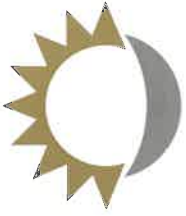


Alchemist

The London Bullion Market Association

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LBMA







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*Relic of the California Gold Rush
One of a number of bars recovered from
the wreck of the SS Central America.
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LEADING FINANCIERS OF MINING PROJECTS

 <p>RANGER MINERALS NL Abooso Goldfields</p> <p>The undersigned acted as Joint Arranger of the US\$70 million project financing for the 290,000 oz per annum gold project in Ghana. Barclays jointly co-ordinated and implemented a 952,000 oz gold hedge.</p> <p>Barclays Capital GHANA</p>	 <p>ASHANTI GOLDFIELDS Ashanti</p> <p>The undersigned acted as Arranger and Provider for US\$50 million of acquisition finance to Ashanti in its takeover of Samax Gold Inc. Barclays Capital acted as Senior Co-Arranger and Technical Bank in Ashanti's enlarged US\$270 million Corporate Revolving Credit Facility.</p> <p>Barclays Capital GHANA</p>	 <p>SAMAX Golden Pride</p> <p>The undersigned acted as Sole Arranger to finance Resolute Limited/Samax Gold Inc.'s 130,000 oz per annum Golden Pride project in Tanzania. The financing benefits from a medium term hedge programme.</p> <p>Barclays Capital TANZANIA</p>
 <p>STILLWATER Nye/East Boulder Projects</p> <p>The undersigned acted as Documentation Agent for the US\$175 million corporate and project finance credit facility. The funds will be used to expand the existing Nye operation and for the development of the East Boulder project, both located in Montana. Stillwater is the only significant producer of platinum group metals in the Americas.</p> <p>Barclays Capital USA</p>	 <p>AGNICO EAGLE MINES LIMITED Agnico-Eagle Mines Limited</p> <p>The undersigned acted as Co-Lead Arranger and Underwriter of the US\$100 million senior secured credit facility for the expansion of the La Ronde Mine in Quebec.</p> <p>Barclays Capital CANADA</p>	 <p>BOLIVAR GOLDFIELDS LTD. Bolivar</p> <p>The undersigned acted as Arranger and Metals Hedging Co-ordinator of the US\$20 million financing for the acquisition of the Revemin processing plant and the development of the Tomi gold deposit.</p> <p>Barclays Capital VENEZUELA</p>

Project Finance Magazine 1998 Deal of the Year (Golden Pride).
Mining Finance Magazine - Ranked First in Mining Sector Non-Recourse Loans, 1998 - March 1999
Project Finance Magazine 1999 Deal of the Year (Antamina).

Contact: Gerard Holden, Barclays Capital Tel +44 (0)20 7773 0336 Fax +44 (0)20 7773 0402

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The Global Market Gathers in Dubai Precious Metals Conference 2000

Dealers. Refiners. Central bankers. Fabricators. By early February, some 250 delegates from across market sectors and from around the world had registered for the Association's first precious metals conference, to be held at the Jumeirah Beach Hotel in Dubai.



The programme includes presentations from 27 invited speakers focussing on Bullion Banking; the Role of the Official Sector; Mining; Physical Demand; and Marketing of Jewellery. The second afternoon of the Conference is devoted to three parallel workshops: Demand in India; the Prospects for E-Commerce in Precious Metals and Jewellery; and the Impact of the Rules on Hedge Accounting Published by the U.S. Financial Accounting Standards Board.

It is the first major event which the LBMA has organised outside the UK and reflects the growing international element in its activities. Delegates attending will receive information about the new category of membership – International Associate – introduced in January this year.

Highlighting the importance of the precious metals market to the economy of Dubai, His Highness General Sheikh Mohammed Bin Rashid Al Maktoum, Crown Prince of Dubai and UAE Defence Minister, graciously agreed to inaugurate the Conference. Following the opening ceremony, Timothy Green will give the keynote address, "Launching Gold into the 21st Century".

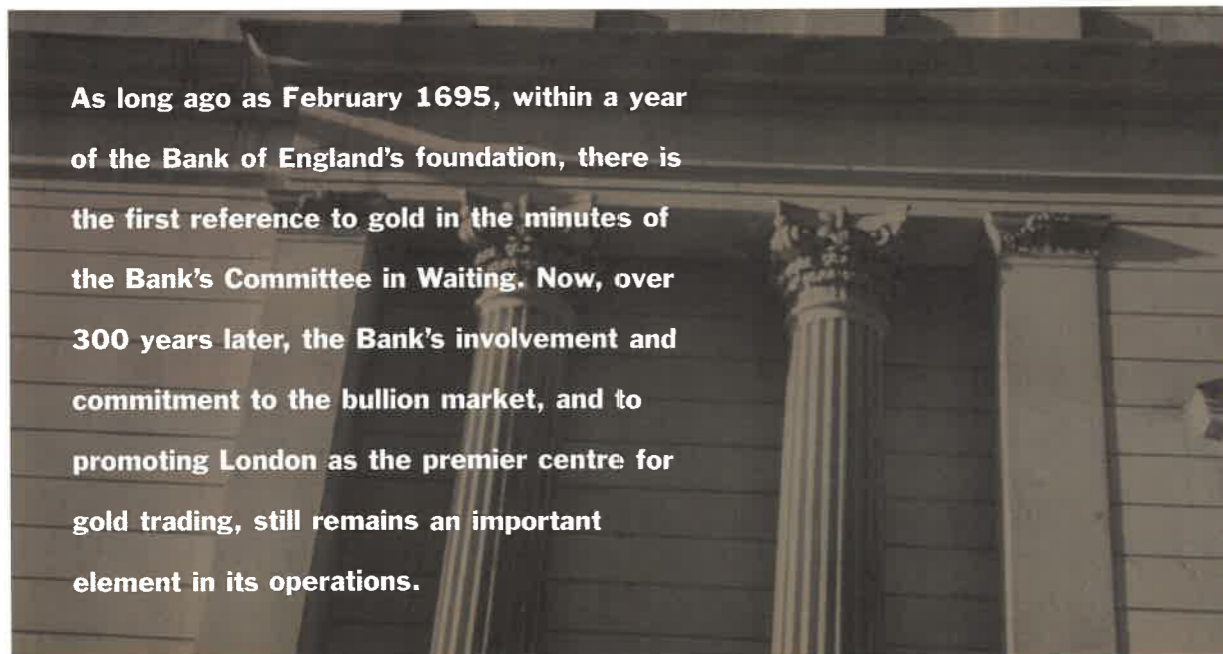
The Dubai Gold and Jewellery Group, a representative body of 360 gold and jewellery traders, is hosting a cocktail party for all delegates at the start of the Conference. At the close of the programme on the first day, they are also sponsoring a visit to the local gold souk, which has generated considerable interest. As part of the Conference, shipping companies, including LBMA members as well as local Dubai operations, are staging an exhibition of their services. After the Conference finishes, many of the participants and their accompanying partners will stay behind for an evening barbecue at a Bedouin desert encampment.

LBMA Chairman Martin Stokes indicated his satisfaction with the numbers and range of delegates attending. "I am very pleased to have such an excellent representation from the physical market – namely the companies that distribute and fabricate gold in the Middle East, India and further afield in Asia. And I am particularly happy to see delegates from as far away as the Central Asian Republics of the CIS and China. When we were beginning to organise this event last year, it was by no means clear that we would be able to attract a large and high-quality audience to Dubai. But, having put together a most interesting and innovative programme and having found an excellent venue, the response from around the world has certainly exceeded our expectations. Looking ahead, we are now planning next year's event. Based on the successful model that we adopted for Dubai, this will probably take place in a jewellery fabricating area, with the likely date being sometime in the late spring or early summer."



As Safe as the Bank of England

By Nick Durey, Bullion Manager, Bank of England



As long ago as February 1695, within a year of the Bank of England's foundation, there is the first reference to gold in the minutes of the Bank's Committee in Waiting. Now, over 300 years later, the Bank's involvement and commitment to the bullion market, and to promoting London as the premier centre for gold trading, still remains an important element in its operations.

The Bank's involvement with gold is multifarious. We maintain gold storage accounts for member firms of the London Bullion Market Association, as well as similar accounts for many overseas central banks. It is this mixture of private and public-sector participants in the gold market that has led to the Bank's current pivotal role as a settlement agent.

Overseas central banks began to hold gold in safe custody at the Bank in the first few decades of the twentieth century – drawn no doubt by the adage “as safe as the Bank of England”. At that time, many of these banks were constrained by their internal legislation from releasing ownership of the specific gold bars held as part of their reserves. To facilitate this requirement, the Bank instituted allocated accounts and, with the exception of a few years during and shortly after the Second World War, has continued to act solely on this basis to this day.

This allocated system requires us to mark each individual bar with a unique identifying number. To this end we utilise a custom-built machine that uses over four tonnes of compressed air pressure to indent the relevant number onto the bar. This machine is in fact the last remaining element of an experiment inaugurated some 20 years ago with the intention of automating the unloading of gold bars delivered to the Bank. This took the form of a conveyor belt designed to protrude through a window in the Bank's bullion area out to the delivery vans parked within the confines of the Bank. A worthy effort and, although not quite on a par with a Heath Robinson machine, unfortunately soon found to be impracticable. Gold clearly deserves the human touch!

This historical relationship with so many overseas customers has led not just to the Bank being the largest physical depository of gold bars in the UK, but also to our holding a tremendous variety of different “branded” bars. At the last count, we have examples of bars from over 50 separate melters worldwide – from Johnson Matthey to the Rand Refinery and from the Perth Mint to the Royal Canadian Mint – with all stops in between. The oldest example currently held bears a date of 1890. In addition, we hold a number of bars of historical interest, including examples salvaged from both the wreck of HMS Edinburgh, sunk in the Barents Sea 200 miles from Murmansk in 1942, and from the wreck of the SS Fort Stikline. The latter was destroyed in Bombay Harbour in April 1944 in what has been described as the largest single explosion of the Second World War, apart from the atomic bombs.

The large number of bars in safe custody means we have to devote a considerable amount of space to their safekeeping. Currently, gold occupies over 35,000 square feet of storage space at the Bank, the equivalent of approximately 18 tennis courts. We are “inconvenienced” by the City of London being built on foundations of London clay. As such, we need to spread the considerable load of the gold perhaps more thinly than in other centres. But this is successfully accomplished and those who have waited hopefully below Threadneedle Street in the London Underground system have therefore waited in vain!

But the physical storage and handling of gold is only one of the many strings to our golden bow. Every day, many transactions pass across the gold accounts maintained here at the Bank, resulting in

bars being transferred between account holders. However, such transfers are settled without any physical movement of bars in the vault areas – rather, these transactions are recorded and settled using a computerised book-entry transfer settlement system written specifically for us by our own in-house IT personnel.

This system also doubles as a stock-control package, enabling us to identify individual ownership of any specific bar at any one time, as well as allowing us to track the exact location of each separate bar at any moment (not that we would ever have lost a bar without this package). We are also able to use the same system to produce, in a very prompt fashion, specific allocations of gold for any of our customers, a facility for which there is no charge.

Lastly, in addition to this ‘back-office’ role of settling many of the transactions done here in the London market, the Bank has an active ‘front-office’ role, participating itself in some of these transactions. Not only does the Bank manage the UK's gold auctions on behalf of HM Treasury, but it is also involved in the gold market on a day-to-day basis – lending gold not just on behalf of HM Treasury but also as agent for some overseas central bank customers. As a result, many of those active in the gold market are familiar faces here at Threadneedle Street – and we expect them to continue to be so even after the UK's gold sales are complete.

As we enter the third millenium, the Bank sees its participation and involvement with the gold market continuing to evolve. We look forward to continuing our close relationships with the London Bullion Market Association, its member firms and our overseas central bank customers, and to helping maintain London's premier position in the bullion world. As Joyce Cary noted, the path to hell is paved with good intentions, but that to heaven goes in for more. Solid gold. ■

Nick Durey

Nick Durey joined the Bank of England in 1971 and spent several years in the Bank's Exchange Control Department. A period in the Bank's Economic Intelligence Department followed, before a spell of some seven years in the Bank's Internal Audit Division where he was an Audit Manager (it was here that he first learnt how to count gold bars). He joined the Market Services area of the Bank in 1990. He has been the Bank's Bullion Manager, with responsibility for bullion settlement and custody, for the past five years.



Gold Rollercoaster

An overview of the gold market in 1999

By Gold Fields Mineral Services

1999 was a year of both hope and despair for those looking for an end to the bear market that has gripped gold in recent years. The price tumbled towards \$250/oz, recording a 20-year low in July, before making a remarkable comeback in October. However, as in 1998, gold's decline was only temporarily reversed, with the price rally in 1999 being based largely on short covering rather than new money coming in.

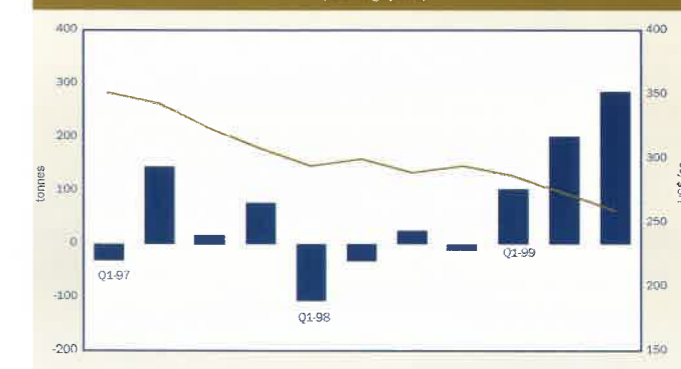
Despair prevailed in July as gold prices dipped to an historic low of \$252.80/oz. Throughout the first nine months, market sentiment was deeply negative with a sequence of announcements confirming the market's fears about official sector supply. Heavy sales from this source, coupled with extensive "defensive" hedging from producers, kept the price under severe pressure, particularly in the third quarter. A modest recovery in the price was underpinned by the successful campaign against the original IMF gold sales proposal, and the strength of demand at the second UK auction. Hope rose at the end of September as the price surged in the wake of the European Agreement on Gold, setting a limit on sales and lending from the 15 signatory countries over the next five years. The powerful price rally that followed took the price to a high of \$325.50/oz in October, prompting some to declare a new era for gold. However, this was not to be: the price rapidly fell back below \$300/oz by the end of October.

It seems that gold's journey into the \$320s in October was a classic example of a market overshooting on the upside, just as it probably undershot on the downside earlier in the year when gold was in the \$250s. That the price was unsustainable much above \$300 was clear from, firstly, the collapse of physical demand and, secondly, the absence of any real investor buying interest, with the large swing to net investment in the second half essentially reflecting short covering by funds and dealers.

Supply

Mobilisation of gold by producers and central banks dominated the supply side in 1999. Concern that central bank supply might swamp the market and send the price lower contributed to unprecedented volumes of producer hedging in the first nine months of the year (producers had added 590 tonnes to their forward sales positions by the end of September; see Figure 1). The announcement of the European Agreement on Gold on 26 September resulted in a dramatic improvement in sentiment, reflected in an impressive price rally. Paradoxically, the unexpected sharp increase in price triggered a crisis for several hedged producers. Perceptions of an improved outlook for gold prompted widespread restructuring of hedge books and buying back of previously established positions during the last three months.

Figure 1 Net Impact of Forward Selling on Bullion Market (excluding options)



As for the official sector, its impact on the price was not limited to the effect that announcements, both positive and negative, had on market sentiment. GFMS research indicates that 1999 witnessed a high level of official sector sales from various countries (the Summary Table gives an estimate of net sales of 441 tonnes in 1999, almost 90% of them in the second half). Whilst some of these



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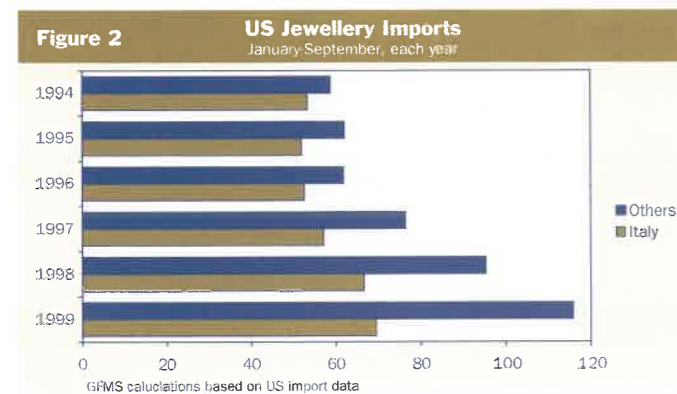
transactions were publicly disclosed – for example, the three auctions by the UK Treasury, the ongoing reductions in Canada's gold holdings and sales by the Netherlands central bank – in several other cases sales were made with no announcement either before or after the event. These transactions are unlikely to be ever reflected in official statistics).

Mine production increased by 1% last year, even with prices at historic lows, although the growth rate slowed during the second half. Such growth as there was came from a handful of very large-scale, low-cost mines in countries such as Peru, Indonesia and Argentina, while the mining sectors of the "Big Four" producing countries – South Africa, the United States, Australia and Canada – all contracted. Production costs remained low during 1999: reported total cash costs averaged \$197/oz in the first nine months. Following on the record levels of scrapped gold in 1998, in the wake of the currency collapse in several East Asian countries, the summary table shows that last year global scrap supply fell back to normal levels, totalling 624 tonnes (468 tonnes less than in 1998).

Demand

Last year's 1.4% fall in fabrication was entirely due to a 2.8% decline in jewellery demand, which more than offset robust growth in coins and electronics.

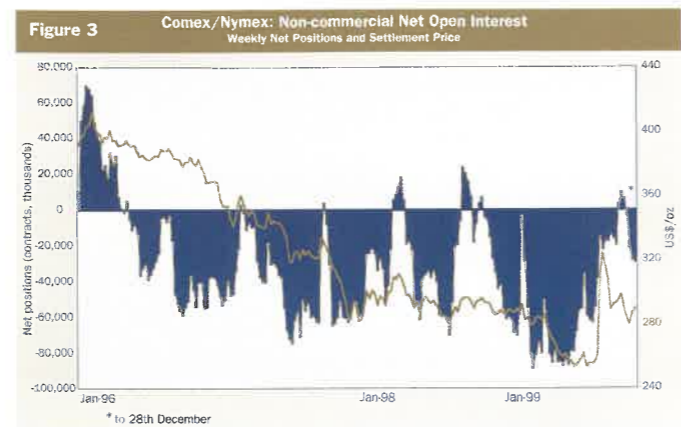
In spite of the average dollar price falling 5% year-on-year to a new 20-year low, jewellery demand in some of the largest consuming regions was poor. Part of the decline can be attributed to the price spike in October, but other forces, including low oil prices over the past few years and rising competition from, for example, gemset jewellery, also played a role. The Indian sub-continent and the Middle East both recorded similar-sized falls in absolute (of over 70 tonnes) and percentage (over 10%) terms, whilst jewellery fabrication in China fell by a more modest 6%, or 10 tonnes.



Output of jewellery in Europe was adversely affected by lower Italian production for export and the home market.

A strong recovery in East Asian demand partly offset some of the above-mentioned declines. Indonesia, Thailand and Korea all recovered markedly in 1999, helping to push up East Asian fabrication by over 20%, or close to 100 tonnes. North American fabrication also rose strongly, by no less than 8% year-on-year. GFMS' initial projections indicate that US jewellery consumption

increased to almost 400 tonnes in 1999, with official imports increasing around 11%. The graph shows that US jewellery imports from January to September were up modestly last year in the case of Italy (around 4% year-on-year) whereas they soared from the rest of the world (up 21% year-on-year).



Significant growth occurred in other areas of gold demand. Bar-hoarding demand increased by over 80% to over 200 tonnes in 1999 (see Summary Table). Growth in East Asian hoarding demand (which moved from dishoarding in 1998 back to net hoarding in 1999) more than offset the sharp falls in the Indian sub-continent and China. Coin fabrication rose by 8% in 1999, whilst gold use in electronics rose by over 9% year-on-year, driven by strong demand in both East Asia and North America.

The Summary Table shows implied net investment totalling an estimated 203 tonnes in 1999. Captured in this annual number is implied net disinvestment of 126 tonnes in the first half, due mainly to short selling, and net investment of 328 tonnes in the second half, principally the result of an even greater amount of short covering. Most of this short covering took place during the price rally in late September and October (see Figure 3).

Outlook

Although the European Agreement on Gold may well lend support to the price in the medium term, this is unlikely to be the case in the first half of 2000. GFMS forecast around 229 tonnes of official sector sales during this period, largely coming from Europe. In addition, it is unlikely that the agreed lending cap will have much bearing this year due to fresh supply from non-signatories to the agreement, which should keep lease rates low. GFMS do not, however, expect producers to take full advantage of the high contango that should result. Net hedging will probably contribute only a small amount of new supply in the first half as both producers and their lenders will be disinclined to see hedge books aggressively increase after last year's experience. On the other hand, the attractive contango should encourage renewed short selling and disinvestment. Modest increases in both scrap and mine production are expected, with any overall decline in the latter probably set to occur next year rather than in 2000.

Looking at the other side of the equation, GFMS predict that the price will find support from physical demand, especially at the bottom end of their forecast range. However, a strong rise in jewellery demand will be partially offset by lower production of

price will find support from physical demand, especially at the bottom end of their forecast range. However, a strong rise in jewellery demand will be partially offset by lower production of bullion coins and medals, limiting the growth in total fabrication to a respectable 3.6% year-on-year in the first half. Finally, little change in bar-hoarding demand is expected unless the price moves outside the forecast range.

Considering these supply/demand components in the light of last year's rally, there seems to be little justification for the price to trade much above the \$300 level in the first half. Gold's downside potential is also rather lower than was the case in the second half of 1999. GFMS therefore predict the price to trade within a \$265-\$305 range in the first six months of 2000, with a forecast average for the period of \$280/oz. ■

This article has been compiled from Gold 1999 – Update II, which was published on 12 January. Copies can be ordered from Gold Fields Mineral Services tel: +(44) 0207 539 7820 fax: +(44) 0207 539 7818 email: gold@gfms.co.uk.

Summary-World Gold Supply & Demand

(in tonnes)	1998	1999E	y-o-y %
Supply			
Mine Production	2,542	2,569	1.1%
Official sector sales	375	441	17.6%
Old gold scrap	1,092	624	-42.9%
Net producer hedging	88	445	405.2%
TOTAL SUPPLY	4,097	4,078	-0.5%
Demand			
Fabrication	3,725	3,672	-1.4%
Bar hoarding	113	203	80.5%
Net implied investment	260	203	-21.9%
TOTAL DEMAND	4,097	4,078	-0.5%

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Capital Accord

Implications for Precious Metals

By Julian Cathrew, Director of Credit Exposure Management, Credit Suisse First Boston

Designed to ensure that banks and other financial institutions maintain sufficient capital relative to the risks associated with their portfolios, the Basle Committee Capital Accord has been in place for roughly a decade. The original framework was developed in the 1980s using a building block approach, whereby the amount of capital is measured against a sum of the risk-weighted assets – the ratio of capital to risk-weighted assets to be maintained above a minimum ratio of 8%. The framework has been under constant evolution and now encompasses market risk as well as the original credit risk component.

In this article our aim is to explain the important facets of the capital requirements and highlight key calculations in the framework. We consider the basic capital requirements of a lending transaction and the implications of a more complex portfolio of short-term FX derivatives and a longer-term hedge transaction.

Credit risk of a loan

A loan transaction is generally a hold-to-maturity asset, and as such the capital requirement is described as a banking book requirement. This treatment is different to trading book assets, which are deemed to be liquid tradable instruments where the risks are managed on a mark-to-market (MTM) basis. The capital required is the nominal multiplied by the counterparty weighting multiplied by the FI's particular capital ratio. Therefore for a gold loan of 10,000 ounces to a corporate where the FI's capital ratio is 8%:

$$\begin{aligned} \text{Capital} &= \text{Loan Nominal} * \text{Counterparty weighting} \\ &\quad * \text{BIS capital ratio} \\ &= 10,000 * 285 * 100\% * 8\% = \$228,000 \end{aligned}$$

In summary, the FI must maintain capital above \$228,000 to maintain its capital adequacy ratio above 8%. The framework prescribes a building-block approach such that each transaction in the loan portfolio requires its own capital. Any return on capital employed for a transaction can be measured relative to the amount of capital required.

Credit risk of a portfolio of derivatives

For an off-balance sheet or trading book asset such as an FX derivative, the calculation is somewhat more complex and is dependent on two variables. The first is the MTM of the transaction and the second is an add-on factor. This add-on is added to the MTM to take into account the potential future exposure of the transaction. For a gold FX trade where the FI receives 10,000 ounces for US dollars two years forward from a FI counterparty where the current MTM is \$1m:

$$\begin{aligned} \text{Capital} &= ((\text{Add-on} * \text{Notional}) + \text{MTM}) * \text{counterparty} \\ &\quad \text{weighting} * \text{BIS capital ratio} \\ &= ((10,000 * 285 * 5\%) + 1,000,000) * 20\% * 8\% \\ &= \$18,280 \end{aligned}$$

The add-on applied to the notional of a transaction is dependent on the type of precious metal and the residual maturity of the transaction.

From the table below we can see that as the residual maturity drops below one year the add-on decreases substantially (since the potential exposure is deemed to have reduced). For comparison we have included the add-ons for equity and interest rate products.

For a portfolio of derivatives the calculation is additive for the MTM element but cumulative for the add-on. This is to say that where we have an appropriate netting agreement with a counterparty, we can sum the MTM of each transaction to that counterparty. However the add-on is cumulative by transaction. This is a generally deemed

Residual Maturity (years)	FX (inc Gold)	Precious Metals	Commodities	Equity & Credit	Interest Rate
< = 1	1%	7%	10%	6%	0%
1-5	5%	7%	12%	8%	0.5%
.5	7.5%	8%	15%	10%	1.5%

to be conservative and the UK FSA does give a dispensation on the cumulative effect of add-ons because of the natural off-set within a portfolio of derivatives:

$$\text{Add-on net} = 40\% \text{ Add-on Gross} + 60\% * \text{NGR} * \text{Add-on Gross}$$

NGR is described as the ratio of the net MTM of the portfolio to the gross MTM. The gross MTM is the simple sum of the trades with positive MTM.

Using the building block approach, the amount of capital required for a portfolio of derivatives comprises the MTM element plus the add-on element multiplied by the counterparty weighting, which is then multiplied by the capital ratio. Each counterparty therefore requires a certain portion of regulatory capital to support the credit risk.

Credit risk of a long-term hedge transaction

Since the normal gold forward curve is upward sloping, we can derive that on a forward basis the MTM of a long-term hedge transaction will be positive if we actually reach the forward rate. At the inception of a long-term transaction we can therefore estimate the cost of capital for a transaction within certain parameters. It is also very important to evaluate the stressed exposure of a transaction to a given level of confidence not only to evaluate the potential credit risk, but also to evaluate the potential return on capital of a transaction.

Market risk

The second additive element of capital required to support a portfolio of precious metal transactions is the market risk. The regulator of a complex FI will review the risk management and value at risk (VAR) models used to manage the market risk of the portfolio. Where a regulator is comfortable with the FI's

approach to risk management and the actual application of the models, the amount of capital required is set in relation to the output of the internal models. Therefore the amount of capital needed to support the market risk is specific to the FI and the types of risks managed.

Conclusion

The capital requirement of a precious metal portfolio is complex and very sensitive to the prevailing market rates of the metal and interest rates. These rates drive the MTM that is the major component of the credit risk capital requirement. Given the variability of the add-on and the scope for the mark-to-market movements over time, the capital requirement is also sensitive to tenor and notional.

From a credit risk perspective, the importance of having a strong ISDA master agreement should also be emphasised. These netting agreements are essential in credit risk management and also lead to efficient capital management where netting is enforceable. We would also add that the framework is evolving and as such is planned to encompass a requirement for operational risk in the future. ■

Julian Cathrew has worked in CSFB since June 1990, starting in Financial Control and then working in the accounting and regulatory departments in London under the FSA UK regulatory regime. He was promoted to be in charge of the Regulatory Reporting to the Bank of England for four years before moving to Credit Risk Management in 1996, where he manages a specialist team responsible for the management of specific credit exposures that require risk mitigation techniques to reduce exposure.



Golden Menagerie Brought to Book

The Industry Catalogue of Gold Bullion Coins

Panda . . . Lion . . . Eagle . . . Kangaroo . . . Cat . . . Like a golden-age Noah filling a fact-packed galleon, Nigel Desebrock parades these and other leading bullion coins from around the world through 380 pages, 400 photographs, and 200 examples of gold-related ads and brochures in his latest reference book, *The Industry Catalogue of Gold Bullion Coins*. The book, the latest in his continuing series focusing on gold, delivers extensive data on 22 markets for gold coins, gold's tax status in 44 countries – if the question is gold, the answer is probably within these pages. For instance, the Kruggerand: In the Seventies and Eighties the South African Chamber of Mines developed and energetically marketed it not as an end in itself – but as a promotional vehicle to stimulate investment in gold in general. *The Industry Catalogue of Gold Bullion Coins* is available from Grendon International Research Pty Ltd. Tel: (61-8) 9319 2171. Fax: (61-8) 9319 2154. Email: grendon@global.net.au.



The Gold Analysts' Sentiment Index

By Frederick Panizzutti, Vice President – Strategy & Research, MKS Finance SA

In August of last year, MKS Finance launched GASI, a new market index. While a number of banks in the foreign exchange markets compile indexes measuring market sentiment by a consensus reading, such indexes have not been generally available in gold. Until now.

Our idea was to differentiate this index from typical bullish consensus readings – a tool typically used by many contrarian traders. To accomplish that, we decided to gather a consensus of opinions from gold analysts around the world – people with a generally objective view of the market – rather than take views from customers and dealers, who might tend to have more subjective views.

Thanks to the great and kind co-operation of a number of prominent analysts, thereby giving a good representation of trading centres around the world, we have been able to put together what we believe is a useful tool for traders looking to gauge the sentiment of market insiders.

The Gold Analysts Sentiment Index (GASI) is essentially an average derived from figures contributed by 17 gold analysts from a number of the world's leading bullion banks

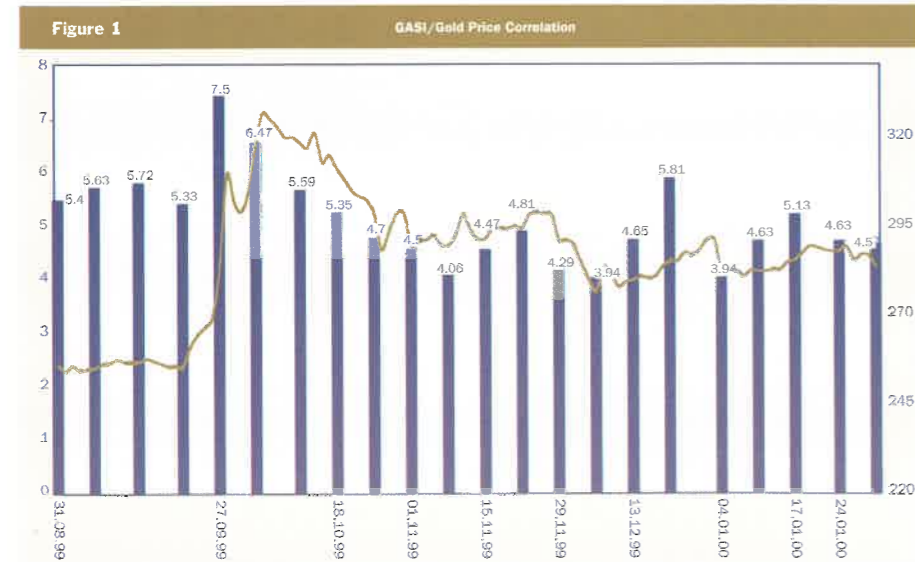
and investment houses as an indication of their price expectations for gold for the week ahead. Every Monday morning the gold analysts express their sentiment for the direction of the gold price through a level from 0 to 10. A reading of 0 indicates an extremely negative assessment; a reading of 10, an extremely positive outlook.

As the survey is relatively new, we are not yet sure whether the index is more useful as a contrarian tool or if in fact there is a more positive correlation. Early indications suggest that, so far, the GASI numbers have a positive correlation to the gold price (see Figure 1).

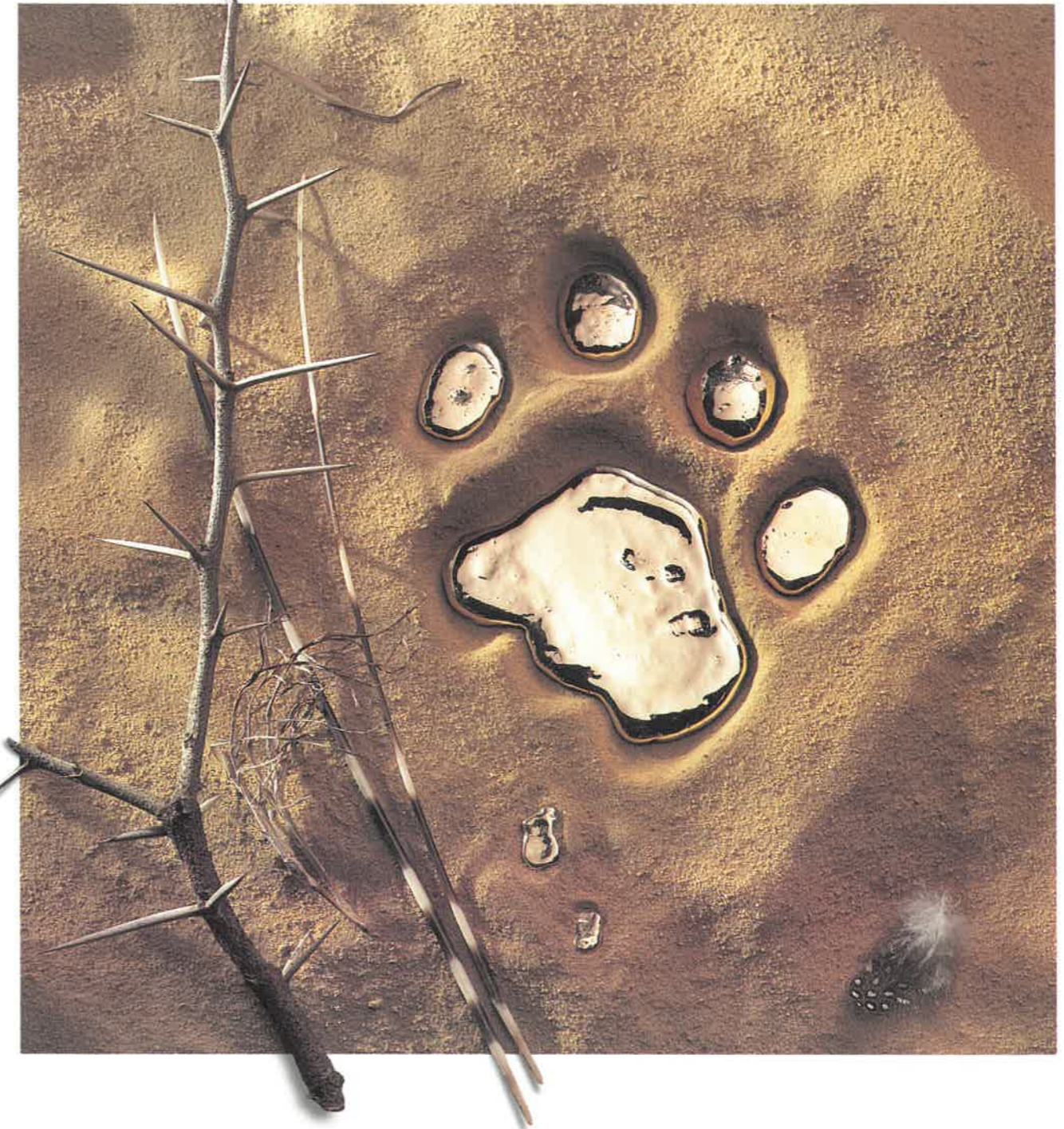
The response so far from market participants has been very positive, and we would like to thank all the contributors to the survey for their assistance in compiling the numbers. ■

Frederick Panizzutti

began his career in the Treasury Division of Sandoz. After leaving Sandoz, he worked at Union Bank of Switzerland in foreign exchange and equities. Three years ago he joined MKS Finance Geneva three years ago as a vice president where he is responsible for research and strategy on a variety of markets, concentrating on gold and other precious metals. Enquiries about GASI may be directed to him by e-mail at fpanizzu@mks.ch.



WE HAVE THE LION'S SHARE OF THE WORLD'S GOLD.



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force in our industry. We believe that finding and extracting the earth's riches is only the beginning of the process. Creating demand and developing new markets is equally important if we're to help make the world a wealthier place. AngloGold. The most lionized name in precious metals.



The Saga of the SS Central America

By David Tripp

September 12, 1857, the SS Central America, a side-wheeler bound from Panama to New York, was swallowed by the North Atlantic in a monstrous hurricane.

The *Central America* had been carrying more than five hundred passengers and crew and three tons of gold mined in northern California when the hurricane struck. Settling to the bottom, some 8,500 feet beneath the swirling waves, she rested for one hundred and thirty years. Her saga is one that contains the elements of a grand drama: treasure, tragedy and boundless heroism.

John Marshall's discovery of a nugget "half the size and shape of a pea" at Sutter's Mill in 1848 profoundly affected the history

of the United States. Waves of eager forty-niners invaded California in the hopes of making their fortunes (some paying as much as \$100 each for a pick, shovel and miner's pan). For the next eight years, more than \$400,000,000 of gold (at 1848 prices) was taken from the Sierra Nevada. Of that, nearly three-quarters was sent East to fuel the nation's growing economy.

In order to transport the gold back east in a timely manner, it was shipped via the Panama Route. The gold was loaded on



Rust streams from the decaying wood of the ship stained some of the bars, which range in size from five ounces to fifty-five pounds.
*All photographs courtesy of Sotheby's



a steamer, which sailed from San Francisco south to Panama City, where the gold was transhipped across the isthmus (first by mule, then from 1855 via railroad), where the passengers and cargo were taken aboard a second steamer for the trip to New York.

The *Central America* had been built in New York under government contract expressly for the purpose of running the Panama Route. Originally called the *George Law*, she made bi-monthly trips for four years. The name was changed in June 1857. Two months later, she made her nineteenth passage under Commander William Herndon. It was to be the final voyage.

Having picked up the cargo and passengers in Aspinwall on the east coast of Panama, she set sail to New York via Havana on 3 September 1857. All was well until the 9th when, a day out of Havana, the weather worsened and a massive hurricane mauled the ship. The survivors' accounts and contemporary newspaper reports of the disaster best describe the events as they unfolded.

"...We passed another fearful day, the vessel rocking and pitching violently."
Virginia Beach, Baltimore American, 22 September 1857

"All hands, passengers and crew were ordered to go to work bail... All of us knew how desperate our situation was..."
Frank Jones, New York Tribune, 19 September 1857

On 12 September 1857 the brig *Marine* was sighted and Captain Herndon sought to save the women and children. The harrowing rescue was a testament to the bravery and selflessness of the men aboard the ship. All the women and all but one of the children were rescued:

"The dangerous, heroic and almost superhuman effort in transferring the women and children in safety to the brig Marine, can scarcely have a parallel."

Dr. Obed Harvey, Mountain Democrat, 14 November 1857.

But the two ships drifted apart. As their fate became apparent the remaining passengers became increasingly restive. Captain Herndon continued to try to calm the terrified mass. But ultimately as the end drew near, he changed into his dress uniform, climbed the paddle box and waited for the inevitable. The human toll was massive – 425 perished and only 153 were saved. It was the worst peacetime maritime disaster in American history.

In addition to the frightful number of dead, the loss of so much gold stunned the financial community, which was attempting to recover from a run on the banks only weeks earlier. The Panic of 1857 ensued. While the *Central America's* foundering played a role, the cargo was fully insured, and the companies paid off in record time to assuage the public's fears.

Although it was not until 130 years later that the ship was recovered, attempts to locate and recover the glittering cargo began within months. The underwriters, who had paid out more than \$1,200,000, aggressively sought ways to recoup their losses – but it was not until 1987 that the treasure was recovered.

Because of the great depth, the recovery, carried out by the Columbus-America Discovery Group, had to be accomplished robotically. A vessel called *Nemo* was developed and attached to the surface by more than two and a half miles of cable. Equipped with television lenses for eyes, it was capable of lifting massive bars of gold (weighing over 75 pounds) as well as individual coins and flakes of



Gold and quartz nugget weighing nearly 17 1/2 ounces. One of, if not the largest nugget recovered from the ship



Ten-Dollar gold pieces. The enormous quantities of gold discovered eventually led to the creation of a Federal Branch Mint in San Francisco in 1854.

help keep the Gold Rush economy moving, as well as some fifty pounds of gold nuggets and dust, in their natural form. But the most remarkable cache of gold recovered was in the form of assay ingots.

These bars, ranging from under 5 ounces to over 75 pounds, were privately produced by five separate assay firms whose names were stamped on the ingots. Blake & Co.; Harris, Marchand & Co.; Henry Hentsch; Justh & Hunter and Kellogg and Humbert are the names of long-gone companies who produced these bars from unrefined gold for shipment back East. Although records of the period indicate that such bars existed, because they were essentially made to be destroyed in a matter of months, their survival aboard the Central America was unprecedented and of the greatest importance.

The sage of the Central America is the stuff of legend, from the tragic tale of so many lives lost to the astonishing recovery of boundless riches.

While the ultimate disposition of the cargo is a matter for the courts to decide, her story is for all to share, and the objects recovered have provided the world with a snapshot in time. ■

of the most remarkable feats in the annals of sea-salvage. And its treasure, one of the most valuable ever recovered.

What was recovered included California Gold Rush gold in every conceivable form. Thousands of twenty dollar gold pieces freshly struck at the San Francisco Mint survived in pristine condition, still packed in their original boxes. Alongside were gold coins struck by private companies to



David Tripp is an independent numismatic consultant, art history, writer and cartoonist. He received his BA in Classical Civilisations from New York University in 1975, and his MA in Archaeology of the Roman Provinces from the Institute of Archaeology at London University a year later. He joined Sotheby's New York in 1973 as director of the Department of Coins and Medals, later adding the Tapestry and Musical Instrument Department to his responsibility. In 1979, Mr Tripp founded Sotheby's Representative Office in Baltimore, leaving in early 1980 to open his own consulting service.

For the past twenty years, he has been privileged to act as the advisor to numerous clients, both private and institutional, including J.P. Morgan, The Estate of Jane Brad Allen, John Hopkins University, and Sotheby's, for whom he serves as Special Consultant.

Mr Tripp has written or advised on the catalogues of some of the most valuable collections of coins ever sold at auction, including The Garrett Collection, The Virgil M. Brand Collection, and The Nelson Bunker Hunt Collection.

He is also a cartoonist whose work has appeared in Punch, and who created the cartoon strip Sadie, which has been appearing for 15 years in Cat Fancy magazine in the United States.



India's Golden Future

New Gold Deposit Scheme Earns Interest

By J Ramchandran, Chief Manager & T Guharoy, Senior Manager, Foreign Department, Allahabad Bank

As the largest consumer of gold in the world,

India imports 600 to 800 tonnes a year.

Estimates of private stocks of gold in India

range from 13,000 to over 30,000 tonnes.

Gold has always been an integral part of India's past - and it is fitting that gold will now become part of its future.

For at least a decade, we have been grappling with ideas on how to bring India's most significant saving window into the monetary economy. There have been various schemes to tap this resource in the past, most of which met with only modest success. However, these past experiments have yielded considerable valuable information which could help ensure that the current scheme is designed to successfully ensure an ongoing flow of savings out of gold and into monetary assets, with a concomitant reduction in gold demand. There is considerable evidence from other developing countries that gold demand rises with GDP per capita to a point, after which it declines, suggesting that as people get richer, they get more financially sophisticated and tend to move their savings into higher-return investments like stocks and bonds. India has not yet reached that turning point (on the GDP scale), which may explain the relative lack of success of those schemes. The steady increase of GDP over the past decade that has accompanied the continuing liberalisation of our economy and the development of our financial markets suggests that we may now have arrived at the perfect time.

With a view to mobilising gold lying idle with the public and putting it to productive use, the government of India announced the introduction of a Gold Deposit Scheme (GDS) in the budget for the year 1999-2000. These regulations now permit commercial banks to solicit gold deposits from the public to reduce imports and increase the effective use of savings in the country. The Reserve Bank of India has formulated the guidelines for the scheme in order to allow banks dealing in gold to prepare their own individualised GDS.

The Gold Deposit Scheme in Practise

Instrument - Banks may issue either a pass book/statement of account or a certificate/bond to depositors for their gold deposits, which will be transferable by endorsement and delivery.

Acceptance of Deposits - Gold (bars, coins, jewellery etc.) will be accepted in scrap form only. There will be a preliminary assay to ascertain the gold content/caratage of jewellery firstly by a non-destructive technique such as x-ray/caratmeter, and secondly by a foolproof method like fire assay. Depending on the results of the preliminary assay, the depositor may be given the option to withdraw the tender at that point. If the option to withdraw is exercised, banks may consider levying a nominal charge to defray the cost of the preliminary assay. Banks may either enter into arrangements with an existing assayer or use the assaying infrastructure being jointly set up by the designated banks.

Entities eligible to subscribe - Resident Indians (individuals, HUF, trusts, companies) may invest in the scheme. Joint tenders may be accepted and more than one certificate may be issued in the case of joint holders.

Deployment of mobilised gold - Banks may deploy gold mobilised under the scheme as follows:

- 1 - Gold loans to the domestic jewellery industry
- 2 - Gold loans to jewellery exporters
- 3 - Outright sales of gold domestically
- 4 - Sales of gold to other nominated banks.

Reserve requirements - Nominated banks will be exempted from maintaining Credit Reserve Ratios (CRRs) on liabilities under gold deposits mobilised in India. However, in view of multiple prescriptions, banks must maintain a minimum CRR of 3% on total net demand and time liabilities (including zero CRR liabilities). As there is a uniform prescription of 25% on the total net demand and time liabilities, which is the statutory minimum, the nominated banks have to maintain an SLR of 25% on liabilities under the gold deposit scheme.

Tax exemptions -

- 1 - Exemption of interest earned on gold deposit bonds from Income Tax.
- 2 - Exemption of value of assets deposited in the scheme from Wealth Tax.
- 3 - Exemption from capital gains made on the bonds through trading or at redemption from capital gains tax. ■

Please note that the opinions expressed above are those of the authors and not necessarily those of the bank.

A View from the US

Gold and silver usage in the new millennium

By Robert Arcand, Fleet National Bank

Does the new millennium begin this year or next? Are we entering a new era for gold and silver in the US – or we have been in one for a while now?

My answer to the first question would be: Who cares? Just accept both possibilities and enjoy two years of millennium parties.

The answer to any questions about the outlook for gold and silver consumption in the US is somewhat more complicated, but must in any case start with jewellery. After India, the US continues to be the second largest consumer of gold jewellery in the world, and there is no long-term sign of any abatement. Despite having the second-largest mining output of gold in the world, gold jewellery consumption in the US currently exceeds mining production.

As you can see in Table 1, gold jewellery consumption from 1991 through 1998 increased by an average of 6.5%, while mining production increased by an average of 3%. During this period, imports grew faster than domestic fabrication, going from 49% of consumption in 1991 to 54% in 1998. Demand in early 1999 continued to grow, but fell off in the second half of the year because of the

price spike in the autumn. US consumption has also started to shift into larger, higher-quality pieces at the expense of more traditional mass-market jewellery. Pearl and diamond jewellery demand has been growing as well, but this tends to help the gold industry because the settings for these products are usually made from higher-carat gold (with the exclusion of pearl strands). Neckchains still hold a commanding lead over all other types of jewellery products, accounting for about 40% of retail dollars spent. Rings (including wedding bands) are in second place with about 17%, while earrings and bracelets are pretty even at 13-14% each.

The demand for platinum jewellery has been growing, especially in settings for more expensive stones. But even at its current rate of growth, which is roughly 20% per annum, it will be some time before platinum will start to have a significant impact on the growth of gold jewellery in the US. If gold jewellery consumption were to continue at its current 6% annual growth and platinum at its 20%, the result after five years would be over 16 million ounces of gold compared to 750 thousand ounces of platinum jewellery consumed in 2004. It thus appears that there will be room for growth in both metals in the years to come.

There is only a small demand for silver jewellery in the US. It is estimated that total demand for both silver jewellery and silverware is only about the same number of ounces (and

US Gold			
	1998	1999	Average Annual % Increase
Jewellery Consumption	11.9	7.6	6.6
Jewellery Fabrication	5.4	3.9	4.8
Mining Production	11.7	9.5	3.0

Data source: GFMS




Photo courtesy Grendon International Research

much less dollar value) as demand for gold jewellery alone.

By far the biggest season for jewellery sales is the holiday season in December, followed by Mother's Day and the wedding season in the spring. Of course, the heaviest demand for the bullion to produce the jewellery runs about two months before the actual retail sales occur.

Distribution of gold jewellery will probably change during the first years of the millennium as more and more consumers start to shop by computer. Non-store consumption of jewellery already accounts for close to 10% of all jewellery sales in the US, largely because of the acceptance of TV shopping through cable channels. More retail websites for jewellery will be created, and as graphics continue to improve, the quality of three-dimensional

representation of individual pieces will allow consumers to view them from any angle. Since TV has already broken the way in remote jewellery purchasing, these on-line purchases should not take long to catch on, but, as with platinum jewellery, it will take a while to gain a significant market share because it is starting from a small base.

As mentioned earlier, the price spike in 1999 caused jewellery demand in the US to slow. Some manufacturers cannot pass on an increase in the gold price immediately because they commit to holding a certain price for a period of time – perhaps as long as three months. However, many others base the price of their merchandise on the price of the gold on the date of shipment of the finished product, and are thus able to pass on increases almost immediately. Usually the full effect of a gold price increase for larger, high-carat gold pieces can be passed on to the consumer within a few weeks.

It appears that a stable or slowly moving price under \$350 would not affect current demand greatly, but if the price moved much above that area, consumers might start turning to electroformed jewellery.

Electroformed jewellery is hollow, very thinly walled, and can be made into very intricate designs. Hollow, somewhat flexible rubber moulds of the design are filled with wax, treated with chemicals, and placed in a bath containing a gold solution. The moulds are then spun around for a number of hours, and the gold electrically bonds to the wax. The rubber moulds are then removed and the wax is drained. It is important that the design is not too thin, since it would dent very easily either in production or wear. Although the cost of production is relatively high, electroformed

jewellery gives the appearance, but not the feel, of the heavier jewellery for considerably less cost.

Use of gold and silver in electronics has increased along with the supply of home computers in the US, with over 1.5 million ounces of gold and 44 million ounces of silver being used in the last year. The continued use of precious metals connections in computing is currently facing a challenge from some new designs that use copper connections instead. Other industrial uses of gold were covered by John Lutley in *Alchemist 16*, and there have been moderate increases in usage over the last few years. This should probably continue as new applications replace old. Currently gold and silver industrial uses (excluding electronics and electrical) amount to about 5% of the total usage of gold and silver in the US. Gold use in dentistry is still important, with almost 500 thousand ounces of gold consumed in this application last year.

The largest application of silver in the US remains photography, employing about twice as much as the second largest product. Although photographic demand has not yet been hurt by digital cameras, and there will probably always be a need for silver in higher quality photography such as portraits, the fact remains that digital cameras are getting cheaper while the pixel count is steadily increasing. As memory storage on hard drives and writable CD-Roms becomes cheaper, and more of the population has access to personal computers, the amount of prints made should decrease as people store and send photographs electronically.

Photo courtesy Adornis.com

For example, a parent in Dubuque, Iowa could take a picture of a child's first step, download it into the computer and E-mail it to 50 relatives all over the world. The child's grandparent in Dubai could print a copy less than an hour after that first step.

This technology is currently here, but silver used in imaging will remain king a few years longer.

The large increase in gold coin demand over the last two years is most probably just a reflection of Y2K fears. The decline in demand for coins actually started during the last half of 1999, and demand will probably continue to decrease in 2000. The premiums for gold and silver coins have crumbled in the first few weeks of the new year as this disharding has apparently started in earnest. Thus far the rules for IRAs (individual retirement accounts), 401Ks, and other tax-deferred US retirement plans have limited the ability of investors in these plans to buy gold or silver to the purchase of certain bullion coins. There is a chance that – if IRA and 401K rules are loosened to allow investors to also buy gold and silver through unallocated accounts at funds or financial institutions – a new influx of demand could come into the market as investors seek to diversify their portfolios. If even

1% of retirement funds were to be invested in precious metals, it would mean hundreds of tons in extra demand.

Thus, overall, the outlook for gold and silver demand in the US over the next few years may not be overwhelming, but it should continue to be strong and steady. ■

Robert G. Arcand joined Fleet in 1982 as Head of the Operations Section in the Precious Metals Group. He moved into the trading area in 1984 and has been Chief Dealer for Fleet Precious Metals since 1992. Bob started working with precious metals in 1970 in the vault and operations area at another major US bullion bank, and moved up through the ranks to manage the precious metals operations before entering the trading area there. He has presented a paper for the IPMI and has had articles published in international trade magazines. Bob has been on the Board of the New England Chapter of the IPMI since 1984, including having served as both Secretary and President, and currently is a member of the Gold and Silver Advisory Committee for the NYMEX.



Clips and Quotes since the previous edition of the *Alchemist*

Gold Quotes

- Gold miners face question of pruning their hedges
Financial Times, 12 November 1999
- VAT change fails to lift gold demand
Financial Times, 12 January 2000
- Gold Prices and Enthusiasm Cool After Bank of England Auction, *Wall Street Journal, 26 January 2000*
- Kebble's ambitions thwarted by change in ethical climate,
Financial Times, 26 January 2000
- Gold, Silver and Copper Futures Decline, Hurt by Dollar's Surge, *Wall Street Journal, 31 January 2000*
- Gold Could be Transferred to ECB
Wall Street Journal, 1 February 2000
- Ashanti Seeks to Sell 50% of Geita Mine in Tanzania
Wall Street Journal, 4 February 2000

- Price rise helps Gold Fields fly,
Financial Times, 4 February 2000
- "Jay Taylor has thrown down a challenge to the entire gold industry".
Placer Dome trims hedging, Financial Times, 7 February 2000
- All eyes on gold price after \$23 leap
Financial Times, 7 February 2000
- Gold Soars in Europe *Wall Street Journal, 8 February 2000*

Silver Quotes

- Ho-Hum Silver – Price is Flat Despite Good Fundamentals
Barron's, 15 November 1999

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Bayerische Vereinsbank Aktiengesellschaft	(0171) 626-1301	Mitsubishi Corporation (UK) PLC	(0171) 822-0022
Brambles Security Services UK Limited	(0171) 426-4500	Mitsui & Company UK Limited	(0171) 822 0475
Brink's Limited	(0171) 247-9481	Morgan Stanley & Co International Limited	(0171) 513-8000
Canadian Imperial Bank of Commerce [CIBC]	(0171) 234-6000	Nissho Iwai (Europe) Plc	(0171) 634-0270
Citibank NA	(0171) 500-0499	Phibro Bullion, Division of Phibro Futures and Metals Limited	(0171) 721-4000
Commerzbank Aktiengesellschaft	(0171) 418-4700	Prudential-Bache International Limited	(0171) 283-9166
Cookson Precious Metals Limited	(0121) 200-2120	Rabobank International	(0171) 809-3000
Credit Lyonnais Rouse Limited	(0171) 374-6100	Royal Bank of Canada	(0171) 489-1188
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Engelhard-CLAL UK Limited	(0181) 974-3038	Sogemin Metals Ltd	(0171) 410-4950
Engelhard Metals Limited	(0171) 456-7300	Standard Bank London Limited	(0171) 815-4130
Fleet Bank N.A. UK Representative Office	(0171) 588-1217	Sucden (UK) Limited	(0171) 940-9400
Gerald Metals Limited	(0171) 623-5711	Sumitomo Corporation Europe plc	(0171) 246-3600
GFI Brokers Ltd	(0171) 422-1000	Tradition Financial Services	(0171) 375-1188
GNI Limited	(0171) 337-3500	Triland Metals Limited	(0171) 236-4382
Guardforce International	(01784) 420020	VIA MAT International Ltd	(01932) 230130
Itochu Europe PLC	(0171) 822-0822	WestLB, London	(0171) 638-6141
Johnson Matthey Plc	(0171) 269-8000		

LBMA News

By Stewart Murray, Chief Executive, LBMA

Membership Changes

Following the acquisition of Republic New York Corporation by HSBC Holdings on 31st December, the Market Making Membership of the merged entity is now held in the name of HSBC Bank USA London Branch. All market making will be conducted from the dealing room at Thames Exchange:

HSBC Bank USA London Branch
Thames Exchange
10 Queen Street Place
London EC4R 1BQ
Tel: (0171) 621 7801
Fax: (0171) 621 7878.

Following the acquisition of Bankers Trust by Deutsche Bank, the Ordinary Membership held by Bankers Trust Company has been relinquished with effect from 31st December, 1999.

Following Metallgesellschaft's acquisition of Billiton Metals Ltd, the latter's Ordinary Membership has been relinquished with effect from 31st December, 1999.

Jordan International Bank and Moscow Narodny Bank resigned their Ordinary Memberships with effect from 31st December, 1999.

Sogemin Metals Ltd has changed its address to:

5th Floor
Mansion Court
47-53 Cannon St
London EC4M 5SH
Tel: (0171) 648 4950

The membership name and address for Société Générale have changed to:
SG London Branch
41 Tower Hill

London EC3N 4SG
Tel: (0171) 676 8760.

Good Delivery List

Additions

● Gold

Russia – Open Joint Stock Company "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet) and Prioksky Plant of Non-Ferrous Metals were both listed from 29th November 1999.

● Silver

Bulgaria, KCM – S.A. Plovdiv, listed from 8th September 1999.

● Gold and Silver

Japan – Matsuda Sangyo Co Ltd, listed from 11th January 2000.

Name change:

Silver

OJSC "Krastsvetmet" is now known as the Open Joint Stock Company "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC "Krastsvetmet").

Committees

Management Committee

In addition to its oversight of the activities described below, the Management Committee continues to develop a new Rule Book covering various aspects of trading in London.

Work has also continued on the preparation of a bullion annexe to be used with the new codes to be published by the FSA and Bank of England. This will replace the London Code of Conduct when the Financial Services and Markets Bill is passed later this year.

The Committee has also been monitoring the operation of the GOFU page to which the Market Making Members of the LBMA contribute. An initiative to improve the timeliness of updates by contributors and data capture by Reuters will be announced shortly.

Finally, much work has gone into the preparation of an updated version of the LBMA Corporate Brochure, which will be launched at the Dubai Conference (see below).

A final draft of a proposed recommended market standard document to cover Gold Interest Rate Swaps is now with the lawyers of those companies represented in the Committee. After they have finished their review, the draft will be circulated to the whole membership.

Physical Committee

A record number of applicants for the Good Delivery Lists were successfully processed in 1999 – eight for gold and seven for silver. Nevertheless, as many as seven further applications from six different countries are

currently being processed.

While Chris Elston retired as Chief Executive at the end of October, he has nonetheless been working hard on a consultancy basis on the documentation underlying the Good Delivery Lists. Following the circulation of a questionnaire to Good Delivery refiners, a new enhanced list will be prepared containing information about the location of the refineries and their first date of listing. The Committee is in the final stages of developing a new comprehensive set of instructions which applicants must follow to achieve Good Delivery Status.

Other work of the Committee includes the development of an Automated Matching System to make the process of clearing even more efficient. Work on the development of a system that would allow the electronic weighing of gold has also continued.

Public Affairs Committee

There have been a number of changes in the membership of the Committee in recent months. Jason Thiel resigned in



Dinner held in honour of Chris Elston's retirement. From left to right – Martin Stokes, Jill Murray, Jennie Elston, Chris Elston, Frances Stokes and Stewart Murray.

September and James Dobell, who had chaired the Committee since January, 1997 resigned in October. Our thanks go to both of them – particularly to James for his unflagging efforts in this important area of the LBMA's activity. Following the advertisement of the resulting vacancies within the membership, Andy Hoare of Mitsubishi and Emma Jenkins of CSFB joined the Committee in November, and Helen McCaffrey was appointed Chairman – the first "Madam Chairman" of an LBMA Committee!

Much of the work of the Committee in recent months has concentrated on the organisation of the LBMA's first major international event – the Precious Metals Conference taking place in Dubai on 20-21 February. Approximately 250 delegates are expected to attend, with presentations on gold, silver and platinum being given by 29 invited speakers.

Following the successful autumn seminar in November, plans are now being drawn up to hold a spring seminar in May. Rather than the lunchtime format that has been adopted for most

seminars so far, the Committee would like to hear the views of members and guests on the possibility of organising an evening event on this occasion.

Membership Committee

The main activity of the Committee has been connected with the new category of membership – International Associates – that was introduced with effect from 1st January, 2000. A pocket booklet describing the benefits of International Associateship has been prepared and is being circulated to potentially interested companies.

Golf

John Coley writes:

The annual Golf Day is planned for 11 May at the Drift Golf Club, East Horsley, Surrey. There will be an 18 hole individual competition for the Jack Spall Trophy in the morning and team competition for the TFS Trophy in the afternoon. The exact cost is not yet known, but we hope it will be as reasonable as last year (less than £40) thanks to anticipated sponsorship. Any company interested in helping to sponsor the event would be very welcome.

The Drift is a very attractive course, especially in May when it resembles a mini-Augusta with colourful trees and shrubs. Players should note that the course applies a SOFT SPIKES ONLY policy.

We look forward to welcoming members (both past and present) together with their guests at this year's event. ■



Smith Goes Long Andy Smith takes delivery from John Fairley of an ounce of Johnson Matthey gold. Both Andy and Kevin Crisp correctly predicted last year's average in our Forecast '99, but Andy prevailed by also hitting the year's high and low.

DIARY OF EVENTS

20-21 February 2000

The LBMA Precious Metals Conference 2000, Jumeirah Beach Hotel, Dubai UAE

Tel: 001 202 835 0185
Fax: 001 202 835 0155

26 April 2000

GFMS Gold Survey 2000 Launch, London, New York
Tel: 171 539 7820
Fax 171 539 7818
Email: enquires@gfms.co.uk

29 February 2000

CPM Group Silver Survey 2000 Release and Silver Mining Investment Conference 2000, New York
Tel: 001 212 785 8320
Fax: 001 212 785 8325
Email: cpmgroup@cpmgroup.com

10-12 April 2000

Australian Gold Conference, Burswood Convention Centre, Perth WA
Tel: (00) 618 9226 3280
Fax: (00) 618 9226 1544
Email: enquiry@conference.australiangold.org.au

24 May 2000

World Silver Survey 2000 Launch London, New York and other major centres, Gold Fields Mineral Services contact as above.

31 May - 1 June 2000

Northeast Investment in Mining Conference, IIC, New York, NY USA
www.iiconf.com

16-18 April 2000

Gold & Silver Institutes' Annual Conference, Rancho Mirage, Ca, USA

Year 2000 Dated Bullion Sovereigns

After 18 years, the Royal Mint has re-introduced the gold bullion sovereign and half-sovereign.

The year 2000 dated sovereigns have been available since 1 January 2000. Both the sovereign and half sovereign have strict issue limits of 250,000. Manufactured from 22 carat gold, the sovereign weighs 7.988 grams and the half sovereign 3.994 grams.

The coin's reverse depicts Benedetto Pistrucchi's famous masterpiece of St George and the Dragon, while the obverse features, for the first time on a bullion sovereign, the portrait of Her Majesty the Queen by Ian Rank Broadley, FRBS, FSNAD.

Year 2000-dated gold bullion coins are only available directly from the Royal Mint, in minimum order volume of 500 pieces.



NEW HORIZONS

By Stewart Murray, Chief Executive, LBMA

It is now just over four months since I arrived at the elegant Georgian building just a stone's throw from the Bank of England housing the small and cramped office that is the powerhouse of the LBMA. I could hardly have asked for a more fascinating start to my new career – beginning just a week after the announcement by the European central banks about their gold reserves. Since taking up my new appointment, the main impression I have formed of the organisation is a high degree of commitment and participation on the part of both the staff and the membership.

Although the members compete fiercely for business with one another, as well as with banks and dealers in other centres, there are many areas where co-operation makes sense – not just to the eventual benefit of dealers in London, but to that of the market participants around the world. The areas of co-operation can be divided into two parts, which one might loosely term increasing efficiency and keeping the playing field level.

A good example of the former are the discussions aimed at setting up an automated matching system by the members who offer clearing services. Instead of using the telephone as at present, a system of electronic matching of transfers could increase speed and reduce errors. Another example from the work of the Physical Committee involves the arrangements for admitting new refineries to the London Good Delivery List. Here, improvements have been implemented to facilitate the assessment process without, in any way, reducing the stringent criteria concerning the applicants' ability to produce and assay bullion to the highest standards of accuracy. An example of keeping a level playing field, this time from the trading area, is the ongoing development of various types of standard documentation covering a range of products.

The common factor in all this work is the involvement of the LBMA members in coming up with fresh ideas – and just as importantly, in following them through. It is particularly encouraging that once an initiative is adopted, the members do not simply leave all the work to the Executive.

But undoubtedly the most exciting aspect of my new job is the way the LBMA is now reaching out to the global market that its members have always served. Two examples are the LBMA's first Precious Metals Conference being held in Dubai and the introduction of a new, non-voting membership category – that of International Associate – which will allow suitably qualified companies around the world to share in the prestige that the London market has built up over the years. These initiatives indicate a desire to reach out to the world market rather than just waiting for the market to come to London.

There is eagerness in the Association to explore new ideas in many areas and to respond to change. And of course, change is all around. This year has already seen the removal of Value Added Tax from investment gold across the European Union. Later in the year, a new Financial Services and Markets Act will be passed in the UK. Work has begun on drafting a new rule book.

The learning curve has been steep but with the active support of the membership, I can only look forward to continued expansion of the Association's horizons, both physically and metaphorically. ■



The gold mining industry continues to shrink, at least in terms of the number of participants, although, as yet, production is unaffected. This trend of consolidation has been apparent for some years and events of the past few months confirm its continued existence. However, the scale of the latest mergers is extremely modest when compared with the recent multi billion-dollar initiatives between Warner and AOL, communication companies Mannesmann and Vodafone, and pharmaceutical multinationals Smithkline Beecham and Glaxo Wellcome.

But, like these industries, the gold mining industry is becoming increasingly polarised as the big get bigger by swallowing up smaller competitors. Although there is still an element of growing for the sake of growing underlying all this corporate activity, there is, encouragingly, a realisation that all acquisitions should be earnings enhancing.

The consolidation is partly in response to a perceived demand from investors for larger, more financially robust companies with greater liquidity. However, one of the main reasons behind the rationalisation is the need for the global producers to secure scarce and prime assets in an effort to reduce costs at a time when exploration spending has been squeezed by the falling gold price.

Figures released by Metal Economics Group indicate that exploration expenditure by senior mining companies fell in 1999 by 23%, after a fall of 31% the previous year. After peaking in 1997 at an estimated US\$5.1 billion, the latest estimate for 1999 is US\$2.7 billion. Producers looking for growth have thus turned away from risky grassroots exploration to the acquisition of companies with promising prospects but perhaps no cash with which to develop them.

The latest bout of merger activity was led by the world's largest gold producer, AngloGold, as it ventured into Australia for the first time, grabbing Acacia Resources from the unwanted attentions of Delta Gold. AngloGold completed its US\$535 million friendly take-over at the end of December, raising its annual production profile from 7 million ounces to over 7.5 million ounces in the process. As well as helping AngloGold reduce its unit total cash costs (Acacia's costs were US\$18/oz less than AngloGold's in the September 1999 quarter), the

acquisition immediately lifts the proportion of production from open pits for the deep-level South African miner to 23%.

Elsewhere, AngloGold's name has been linked with Ashanti Goldfield's Geita project, in Tanzania. The Ghanaian producer was itself in danger of being bought at a bargain-basement price towards the end of 1999. At the time, management was struggling to extricate the company from the financial mess brought about by the sudden rise in the gold price in October, which saw onerous margin demands from its hedging counterparties. The board managed to renegotiate its hedging exposure and credit limits and the company appears to have stabilised, albeit with a greatly reduced share capital. There is, however, much speculation that it will be forced to sell up to 50% of the Geita project to bolster its balance sheet.

Aside from AngloGold, Canadian majors Placer Dome and Barrick Gold are apparently interested in the project.

Barrick Gold already has a substantial presence in the country with a 50% interest in the Golden Ridge mine and 100% ownership of the large reserve base at Bulyanhulu. Barrick has announced that it is to spend US\$280 million on building a new underground mine at Bulyanhulu, which it secured with the US\$350 million acquisition of Sutton Resources in March 1999. The Bulyanhulu mine is expected to produce up to 500,000 ounces per year at the low total cash cost of US\$140/oz.

South of Tanzania, in South Africa, corporate restructuring, which has totally remodelled the industry over the past few years, saw another phase reach a dramatic, and unexpected, conclusion.

Since 1993, many of the complex cross-holdings between mining companies that epitomised the industry there have been dismantled, but those within JCI Gold, Consolidated African Mines and Randgold & Exploration groups remain, principally because one family, the Kebble family, acquired significant interests in them all two years ago. Restructuring of the groups, which include the Western Areas and Randfontein gold mines, was eagerly awaited throughout 1999, but plans were only announced in the final month of the year. Essentially the idea was for Western Areas Ltd to acquire the issued share capital of all the other companies, including West African gold producer Randgold Resources, and change its name back to the historic JCI Ltd. Thereafter it was the intention of the JCI board to list the company on the Toronto Stock Exchange.

However, before the grand scheme could be enacted, fellow South African gold producer Harmony made a bid for Randfontein, a mine that it believed fit well with its operational strategy. If such a bid were successful it could have scuppered the consolidation plan because Randfontein's production would be a significant proportion of the new entity.

Harmony's intervention was dramatic enough, but there was further drama about to unfold as one of the Western Areas' directors launched a defence without the approval of his board. It transpired that Brett Kebble, deputy chairman of Western Areas and chief executive of JCI Gold, made an unauthorised loan of R100 million to Durban Deep, (of which Roger Kebble, Brett's father, is chairman), for Durban Deep to buy Randfontein shares. When this act was exposed, Mr Kebble (junior) resigned from the board of Western Areas, effectively

allowing Harmony to seize control of Randfontein within days.

The future of the companies within the Kebble stable again looks uncertain and the individual assets may end up being sold piecemeal. Harmony meanwhile emerged as the sixth largest gold producer in the world, with an output of around 2.2 million ounces of gold annually.

In far less sensational fashion, St Helena quietly disappeared from the stock market listings as Gold Fields increased its holding in the company from 54.2% to 100% through an offering to minority shareholders.

In the final piece of major corporate action, base metals producer Aur Resources made a bid for Cambior, the base metals and gold producer whose market capitalisation was decimated after it, in common with Ashanti, experienced severe problems with its hedge book following the sharp gold price rise in October. ■

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