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# Fortis Metals Monthly November 2005

Gold, Silver, Platinum, Palladium,  
Aluminium, Copper, Nickel,  
Lead & Zinc, Tin, Plastics.

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



## Metals and Plastics – Strategic View

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**Introduction**

Precious metals still strong as investors take note of improving fundamentals, copper shines amid base metals trending lower.

**Gold**

Another good month for gold, record total net long positions help push price higher; more economic uncertainty in Q4 could keep the momentum going.

**Silver**

Silver perks up, could trend higher.

**Platinum**

Firm floor of \$900/oz though this level will damp down China's jewellery sector.

**Palladium**

China's jewellery market is growing more enthusiastic for palladium.

**Aluminium**

Stronger prospects on tightening production, good demand.

**Copper**

\$4,000/t finally breached for the benchmark contract, high volatility likely.

**Nickel**

Softer outlook as steel glut gloom intensifies.

**Lead & Zinc**

Lead marks time; tighter concentrate supplies underpin higher trend for zinc.

**Tin**

Persistently depressed prices look fairly entrenched for the short-term.

**Plastics**

Greater volumes on LME could indicate growing acceptance by converters.

## Forecasts

### Price forecasts

		End-October	1-month	3-month	2 years
<b>Gold</b>	\$ per oz	470.75	450-480	460	350
<b>Silver</b>	c per oz	776.50	700-800	700	600
<b>Platinum</b>	\$ per oz	938	925-960	>900	850
<b>Palladium</b>	\$ per oz	227	200-240	220	220
<b>Aluminium (3-month)</b>	\$ per tonne	1,981	1,900-2,000	1,800	1,700
<b>Copper (3-month)</b>	\$ per tonne	3,925	3,700-4,100	>4,000	2,900
<b>Nickel (3-month)</b>	\$ per tonne	12,045	11,000-12,000	14,500	13,000
<b>Lead (3-month)</b>	\$ per tonne	979	900-980	950	900
<b>Zinc (3-month)</b>	\$ per tonne	1,564	1,400-1,600	>1,400	1,200
<b>Tin (3-month)</b>	\$ per tonne	6,152.50	6,000-6,700	6,800	8,000
<b>Plastic: LL (November)</b>	\$ per tonne	1,217.50	>1,300	>1,500	1,300
<b>Plastic: PP (November)</b>	\$ per tonne	1,205	>1,300	>1,500	1,300

Source: Virtual Metals

## Analysis

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### Aluminium: geography + energy = change

Last-ditch hopes that the Hamburg Aluminium Werke (HAW) aluminium smelter, jointly owned by Norsk Hydro, Alcoa, and Amag, could be kept alive were finally disappointed in late October, when a bid by Germany's steel manufacturer Georgsmarienhütte Holding was rejected. Earlier in the month Trimet Aluminium AG withdrew its bid for HAW, which has an annual capacity of 135,000t of primary metal and 70,000t of recycled aluminium. It now seems certain that the plant will close by the end of the year.

The decision to close HAW first became public in June, when Norsk cited the failure to secure a satisfactory long-term power supplier as the problem. Electricity costs in Germany have risen by some 40% since the start of 2005, and with electricity representing 35% of the cost of primary aluminium production the HAW plant, along with others in west Europe, is no longer competitive in the face of cheaper production from lower-cost energy regions such as China, the Middle East and Russia.

The close of HAW symbolises a progressive and significant shift of aluminium production away from high-cost Western Europe to other regions, where energy is cheaper. Other west European smelters are up for sale. Alcan has entered into preliminary discussions with a consortium over a possible sale of its smelter at Steg, Switzerland, which has an annual capacity of 44,000t. Alcan has also started preliminary talks with local stakeholders regarding plans to close its Lannemezan smelter in France. Norsk is still trying to reach satisfactory terms regarding long-term power supply at its 230,000t a year Neuss smelter, also in Germany; the current contract expires at the end of 2005.

### Power to Russia

Access to relatively cheap power supply has always been a key factor driving aluminium production, but the recent surge in energy prices has intensified this. As mature economies suffer the burden of shrinking fossil fuel reserves and higher energy costs, developing economies with access to cheaper power sources are beginning to take advantage of the new order. RusAl, Russia's largest aluminium producer, plans to invest \$8bn in production development by 2013. RusAl accounts for 75% of Russia's primary metal production and 10% of the world's total, with output of primary aluminium of 2.671 Mt in 2004, 3.1% higher than 2003. Yet it is just five years since RusAl was created from the merger of smelters and producers. "Our key strategy going forward is to be the world's number one aluminium producer within the next 10 years," Vladislav Soloviev chief financial officer with RusAl told Dow Jones.

Soloviev's confidence is based essentially on one key advantage – cheap power. It agreed a deal in October 2004 with the Tajikistan government to build the Rogunskaya hydroelectricity plant, while in the Krasnoyarsk region of Siberia RusAl is also currently involved the Bogushanskaya hydroelectricity development, next door to which it is planning a new 600,000t a year smelter. Russia's abundant hydroelectric power means that RusAl's targets of 5 Mt of aluminium and 8 Mt of alumina production, almost double the current levels for both, will mean it can produce primary aluminium at strongly competitive prices.

This energy-cost induced revolution is not just a west European phenomenon. Higher energy costs in the USA are also beginning to bite. Alcoa said in October its 195,000t annual capacity Eastalco smelter in Frederick, Maryland, could be threatened if the current power supply contract, which expires at the end of 2005, was not renewed on agreed terms. These straws in the wind are getting harder to ignore.

## Focus

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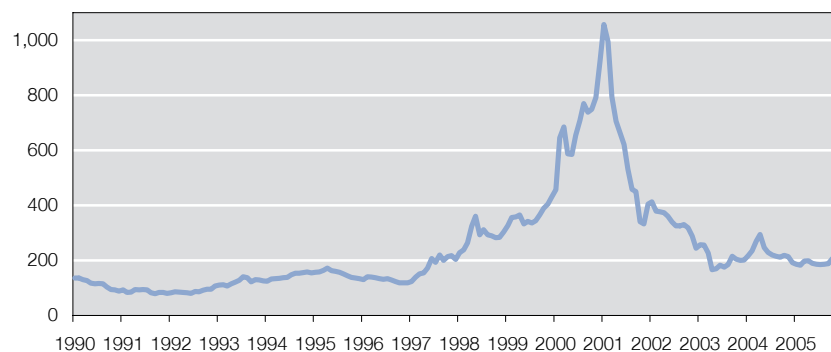
### Stillwater – running deeper in China

*The prospects for palladium have recently begun to look much brighter. In China especially, demand for palladium for jewellery purposes has shot up since early 2004. This demand, from a basis of almost nothing, has begun to provide a much-needed additional market beyond the well-established industrial uses of auto-catalysis and, less importantly, electronics. The major marketing force behind this remarkable surge in demand for palladium jewellery has been the USA's PGMs producer, Stillwater Mining. We talked to John Stark, vice president of Stillwater, to see how this has been achieved, and to glean an insight into what future additional growth might be possible.*

Palladium has been in almost continuous decline ever since January 2001, when it peaked at an average \$1,056/oz for the month. The collapse was painfully swift; by March that year the average price was \$794/oz, and plunged still further until by January 2002 the monthly average was \$413/oz, since when it has never threatened to even approach \$400/oz. For the past 12 months the price has averaged just over \$194/oz. This decimation of palladium, whose biggest uses are in auto-catalysis, electronics, and dentistry respectively, was a searing experience for many investors who imagined in January 2001 that the momentum was all one-way. In electronics, the price spike of January 2001 induced a massive and permanent substitution away from palladium.

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**Palladium, 1990-2005 (USD/oz)**



Source: Virtual Metals

Today, palladium's prospects continue to be overshadowed by two key issues – how much physical metal is in the vaults of Swiss banks and the world's biggest palladium producer, Russia's Norilsk; and how much secondary supply may come back into the market as a result of the growing global legislative-driven pressure to recycle vehicles and electronic waste, including palladium-enriched auto-catalysts in petrol-fuelled cars and palladium-rich printed circuit boards? Norilsk has said it will publish information about its inventory by the end of 2005, which, depending on the degree of explicitness, could demolish one nagging enigma. As far as recycled auto-catalysts are concerned, we calculate that more than 40 Moz of palladium, about 6 years' supply, is available in the form of vehicles currently on the roads which, within a decade, will be on the scrap heap. As for how much palladium lies beneath the floors of Zurich banks, that will in all likelihood remain a tightly guarded secret.

For predominantly palladium producing miners such as Stillwater Mining, in the US state of Montana, this potential palladium mountain is a persistent headache. Stillwater is the largest primary PGMs miner outside South Africa and Russia, producing 439,000 oz of palladium and 130,000 oz of platinum in 2004. But Stillwater, of which Norilsk has a 55% shareholding, has, almost single-

handedly, set about proving that, rather than the glass being half empty it is actually half full. Stillwater has for the past year, almost unnoticed, been engaged in an innovative palladium marketing programme, doing its best to stimulate demand in a market which was all but dead – jewellery. In one sense, Stillwater is rediscovering the past. During WWII, when platinum was virtually unobtainable for jewellery (in the USA it was classified as a strategic metal), those who wanted a platinum look had no choice but to buy palladium. But while gold and platinum producers have tried to nurture the downstream core markets, by consistently pumping considerable collective funds into marketing gold and platinum jewellery, no-one, until now, has really tried to do the same for palladium. Even more radical – it seems to be working.

### From miner to jewellery promoter

Fast-forward to early 2004, when something occurred which now retrospectively appears to have been a pivotal moment in the precious jewellery world: platinum broke above \$900/oz for the first time to average \$901/oz in March, having steadily risen for almost all the previous 12 months. For the all-important Chinese platinum jewellery market this was a spike akin to the shock caused by palladium's spike back in January 2004. Palladium, meanwhile, averaged \$219/oz the same month. This \$682/oz differential induced a dramatic re-think by China's jewellery fabricators and retailers; platinum jewellery demand in China collapsed almost overnight. Imports of palladium into Hong Kong and China rose from a monthly average of 4,740 oz in 2002, to 24,810 oz in 2003, still small by comparison say with platinum, which by then was well over 1 Moz a year. In 2004 however imports of palladium soared, particularly in March, when 208,851 oz were bought. The average for the year was 88,091 oz a month, a total of over 1 Moz for the full year.

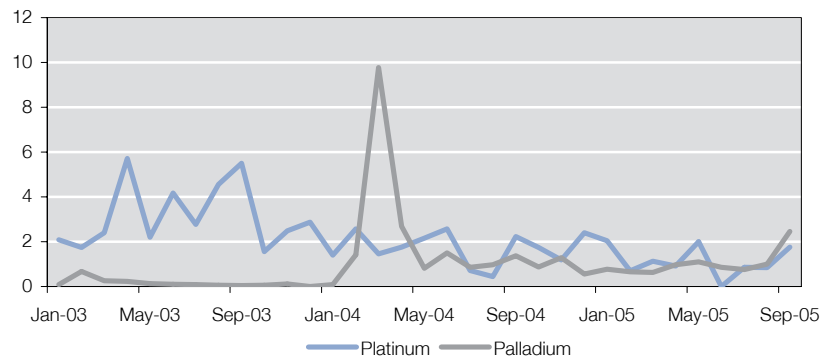
In China's southern provinces jewellery fabricators began to turn increasingly to palladium. And they found a positive response from customers who liked the white metal look of palladium, indistinguishable to most eyes from platinum, and available at a much cheaper price. More intriguingly, Chinese buyers appear to be opting for palladium over white gold, preferring the 950 caratage over the 750 associated with white gold. PAMP of Zurich introduced a line of palladium jewellery pieces, while the powerful QVC shopping channel began selling palladium necklaces, earrings, rings and bracelets. And in June this year Fredrick Goldman Jewellers displayed a new line of palladium jewellery at the Las Vegas BRK Jewellery Show, including wedding rings – called the Stillwater Collection.

According to Stillwater's John Stark, "the launch by jewellers in north America of palladium wedding rings has done much better than we expected, and stocking is now occurring. From nothing, we expect in excess of 50,000 oz of palladium demand in North America this year and we liken it to the China market in 2004. We are not competing with platinum but with 18 carat gold. Our view is that one way to help with the overhang in the market is to promote palladium jewellery and we believe that 20% of total supply will this year be going into jewellery, that's comfortably over 1 Moz for the year. With platinum over \$900 and gold at more than \$460, this is a good time to do this. If you have an over-supply, how do you develop? In our view, this is one way to do that."

### Riding the trend

While we take a more conservative view of probable Chinese palladium demand for jewellery purposes, which we currently estimate will be almost 735,000 oz in 2005 (based on data for the first six months of the year, and assuming that this represents actual demand and not stock-building, which we believe accounted for some of the remarkable demand seen in 2004), Stillwater has nevertheless tapped into a currently rising trend, gently pushing on a door already ajar, one which offers a solid basis for greater optimism about the future palladium price.

China/Hong Kong palladium imports vs. Platinum imports (Tonnes a month)



Source: Virtual Metals from TradeStats

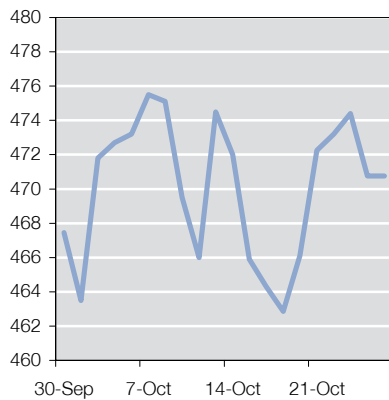
Stillwater is blazing a trail and so far has not been joined in its marketing expenditure by other key palladium producers. Stark is confident that, once jewellery buyers have sampled palladium products, they will jettison the historic prejudices which surround the metal's adornment image and instead relish palladium's colour, lightness (45% lighter than an equivalent platinum piece), strength and price competitiveness (22% of the price of an equivalent platinum item). Retailers also like the metal (and are thus enthusiastic promoters) because of the higher margins it yields – in China, according to Stillwater, retailers are getting margins of almost 63% on palladium jewellery, compared to almost 12% on platinum 950 items and just above 11% on 24 carat gold pieces. "In our experience, the new customers for palladium jewellery are not those who have previously been buying platinum, they are people who have moved away from white gold," he says.

The key of course is whether or not Stillwater's accomplishments in marketing palladium in China can be replicated elsewhere. It is still too early to tell if the north American market is making a genuine and permanent move towards palladium, but if that proves to be the case then Stillwater will be aiming at taking on Taiwan and Japan. Says Stark: "The demand is there, but it will take work. We know there are lots of people in those markets who are interested, they want to know about these products. The great unknown, although we have already had some positive indications, is India. We beat a drum and people laughed at us. Well, it's starting to happen. Platinum has done a wonderful job at getting into the wedding band market. Will palladium do the same? It might. We are not at a stage where we can give a firm answer. But at the custom jewellery level it's been amazing. One fabricator in North America has gone from a line of making five palladium rings to 50 this year alone."

Having made such impressive strides in tackling the possible looming supply problems, what Stillwater does not need, of course, is a return to the heady days of January 2001. One indication that this bandwagon is really rolling will be if and when the major South African palladium producers, so far silent on the issue of promoting palladium jewellery, begin to join in.

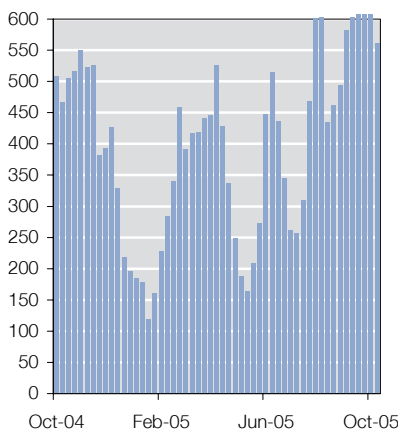
# Gold

Gold price (\$/oz)



Source: London Bullion Market Association

Comex: Non-commercial net position (tonnes)



Source: Virtual Metals

## Quote of the Month

**“Gold importers are on a holiday”**

**Rajesh Khosla, managing director of Metlloy Trading Services, bullion dealers in India**

## News

- Oct 31<sup>st</sup>: Barrick launches an unsolicited bid of \$9.2bn for Placer Dome, a 24% premium over the previous closing price; Barrick earlier reported Q3 05 production of 1.5 Moz vs. 1.2 Moz for Q3 04 and earnings of \$113m (vs. \$32m in Q3 04).
- Oct 26<sup>th</sup>: Newmont reported net income for Q3 fell 2.3% to \$126m on revenue up by 1.7% to \$1.16bn. It expects to sell some 6.5 Moz in 2005.
- Oct 26<sup>th</sup>: AngloGold Ashanti reported its Q3 production fell 2% to 1.53 Moz.
- Oct 18<sup>th</sup>: Freeport-McMoRan reported Q3 net profits of \$108.9m vs. \$32.3m for Q3 04, on revenues of \$983.3m, up from \$600.6m in Q3 04.
- Oct 3<sup>rd</sup>: Gold Fields said production in the quarter ending September 05 fell 8% to 993,000 oz vs. the same quarter 04.

## Analysis

- Fundamentals look supportive

Barrick’s unsolicited bid for fellow Canadian gold miner Placer Dome would create, if successful, the world’s biggest gold mining company, displacing Newmont from first position, with combined annual production of as much as 8.5 Moz. Other bids – from Newmont or AngloGold Ashanti – may be flushed out. Norilsk’s gold subsidiary, Polyus, recorded sales of 440,000 oz in the first half of 2005, vs. 528,000 for the same period in 2004, which it said was due to the start of direct exports, resulting in it being unable to book revenue for metal still in the process of being shipped. Gold output also dropped, by 17%, due mainly to declining ore grades. Gold Fields is in talks with Norilsk over the possibility of eventually buying back Norilsk’s 20% stake in Gold Fields, according to Dr Nkosazana Dlamini Zuma, South Africa’s minister of foreign affairs. Norilsk expects Polyus to produce 35t-37t of gold in 2005. The Russian Gold Producers’ Union said Russia’s mine production fell 6% in the first nine months of 2005, to 114.189t.

The Dubai Gold and Commodities Exchange (DGCX) will start trading gold and silver futures contracts on 22<sup>nd</sup> November 2005. Zimbabwe’s gold production slipped 36% in the first nine months of 2005 according to the central bank governor, Gideon Gono, to just over 10.5t against 16.4t for the same period in 2004. Gono blamed “leakages” into the black market, attracted by higher than official exchange rates. Earlier this year official estimates were that production would rise to 35t in 2005.

According to the World Gold Council, the producer-funded promotional body, gold demand (excl. recycled metal) in India was up 57% to 580t in 1H 05 and will total 850t for the whole year, amid mixed reports on Diwali festival buying.

## Outlook

**Gold’s fundamentals are looking attractive, but there are some reports that high prices are denting demand in India. The sizeable long positions on Comex – the highest since at least 1983 – are anticipating further upside. Short-term: \$450/oz-\$480/oz.**

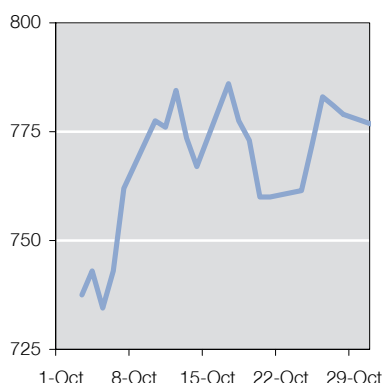
## Market data (October unless stated)

Prices	US\$/oz	Euro/oz	Rand/kg	ETF investment	Ounces	Lease rates	1m	3m	6m	12m	Option volatility (end month)	
Average	470	391	99,700	US	116,897	Average	0.12	0.14	0.18	0.50	1-month	14.4%
High	476	396	102,121	UK	54,483	High	0.18	0.19	0.27	0.60	3-month	14.4%
Low	463	386	97,003	Aus	3,622	Low	0.10	0.11	0.14	0.24	6-month	14.5%
				S.Africa	-						12-month	14.5%

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

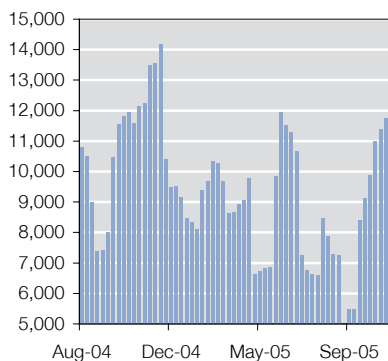
# Silver

Silver price (cents/oz)



Source: London Bullion Market Association

Comex: Non-commercial net position (tonnes)



Source: Comex

### Quote of the Month

**“We don’t endorse a silver ETF because of the potential liquidity problems”**

**Silver Users Association**

### News

- Oct 28<sup>th</sup>: Industrias Penoles of Mexico reported net profits of \$24.8m for Q3 05, 15% higher than the same period for 2004; silver production rose by 24% to 12.6 Moz.
- Oct 26<sup>th</sup>: Hecla revised its projections for silver output in 2005 down by 200,000 oz, close to the original projection of 6.3 Moz for the year as a whole.
- Oct 12<sup>th</sup>: Oxus announced it had started silver production at its Vysokovoltnoye silver and gold mine in Uzbekistan. Total silver production at the mine is estimated to be 2.47 Moz annually.

### Analysis

- Silver follows gold’s lead

The Silver Users Association (SUA) is urging the Securities and Exchange Commission (SEC) to stop Barclays from creating a silver backed Exchange Traded Fund. The association, which was created in 1947 to lobby on behalf of companies which use silver, has argued to the SEC that the economy could suffer if silver prices spike. Barclays filed a registration in June 2005 with the SEC to create the first silver ETF; however it is still pending regulatory approval.

The silver ETF would be similar to gold ETFs; the trust would take delivery of millions of ounces of silver bullion and store it in the UK. However, some speculators believe that there is not enough silver stored above ground to fulfil investment demand for a silver ETF. The SUA fears that taking silver from exchange warehouses could be enough to set off a shortage. “We don’t endorse a silver ETF because of the potential liquidity problems it would create,” the SUA said.

The London Bullion Market Association reported that silver ounces transferred increased 21.5% in September to a daily average of 126.8m, which was the highest September level since September 1999 and the second highest level for the year. Based on an average fixing of \$7.154 - 11 cents higher than August - value rose to a daily average of \$0.91bn. Year-on-year, ounces transferred rose 54%, value was 72.8% higher and the number of transfers increased 41.3%.

### Outlook

The daily London fix held well above \$7/oz throughout October, with a high of \$7.83/oz on the 26<sup>th</sup> and a low of \$7.375/oz on the 3<sup>rd</sup>. On Comex, the net long positions rose to 11,976t for the week ending 25<sup>th</sup> October, still below the peak in June (12,225t), with the large speculators’ position more than 72% of the net longs. This is probably heading for a correction but if gold stays firm then silver will benefit.

**Short-term: \$7/oz-\$8/oz.**

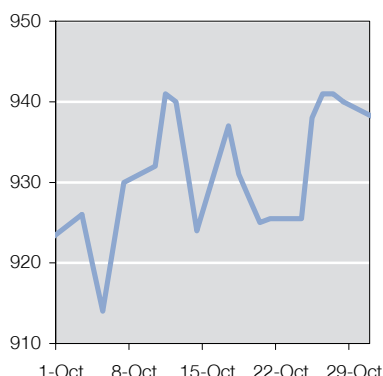
### Market data (October unless stated)

Prices	c/oz	e/oz	p/oz	Imports	kg	Lease rates	1m	3m	6m	12m	Option volatility (end month)	
Average	767.0	638.1	434.9	USA (Aug)	483,770	Average	1.00	1.41	2.10	4.22	1-month	26.0%
High	786.0	654.0	449.3	Japan (Aug)	267,343	High	1.10	1.61	2.32	4.98	3-month	26.0%
Low	734.5	614.3	416.4	China (Sep)	131,908	Low	0.92	1.25	1.66	4.10	6-month	26.0%
											12-month	26.0%

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

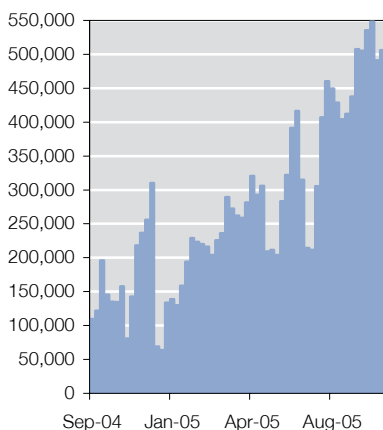
# Platinum

Platinum price (\$/oz)



Source: London Platinum & Palladium Market

Nymex: Non-commercial net position (ounces)



Source: Nymex

### Quote of the Month

**“China’s platinum demand for jewellery in 2005 will be slightly less than 2004”**

### Virtual Metals

## News

- Oct 28<sup>th</sup>: Aquarius Platinum reported net profits of \$9.9m for Q3 05 on production of 103,869 platinum group metal oz.
- Oct 26<sup>th</sup>: Lonmin said platinum output in Q3 05 was 309,239 oz, with total production for the year up to the end of September bigger than expected at 916,420 oz. Final results for the year will be announced 16<sup>th</sup> November.
- Oct 26<sup>th</sup>: Zimplats, 83% owned by Implats, said it sold 22,623 oz in the quarter up to the end of September.
- Oct 20<sup>th</sup>: Norilsk reported Q3 production of 6.2t (199,336 ozs) and forecast full year output of 22.7t (729,827 ozs).
- Oct 20<sup>th</sup>: Angloplat said the shutdown of its Polokwane smelter will cut earnings by \$38m this year and reduce 2005 production from a projected 2.6 Moz to 2.45 Moz.

## Analysis

- Firm 900\$/oz floor

Hopes that China might this year revive platinum jewellery offtake have probably been snuffed-out by the recent price surge, which now seems set to remain comfortably above \$900/oz for the immediate future, with good prospects of \$1,000/oz in the offing. We estimate that China’s platinum demand for jewellery will be just over 1 Moz for the whole of 2005, some 20,000 oz less than 2004 and way below the 2002 peak, as substitution into palladium takes a firmer grip.

Lev Puchkov, Rector of the Moscow State Mining University, said in an interview with South African media in the wings of an Inter-Governmental Committee on Trade and Economic Cooperation (ITEC) that he thought Russia and South Africa should consider establishing “an economic well-thought cooperation around platinum. Maybe we need to sit down and suggest to the world consumers that let’s make an exchange, platinum for technology, or maybe our governments should form a big consortium similar to those of oil companies.”

## Outlook

By 27<sup>th</sup> platinum had reached a 25 ½ year high with spot trading at \$947/oz; highest London pm fix for the month was \$941/oz, lowest was \$914/oz. Platinum reached \$1,047/oz in 1980 before rapidly plunging. Net longs on Nymex rose again to total 506,300 oz by the week ending 25<sup>th</sup> October. Consensus is rapidly building that a price of \$1,000/oz is now conceivable. Short-term: \$925/oz-\$960/oz.

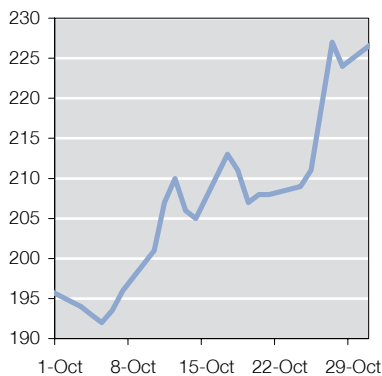
### Market data (October unless stated)

Prices	US\$/oz	Lease rates	1m	3m	6m	12m	Trade (kg)	Imports	Exports	Option volatility (end month)
Average	931	Average	2.6	2.8	2.8	2.6	USA (Aug)	5,772	3,182	1-month 12.3%
High	941	High	2.8	2.9	2.9	2.8	Japan (Aug)	5,386	925	3-month 13.0%
Low	914	Low	2.2	2.5	2.7	2.5	China (Sep)	1,813	404	6-month 14.8%
							Switzerland (Sep)	6,744	3,030	12-month 16.3%
							Hong Kong (Aug)	1,909	1,257	24-month 17.8%

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

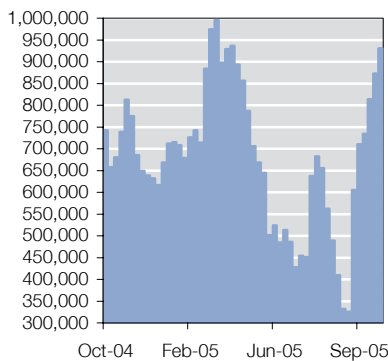
## Palladium

Palladium price (\$/oz)



Source: London Platinum & Palladium Market

Nymex: Non-commercial net position (ounces)



Source: Nymex

### Quote of the Month

**“We think palladium is more undervalued than platinum is overvalued”**

### Norilsk

### News

- Oct 20<sup>th</sup>: Norilsk reported Q3 production of 26.1t (839,141 ozs) and forecast output for the full year of 95.8t (3.08 Moz). Earlier in the month it reported 1H 05 net profits of \$974m vs. \$873m for the same period in 2004, up more than 11.5%.
- Oct 6<sup>th</sup>: North American Palladium reported production of 39,352 oz in Q3, vs. 79,174 oz in the same quarter of 2004; the company said it expected output of 56,000 oz in Q4.

### Analysis

- China’s appetite for jewellery continues

Palladium brightened considerably in October, with the highest prices so far this year, as it became clearer that a key market for palladium jewellery, China, is likely to record just as good if not better demand than 2004. Our estimates, which are conservative, being based on publicly available data up to mid-year, are that China’s jewellery market will, for the whole of 2005, account for more than 733,000 oz, about 75% of global palladium jewellery offtake. This figure could increase before the end of the year, given the recent strong performance from platinum. If efforts to develop the Asian palladium jewellery market pay-off, and China’s appetite proves to be more than a passing fad, this could radically alter the previously pessimistic prospects for palladium.

Ford and General Motors both reported substantial declines in car sales for September, by 20% and 24% respectively over August, bringing the seasonally adjusted annual rate of new vehicle sales for the USA down to a probable 16.4m, vs. 17.4m in 2004, and a projected rate in August of 16.8m. Other manufacturers registered strong gains in September however, Nissan up 16%, Toyota rose 10%, Honda by 12%, while Chrysler, the US subsidiary of DaimlerChrysler, lifted its sales by 4%. Sales of SUVs and trucks were particularly badly affected by higher gasoline prices; GM’s SUV sales in September were down 30% compared with the same month in 2004, while Ford’s plunged by 51%.

Gold Fields said it will go ahead with Arctic Platinum, Europe’s first palladium mine, in Finland, with North American Palladium. A feasibility study and exploration programme should be completed by June 2008, with the aim of defining reserves of 5 Moz of palladium, platinum and gold. If it goes into production Arctic Platinum could produce as much as 450,000 oz of these metals annually.

### Outlook

**Palladium finally took off in October, with intensified speculation that the substitution to palladium jewellery in China is no passing fad. Trading at its highest level in more than 12 months, palladium’s highest London pm fix was \$227/oz, the highest this year so far, while the lowest was \$192/oz. Short-term: \$200/oz-\$240/oz.**

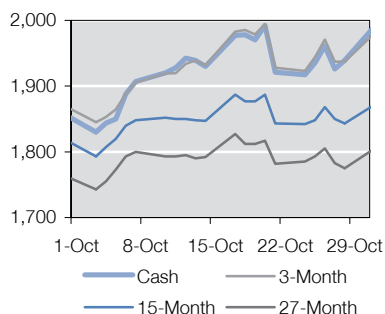
Market data (October unless stated)

Prices	US\$/oz	Lease rates	1m	3m	6m	12m	Trades (kg)	Imports	Exports	Option volatility (end month)
Average	208.0	Average	0.95	1.11	1.22	1.27	USA (Aug)	8,775	5,628	1-month 26.0%
High	227.0	High	1.10	1.18	1.32	1.46	Japan (Aug)	309	1,066	3-month 27.0%
Low	192.0	Low	0.87	0.99	1.14	1.12	China (Sep)	404	100	6-month 28.0%
							Switzerland (Sep)	4,218	5,538	12-month 29.0%
							Hong Kong (Aug)	4,320	171	24-month 31.0%

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

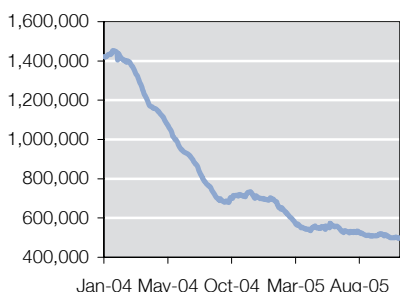
# Aluminium

Aluminium price (\$/tonne)



Source: London Metal Exchange

Aluminium stocks (tonnes)



Source: London Metal Exchange

### Quote of the Month

**“Higher energy and raw material prices represent increasing challenges”**

**Eivind Reiten, CEO of Norsk Hydro**

### News

- Oct 21<sup>st</sup>: Russia’s Bratsk aluminium plant, 98.6% owned by RusAl, increased by 3.5% its January-September production vs. the same period in 2004, to 728,000t, and anticipated full year output of 972,000t, 16,000t higher than last year.
- Oct 21<sup>st</sup>: Alstom, the French engineering company, announced it will build a new power plant for the Argentine aluminium producer Aluar in Puerto Madryn, enabling it to raise smelting capacity from the current 280,000t annually to 400,000t.
- Oct 13<sup>th</sup>: Brazil’s primary aluminium production grew 4.8% in September compared with the same month in 2004, according to figures from the Brazilian Aluminium Association (ABAL).
- Oct 10<sup>th</sup>: Alcoa reported Q3 net income of \$289m, vs. \$283m for Q3 2004 but \$171m down from Q2 2005, a result of higher energy costs.

### Analysis

- LME prices climb, but profit taking steps in

Global aluminium production in September fell 69,000t to 1.941 Mt, from a (revised) 2.01 Mt in August, according to updated data from the International Aluminium Institute (IAI). In the USA the Aluminium Association reported that the annual rate of primary aluminium production fell 2.3% in September vs. the same month in 2004, at just over 2.425 Mt; in the year to date, total USA production fell 1.3% to just over 2.488 Mt. The Aluminium Association of Canada reported annual rate of primary metal production in Canada 24.5% higher in September, at more than 3 Mt.

The Aluminium Corporation of China, Chalco, China’s biggest alumina producer, said it expected China’s demand for alumina in Q4 2005 to be some 15 Mt, roughly double domestic production, keeping alumina prices high. It reported its own alumina production for Q3 at 1.81 MT, 12% higher than the same period for 2004, with prices averaging 3.6% higher in the quarter. Chalco, said its output of aluminium products in the same quarter was 21.7% higher, at 284,000t. It estimated China’s total primary aluminium production for 2005 to be about 7.5 Mt, with consumption being some 6.8 Mt.

Alcoa announced it has joined with CITIC, China’s biggest state-owned financial group, to form a new aluminium company in China, to be called Alcoa Bohai Aluminium Industries, which will have primary metal capacity of 223,000t annually from construction completion, scheduled for 2008.

### Outlook

**The LME’s benchmark 3-month contract was hit by profit-taking on 21<sup>st</sup>, sliding 4.4% to two-week lows in early trades to \$1,887.50/t, having previously settled at \$1,994.50/t, the month’s peak. Stronger fundamentals however suggest a fresh assault on \$2,000/t is possible in the final stages of 2005.**

**Short-term: \$1,900/t-\$2,000/t.**

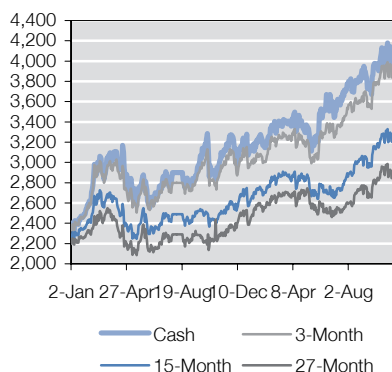
Market data (October unless stated)

Prices (\$/t)	Cash	3-month	15-month	LME stocks	Tonnes	Prod (kt)	August	September	LME Open Interest (contracts)
Average	1,928	1,932	1,850	End-Sep	514,025	Europe	722	698	Aluminium 562,320
High	1,992	1,995	1,887	End-Oct	497,025	Americas	672	646	
Low	1,830	1,845	1,793			Asia	275	267	
						Other	341	330	
						Total	2,010	1,941	

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

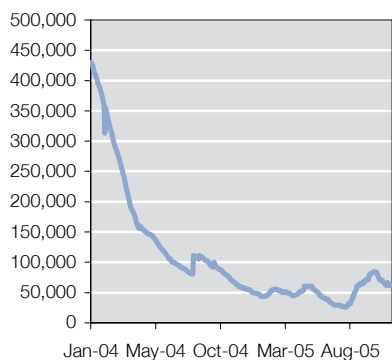
# Copper

Copper price (\$/tonne)



Source: London Metal Exchange

Copper stocks (tonnes)



Source: London Metal Exchange

### Quote of the Month

**“In the short term we see prices being underpinned by chronically low stock levels”**

**Andrew Greville, commercial manager with Xstrata, Bloomberg 28<sup>th</sup> October**

### News

- Oct 20<sup>th</sup>: Chile’s Escondida mine, owned by Rio Tinto, said Q3 production was 101,700t, 16% higher than the same period in 2004.
- Oct 20<sup>th</sup>: The Russian Copper Company (RMK) said it will reach a production level of up to 190,000t of refined copper by the end of 2006.
- Oct 15<sup>th</sup>: Zambia waived 30% excise duty on fuel oils used in copper smelting; shortages and erratic supply had previously put the Konkola Copper Mines’ Nkana smelter on half capacity and closed the Mopani Copper Mines’ Mufulira smelter. Zambia previously forecast 2005 copper output to be 550,000t vs. 400,000t in 2004, but this is now unlikely.
- Oct 7<sup>th</sup>: The Chilean government rejected proposals to privatise the state-owned copper producer Codelco.
- Oct 6<sup>th</sup>: Kazakhmys, the Kazakhstan producer, reported its output was down 9.3% on the year to 294,000t during January-September; in 2004 the company’s output rose 2.3% to total 427,000t for the year.

### Analysis

- LME benchmark contract briefly sets new record

October began to look bleak for copper when the price fell 3.8% in two days (12<sup>th</sup>-13<sup>th</sup>) on Comex, the biggest drop in two months, following news that China’s demand in July fell 13% compared to June, according to the International Copper Study Group (ICSG). The ICSG also reported a deficit of 15,000t in the global refined market in July, with the refined copper balance for January-July implying a production deficit of about 235,000t, though dropping to a deficit of some 60,000t on a seasonally adjusted basis, compared to a (seasonally adjusted basis) deficit of 615,000t for the same period in 2004.

The ICSG said world refined usage dropped by 1.2% during January-July, with all regions showing negative growth in this period with the exception of Asia (up 4%); China’s growth of 15% and India’s of 10.5% offset falls in Japan (down 7%), South Korea (down 10%) and Taiwan (down 11%). North American usage fell by 8.6%, and the EU countries overall dropped 9%. Mine production for the same period grew globally by 3.4% over the same period for 2004.

Chile’s state-run copper commission, Cochilco, reported that new mining projects in Chile due to come on-stream up to 2010 will require an additional 2,500 GWt of power, 15% more than required in 2004; about 34% of the country’s 48,700 GWt hours produced in 2004 were consumed by mining projects.

### Outlook

October was another month of nervous trading at record prices. The LME’s 3-month contract slipped 2% on 19<sup>th</sup> October to \$3,890/t but next day the fresh record high of \$4,000/t was quickly achieved. On 21<sup>st</sup> profit-taking sliced 6% off the benchmark contract taking it down to \$3,755/t in early trades.

**Short-term: \$3,700/t-\$4,100/t.**

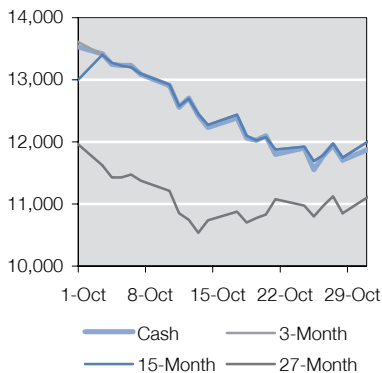
Market data (October unless stated)

Prices (\$/t)	Cash	3-month	15-month	27-month	LME stocks	Tonnes	LME Open Interest (contracts)
Average	4,059	3,898	3,246	2,909	End-Sep	83,250	Copper 312,063
High	4,179	3,990	3,330	2,985	End-Oct	62,575	
Low	3,904	3,770	3,145	2,825			

Source: London Metal Exchange

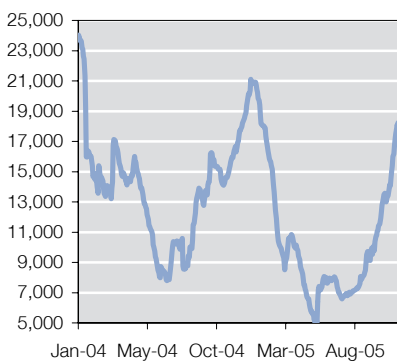
# Nickel

Nickel price (\$/tonne)



Source: London Metal Exchange

Nickel stocks (tonnes)



Source: London Metal Exchange

### Quote of the Month

**“It’s a very attractive and fair offer, and it’s a good deal for Canada”**

**Derek Pannell, CEO of Falconbridge, on the bid by Inco**

### News

- Oct 25<sup>th</sup>: Inco reported net earnings of \$157m for Q3 05 vs. \$209m for Q3 04.
- Oct 12<sup>th</sup>: Coral Bay Nickel Corporation, the Philippines-based nickel refinery owned by Sumitomo Metal Mining, plans to double its nickel output to 20,000t annually in the next two to three years.
- Oct 11<sup>th</sup>: Inco, the world’s second biggest nickel miner, made a friendly bid for Falconbridge, valuing the company at C\$12bn (\$10.2bn). Already approved by the boards of the two companies, the resulting merger will displace Norilsk as the world’s biggest nickel producer.
- Oct 6<sup>th</sup>: Norilsk Nickel reported 1H 05 nickel sales of 119,000t vs. 121,000t for the same period in 2004.

### Analysis

- LME prices trend lower, depressed by steel

The purchase of Falconbridge, the world’s fourth biggest nickel producer, by Inco is part of continuing consolidation in the nickel mining business; the joint production of the two companies should reach more than 333,484t this year and more than 450,000t by 2009. Industry observers had been expecting Xstrata to make a bid, having taken its share of Falconbridge to 20.1% in September. Inco’s chairman and chief executive, Scott Hand, said the fundamentals for nickel and copper are likely to be strong for years ahead, with global nickel demand estimated to grow by 5% annually until 2015. Combined nickel reserves of the two are estimated at 8.45 Mt, compared with Norilsk’s estimated reserves of 5.5 Mt.

There is growing concern that Chinese steel capacity growth will exacerbate the global steel glut. At the annual meeting of the International Iron and Steel Institute (IISI) in South Korea in the first week of October, Nicholas Lardy, an authority on China with the Institute for International Economics in Washington, estimated that China will this year add more than 50 Mt of steel-making capacity, roughly the same as in 2004. “In coming years, there will be massive, massive excess capacity” he said, according to Dow Jones. A contrary view was given by Scott Hand of Inco, in the context of Inco’s reporting quarterly figures. He anticipated falling stainless steel inventories and said that “overall market fundamentals remain strong”, adding that non-stainless steel markets for nickel are growing favourably.

The LME’s chief executive, Simon Heale, said it would create six steel price indices as a preliminary to introducing steel contracts, possibly in one year’s time.

### Outlook

**Nickel’s fate is bound up with steel’s, and weak prices and over-supply are a real problem for steel right now. The LME 3-month contract trended lower throughout October, falling from its high of \$13,400 at the start to finish at \$12,045/t. The outlook is for further weakness, medium-term. Short-term: \$11,000/t-\$12,000/t.**

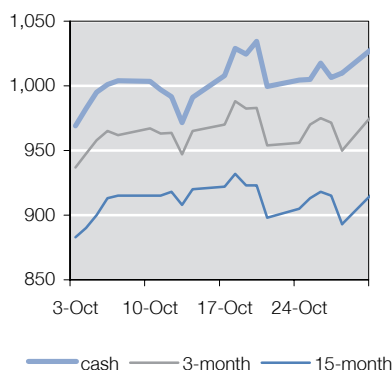
Market data (October unless stated)

Prices (\$/t)	Cash	3-month	15-month	27-month	LME stocks	Tonnes	LME Open Interest (contracts)
Average	12,390	12,419	12,419	11,026	End-Sep	13,206	Nickel 63,977
High	13,415	13,400	13,400	11,625	End-Oct	18,246	
Low	11,550	11,690	11,690	10,535			

Source: London Metal Exchange

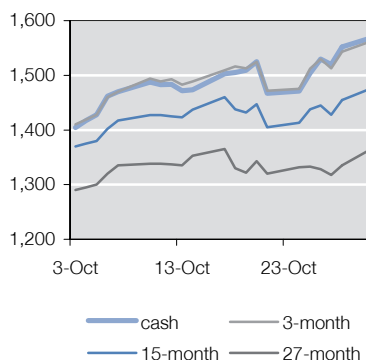
## Lead & Zinc

Lead price (\$/tonne)



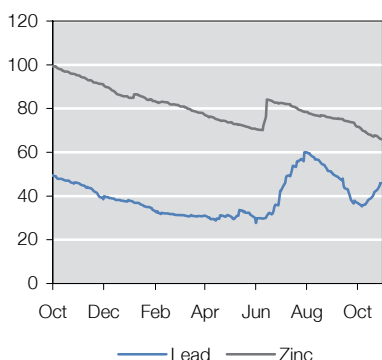
Source: London Metal Exchange

Zinc price (\$/tonne)



Source: London Metal Exchange

Stocks on LME (1<sup>st</sup> Jan. 2004 = 100)



Source: Virtual Metals from LME

### News

- Oct 24<sup>th</sup>: Zinifex’s annual report showed that its main zinc mine, Century, produced 501,480t of contained zinc in the year ending June 30<sup>th</sup>, 2.4% lower than expected, due to the breakdown of a mill. Production overall was 3% lower for the quarter up to the end of September than for the same period in 2004.
- Oct 21<sup>st</sup>: Australia’s CBH resources declared force majeure at its Endeavour lead and zinc mine following an underground collapse. The mine produced 15,392t of zinc and 8,507t of lead in 3Q05.
- Oct 15<sup>th</sup>: Teck Cominco resumes full production at its Trail lead and zinc smelter following the end of an 11 week strike; the new collective agreement at the plant is for three years up to 31<sup>st</sup> May 2008.
- Oct 5<sup>th</sup>: A brief strike at Umicore’s Balen zinc smelter ended, with the company reporting little disruption to its annual 250,000t production.
- Oct 3<sup>rd</sup>: Falconbridge declared force majeure over industrial action at its Kidd Creek zinc plant in Ontario, which has an annual capacity of 150,000t.

### Analysis

- Lead marks time; zinc still looking good

The International Lead and Zinc Study Group (ILZSG) reported world refined zinc production at 6.874 Mt during Jan-Aug, vs. 6.705 Mt for the same period in 2004. Global lead production for the same period was 4.89 Mt, 431,000t more on the 2004 figure. World consumption of zinc was marginally higher in the first eight months of 2005, at 7.098 Mt, against 6.979 Mt for the same period in 2004, implying a deficit of 224,000t, according to the latest figures from the ILZSG. Lead consumption during January-August was 5.010 Mt, against 4.717 Mt during the same months in 2004.

Higher energy costs have made themselves felt on zinc producers this year but, according to Greig Gailey, chief executive officer of Australia’s Zinifex, “prices will more than outweigh any costs pressures we are under.” He forecast zinc prices – about 30% up so far this year on last – would remain high as supplies tightened over the next 18 months. LME stocks have fallen some 200,000t this past year to around 526,000t. Zinifex also cited “increasingly severe shortage of zinc concentrates” as underpinning zinc prices; it expects lead prices to soften but remain above long-term averages. Roger Brain, vice president of Teck Cominco, said global concentrate production will rise in 2006 but will still be “significantly less than demand.”

### Outlook

**Rising stocks depressed prices, keeping the benchmark LME 3-month contract below \$1,000/t. Demand from China is likely to remain buoyant but elsewhere there is little to propel the market higher. Zinc still appears well supported by concentrate shortages, with smelters competing for material.**

**Lead short-term: \$900/t-\$980/t. Zinc short-term: \$1,400/t-\$1,600/t.**

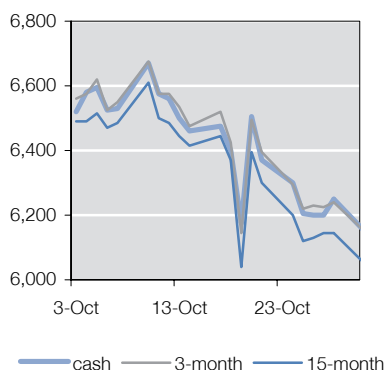
Market data (October unless stated)

Prices (\$/t)	Cash Lead	Cash Zinc	3-month Lead	3-month Zinc	LME stocks		LME Open Interest (contracts)		
					Lead	Zinc	Lead	Zinc	
Average	1,004	1,487	964	1,490.79	End-Sep	39,750	13,206	Lead	78,342
High	1,035	1,570	988	1,564.50	End-Oct	49,400	18,246	Zinc	193,791
Low	969	1,404.5	937	1,410.00					

Source: London Metal Exchange

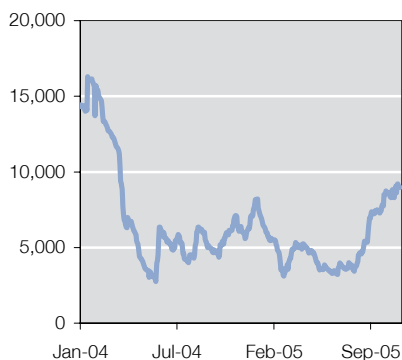
# Tin

## Tin price (\$/tonne)



Source: London Metal Exchange

## Tin stocks (tonnes)



Source: London Metal Exchange

### Quote of the Month

**“Any increase in supply to meet additional demand will probably mainly come from Indonesia”**

**Datuk Dr Mohd Ajib Anuar, president of the Malaysian Chamber of Mines**

## News

- Oct 4<sup>th</sup>: Bluestone Tin, the Tasmanian producer, suspended mining at its Reniston operation, blaming current low prices.

## Analysis

- Low tin prices damp down supply growth forecasts

Malaysia’s tin production will not grow in the next two years, according to Datuk Dr Mohd Ajib Anuar, president of the Malaysian chamber of mines and chief executive of the Malaysia Smelting Corporation. He forecast global demand for tin will grow by 3%-4% annually over the long term, with particular growth likely in electronics and chemicals, especially in China. Malaysia Smelting is to spend \$3m exploring for tin in Bangka, Indonesia and is conducting preliminary assessments of tin potential in Burma. Malaysia’s production this year “will be the same as last year and it will probably be at the same level in the next two years,” he said. Indonesia, the world’s biggest tin producer, plans to maintain its official level of production at an annual 70,000t-80,000t in 2005, against 76,000t for 2004.

Malaysian and Indonesian tin producers have evinced concern at this year’s sliding tin price, down about 30% so far compared with 2004. Bluestone’s decision to suspend its Reniston works for nine months was pinned directly to low prices rendering the plant uncompetitive. Peter Cook, managing director of Bluestone, said the company plans to recommence Reniston at a later date as an integrated project, using ore supplemented from its Mount Bischoff tin project at Waratah, and the establishment of its Rentails Tailings retreatment and downstream tin fumer plant.

Indonesian navy divers discovered a shipload of 600t of refined tin with an estimated value of \$4.7m, which was hijacked in September. The discovery was made off the coast of the island of Bangka, Indonesia’s main tin producing region. PT Koba Tin, the tin’s owner, is now salvaging the load, which is equivalent to about one third of Koba’s monthly product.

## Outlook

**Tin remained depressed in October, drifting steadily lower on the LME; but higher energy prices in Indonesia, which has removed subsidies on industrial fuels, should eventually negatively impact production from the smaller smelters. If Chinese demand can continue to grow at an anticipated 3% annually, then prices could trend higher towards \$7,000/t in the medium-term, but China could equally turn to exporting its own metal in the longer-term.**

**Short-term: \$6,000/t-\$6,700/t.**

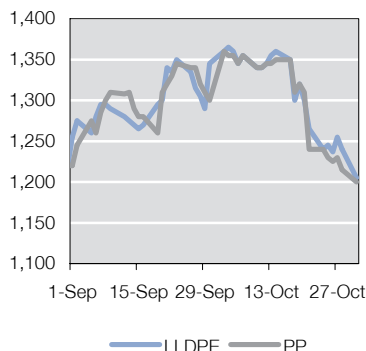
### Market data (October unless stated)

Prices (\$/t)	Cash	3-month	15-month	LME stocks	Tonnes	LME Open Interest (contracts)
Average	6,416	6,429	6,345	End-Sep	8,530	Tin 20,465
High	6,670	6,675	6,610	End-Oct	8,975	
Low	6,150	6,145	6,040			

Source: London Metal Exchange

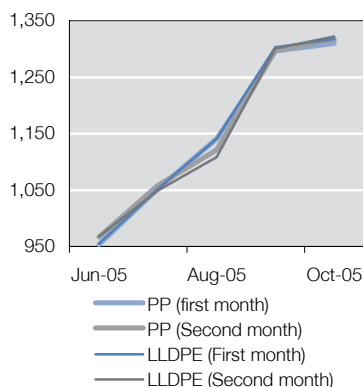
## Plastics

**Plastics prices, 3-month contract, LME (\$/tonne)**



Source: Virtual Metals from LME

**Volume traded, 3-month contract, LME (contracts/day)**



Source: London Metal Exchange

**Market data (October unless stated)**

Prices (\$/tonne)	LLDPE	PP
November	1,315.67	1,310.24
December	1,317.38	1,316.90
January	1,322.38	1,319.17

Source: LME

### Quote of the Month

**“The price increases now being pursued by our businesses should allow us to maintain or improve overall margins”**

**G. E. Merszei, Chief Financial Officer,  
Dow Chemical**

### News

- Oct 28<sup>th</sup>: Dow Chemical reported Q3 profits of \$801m, 26% higher than the same period in 2004.
- Oct 27<sup>th</sup>: Total and Samsung announced expansion of their joint venture petrochemicals plant at Daesan, South Korea, doubling its polypropylene capacity from the current annual 250,000t.
- Oct 24<sup>th</sup>: Ibn Rushd, the polyester feedstock and aromatics producer subsidiary of Sabic, is to expand its Yanbu polyethylene plant from its current 70,000t annual capacity to 300,000t in response to growing global demand for packaging. The additional capacity is due to come onstream in Q2 2007.

### Analysis

- Surge in volumes traded on LME

October saw substantial price rises across the board for thermoplastics, in the order of 20% over those for September, in west Europe, as supply tightness and further feedstock cost increases gave producers the upper hand. The strong upward trend on producer prices so far this year was testified to by Dow Chemical’s Q3 results, which revealed that its Performance Plastics division saw profits for the quarter up by 144% to \$580m, on sales 22% higher, at \$2.9bn. Dow said that demand for all plastics continued to be strong, and despite higher feedstock prices, margins remained firm.

There was a sudden surge in plastics trading on the LME according to LME statistics; 19<sup>th</sup> October saw 55,000t of PP traded, following 41,000t of PP and 20,000t of LLDPE traded the previous week. This was quite a jump; in the whole of September 45,000t of PP and 29,000t of LLDPE were traded. In the context of high prices, which look like they could be continuing into 2006 as a consequence of higher feedstock prices, it appears that some end-users are beginning to hedge their material costs into next year.

The French Assembly unanimously voted in favour of a new law which bans the sale and distribution of all plastic bags and plastics packaging from 2010, unless they are biodegradable. The legislation has now to go to the French Senate. German plastics packaging trade association Industrierverband Kunststoffverpackung (IK) said the proposed French ban would be illegal under the EU Packaging Directive 94/62; this rules out any ban on packaging which meets the Directive’s requirements.

Consumption of polyethylene will grow by 6%-7% in 2005 in west Europe this year, totalling 2.5 Mt, according to John Hodgkinson, senior consultant with plastics industry analysts CMAI. Growth in 2004 was 3%-4%. During 2005-2010, CMAI expects annual growth of 5%.

### Outlook

**Bigger volumes in LME contracts is welcome news for the exchange and could indicate a corner turned.**

**Short-term (November contract): LLDPE >\$1,300/t, PP >1,300/t.**

### Market Data

Volumes (Sep)	Open Interest (contracts) (end-Oct)			
	LLDPE	PP	LLDPE	PP
Daily average	57	87	714	1,530

Source: London Metal Exchange

## Indices

### Precious and base metal prices

(1999 Avg.=base 100) 31 <sup>st</sup> October 2005	Change from						
	Current	1 M	1 Yr	5 Yr			
Gold (spot)	169	-1% ↓	170	12% ↑	151	74% ↑	97
Silver (spot)	149	3% ↑	144	9% ↑	136	61% ↑	93
Platinum (spot)	248	3% ↑	241	11% ↑	223	61% ↑	154
Palladium (spot)	63	16% ↑	54	3% ↑	61	-70% ↓	207
Aluminium (cash)	146	7% ↑	136	9% ↑	134	33% ↑	110
Aluminium (3m)	143	6% ↑	135	11% ↑	128	31% ↑	109
Aluminium (15m)	130	3% ↑	127	12% ↑	117	22% ↑	107
Aluminium (27m)	123	2% ↑	121	12% ↑	110	19% ↑	104
Copper (cash)	260	4% ↑	251	36% ↑	191	115% ↑	121
Copper (3m)	245	3% ↑	237	35% ↑	181	105% ↑	119
Copper (15m)	195	3% ↑	190	34% ↑	146	73% ↑	112
Copper (27m)	170	2% ↑	166	31% ↑	130	59% ↑	107
Nickel (cash)	198	-12% ↓	225	-17% ↓	239	55% ↑	128
Nickel (3m)	198	-12% ↓	225	-16% ↓	237	64% ↑	121
Nickel (15m)	203	-7% ↓	218	-15% ↓	240	82% ↑	112
Nickel (27m)	192	-7% ↓	207	6% ↑	181	82% ↑	105
Zinc (cash)	146	11% ↑	131	48% ↑	99	43% ↑	102
Zinc (3m)	143	11% ↑	129	45% ↑	99	42% ↑	101
Zinc (15m)	135	8% ↑	125	34% ↑	101	32% ↑	102
Zinc (27m)	125	7% ↑	117	25% ↑	100	24% ↑	101
Lead (cash)	205	6% ↑	194	11% ↑	185	112% ↑	97
Lead (3m)	192	4% ↑	184	10% ↑	175	99% ↑	97
Lead (15m)	174	4% ↑	167	17% ↑	149	80% ↑	96
Tin (cash)	114	-6% ↓	122	-32% ↓	167	16% ↑	98
Tin (3m)	114	-7% ↓	122	-31% ↓	165	15% ↑	98
Tin (15m)	112	-7% ↓	120	-28% ↓	156	12% ↑	100

### LME base metals stocks

(1999 Avg.=base 100) 31 <sup>st</sup> October 2005	Change from						
	Current	1 M	1 Yr	5 Yr			
Aluminium	63	-3% ↓	66	-29% ↓	89	50% ↑	42
Aluminium Alloy	78	6% ↑	74	31% ↑	60	-40% ↓	131
Copper	8	-25% ↓	11	-29% ↓	12	-84% ↓	50
Lead	36	24% ↑	29	0%	37	-65% ↓	104
Nickel	34	38% ↑	24	29% ↑	26	56% ↑	21
Tin	97	5% ↑	92	60% ↑	60	-22% ↓	124
Zinc	165	-8% ↓	180	-31% ↓	239	126% ↑	73

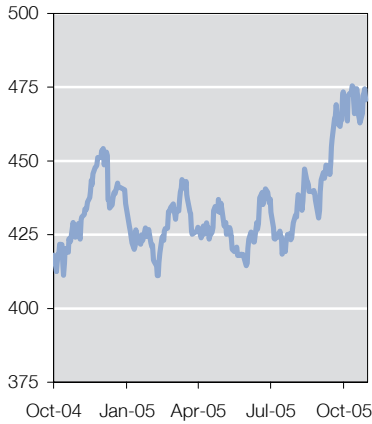
### USD exchange rates

(1999 Avg.=base 100) 31 <sup>st</sup> October 2005	Change from						
	Current	1 M	1 Yr	5 Yr			
European euro	89	1% ↑	88	4% ↑	85	-29% ↓	125
Canadian dollar	79	2% ↑	78	-5% ↓	84	-22% ↓	102
Great British pound	91	0%	91	2% ↑	90	-18% ↓	112
Japanese yen	102	3% ↑	100	7% ↑	96	7% ↑	95
South African rand	110	6% ↑	104	5% ↑	104	-10% ↓	122
Australian dollar	86	2% ↑	84	-2% ↓	88	-29% ↓	122

Source: Virtual Metals & London Metal Exchange

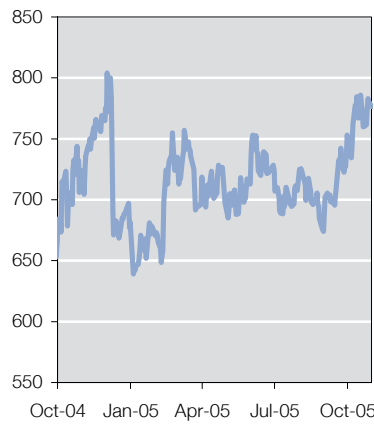
# Prices

**Gold (\$/oz)**



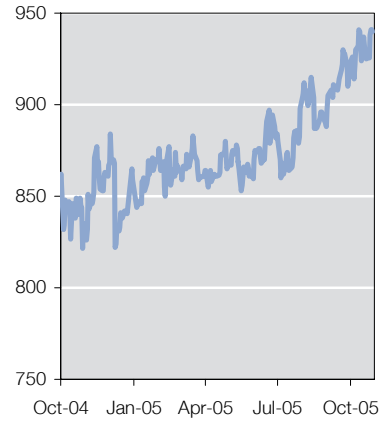
Source: London Bullion Market Association

**Silver (cents/oz)**



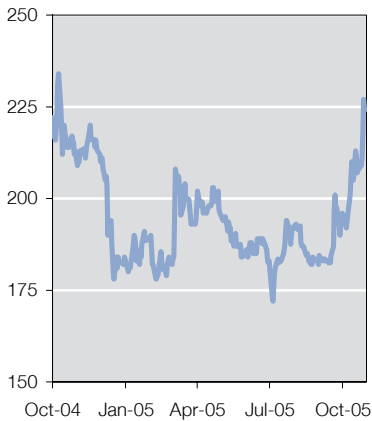
Source: London Bullion Market Association

**Platinum (\$/oz)**



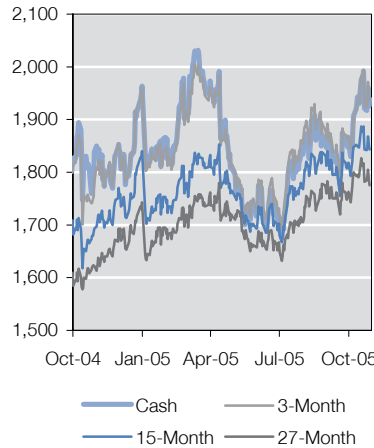
Source: London Platinum & Palladium Market

**Palladium (\$/oz)**



Source: London Platinum & Palladium Market

**Aluminium (\$/tonne)**



Source: London Metal Exchange

**Copper (\$/tonne)**



Source: London Metal Exchange

**Nickel (\$/tonne)**



Source: London Metal Exchange

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



Source: London Metal Exchange

**Tin (\$/tonne)**



Source: London Metal Exchange

# Notes

# Notes

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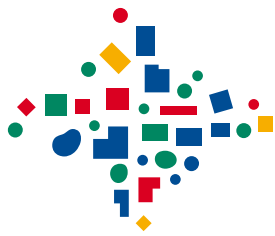
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Solid partners, flexible solutions

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In its home market, the Benelux countries, Fortis occupies a leading position which it aims to develop and bolster. Fortis is drawing on the expertise it has acquired in its home market to realise its European ambitions via growth platforms. Fortis also operates successfully worldwide in selected activities. In specific countries in Europe and Asia it effectively exploits its know-how and experience in bancassurance.

Sustainable economic growth and social responsibility are important considerations for the way in which Fortis operates.

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Fortis is listed on the exchanges of Amsterdam, Brussels and Luxembourg and has a sponsored ADR programme in the United States.

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