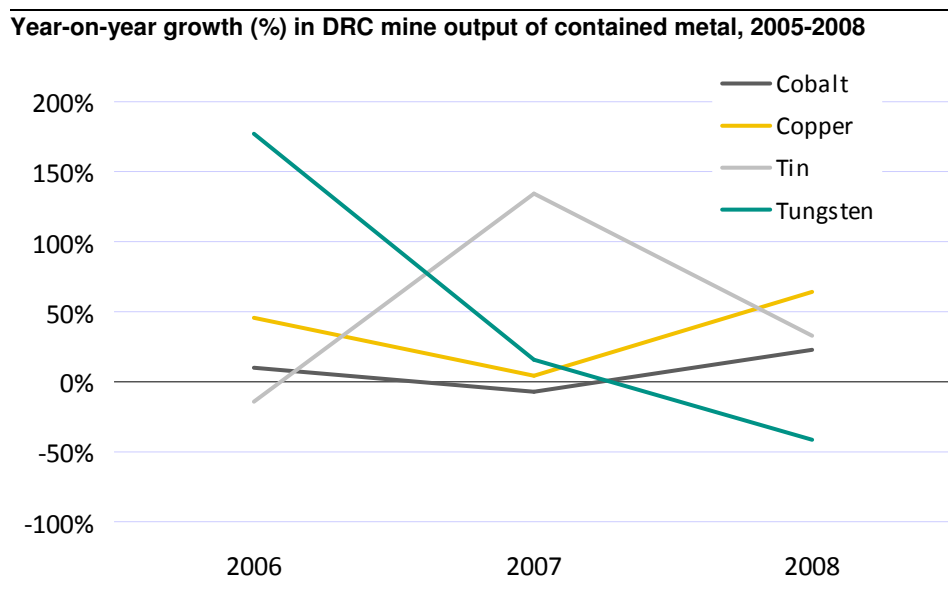
Echo reverberates

The rest of the world has been watching these developments closely. Investors, consumers – not least China – and other resource-laden countries have all viewed the Australian tax episode as a sort of test case. It is perhaps the first clash between government and industry since the recession unofficially ended and the recovery – at least in emerging markets – got fully underway. Some would suggest that the RSPT, and perhaps even the MRRT, were the first examples of the return of resource nationalism by a government since the financial crisis drew to a close.

Certainly, resource nationalism is what Canadian company First Quantum Minerals believes is taking place in the Democratic Republic of the Congo (DRC), where it claims its copper mining investments make it the country's biggest tax payer. First Quantum's Kolwezi copper tailings project was declared by the Kinshasa government in 2009 to belong to state owned mining company Sodimico. First Quantum disagrees. It says it has invested over \$750m in the project, and has begun international arbitration proceedings against the

government at what it calls the illegal cancellation of the project. In response, the DRC has suspended mining licenses for another, larger First Quantum operated mine, Frontier and Lonshi. First Quantum has spent \$300m developing this mine and asserts that the government's actions are an "orchestrated attack" on the company.

First Quantum's projects, due to their size and level of investment, have long been viewed as a bellwether of political and sovereign risk in the DRC. The decisions of the DRC government have caused some serious concern, not least to companies like Freeport-McMoRan which operates the huge Tenke Fungurume copper mine – but which is still waiting to receive the full slate of mining rights for the project.



Source: VM Group from various sources

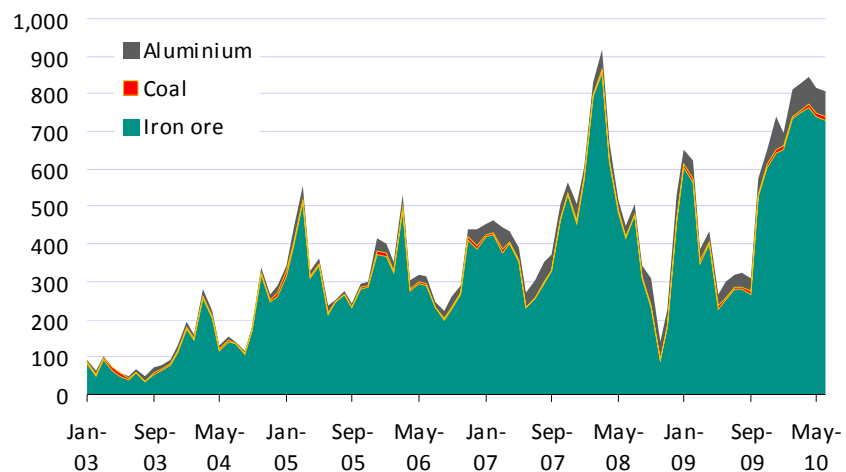
The dispute rages on, and the Canadian government is fully backing First Quantum – to the extent that it tried to block a World Bank/IMF policy to grant \$12bn in debt relief for the DRC, timed to coincide with the 50th anniversary of the country's independence. Although the debt cancellation went ahead – in the end Canada, along with Switzerland, abstained from the World Bank/IMF vote on the question – and even though the write-off was largely symbolic (the debt was incurred under the Mobutu regime and had not been serviced for some time), Canada's position is important. It signals it is willing to exert pressure on the DRC government and the international community on what it perceives to be the illegal confiscation by the DRC government, of essentially Canadian held assets.

New mining laws are about to be debated in India as well. The draft Mines and

Minerals Bill 2010, will be introduced to parliament when it reconvenes on 22 July. This bill aims to replace the current mining laws, which were introduced in 1957. The stated aims of the new laws are to clamp down on illegal mining and guarantee a fairer share – around 25% – of resource profits for communities living in the extraction areas, but perhaps the major motivation for the new laws comes from the desire to limit the apparent environmental effects of mining.

Jairam Ramesh, India's forthright minister of the environment, has already introduced some legal limits to extraction. For example, he has banned mining in the coastal state of Goa, a major tourist destination and formerly a significant iron ore producing region. In May, Ramesh put a hold on coal mining in India's dense forest areas. This ban could impact up to 35% of India's coal reserves – no small amount, as India is the world's third largest coal (and lignite) producer. The governing Congress party is aware that this will mean that India will have to import increasing amounts of coal – in particular to satisfy the growing domestic consumption requirements for electricity – but has made a choice to preserve the country's forests, and their inhabitants, over this pressing energy need.

Monthly Indian exports of iron ore, coal and aluminium, Jan 2003-June 2010, million \$



Source: ABARE, VM Group, other data sources

Mining companies may find this frustrating but others will find the Indian government's commitment to preserving its biodiversity, even at a cost to its own economic development, impressive. There is some political impetus behind the decision too – it is precisely these forests, and the poorer tribal communities they host that form the hotbeds of support for India's radical Maoist insurgency. Known as Naxalites, the group has long fought for what it describes as the poor and underrepresented communities of the eastern and central parts of India.

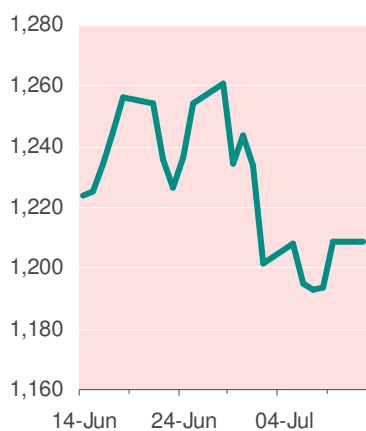
Among the movement's chief complaints are that resource exploitation in India is inequitable and damaging of environments and communities.

Also awaiting the outcome of the new law in India is the long-running standoff between the government and Vedanta's plans for a bauxite mine on Niyamgiri Mountain in Orissa state. Already delayed for two years, Vedanta's planned \$2.5bn open cast mine (to feed its alumina refinery at the foot of the mountain in Lanjigarh) is being scrutinised by the environmental ministry because of worries about the effect on the forest rights of the local communities, and in particular the Dongria Kondh tribe which they say may risk extinction if the mine goes ahead and their natural habitat is destroyed. There are only 8,000 members of the Dongria Kondh left; they rely on the forest entirely for their survival and hold the forests and Niyamgiri Mountain to be sacred.

Vedanta expects the bauxite mine – resources in the area are estimated at 78 Mt of bauxite – to ramp up production of alumina at the Lanjigarh refinery from the current 1 Mt a year to 5 Mt per year within four years. The existing refinery has had environmental consequences for the local populations, and the proposed mine has generated a great deal of controversy – the UK and Norwegian governments have expressed concern and some entities have disinvested in Vedanta as a result. For their part, Vedanta say they have already spent \$20m on the region, focusing on child nutrition and infrastructure development, and once the mine is active it will contribute a further 5% of profits to community development projects.

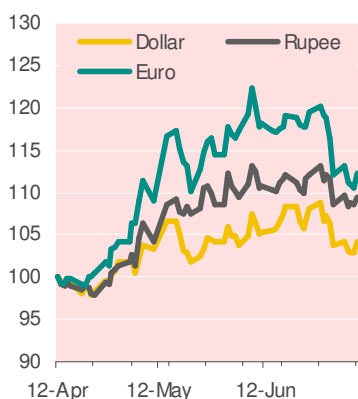
Within the Indian government there is also some dissent over approaches to the planned mine, with the Supreme Court granting approval for the project in August 2008, and the environment ministry strongly opposed to it. Prime Minister Manmohan Singh has asked the environment ministry to make a decision, with the result that some sort of ruling is expected on the mine proposal by the end of July, about the time the full new mining law will be debated in parliament. The outcome of both processes will reveal just how much influence the environment minister has, and the strength of the lobby behind him. And it will also indicate whether in the future India will follow a path of aggressive resource extraction, or choose to rigorously protect its environmental habitats and the people who live in them. If the government opts for the latter, then India may be forced to follow in China's footsteps and try to secure resources elsewhere. This will not be an easy task, not least because of the competition; it will also need to offer inducements to foreign governments – in the same way as China has done – before it can successfully stake a claim to foreign natural resource assets. It will therefore be likely that India's presence in Africa, Central Asia and Latin America will grow, but its exports of raw materials will fall.

Gold, London PM fix, \$/oz



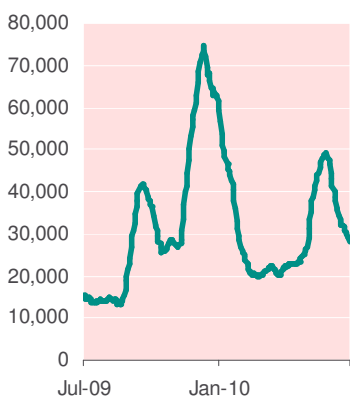
Source: LBMA, VM Group

Gold price in various currencies, three months ago = 100



Source: LBMA, VM Group

Shanghai Gold Exchange, lots/day (average [past 22 days])



Source: VM Group, SHFE

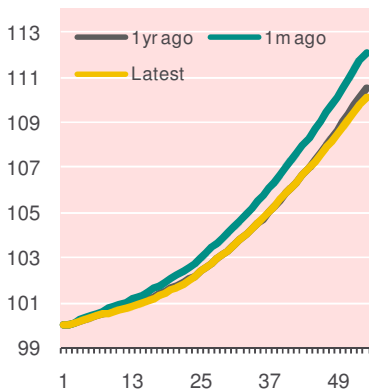
Gold

■ Gold swaps between a central /commercial bank and the Bank of International Settlements (BIS) took top billing in early July, besides the return of risk appetite and the sharp fall in the gold price. There was very little obvious reason for the price correction, besides profit taking at the end of H1 with the liquidation of gold holdings to balance books and meet margin calls, while the correction occurred alongside the weaker US dollar, maintaining gold's positive correlation with the currency since mid-May. It certainly did not stem from the BIS admission on page 171 of its 2010 annual report (released on 28 June) which stated that as of 31 March 2010, it held (in addition to its own holdings) 346t of gold, compared with zero in 2009. The counter-party to this additional tonnage was commercial banks, and rather than a gold swap this transaction was possibly a collateralised loan (the gold deposited with the BIS provided collateral in return for which currencies could be drawn down). The wider significance to this unusual event has little impact on the physical market; the transaction mechanism, we believe, involved the depositing of gold by the national central bank of the commercial banks to the BIS in return for the BIS to make available paper currency to the commercial banks. The transaction does however reveal the fragility of the banking sector, with central banks perhaps reluctant to be seen assisting commercial banks in the same way as in Q4 2008 and 2009. It is also quite bullish for gold considering how governments have mobilised gold to indirectly prop up commercial banks as well as it might slow the rate of official sector gold sales under the CBGA. After all, which central bank will want to be seen ridding itself of this asset?

■ The IMF however continues to sell gold, with 15.25t of gold sold in May, up from the 14.4t sold in April. The sale was in line with our expectations that the IMF will steadily eke out its committed gold sales by the end of the fiscal year in April 2011. Indeed May's figure suggests that sales could be complete by the end of this year or by January 2011. The Russian central bank remained the largest buyer of gold, with 22.46t bought in May – taking its reserves to 703t. It was the largest acquisition this year and brings the Russian central bank's gold purchases to 53.87t in the first five months of 2010.

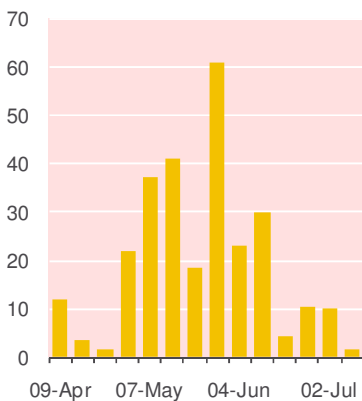
■ The correction in the gold price in early July was well signalled with the Comex net long position near record levels for much of June. The net long non-commercial position stood at 24.47 Moz at the end of June, up more than 2 Moz on the start of the month and its highest since December 2009 when the gold price was ~\$1,100/oz, but the overall net long position had inched down to almost 32 Moz. The net long commercial position however fell to 20.9 Moz in the week ending 6 July and the total net long position to 27.4 Moz. In contrast, ETFs have supported the price, with total holdings rising 2.45 Moz in June and another ~0.25 Moz by 9 July.

Gold forward curve (Comex), 1st position = 100, various dates



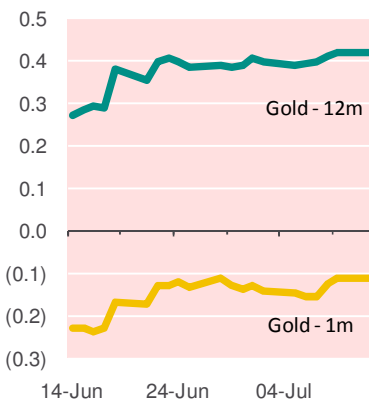
Source: LBMA, VM Group

Gold ETF offtake, tonnes



Source: VM Group

Lease rates, 1m and 12m, % per annum



Source: VM Group

■ Sales of US American Eagle gold bullion coins are also high, with sales reaching 151,500 oz in June, the second highest volume this year after May's record of 190,000 oz. These sales highlight investors' appetite for physical gold, despite the high price. This is not the case in India, the world's largest gold importer, where gold is both a cultural and investment asset. Indian gold imports have fallen sharply in response to prices, with recycling of gold scrap meeting the deficit. Imports in April and May were both lower year-on-year, at just 17t and 28t, respectively, while June's figure we estimate at just 3t. Similarly for Turkey, gold imports are very low by historical standards, at just 300 kg in June from zero in May and 800 kg in April. In the period prior to the collapse of Lehman Brothers, monthly Turkish gold imports were measured in tonnes.

Short term outlook

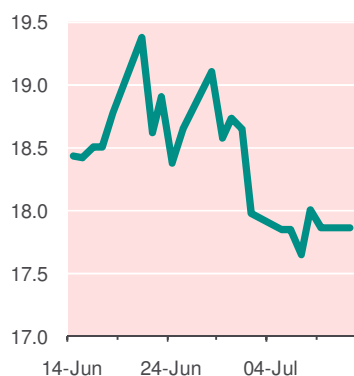
Gold may have lost a bit of its shine at the start of H2, with the London PM fix down almost \$60/oz from its record high of \$1,261/oz on 28 June as of 13 July, but we do not envisage this will last. Concerns over the global economy are not far from the surface. The US continues to disclose an equal amount of both positive and negative economic data, while the eurozone debt crisis is far from over. Indeed the gold price might very well get a boost once the 'stress tests' on eurozone banks are released on 23 July. Should it not, then we expect a further correction in the immediate term. But with near zero interest rates offering up only risky equities or commodities as a means for profitable investment, then gold still looks well placed. Short-term London fix: \$1,150/oz-\$1,260/oz.

Gold supply & demand balance, tonnes

	2008	2009	2010f
Supply			
Mine supply	2,356	2,432	2,435
Scrap recycling	1,185	1,408	1,300
Hedging	33	38	20
Central Bank sales	298	351	230
Total supply	3,871	4,229	3,985
Demand			
Jewellery fabrication	1,976	1,798	1,800
Legal tender coins	201	215	251
Electronics	422	366	400
Other end uses	313	284	250
ETFs	320	576	400
Central Bank purchases	191	380	250
Dehedging	374	229	110
Total demand	3,796	3,848	3,481
Residual	75	397	504

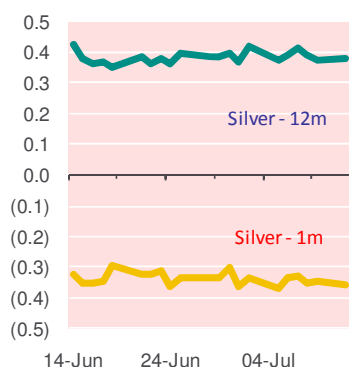
Source: VM Group

Silver, London fix, \$/oz



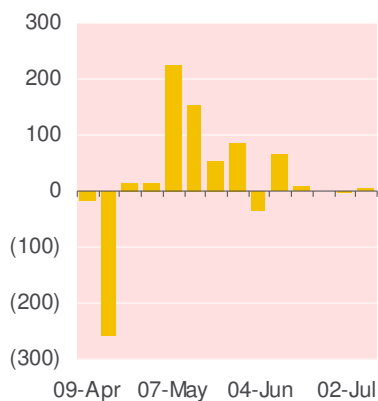
Source: LBMA, VM Group

Lease rates, 1m and 12m, % per annum



Source: LBMA, VM Group

Silver ETF offtake, weekly, tonnes



Source: VM Group, ETF providers

Silver

Industrial demand for silver remains weak and thus the price has failed to deliver on high hopes earlier this year; the price has rather followed the ebbs and flows of investment demand, in much the same way as gold over the past several weeks. In fact the silver price had slightly underperformed gold, down 2.4% from the end of May through to July, compared with the 1.3% fall in gold; the gold:silver ratio has nudged up to 66-67 in early July, from less than 65 on 23 June.

But although weak, demand has been improving in H1 2010. Chinese imports of silver, for example, have risen year-on-year in each month since November 2009, although the figures are skewed because of the deep recession that year. May's imports were 482.9t, up 72% on the same month in 2009, but importantly are also up on the same month in 2008 – before the full extent of the financial crisis became apparent. In the first five months of 2010, imports stood at 2176.5t, up 52% on the same period in 2009. China's imports serve both industrial and jewellery demand and ought to be price supportive. The same holds true for Indian silver imports, which in US dollar terms were \$309.8m in June 2010, up 854% on the year, while in the first six months of 2010 they are up 579%, at \$1.69bn. India's appetite for silver has been boosted because gold has become too expensive at current prices. But should the gold price fall then we expect much of this silver will be cashed in for gold.

Short term outlook

While silver more or less tracks gold over the traditionally quiet Q3 period, we expect prices to remain firm and possibly advance going into Q4. The medium to longer term prospects in industrial demand for silver are extremely positive and we would not be surprised to see the silver price test \$20/oz in H1 2011. Short-term London fix: \$17.40/oz-\$19.20/oz.

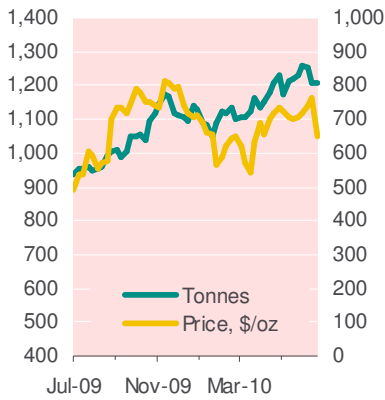
Silver supply & demand balance, tonnes

	2008	2009e	2010f
Supply			
Mine supply	21,398	22,058	22,793
Recycling	12,951	12,752	11,978
Government	500	500	250
Total supply	34,849	35,310	35,021
Demand			
Jewellery and Silverware	7,784	7,068	6,971
Industrial	4,327	3,553	3,259
Investment	6,600	6,260	6,385
Total demand	28,512	28,517	27,805
Residual	6,337	6,794	7,216

Source: VM Group

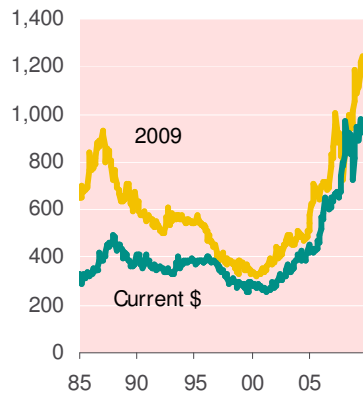
Gold and silver data

Gold CFTC net long position & price



Source: VM Group, CFTC

Gold in current \$/oz and 2009 \$/oz



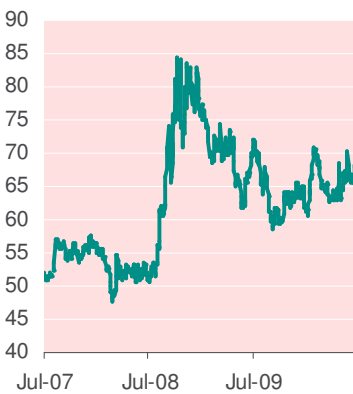
Source: VM Group

Gold/oil ratio, past 3 years



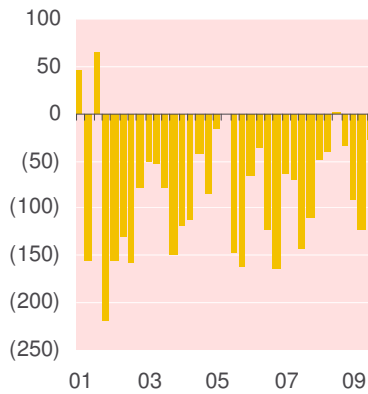
Source: VM Group

Gold/silver ratio, past 3 years



Source: VM Group

Gold dehedging, tonnes/quarter



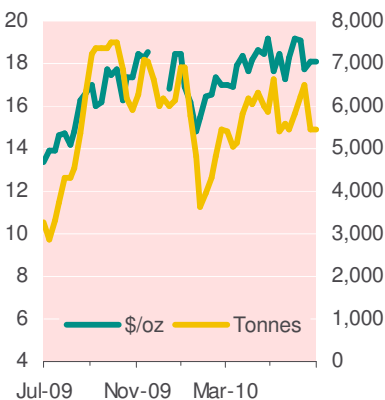
Source: VM Group

Central bank gold data, May 2010

Country/institution	Tonnes
IMF	(15.25)
Kazakhstan	(2.73)
Total sales	(17.98)
Russia	22.46
Total purchases	22.46
Net change	4.48

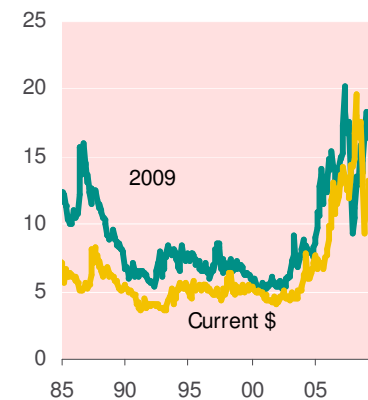
Source: IMF, International Financial Statistics & national country websites. Not all country changes shown

Silver CFTC net long position & price



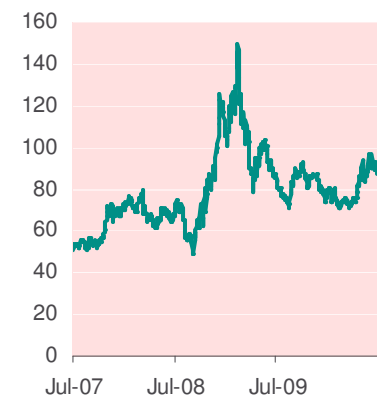
Source: VM Group, CFTC

Silver in current \$/oz and 2009 \$/oz



Source: VM Group.

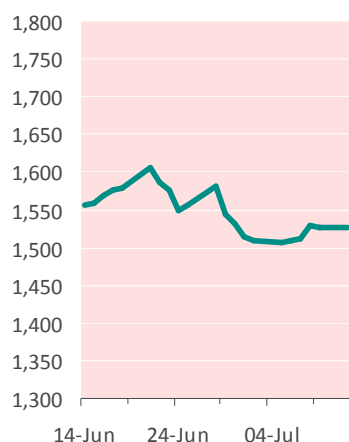
Silver/copper ratio, past 3 years



Source: VM Group.

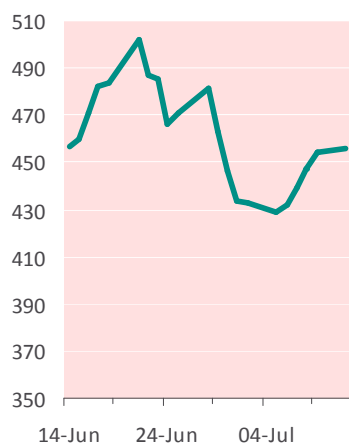
Platinum and palladium

Platinum price, PM fix, \$/oz



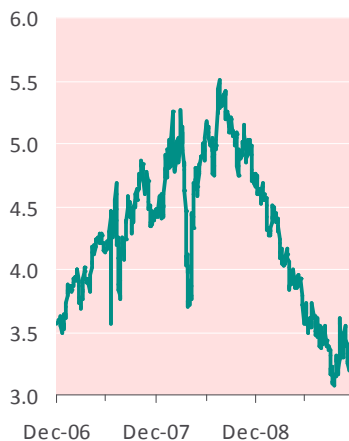
Source: LPPM, VM Group

Palladium price, PM fix, \$/oz



Source: LPPM, VM Group

Platinum/palladium price ratio



Source: VM Group

■ The PGM prices started July only slightly down from end-May levels, at \$1,532/oz (platinum) and \$446/oz (palladium). That prices did not fall further was due largely to the increase in risk appetite and the fact that much of the speculative froth had already been skimmed off in May and subsequently, but to a lesser extent, in early July.

■ The sharp drop in investment in May and early July provides the PGMs with a good base as we enter Q3. The large specs' position on Nymex saw the platinum and palladium net long non-commercial positions fall sharply in the last two weeks of May, signalling the exit of speculators. While June saw little action, early July has seen another sell off by speculators.

■ Platinum and palladium ETFs in June have, however, fared poorly, falling more than 27,000 oz and 47,700 oz, respectively, compared with end-May levels. This was the first monthly decline in platinum ETF investment since May 2009 and the first in palladium since November 2008. It is evident from this that the market remains worried about prospects in physical demand for these two metals, not least because the global economic recovery appears to have stagnated.

■ Car sales have nevertheless been reasonable so far in 2010. China's auto sales have risen 53% year-on-year, to 7.6m units in the first five months of 2010, with passenger car sales up 26% to 1.04m units. Sales of light vehicles in the US are also improving, with sales in the first five months this year at 5.56m units, up 16.8% on the same period in 2009. Those in the EU25 are up 24%, at 1.8m units. However, in these major car markets the latest data for May (June in the case of the US) shows a month-on-month decline, suggesting a possible slowdown in sales ahead, which is bearish for PGM prices.

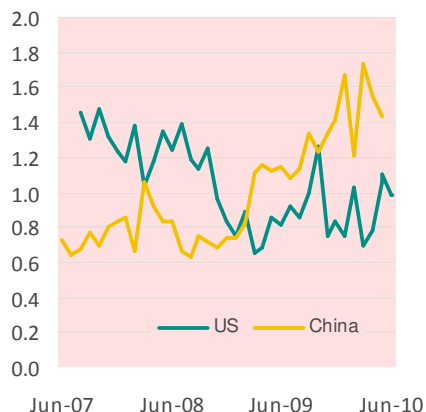
■ Weaker platinum prices are seeing higher turnover on the SGE. Platinum volumes rose 68,545 oz in June from 107,738 oz in May, when the platinum price began its descent. Since the exchange provides a good indicator of the level of platinum jewellery demand in China, this might be considered price supportive. China's heightened demand for platinum is also reflected in its platinum imports. Platinum imports from Switzerland – which is a major exporter of PGMs to China and Hong Kong – were 2.39t (76,840 oz) in May, the largest since August 2007.

Short term outlook

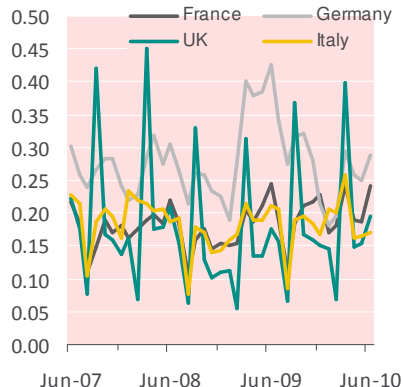
Platinum and palladium prices have continued to edge lower into July. The latest car sales data has not helped, with month-on-month declines in all major regions. But with investment levels now depleted from the highs in May, PGM prices look fairly well supported around \$1,500/oz for platinum and \$430/oz for palladium. Short-term London fix: \$1,500/oz-\$1,600/oz for platinum and \$450/oz-\$500/oz for palladium.

PGMs data

US & China car* monthly sales, million units



Top four European car markets sales, monthly, million units



Platinum turnover on the SGE, rolling 3m average, annualised, oz

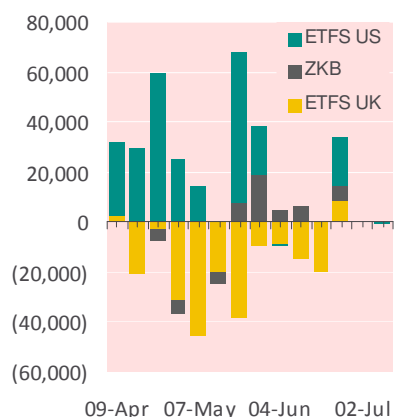


Source: VM Group, national data. * China includes commercial vehicles.

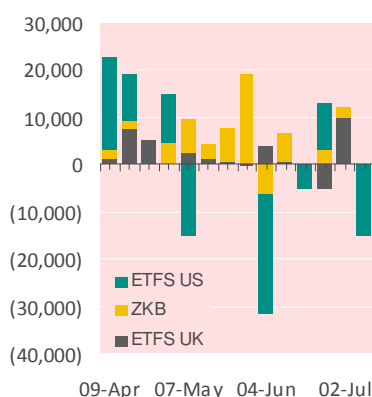
Source: VM Group, national data

Source: VM Group, SGE

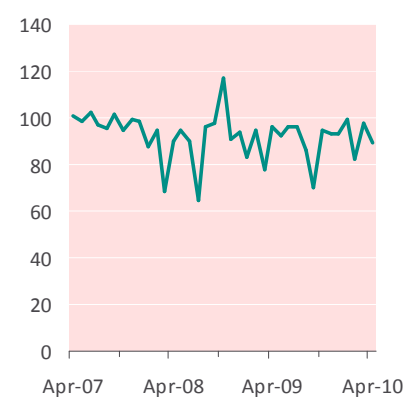
Palladium ETFs weekly offtake, oz



Platinum ETFs weekly offtake, oz



South Africa PGM output, 2005=100



Source: VM Group, company data

Source: VM Group, company data

Source: VM Group, SSA

Platinum supply & demand balance, 000 oz

	2008	2009e	2010f
Supply			
Mine supply	5,964	6,020	6,160
Scrap recycling	1,457	1,450	1,518
Total supply	7,421	7,470	7,678
Demand			
Autocatalysts	3,538.0	2,700.0	3,100.0
Jewellery	1,710.0	2,500.0	2,150.0
Other industrial	1,813	1,571	1,505
Total demand	7,061	6,771	6,755
Residual	360	699	922
<i>Stock movements</i>			
ETF inflows	102	380	633

Palladium supply & demand balance, 000 oz

	2008	2009e	2010f
Supply			
Mine supply	6,345	6,390	6,480
Scrap recycling	1,392	1,356	1,558
Total supply	7,737	7,746	8,038
Demand			
Autocatalysts	4,411	4,000	4,600
Jewellery	1,022	1,075	1,110
Other industrial	2,218	2,093	2,111
Total demand	7,561	7,168	7,821
Residual	86	578	217
<i>Stock movements</i>			
ETF inflows	280	502	1,124
Russian stock sales	1,000	1,000	850

Unknown/implied investment

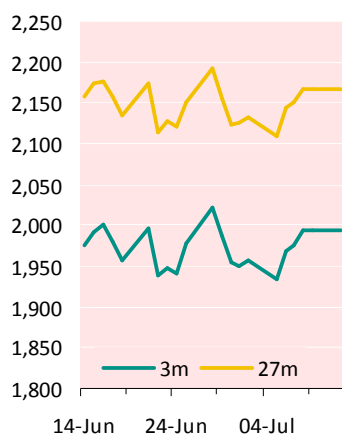
258 319 289

Unknown/implied investment

705 1,076 (57)

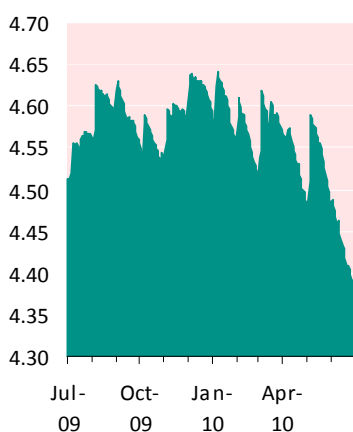
Aluminium

Aluminium price, LME, \$/tonne



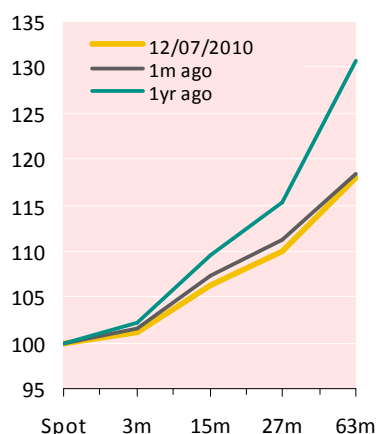
Source: LME, VM Group

Aluminium stocks, LME, Mt



Source: LME, VM Group

Aluminium forward curve, LME, various dates, spot price = 100



Source: LME, VM Group

Our estimate for the aluminium surplus in 2010 is huge. We calculate that it could be as much as 1.6 Mt, while there are predictions of more than 2 Mt to as little as 0.5 Mt. In normal circumstances this would be construed as very negative for the aluminium price. That the metal's price has remained steady in spite of its appalling fundamentals and cross commodity pressure on macroeconomic concerns has allowed the aluminium market to push further into surplus.

LME stocks have however fallen by more than 172,000t since May, to 4.38 Mt by 12 July, suggesting at first glance that demand has picked up significantly from year ago levels. This might be true; manufacturing activity has improved significantly in H1 2010, but not enough to inflict much of a dent in total visible aluminium stocks. Japanese aluminium port stocks are still high, although down slightly on the month in June, to 201,300t, while producer inventories (as reported by the International Aluminium Institute) rose to 1.25 Mt in May, up 6.5% from March. SHFE aluminium stocks meanwhile look to have steadied at more than 0.49 Mt as at 8 July, but even so they are up about 67% from the start of the year.

But Q3 is traditionally a much quieter period for manufacturing and judging by the insipid erosion in aluminium inventories in H1, a reversal in LME drawdowns in the next month or two might be on the cards. Should this occur we expect the aluminium price to come under pressure and Chinese smelters will be first to feel the pinch due to their high cost nature (many of the international smelters idled during the height of the financial crisis have remained closed). Some Chinese smelters have already been idled, but it remains to be seen whether this translates into any discernible decline in metals output volumes.

Short term outlook

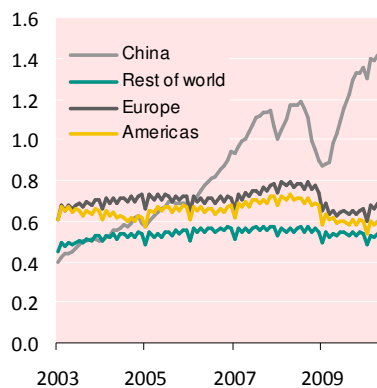
Supply cuts are necessary to bring some order to the aluminium market, but that is unlikely to happen while the price is propped up, with much of the surplus metal locked away in financing term deals. The only support ahead is the inexorable hike in energy costs, which we see rising strongly in 2011. Short term LME three-month aluminium price: \$1,875/t-\$2,050/t.

Chinese aluminium and alumina prices, yuan/t

	14 July 2010	Current	YoY % chg	Last mth	YoY % chg
SHFE spot price	14,685		8%	14,295	7%
SHFE three-month price	14,870		11%	14,525	8%
SHFE six-month price	15,150		14%	14,890	-91%
SHFE stocks, tonnes	498,008		201%	489,495	3509%
Chinese aluminium ingots (99.7%min)	14,655		8%	14,275	5%
Chalco alumina prices	2,650		10%	2,850	-19%
Chinese alumina (Australian import)	2,575		18%	2,725	-29%

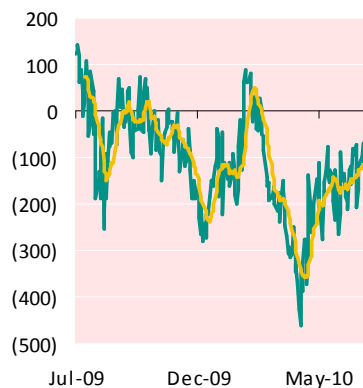
Aluminium data

Aluminium output by region, monthly, Mt



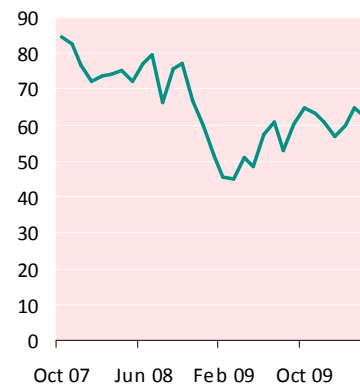
Source: IAI, VM Group

SHFE/LME price differential, \$/t



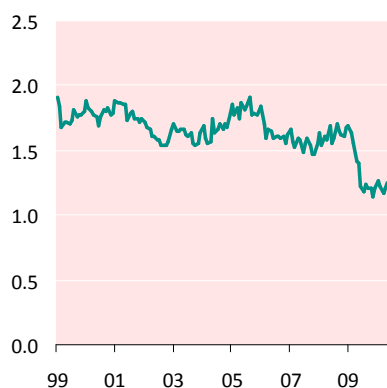
Source: SHFE, LME, VM Group

Japanese domestic shipments of extruded products, 000t



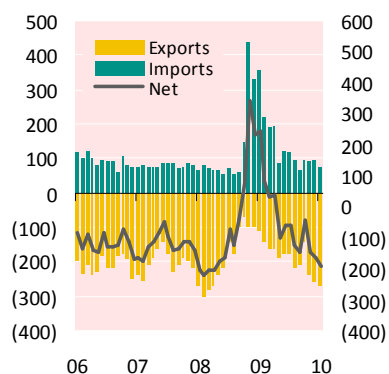
Source: Japan Aluminium Association

Unwrought aluminium producer stocks, Mt



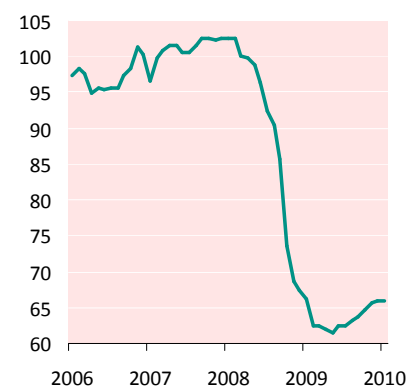
Source: IAI, VM Group

Chinese imports/exports of unwrought aluminium and aluminium products, 000t



Source: China Customs

US output, alumina and aluminium, 100=2002



Source: Federal Reserve, VM Group

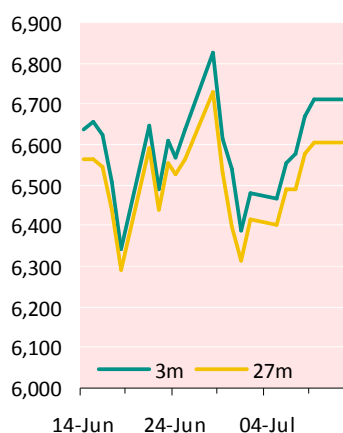
Aluminium supply & demand balance, 000t

	2006	2007	2008	2009	2010	2011
Supply						
China	9,352	12,605	13,247	13,483	16,210	17,885
North America	5,334	5,643	5,783	4,762	4,779	4,801
Europe & CIS	9,197	9,665	9,997	8,774	8,784	8,482
Rest of world	10,029	10,181	10,588	10,438	10,452	11,100
Total world output	33,912	38,094	39,615	37,457	40,224	42,268
Year-on-year % chg	6%	12%	4%	(5%)	7.4%	5.1%
Demand						
Total world consumption	34,121	37,765	38,265	35,722	38,575	41,565
Year-on-year % chg	7%	11%	1%	(7%)	8.0%	7.7%
Implied market balance	(209)	329	1,350	1,735	1,649	703
Total stocks	3,671	4,248	4,987	6,695	8,490	8,709
Average 3-m LME price (\$/t)	2,593	2,662	2,626	1,703	2,062	2,652

Source: IAI, WBMS, VM Group

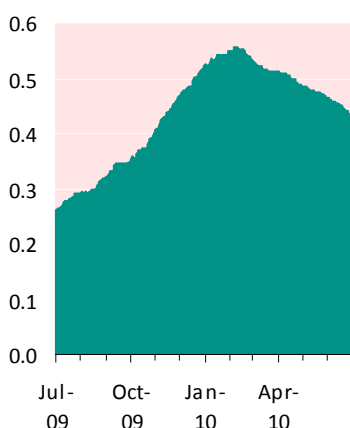
Copper

Copper price, LME, \$/tonne



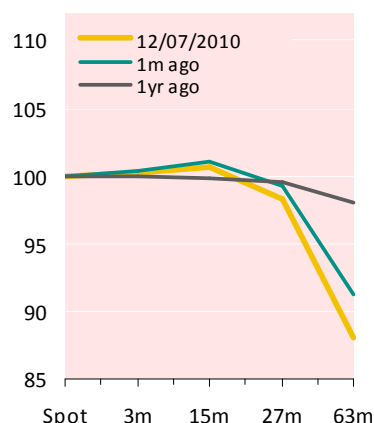
Source: VM Group

Copper stocks, LME, Mt



Source: VM Group

Copper forward curve, LME, various dates, spot = 100



Source: VM Group

- Barring any further collapse in sentiment the copper price looks fairly comfortable above \$6,100/t, although the price has trended down after briefly reaching more than \$8,000/t in mid-April. It has not looked liked rallying since. Macroeconomic uncertainties are forming a natural cap and floor to prices, although the floor has as we predicted been getting lower. Q3 is therefore shaping up to be an acid test, as demand traditionally weakens during this period.
- Falling SHFE and LME copper stocks have provided a positive support to the copper price. Both exchanges have seen copper inventory outflows, with SHFE stocks falling from a high of 189,441t in early May to 117,459t by 8 July and those in the LME from a high of 555,075t in early March to 432,550t as at 12 July. Outflows also do not yet appear to be weakening either, despite moving into the traditionally quiet Q3 period. LME copper warrants now stand at more than 6% of total stocks, from less than 5% in early June and 3%-4% in May. Stocks held at producers and consumers have also inched down, implying – when coupled with exchange stock drawdowns – that real demand has picked up.
- Chinese demand certainty has not diminished despite expectations that its thirst for refined copper would slacken significantly in 2010. China's imports of unwrought copper and products may have hit 328,231t in June, down 17% on the month, but in H1 these imports are level on the same period in 2009. The refined copper element of these imports (June's breakdown is not released until late July) fell 4% in the first five months of 2010, to 1.34 Mt, but its imports of copper concentrate were up 22%, to 2.98 Mt and its domestic refined copper output is up 15%, to 1.84 Mt. It is our view that despite Beijing's hopes and desires to slow China's rate of growth, its appetite for copper is remains very healthy.

Short term outlook

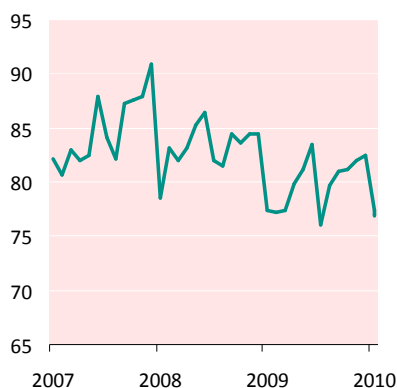
We feel there could be greater downside risk to the copper price in the short term. The quieter Q3 period coupled with continuing fears over eurozone debt levels and the slower than anticipated recovery in the US might see prices dip below \$6,000/t. But copper's convincing medium-term prospects should underpin prices moving into Q4. Short term LME three-month copper price: \$6,050/t-\$6,750/t.

Chinese copper prices, yuan/t (unless stated otherwise)

	14 July 2010	Current	YoY %chg	Last mth	YoY %chg
SHFE spot price		53,910	35%	51,710	125%
SHFE three-month price		53,550	36%	51,370	123%
SHFE six-month price		53,290	35%	51,360	123%
SHFE stocks, tonnes		114,302	115%	139,332	230%
Chinese copper cathode (99.95%)		53,750	34%	51,850	25%
		Current		Last mth	6m ago
Copper TC (cif) China (\$/t)		7.5		7.5	10.5

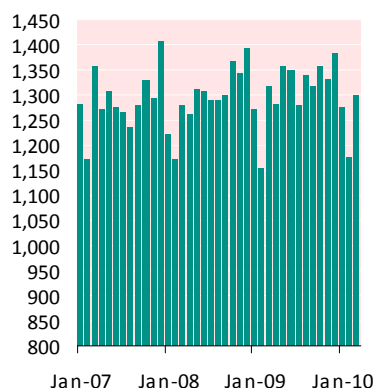
Copper data

World mine capacity utilisation, %



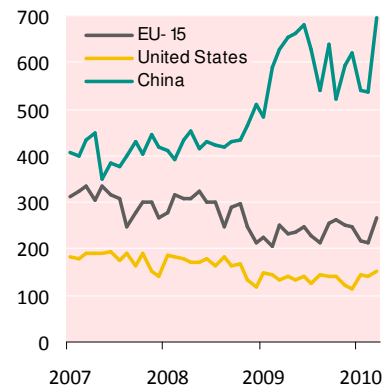
Source: ICSG, VM Group

Global copper concentrate output, monthly, 000t



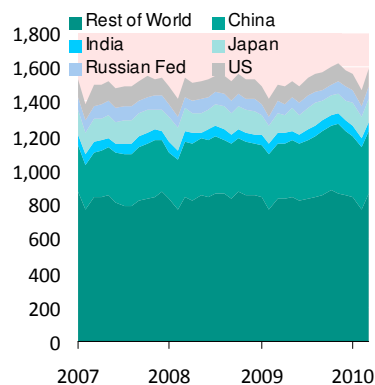
Source: ICSG, VM Group

Apparent copper usage, monthly, 000t



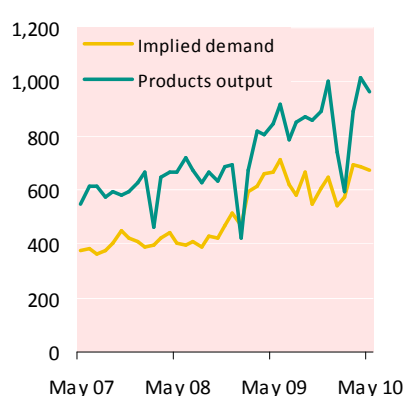
Source: ICSG, VM Group

Monthly refined copper production (primary and secondary), 000t



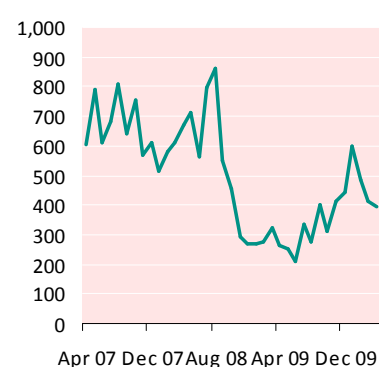
Source: ICSG, WBMS, VM Group

China implied copper demand & copper output, monthly, 000t



Source: China customs, NBS, VM Group

US copper imports in million dollars



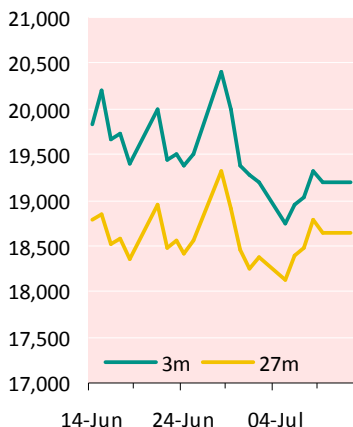
Source: US Census Bureau, VM Group

Copper supply & demand balance, 000t

	2006	2007	2008	2009	2010	2011
Supply						
Total mine production	14,983	15,439	15,450	15,262	15,949	16,148
Year-on-year %change	0%	3%	0%	(1.2%)	4.5%	1.3%
North America	2,150	2,169	2,182	2,002	2,055	2,151
Latin America	3,555	3,600	3,515	3,564	3,601	3,604
Asia (ex China)	3,974	4,167	4,121	3,952	4,056	4,065
China	2,822	3,222	3,597	4,005	4,048	4,047
Europe	3,551	3,578	3,698	3,522	3,621	3,680
Total refined production	17,361	18,011	18,232	18,288	18,531	19,068
Year-on-year %change	5%	4%	1%	0.3%	1.3%	2.9%
Demand						
Total refined consumption	17,148	18,048	18,027	17,821	18,433	19,083
Year-on-year %change	3%	5%	0%	(1.1%)	3.4%	3.5%
Implied balance	213	(37)	204	467	98	(15)
Total stocks	1,093	1,422	1,158	1,263	1,436	1,421
Average 3-m LME price (\$/t)	6,861	7,096	6,871	5,186	6,980	7,908

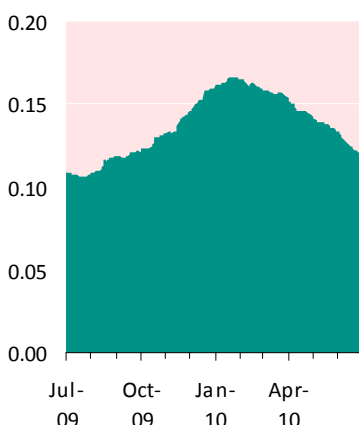
Source: ICSG, WBMS, VM Group

Nickel price, LME, \$/tonne



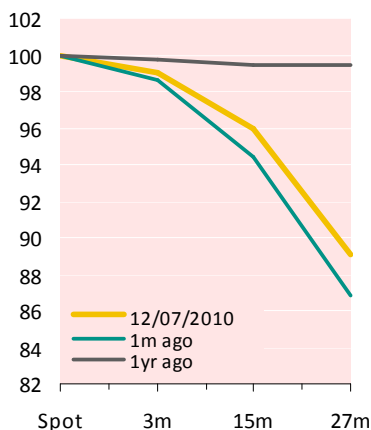
Source: VM Group

Nickel stocks, LME, Mt



Source: VM Group

Nickel forward curve, LME, various dates, spot = 100



Source: VM Group

Nickel

■ The recent tentative settlement between Vale and the year-long striking workers at its Sudbury nickel operations in Canada looks likely to widen the global nickel surplus. The nickel price enjoyed a renaissance earlier this year, hitting a high of \$27,590/t (LME three-month contract) in mid-April. Since then the price has been trending lower to ~\$19,000/t levels in early July. Should the Vale deal be accepted then we expect to see production rates at Sudbury normalise later this year, increasing the chance of a deal at Vale's other Canadian nickel operation, Voisey's Bay, also suspended because of strike action. Q1 2010 production from these two operations, aided by Vale's use of contract workers, was 3,941t of nickel equivalent. Compared with Q2 2009, which was the last quarter before the strike, production was more than 30,000t. If the strikes at Sudbury and Voisey's Bay end in the coming month then we expect production volumes to yield as much as 12,000t of additional nickel by year-end.

■ Declining LME nickel stocks have lent support to the thesis that nickel demand from the stainless steel sector – its largest end use – has strengthened. This certainly seems to hold true for late Q1 and Q2 2010, with LME nickel stocks sliding from a high of 166,476t in early February to 119,964t by 12 July. But even so, July's nickel inventories are still high by historical standards. Furthermore, some of this nickel leaving LME warehouses has merely gone to replenish very low producer inventories, and we suspect this will draw to a close in Q3. This is supported by LME cancelled warrants, which as a percentage of total nickel stocks have declined to 4% as at 12 July from 5%-7% in June.

Short term outlook

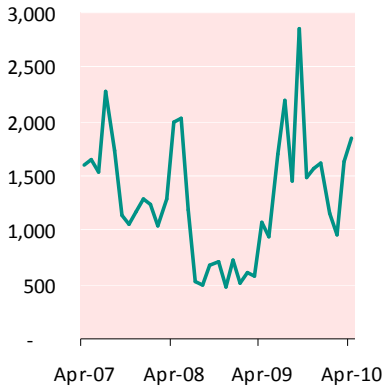
Stainless steel mills are reining-in their nickel buying as demand weakens during Q3 2010, meaning further LME stock drawdowns are unlikely ahead. The extent to which the full restart of supply from Vale's Canadian operations will tip the balance later on this year will depend on the level of demand. We believe the nickel market was in slight deficit in the first half of this year but should head firmly into surplus in H2. Our nickel market balance estimate for the whole of 2010 is for a surplus of 19,000t. Short term LME three-month nickel price: \$18,000/t-\$20,250/t.

Chinese nickel and stainless steel prices, yuan/t

	14 July 2010	Current	YoY %chg	Last mth	YoY %chg
Nickel cathode (Jinchuan, 99.9% min)		153,000	27%	153,000	29%
Nickel cathode (Norilsk 99.9% min)		154,500	31%	155,500	36%
Nickel cathode (Vale Inco, 99.9% min)		170,000	29%	171,500	35%
Stainless steel					
Hot rolled sheet (304)		20,250	15%	20,350	17%
Cold rolled coil (304)		20,750	2%	20,050	1%

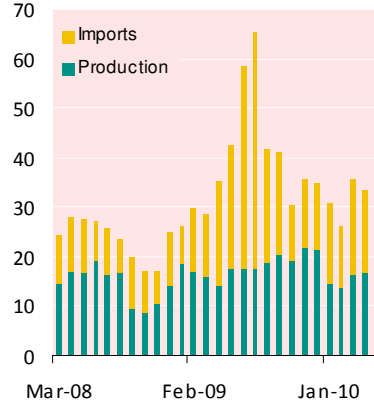
Nickel data

Chinese imports of nickel ore, 000t



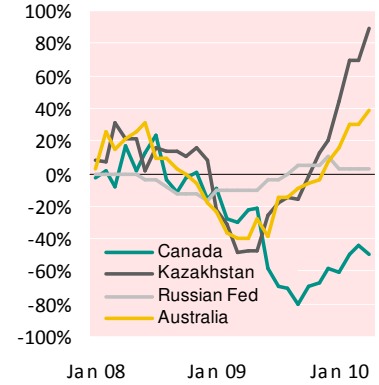
Source: China Customs

Chinese refined nickel output and imports, 000t



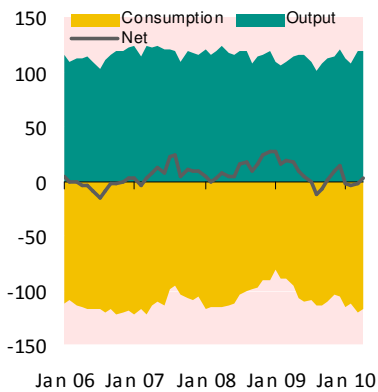
Source: China Customs, NBS

Nickel mine production, year-on-year % change



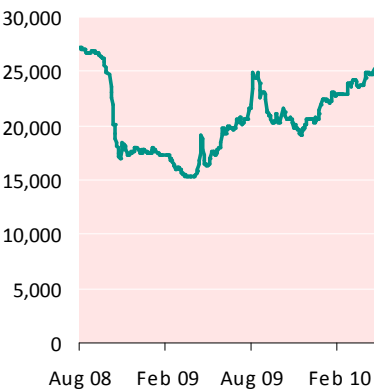
Source: INSG, VM Group

World primary output and refined consumption, 000t



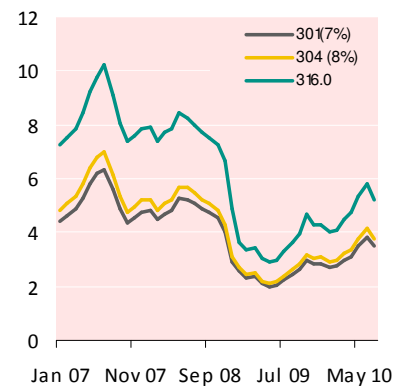
Source: INSG, VM Group

Chinese stainless CR Sheet (304 2b, 1mm), yuan/t



Source: Asian Metals, VM Group

US stainless steel prices for flat rolled coil, \$/kg



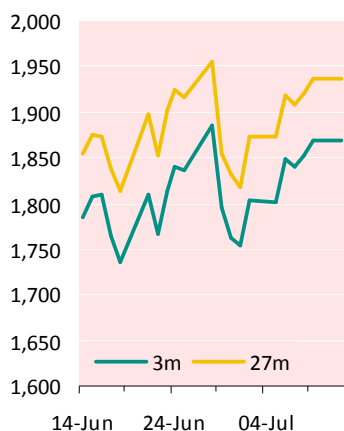
Source: Metal Prices

Nickel supply & demand balance, 000t

	2006	2007	2008	2009	2010	2011
Supply						
Total mine production	1,469	1,595	1,476	1,331	1,410	1,581
% chg y-o-y	5.9%	8.6%	(7.5%)	(9.8%)	5.9%	12.2%
Canada	147	154	168	116	155	165
China	137	199	200	240	265	267
Japan	152	162	158	142	152	161
Russian Fed.	286	272	258	244	250	265
Australia	114	111	104	112	114	118
Total refined production	1,368	1,395	1,375	1,319	1,405	1,460
% chg y-o-y	7.3%	2.0%	(1.4%)	(4.1%)	6.5%	3.9%
Demand						
Total refined consumption	1,398	1,351	1,319	1,238	1,387	1,473
% chg y-o-y	12.0%	(3.4%)	(2.4%)	(6.1%)	12.0%	6.2%
Implied balance	(31)	44	57	81	19	(13)
Total stocks	95	146	182	263	281	269
Average 3-month LME price (\$/t)	23,266	36,217	21,240	14,706	19,805	24,792

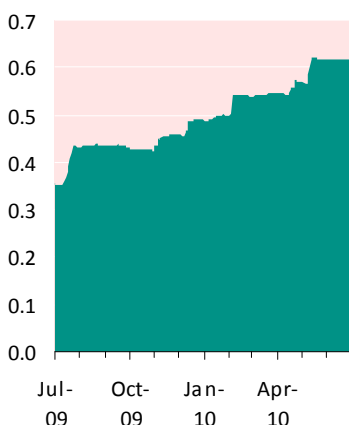
Source: INSG, WBMS, VM Group

Zinc price, LME, \$/tonne



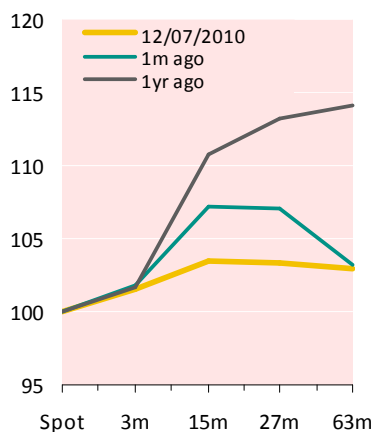
Source: VM Group

Zinc stocks, LME, Mt



Source: VM Group

Zinc forward curve, LME, various dates, spot = 100



Source: VM Group

Zinc

- Zinc remains the hardest hit of all base metals, the price having fallen ~28% from the start of the year and ~4% from the end of May, to less than \$1,900/t as of 12 July. This price weakness is entirely inevitable, given the rapid rise in price seen earlier this year – a rise that was contingent on a much stronger pull away from recession than has proved to be the case. Miners and smelters meanwhile, who were encouraged by the strong price, have restarted idled capacity too soon, too fast. Our market balance estimate for 2010 reflects this and has been adjusted to show a surplus of 570,000t, from 525,000t previously.
- LME and SHFE stock flows lend the impression that the glut is easing but only very slowly. LME stock builds have all but dried up since mid-May, having remained at 615,000t-620,000t to 12 July. But during a supposedly strong quarter where demand was expected to peak, the fact that LME stocks have not showed any inclination to drop suggests that consumption is being more than met by supply direct from producers and from off-market stock piles. SHFE zinc stocks paint a slightly rosier picture, having fallen from their high of 295,454 in late May to 249,736t as of 8 July, but even so they are 48% up from the start of the year. Furthermore the slight slowdown in Chinese demand expected for the remainder of this year, as Beijing reins in its economy, will hit zinc demand due to its large end use in galvanised steel used in construction.
- SHFE spot zinc prices have similarly fallen since early January, to yuan 14,805/t as of 13 July, down 29% from the start of 2010. Crucially, prices are still above marginal costs of production in China, so there is still little to cap supply and the price will need to dip below yuan 14,000/t to force through closures.

Short term outlook

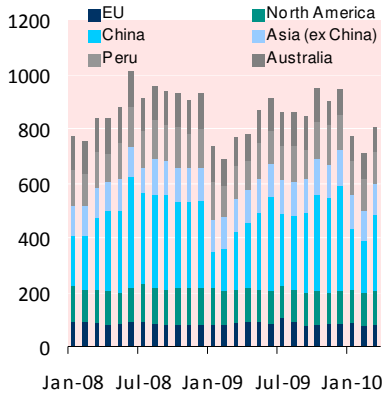
Continuing macroeconomic concerns might push zinc prices below \$1,700/t in the short-term. We believe this is necessary for the expected surplus not to grow even fatter, since prices this low should have an impact on marginal production. Apart from that, the only positive facet of the zinc market is the impending shortage of concentrate in the medium term. Short-term LME three-month zinc price: \$1,725/t-\$1,925/t.

Chinese zinc prices, yuan/t, unless otherwise stated

	14 July2010	Current	YoY %chg	Last mth	YoY %chg
SHFE spot price		14,135	5%	15,735	26%
SHFE three-month price		14,230	7%	16,165	28%
SHFE six-month price		14,560	7%	16,575	30%
Chinese zinc ingot (99.995% min)		14,350	8%	15,750	26%
Chinese zinc conc. (55% min) S China		9,350	7%	10,550	33%
Chinese zinc conc. (55% min) N China		9,050	6%	10,250	32%
Zinc conc TC (50% min, cif) China (\$/t)		135	17%	185	76%

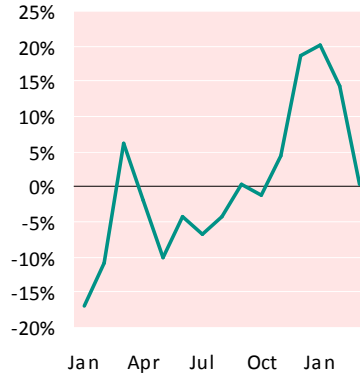
Zinc data

Zinc mine production, 000t



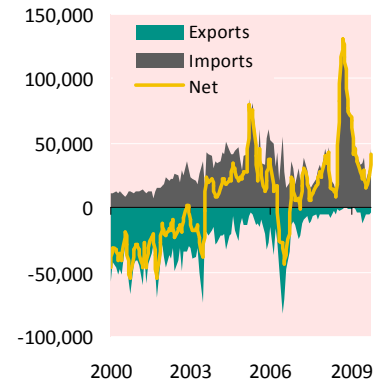
Source: ILZSG, WBMS, VM Group

World zinc demand, Jan 2009-Oct 2009, y-o-y % change



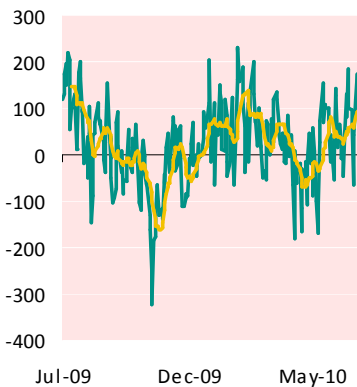
Source: ILZSG, CHR Metals, VM Group

China: imports and exports of unwrought zinc, 000t



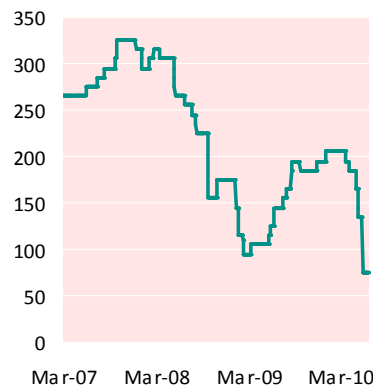
Source: China Customs

SHFE/LME price differential (incl VAT)



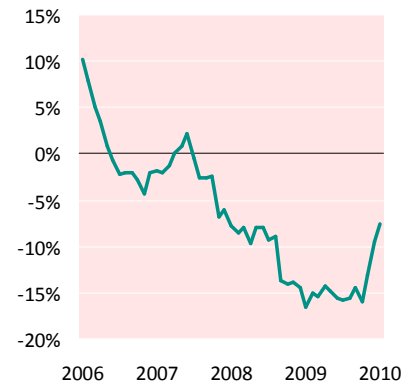
Source: SHFE, LME, VM Group

Zinc concentrate TC, cif China, \$/t



Source: Asian Metal, VM Group

US construction spending, y-o-y % change



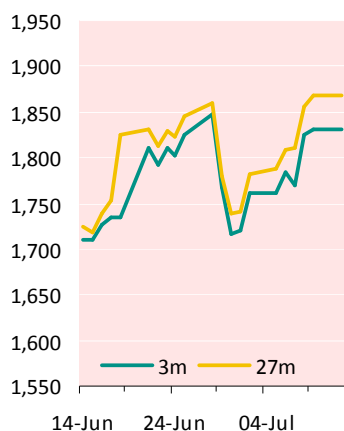
Source: USCB

Zinc supply & demand balance, 000t

	2006	2007	2008	2009	2010	2011
Supply						
Total mine production	10,321	10,975	11,501	11,204	11,827	11,933
% chg y-o-y	5.9%	6.3%	4.8%	(2.6%)	5.6%	0.9%
China	3,117	3,740	3,829	4,334	4,795	5,712
North America	1,371	1,388	1,356	1,120	1,300	1,504
South America	491	471	475	450	489	577
Europe	2,436	2,486	2,429	2,001	2,208	2,503
Australia	463	498	498	500	525	520
Total refined production	10,573	11,189	11,481	11,250	11,762	11,982
% chg y-o-y	5.5%	5.8%	2.6%	(2.0%)	4.6%	1.9%
Demand						
Total refined consumption	11,005	11,250	11,048	10,524	11,192	11,943
% chg y-o-y	5.9%	2.2%	(1.8%)	(4.7%)	6.3%	6.7%
Implied balance	(432)	(61)	433	725	570	39
Total stocks	851	641	825	1,123	1,404	1,401
3-month LME price (\$/t)	3,252	3,243	1,894	1,669	2,048	2,825

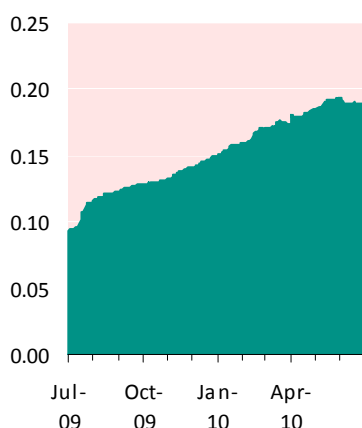
Source: CHR Metals, ILZSG, WBMS, VM Group

Lead price, LME, \$/tonne



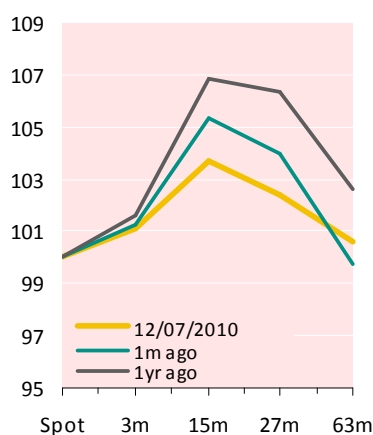
Source: VM Group

Lead stocks, LME, Mt



Source: VM Group

Lead forward curve, LME, various dates, spot = 100



Source: VM Group

Lead

- The lead price saw a slight improvement in late June and early July. From a one-year low of \$1,540/t on 7 June, it has since breached \$1,800/t. The three-month price in fact has outperformed all the other base metals, rising more than 6% from the end of June to 8 July. Compared with that of zinc, up 5% and copper, up 2%, the rise can best be described as a reaction to the long-awaited reversal in LME stock builds and also expectations that lead-acid battery demand can only get stronger by the end of the year.
- The decline in LME warehouse stocks has provided the greatest support to the price, falling for the first time since early 2009. Stocks last stood at 188,700t on 12 July, down from 193,000 in mid-June. At first glance this is positive, but cancelled warrants tell another story. These have declined from 10% as a percentage of total LME stocks to 7% as at 12 July, meaning that metal outflows could slow in the immediate term and perhaps reverse should stronger battery demand not materialise.
- Chinese imports of lead suggest that the market may push for higher prices. China has been a net exporter of lead in each month from November 2009 to April 2010. This changed in May after it imported 3,144t of refined lead and exported just 1,335t. Chinese car sales have soared and replacement battery demand is likely to rise significantly as China enjoys an unusually hot summer. What is all the more remarkable is that Chinese lead mine production and refined lead output has risen 23% and 2%, respectively, in the first four months of 2010 compared with the same period in 2009, reaching 1.14 Mt and 0.45 Mt.

Short term outlook

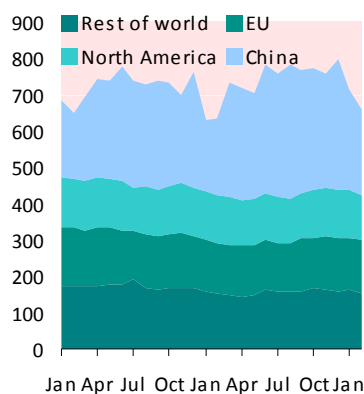
Without the support of the large US car market the lead market has become more reliant on Chinese demand than ever this year. That China's car sales are soaring – albeit dipping slightly in April and then May – is fortuitous. Reports that the SHFE is planning to launch a lead futures contract is therefore not surprising, given that China accounts for about 40% of total global demand. The launch for such an 'in demand' metal would probably see plenty of investor interest and conceivably lead to arbitrage opportunities. Short-term LME three-month lead price: \$1,700/t-\$1,925/t.

Chinese lead prices, yuan/t, unless otherwise stated

	14 July 2010	Current	YoY %chg	Last mth	YoY %chg
Lead ingot (>99.99%)		14,800	12%	14,100	3%
Lead concentrate (60% min)		12,350	15%	11,850	9%
Lead concentrate TC (cif) China (\$/t)		25	-29%	85	240%

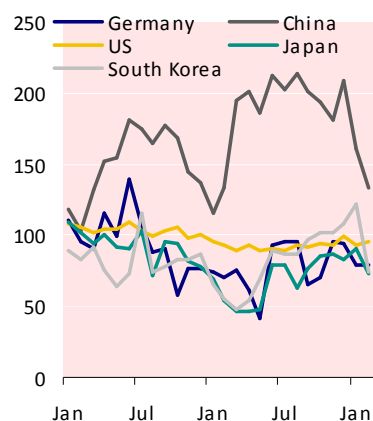
Lead data

World refined lead output, 000t



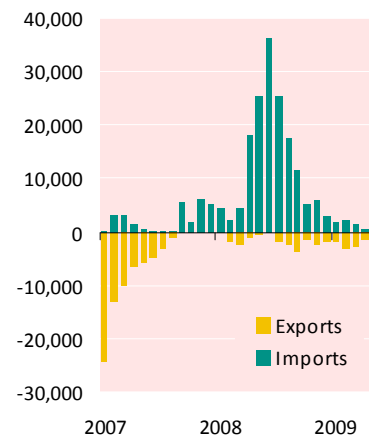
Source: ILZSG, WBMS, VM Group

Refined lead consumption, 100=Aug 2005



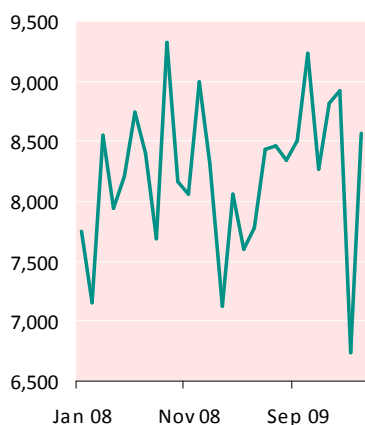
Source: ILZSG, WBMS, VM Group

Chinese lead trade, past two years, tonnes



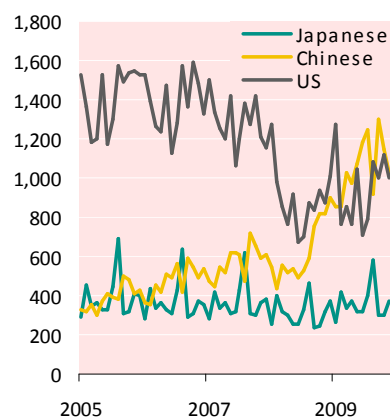
Source: China Customs

North American battery shipments, 000 units



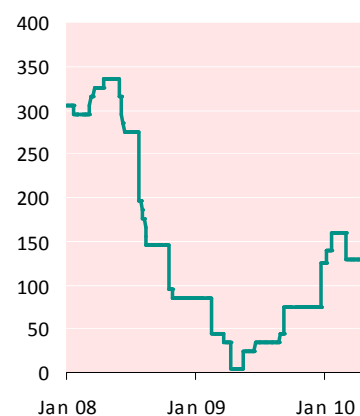
Source: Battery Council International

Passenger cars sold or produced, 000 units



Source: JAMA, NBS, BEA

Lead TC, cif China, \$/t



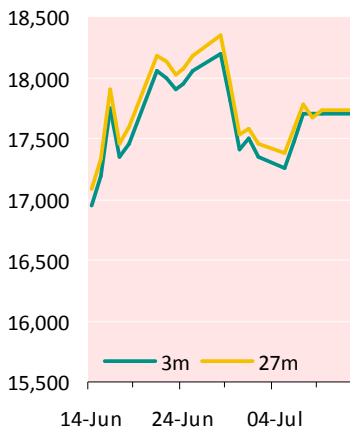
Source: VM Group

Lead supply & demand balance, 000t

	2006	2007	2008	2009	2010	2011
Supply						
Total mine production	3,573	3,690	3,985	3,864	4,249	4,453
% chg y-o-y	3.5%	3.3%	8.0%	(3.0%)	10.0%	4.8%
China	2,715	2,788	3,121	3,605	4,002	4,290
US	1,313	1,303	1,282	1,276	1,295	1,305
Europe	1,625	1,745	1,780	1,702	1,695	1,739
Total refined production	7,981	8,177	8,548	8,805	9,243	9,630
% chg y-o-y	4.8%	2.5%	4.5%	3.0%	5.0%	4.2%
Demand						
Total refined consumption	8,054	8,357	8,481	8,583	9,178	9,627
% chg y-o-y	3.7%	3.8%	1.5%	1.2%	6.9%	4.9%
Implied balance	(72)	(179)	67	222	65	2
Total stocks	284	234	301	521	586	588
3-month LME price (\$/t)	1,282	2,558	2,089	1,721	2,059	2,463

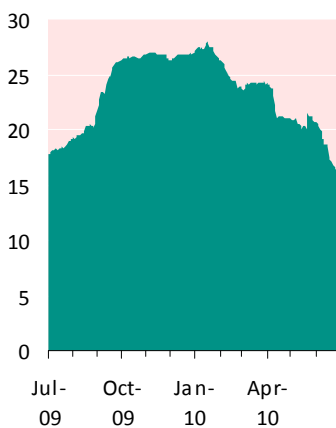
Source: WBMS, ILZSG, VM Group

Tin price, \$/tonne



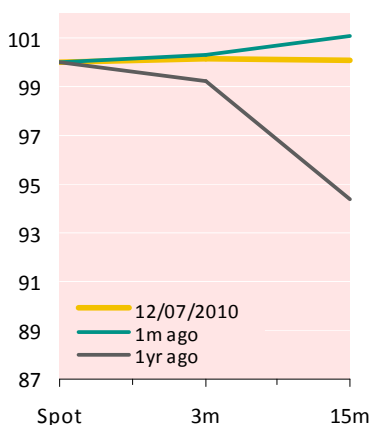
Source: VM Group

Tin stocks, LME, 000 tonnes



Source: VM Group

Tin forward curve, LME, various dates, spot = 100



Source: VM Group

Tin

■ LME tin stocks have fallen by 40% in 2010, to 16,205t, about 17 days of global consumption, taking 2008 as the base case, as of 12 July. Compared with the other base metals it is the outright winner, with only LME nickel stock outflows coming anywhere close. As a result tin prices have stood resolute amid the uncertainty afflicting the rest, with the LME three-month price trading in the range \$16,000/t-\$18,000/t for the best part of May, June and early July. Indeed, the three-month tin price is the only base metal apart from nickel that is up from the start of the year.

■ But with cancelled warrants indicating more metal is due to leave in the near term – representing about 7% of total stocks as at 12 July – then the next month might see the nearby spread move closer to backwardation. This is not surprising given that tin is firmly heading towards a deficit in 2010, unlike any of the other base metals. This tightness in the market has already seen the spread between the cash to three-month price narrow from ~\$46/t in early June to \$25/t as of 12 July, while it has also been neatly symbolised by the rapid drawdown of LME stocks that arrived in Rotterdam and in Baltimore during June. However, cancelled tonnage in volume terms has fallen from mid-June levels of >2,000t to <1,100t as at 12 July, suggesting that these outflows will, as we head further into the quieter summer months of Q3, dry up.

■ Tin demand is expected to rise by 10% year-on-year this year, to 336,000t, but supply to fall 2.5% from year ago levels, to 322,000t. Further LME stock drawdowns are therefore likely in Q4. Chinese refined tin production has so far failed to catch up to 2008 levels and China firmly remains a net refined tin importer. Indonesian supply meanwhile has been rocked by the government's fight against illegal tin ore mining, environmental issues, the accessibility of ore, the new mining tax and bad weather conditions. The latest fallout from this catalogue of issues was the closure of the PT Donna Kembara Jaya smelter.

Short term outlook

Tin's fundamentals are very supportive for a number of reasons and firmly place the metal into deficit territory. Tin's resilience in the face of recent macroeconomic fears stands as testimony to this, and apart from the minor blip earlier in June, it has traded in range, where we expect it to remain.

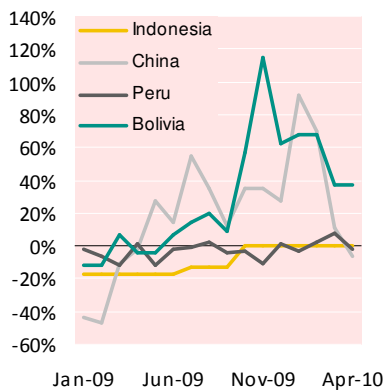
Short-term LME three-month tin price: \$16,750/t-\$18,750/t.

Chinese tin prices, yuan/t, unless otherwise stated

	14 July 2010	Current	YoY %chg	Last mth	YoY %chg
Chinese tin ingot (99.9%)		139,000	25%	144,000	38%
Chinese tin concentrate (60% min)		125,500	29%	129,500	40%

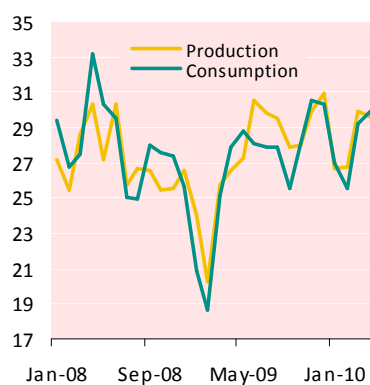
Tin data

Tin mine production, year-on-year % change



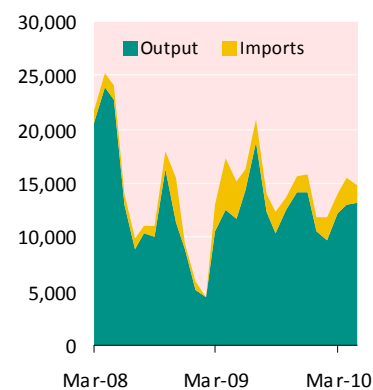
Source: WBM, VM Group

World refined tin production and consumption, 000t



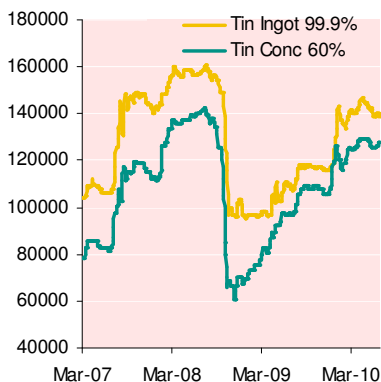
Source: WBMS, VM Group

China tin output and imports, tonnes



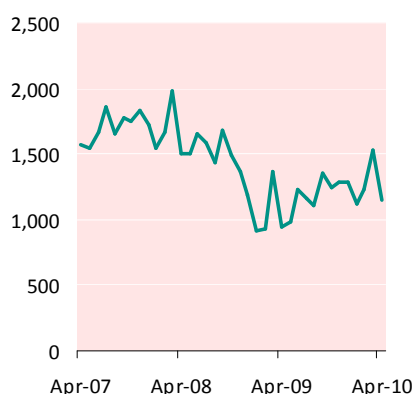
Source: China Customs, NBS

China tin concentrate and ingot prices, yuan/t



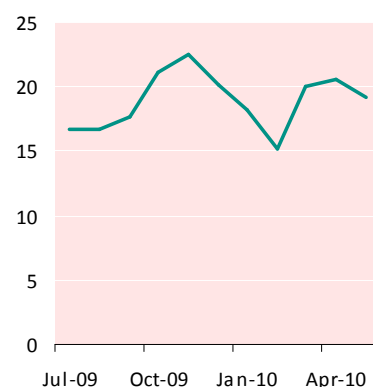
Source: Asian Metal

Japan electronics production, billion yen



Source: JEITA

China computer production, million units



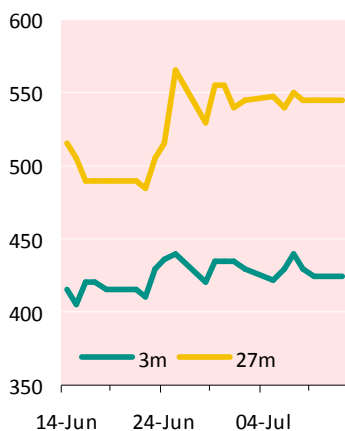
Source: NBS

Tin supply & demand balance, 000t

	2006	2007	2008	2009f	2010	2011
Supply						
Total mine production	334	353	314	306	313	329
% chg y-o-y	(4.4%)	5.7%	(11.0%)	(2.7%)	2.3%	5.1%
China	132	147	129	136	135	141
Indonesia	77	78	70	62	63	73
South America	65	58	61	58	57	60
Rest of world	54	40	43	40	41	42
Total refined production	351	348	334	331	322	351
% chg y-o-y	0.5%	(0.9%)	(4.1%)	(1.0%)	(2.6%)	9.0%
Demand						
Total refined consumption	363	354	341	311	336	355
% chg y-o-y	6.1%	(2.5%)	(3.5%)	(9.0%)	8.1%	5.7%
Implied balance	(12)	(6)	(7)	20	(14)	(4)
Total stocks	34	32	31	52	44	37
3-month LME price (\$/t)	8,758	14,532	18,442	13,337	17,880	19,521

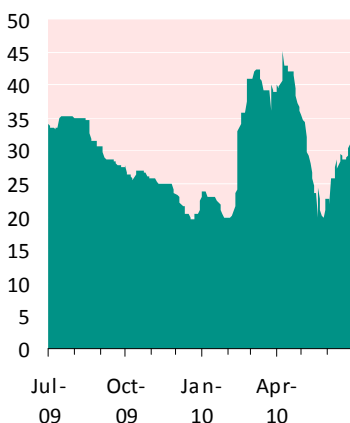
Source: WBMS, VM Group

Steel price, LME, Med, \$/tonne



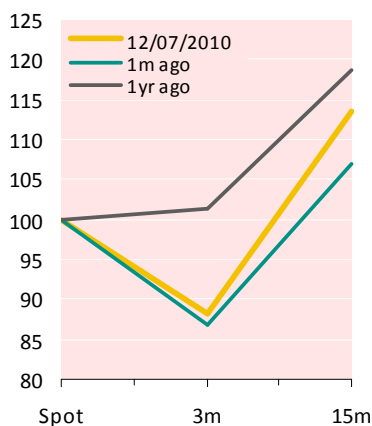
Source: VM Group

Steel stocks, LME, Med, 000 tonnes



Source: VM Group

Steel forward curve, LME, Med, various dates, spot = 100



Source: VM Group

Steel

- The LME steel med price ended June as it started, at \$435/t, having hit a low of \$405/t on 15 June, while contract volumes have remained steady. The listlessness in the contract is due to the expected Q3 slowdown in demand. The Shanghai exchange tells a similar story. Spot steel rebar prices fell to sub yuan 4,000/t levels in June and sub yuan 3,800/t levels in early July due to oversupply issues. Volumes however are huge, having grown to average 1.76m contracts in the first 12 days of July, from 0.2m contracts in the same period a year ago.
- Steel mills outside of China should at least find some comfort in the prospects of a stronger yuan and the cancellation of China's export tax rebates on many steel products. Chinese exports of steel products have steadily inched up since mid-2009, threatening to flood the international market during a time when demand is weak. This has drawn criticism and action in the form of anti-dumping duties in the US, EU and elsewhere. The stronger yuan and loss of export tax rebates should however dampen China's steel products' exports and boost orders in the international steel sector. For Chinese steel mills the near term situation looks bleak. Not only will exports suffer, which have been crucial to alleviate the surplus build up of stocks due to overzealous production volumes, but domestic demand in China is also waning on Beijing's efforts to rein in liquidity.

Short-term outlook

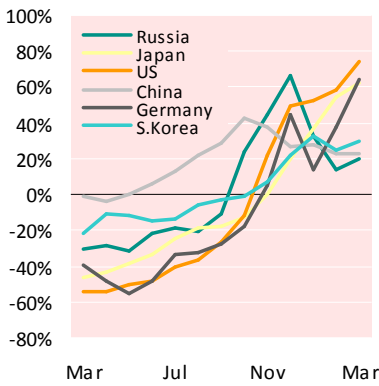
There is considerable danger of a further downside to prices during the traditionally quiet northern hemisphere summer months, especially since demand in Q2 – viewed as a strong period for demand – failed to live up to expectations. Capacity closures look likely, especially in China where its steel sector has been ill disciplined and over producing consistently for at least the past 18 months. Crude steel production in China was running at 661 Mt in May from a record 674 Mt in April. Government forecasts for domestic demand are at a lower 600 Mt in 2010. With the stronger yuan and the cancellation of export tax rebates on many steel products, China's steel sector will almost certainly feel the pinch. Short term LME steel Med price: \$390/t-\$490/t.

Chinese steel prices, yuan/t, unless otherwise stated

	17 June 2010	Current	YoY %chg	Last mth	YoY %chg
SHFE spot rebar		3,736	-4%	3,933	1%
SHFE 3m rebar		3,879	0%	3,995	1%
SHFE 6m rebar		4,026	2%	4,114	2%
SHFE 12m rebar		4,320	9%	4,337	8%
16mm Med plate (Q235b) China (\$/t)		630	29%	635	30%
Iron ore (Indian 61%, cnf China), (\$/dt)		116	71%	127.5	104%

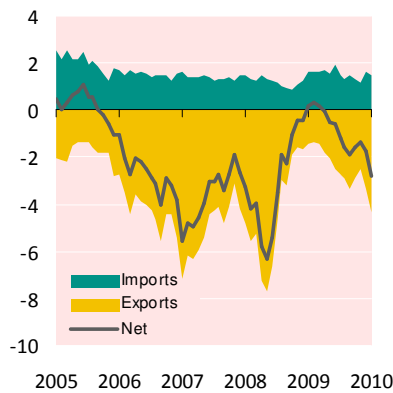
Steel data

Crude steel production, yoy %chg



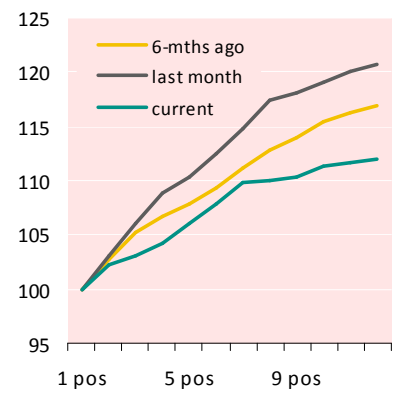
Source: WSA, VM Group

China export/imports, steel products, Mt



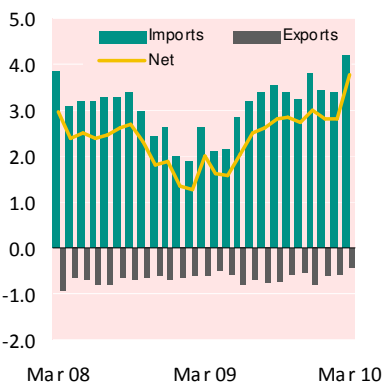
Source: China Customs

SHFE steel rebar price curve, 100=spot



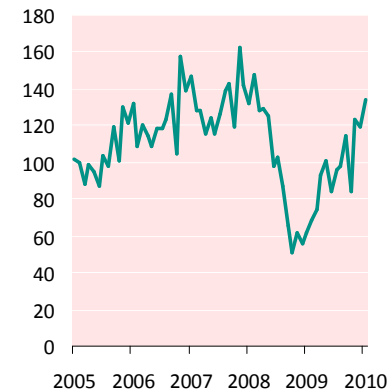
Source: SHFE, VM Group

Japan steel products trade, Mt



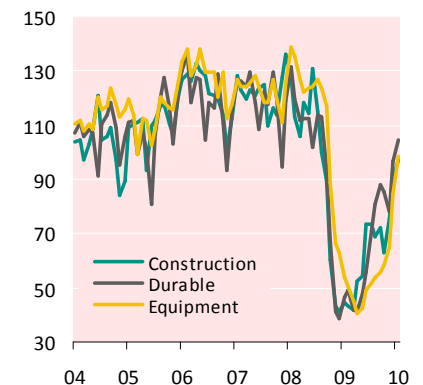
Source: Japan Customs

Germany, new orders of first processing of steel, constant prices, euro, 2005=100



Source: German Federal Statistical Office

US construction, consumer durable and equipment steel output, 100=2002 (\$)

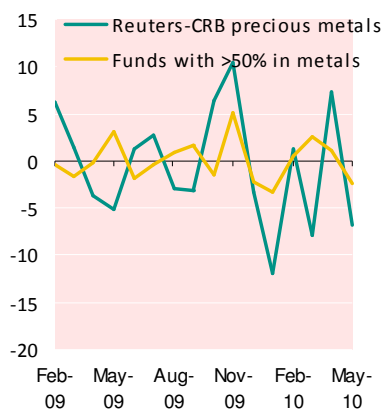


Source: Federal Reserve

Crude steel production, Mt	H2 07	H1 08	H2 08	Q1 09	Q2 09	Q3 09	Q4 09	Q1 10	Mar	Apr	May
China	252.1	262.4	236.1	126.7	139.3	153.7	146.7	157.9	55.0	55.4	56.1
Year-on-year %change	13.1%	9.5%	(6.3%)	1.9%	0.9%	20.8%	34.7%	24.6%	21.9%	27.6%	20.8%
US	49.7	50.9	40.4	12.0	12.5	15.6	17.6	19.6	7.1	6.8	7.2
Year-on-year %change	3.8%	5.1%	(18.7%)	(52.9%)	(51.1%)	(37.9%)	14.2%	63.5%	80.1%	79.4%	66.1%
Russia	35.8	38.4	30.1	12.9	13.9	14.9	16.5	15.7	5.6	5.6	5.8
Year-on-year %change	(0.1%)	4.8%	(15.8%)	(32.9%)	(27.3%)	(19.9%)	42.9%	22.3%	20.8%	28.9%	24.6%
Germany	24.0	24.4	21.4	7.3	6.6	8.8	10.0	10.9	4.0	3.9	4.1
Year-on-year %change	0.4%	(0.5%)	(10.8%)	(39.7%)	(46.9%)	(25.4%)	4.3%	50.1%	94.5%	107.2%	87.7%
India	27.0	27.2	27.9	13.4	13.9	14.1	15.1	16.1	5.5	5.4	5.5
Year-on-year %change	7.5%	4.2%	3.3%	(6.2%)	7.7%	1.2%	8.5%	18.7%	16.8%	16.8%	16.9%
South Korea	25.9	27.6	26.1	10.5	12.3	12.7	13.4	13.2	4.8	4.8	5.2
Year-on-year %change	5.6%	7.4%	0.8%	(22.4%)	(12.2%)	(8.4%)	9.8%	26.9%	26.3%	17.3%	21.9%
Japan	60.8	61.9	56.8	17.6	19.1	24.2	26.6	26.5	9.3	9.0	9.7
Year-on-year %change	2.6%	4.2%	(6.5%)	(42.9%)	(38.5%)	(20.4%)	0.8%	50.7%	62.8%	56.7%	50.2%
Rest of world	153.3	164.7	136.7	51.0	54.6	57.7	65.4	67.9	25.0	25.1	24.6
Year-on-year %change	1.6%	3.2%	(10.8%)	(36.9%)	(34.8%)	(25.9%)	11.2%	32.0%	38.9%	45.4%	32.4%

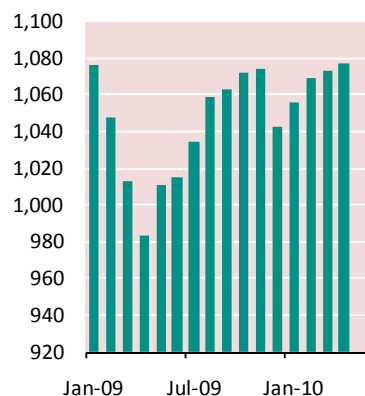
Source: World Steel Association

Hedge fund returns by commodity weighting, % monthly



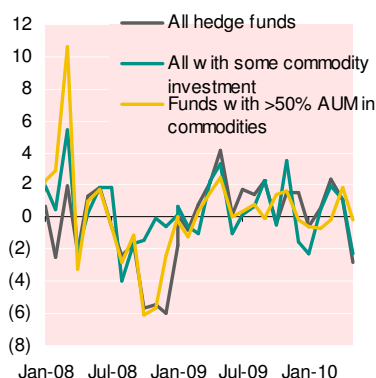
Source: VM Group, Barclay Database

Hedge funds AUM, \$bn



Source: VM Group, Barclay Database

Hedge fund returns in metals, % monthly



Source: VM Group, Barclay Database

Fund activity

- July 9:** ManGroup, the largest quoted player in the hedge fund universe, reported lower than anticipated withdrawals for Q1 2010. Assets under management (AUM) dipped by 2.3% to \$38.5bn. Fund withdrawals have returned to the sector but with not quite the vengeance initially feared.
- July 8:** Not even the most prominent of hedge funds managed to escape volatile summer markets. The Paulson & Co Recovery fund, with \$3bn under management, lost 12.39% in June after recording a 9% loss in May. But it's not all doom and gloom for the Paulson portfolio; unsurprisingly in a comparatively uncertain economic climate, Paulson's gold fund still managed to return 7.3% in June and is up 13% since the start of 2010.
- July 1:** Hedge fund managers in the UK will be subject to the EU's proposals to regulate the size and disbursement of bonuses. Funds regulated under 'The Markets in Financial Instruments Directive', a forerunner of the EU's stalled 'Alternative Investment Fund Managers Directive', will be caught in the web of new restrictions on payouts, which are likely to be finalised and put into effect far sooner than the comprehensive AIFM Directive. With management fees still down, giving back part of hard-earned performance bonuses will be painful.

May: disappointments all round

After a poor showing in April the carnage continued into May, during which hedge funds saw heavy losses and the industry as a whole recorded its worst performance since late 2008. While economists dispute the likelihood of a double dip in the global economy, hedge fund reported returns for May suggest that a degree of nervousness has returned and investors are taking fright. Funds in our database reported negative returns overall in May, falling by 2.8% on average. Funds with commodity exposure were down slightly less, at negative 2.28% returns. Funds with a more concentrated weighting in commodities also suffered, although not quite as badly – those with over 50% of their AUM devoted to strategies within the commodity sector reported negative returns of 0.19%, slightly cushioned from some of the volatility in equity markets. Energy funds fared poorly, at minus 2.74%. Softs and metals funds were not much better, with respective negative returns of 2.41% and 2.56%. The AUM of funds in our database declined for the first time since December 2009, dipping from \$1.08 trillion to \$1.06 trillion. While we may not see a double dip recession, world economic growth is likely to be slow for some months ahead, and average hedge funds' returns could well be feeble as investors await clearer direction in the market. Preliminary data for June suggests a slightly better performance, but no leap from the ditch just yet.

About VM Group

VM Group is a commodities research consultancy that covers not just conventional energy, but also renewable energy, carbon, base and precious metals, and agricommodities. The VM Group comprises a uniquely skilled team that is highly experienced in the analysis of the fundamentals of commodities and their geopolitical impact and contexts.

VM Group work excels in macro-economic analysis, the generation of supply and demand scenarios, costs analysis, derivative research and price forecasting. Confidentiality, experience and independence are key elements in this advisory capacity. We deliver excellence to those in need of external expertise, as well as those who wish to supplement their own in-house resources. Our extensive international contacts mean we are able to span the globe.

To see further how we can meet your research and consulting requirements, please email: info@vmgroup.co.uk

VM Group
100 Ashmill Street

London NW1 6RA

Tel: +44 20 7569 5930

Fax: +44 20 7569 5931

VM Group disclaimer and copyright

This report was prepared by VM Group. VM Group has made all reasonable efforts to ensure that all information provided in this report is accurate and reliable at the time of inclusion (the 1st of this month otherwise stated), however, there may be inadvertent and occasional errors and lack of accuracy or correctness, for which VM Group cannot be held responsible. VM Group and its employees have no obligation to inform the reader when opinions and information contained in this report change.

VM Group makes no representation or warranty, express or implicit, as to the accuracy or completeness of contents of this report. This report is not and cannot be construed as an offer to sell, buy or trade any securities, equities, commodities or related derivative products and the report in no way offers investment advice. Therefore VM Group employees accept no liability for any direct, special, indirect, or consequential losses or damages, or any other losses or damages of whatsoever kind, resulting from whatever cause through the use of any information obtained either directly or indirectly from this report.

The contents of this report, all the information, opinions and conclusions contained are protected by copyright. This complete report may not be reproduced without the express consent of VM Group. Short extracts may be reproduced but only with the full and appropriate citing of the original source.

ABN AMRO disclaimer and copyright

The contents of this document are confidential and proprietary to ABN AMRO Bank N.V. and its affiliates ("ABN AMRO") and may not be disclosed to a third party without ABN AMRO's prior written consent. This document is provided for information purposes only and as an accommodation to you. The information contained herein (the "Information") is current as at the date of issue and ABN AMRO shall be under no obligation to notify you of any changes to the Information or otherwise to update the Information after this date. Any material contained herein is for information purposes only and should not be regarded as an offer, recommendation or solicitation to buy or sell securities or derivative products. It does not contain a complete description of any particular product or transaction and any investment decision should be based upon the final documentation prepared in relation to any particular product or transaction. Information may have been obtained from, and/or based upon information obtained from sources that ABN AMRO believes to be reliable, however the accuracy and completeness thereof and the computations based thereon cannot be assumed. No representation or warranty, express or implied, is or will be made, and no responsibility or liability is or will be accepted by ABN AMRO or any of its officers, servants, agents, employees or advisors in relation to the accuracy or completeness of this document or the Information. The Information must be considered in conjunction with all other publicly available information. This document may include various forms of performance analysis, characteristics and pricing estimates. Such information and any opinion, estimate or projection contained in this document is illustrative only and is not intended to predict actual results which may be expected to differ substantially from those described in this document. Past performance is not necessarily indicative of future results.

ABN AMRO is not providing you with investment advice or a personal recommendation nor will it be deemed to have done so. The Information is being provided to you because we believe, based upon statements and other indications you have provided, that (i) you have sufficient knowledge, experience and professional advice to understand and make your own independent evaluation of the merits, risks and suitability of making an investment in the type of products or transactions described herein; (ii) you are not relying on ABN AMRO for information, advice or recommendations of any sort, except factual information, about the terms of any product or transaction; and (iii) you have sufficient financial means to accept the risk connected with any product or transaction described herein. ABN AMRO acts as principal in transacting with you and does not owe any fiduciary duties to you. You must determine the suitability of any products or transactions described herein. The products and transactions described herein may not be suitable for all investors. ABN AMRO is not providing you with financial, legal, tax, regulatory or accounting advice. It is your responsibility to seek your own advice in these respects and to satisfy yourself that you are aware of any such risks associated with the products or structures described in the Information. ABN AMRO expressly disclaims any responsibility for any uses to which you put this information.

This document does not purport to identify or suggest all of the risks, direct or indirect, which may be associated with any products or transactions described herein. ABN AMRO may have positions in trades and securities similar to the products and transactions described herein. There may be no market for products described herein, therefore investors should be prepared to hold any product until maturity. If you unwind a transaction early you may receive less than the stated redemption amount. Any transaction is subject to

approvals, procedures and policies determined by ABN AMRO and prevailing market conditions. The Information does not constitute research and as such may differ from published views. ABN AMRO Bank N.V. is authorised by De Nederlandsche Bank N.V. in the Netherlands and regulated by the Financial Services Authority for the conduct of investment business in the United Kingdom. Registered Office: Gustav Mahlerlaan 10, Amsterdam, Amsterdam, 1082 PP, Netherlands. ABN AMRO Markets (UK) Ltd. is regulated by the Financial Services Authority for the conduct of investment business in the United Kingdom. Registered Office: 5 Aldermanbury Square, London, EC2V 7HR, United Kingdom (Company number 02706278).