

February 1998

An Amicable Divorce

by Peter Fava, Chairman of the LBMA



Gold and silver have historically behaved rather like an old married couple – sometimes briefly separating, but never able to stay apart for long.

So much for historical precedent. Late autumn 1997 saw a complete divorce. As gold continued to sag lower and lower under the weight of uniformly negative sentiment based on the increasing mobilisation of central bank stocks, silver began attracting positive attention. Like gold, it had run a demand deficit for a number of years but, unlike gold, there could be no eager central bank sellers to fill the gap. When there is not enough silver to go round, there is no lender of last resort.

The squeeze in silver did not initially focus on price, as in the days of the Hunt brothers. Markets are now more sophisticated. This time the lease market was targeted first, and rates surged from traditional levels of 0.5–1.0% up to 8.5–9.5%. It is probably naive to suggest that a move of this magnitude over such a short space of time can be wholly attributed to strong demand. It is more likely that liquidity has been tight in London because more silver has been borrowed than the market actually needs. The desired result of the squeeze is probably a rally, as it was in 1980, although to a more modest level of \$7 to \$8.

While the squeeze does apply to loco London silver, I do not see any evidence to suggest that London trading houses are involved. Nevertheless, the LBMA is maintaining a watching brief on the situation.

Meanwhile, gold began the New Year by hitting new 18-year lows. As we go to print, it has staged a modest recovery – not sufficient to suggest that negative sentiment has vanished, but some moderation in media sentiment is becoming apparent. This may be because there has been a suggestion that a few European central banks are holding on to large quantities of gold in case of difficulties in establishing the Euro; and one economist has even suggested that the best way to stabilise Asian currencies would be to provide a solid anchor – not in the form of the US dollar, but of gold.

One statistic, however, shows gold and silver continuing to move in harmony. December 1997 saw the highest levels of ounces per day cleared in London for both metals since we began publishing these figures 15 months ago. For gold, average daily clearing volumes were 47% higher than a year earlier. For silver, the rise was a massive 59%. Predicting the future is a hazardous business, best left to the analysts in the article on page 12. But whatever the direction of gold and silver over the coming months, one thing is clear: both metals are alive and well. ■

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A Perspective on Gold: An interview with Terry Smeeton

Head of Foreign Exchange, Bank of England

by Susanne M. Capano, Editor

Terry Smeeton has recently announced his retirement in March of this year after a career spanning 37 years at the Bank of England. His involvement with gold dates from 1962, when part of his trainee functions involved counting gold bars in the Bank's vaults, then priced at a fixed \$35 an ounce. He was honoured at a dinner hosted by LBMA members on 19 January, at which Chairman Peter Fava called him "the wise sage whose counsel and support will be greatly missed." Before heading off for rest, retirement and the odd game of cricket, Mr. Smeeton granted the *Alchemist* a wide-ranging interview, looking back on his career and ahead to his views on the future for the gold market.



FAREWELL DINNER

From left to right — Robert Guy, Terry Smeeton, Peter Fava

Were you directly involved in the formation of the LBMA?

Not really, the formation of the London Bullion Market Association was a development that occurred spontaneously in the market and was encouraged by the Bank. It has proven to be a very valuable forum for synthesising ideas about both the regulatory and promotional sides of the market. We are pleased with the way it has developed and welcome the steps it has taken recently to increase the degree of information available, such as publishing clearing turnover statistics. It has been a very positive force for promoting the London market.

Could you comment on the perceived change in central banks' attitude towards gold?

The economic environment has changed quite a bit during my career and, with it, attitudes towards gold. There is a new generation of bankers who never dealt with fixed exchange rates, or with formal linkages between exchange rates and gold, as in the Bretton Woods regime. Central bankers have found other ways of attacking inflation, which to their credit appears likely to remain subdued in the near term. And gold has always been a last resort asset in times of rampant inflation, therefore, it is difficult to be very bullish on the price in the near term.

Gold has proven a poor investment for central banks over the past 15 years — if the gold was purchased in 1980, the results have indeed been disastrous — but if the period considered is 20 or 25 years, it hasn't done all that badly. From a central banker's point of view, having an element of gold over the past generation has provided a source of stability, and there is comfort in that. Maybe the world has changed forever. But given some perspective on a market that has been around for thousands of years, 15 years is but a moment and perhaps shouldn't be given too much weight.

If another central banker came to you for advice on managing their gold reserves, what would you tell them?

Diversification: the best way to utilise any asset. I would begin by advising that a portion of gold reserves be left at home, as a stockpile. The rest should be kept in one or more of the major trading centres — mainly London, but also New York. The reserves are only really useful for employment in the market if they are in such a location. Part of the gold in London can readily be lent or swapped, depending on the size of the holdings, say 50% or so. However, a portion of the gold should always be left unencumbered in case it becomes needed for collateral against a loan or for some other emergency.

What major issues do you expect to be discussed in the gold market in the coming months?

The determination of membership for monetary union and the European Central Bank are the major unknowns facing the market, and rightly so. As history shows, the creation of monetary union is a hazardous process. Whether the ECB decides to hold gold and, if so, how much, will determine what follows. There may well be a gold overhang in Europe that will last for the next few years. The question will be the size of any overhang and what reactions are towards it.

Because central banks will continue to want to earn a return on their assets, I expect to see continued lending in the market. Concerns about central banks will be a feature in the market for quite some time — they won't all disappear after this May.

The central bank lending of course reduces the cost of selling forward for mining houses, and the current price has already absorbed a lot of forward selling. Still, I see the supply side eventually having to contract. I can't predict when or by how much but, clearly, the Western world (ie, Canada, the US, Australia and South Africa) has fairly high production costs, which have been offset by forward selling up until now.

So, it is difficult to be optimistic on the gold price in the short or medium term. But, given some perspective, the situation looks brighter. Consumers will always have an appetite for gold — at a price that suits them. That overhang is being drawn down at the rate of roughly 500 tonnes a year so, while it will last for some time, it won't be there forever.

What relationship do you see between the Bank of England and the gold market in London, now that the Bank's supervisory role has been changed?

When I started in the Bank of England's foreign exchange area, we really only had the operational role, which we still, of course, have today. There was no formal supervision of the gold market, but the Bank has always maintained a maternal eye on the market, and that remained the case until the Financial Services Act and the introduction of the Section 43 regime.

Throughout my time here, we have encouraged the participation of international banks in the Bullion Market through the provision of Safe Custody Accounts to them — vault facilities enabling them to deal directly and discreetly with central banks and, of course, each other. That will continue in the future. The fact that the supervisors will be physically leaving the Bank to join the FSA will not affect the close relationship between the operational area in the Bank of England and the regulatory side. We both have a common interest in encouraging efficiency and maintaining business in the financial markets in London. ■



City Forum Limited, Sixth City of London Central Banking Conference

"[Central banks] are depositing a higher percentage of reserves, they are making deposits for longer terms and they are using a wider variety of yield-enhancing instruments. Unlike the price decline, this broadening of central bank activity has been wholly beneficial for the gold market. It has facilitated the growth of a liquid and deep market in gold interest rates, which now trades several years forward. It has provided liquidity to the gold options market." Martin Fraenkel, The Chase Manhattan Bank, *Central Banks and the Management of their Reserves*

Asociacion Venezolana del Oro, IV International Gold Symposium

"We ignore at our peril the simple fact that gold has never been more widely or readily available and that the above-ground stock of metal has never been so widely dispersed." Kevin Crisp, Morgan Guaranty Trust Company, *The Outlook for Global Gold Supply*

"Much of the current uncertainty in the gold market would be removed if the central banks made their intentions more clear. It is deeply ironical that central bankers who nowadays talk so much about their commitment to price stability are contributing so much to the instability of the price of gold." Robert Guy, N M Rothschild & Sons Ltd, *Changes in the Market Place*

Upcoming Engagements

The Gold & Silver Institutes,
1998 Annual Conference, 5-7
April, Naples, Florida

General Session, Gold and
Silver: Charting New Courses:
A European View Robert Guy,
N M Rothschild

FT World Gold Conference:
The London Market Peter Fava,
HSBC Midland

Outlook for the Australian Producer Market

by Tim Churcher, J B Were & Son

Hedging has protected the market like a suit of armour. But the suit will dissolve in just over three years!



Get lean or get out!

In the past 15 years, Australia's great gold rush was fuelled by the success in finding and mining numerous open pit deposits in the western part of the country, which proved relatively quick and economical to

develop. More recently, sources of open pit deposits have grown scarce. The death of high-cost open pit mines has begun a new cycle of lower cost underground mining (evidenced by such large mines as Plutonic, Centenary, Bronzewing, Kanowna, Jundee and Ridgeway). The large open cut mines (eg, Telfer, Paddington and Boddington) have grown old and tired and helped push Australia's cash costs up.

In addition to the changing dynamics at the mine level, the sector has been financially crippled by the loss of the ability to sell forward. Insulated from the recent drop in the US\$ gold price by a falling Australian dollar, the sector was nonetheless damaged by the loss of high interest rates. Approximately 1,000 tonnes remain covered on hedge books – just over three years of production. It is after that time-frame that some drastic changes could occur.

Recent Production History

A look at factors that have helped shape the current industry

Australian gold production commenced in earnest in the late 19th century and early 20th century. Production was sourced predominantly from underground mines where the gold mineralisation always had an obvious surface expression, ie, Mount Charlotte, Norseman, Copperhead, Sons of Gwalia, Charters Towers, etc. Technical limitations meant having to ignore oxide or weathered ore – ore found within the top 100–200 metres of the land surface which has reacted with air and water.

The second growth phase of Australia's production commenced in the early 1980s, when a rapid technological breakthrough (CIP technology) opened up enormous potential to mine the oxide gold deposits. This was the start of Western Australia's second great gold rush.

Exploration was typically still concentrated around known mining districts, eg, Golden Mile, Sons of Gwalia, Meekatharra. However, the search for oxide deposits in new fields was also spectacularly successful, ie, Boddington, Mt Leyshon, Kidston, Plutonic, Granny Smith, etc. Underground mining, when it did occur, usually had a direct link to the surface, typically by mining beneath oxide pits, ie, Mount Charlotte, Laverton, Bounty, Yilgarn Star, etc.

Australia is just commencing its third phase of production, that is, a refocus on underground mining targets, while the larger surface

Discovery rate – Major Finds by Year

	Gold Found Open Pit	Underground	Total (m oz)
1989 Plutonic, Tick Hill	5	6	11+
1990 Kanowna	1	4	5+
1991 Callie, Brocks Creek	1	2	3+
1992 Union Reefs, Bronzewing, Tanami, Keringal, Tarmoola	5	3	8+
1993 Chalice, Bulletin, Cadia, Harlequin, Jundee, Nimary, Sunrise (Delta), Nolans	11.5	1.5	13+
1994 Sunrise Dam (Acacia)	2	—	2+
1995	—	—	0
1996 Vera Nancy, Centenary, Barton Deeps, Quarters, Ridgeway	2	7	9+
1997 White Foil	0.8	0	1
1998			

Watch file: Federal, Rosemount, Golden Cities, Trilogy

open cuts begin to reach the end of their useful lives. Sophisticated geological equipment and ideas can now target ore bodies at depth, without a surface expression. As this phase has only just begun, Australia remains open pit country, but the growth in underground production is starting to pick up. Significant successes have been registered at such mines as Kanowan Belle, Bronzewing, Vera Nancy, Centenary, Ridgeway and Barton Deeps. We expect that the transition to lower cost underground mining could take a few years to reduce Australia's average cash cost.

Trends in Exploration

Today's discovery is tomorrow's production. Hence, if Australia is going to lower its costs of production, higher grade deposits must be located today.

Discovery Rates Are Falling

Despite exploration expenditures running at record levels of A\$600m–A\$650m, results to date have been relatively disappointing. In general, only about 3m ounces of gold a year have been discovered (see table), versus Australia's annual production of just under 10m ounces per annum. Despite this, reserves are not declining, as mining companies have been rapidly expanding resources at existing mines. Unfortunately, these expansions are typically high cost.

The one bright spot is that the discovery rate of high-grade underground deposits is increasing. Some discoveries, such as Centenary, Ridgeway and Vera Nancy, are low cost and are large enough to lower Australia's average cash cost curve. Still, even with this positive factor, we don't expect a rush of discoveries so it is unlikely that our cost curve will change quickly.

Economic Environment – Insulated by a falling dollar but losing out on forward selling

Gold price

While the US\$ gold price has fallen by 16% during 1997 (from US\$344/oz to US\$290/oz), a corresponding 14% drop in the value of the Australian dollar has meant a drop of only 3.5% in the A\$ gold price (from A\$454/oz to A\$438/oz). Unfortunately for the

mining sector, Australia has only seen exchange rates this low on roughly three brief occasions over the past 20 years. The risk is therefore definitely to the downside for the A\$ gold price over the next six to 12 months.

Ability to forward sell was our key competitive advantage

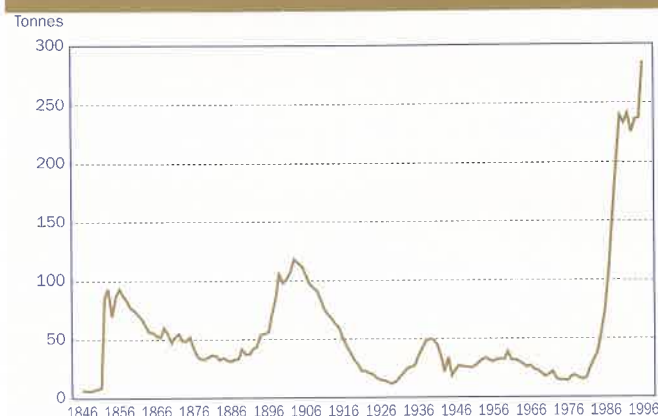
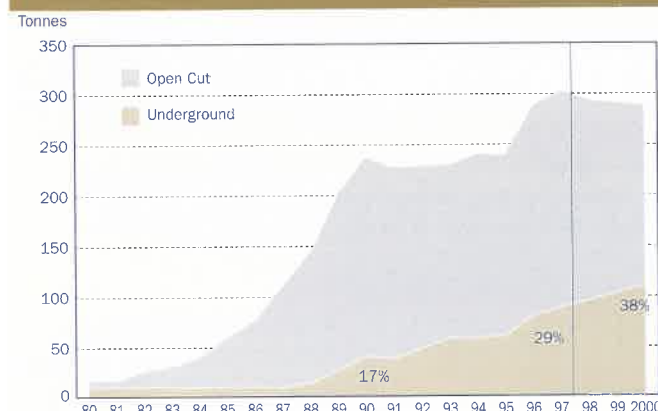
Forward selling by producers in the 1980s was highly profitable and gave rise to an unquestioning acceptance of the technique in



Australia. Companies did, indeed, achieve an average premium over the gold spot price of 20 – 30% over the past two years, despite the spot price falling from A\$520/oz to A\$440/oz.

A good forward sales price requires three variables: high interest rates, a high gold price and low lease rates. In the 1980s, Australia had all three. Interest rates were roughly 15%, gold prices traded as high as A\$600/oz and gold borrowing costs were well below 1%. Since that time, all the variables have shifted. Current Australian interest rates have dropped to around 6%, lower gold spot prices dominate (A\$450/oz) and gold lease rates are as high as 2%. The benefits associated with forward selling have evaporated and, with them, a key competitive advantage for Australian producers.

The response to this change in the forward selling environment has been a strong swing away from 'vanilla' forward sales towards the

Fig.1 Australian Gold Production**Fig.2** Australian Gold Production

use of derivative structures – structures that are more complex to analyse and carry more risk.

Has Australia got lazy on a rich diet of forward selling?

Hedging, as a treasury function, is a proven technique in maximising revenues. However, it appears to have removed the imperative to find and mine low-cost deposits. In short, the treasury function has become intermeshed with operational strategy. Hedge books have encouraged mines to lower cut-off grades, with the focus being on volume growth rather than profit growth.

This volume-led strategy could be breaking down. Market sentiment has turned particularly nasty against companies that produce gold at greater than spot prices, only to be saved by a hedge book. To reflect this sentiment, most managers now comment on the importance of making decisions based on spot prices (excluding hedge gains from the development equation). Without hedging we expect the industry to radically change the way it mines gold (ie, less production but at a lower cost).

Financial Fitness Test

The Australian gold sector would pass a health check, but only just. Despite having some excellent low-cost mines, a large proportion of Australia's production is maintained by hedging.

Cash costs

Average cash costs in Australia have remained relatively stable over the past two and a half years at around A\$330-A\$350/oz. However, as the most recent cost curve shows (see fig.1), around 25% of our

production occurs above current spot gold prices of A\$440/oz. If this production were shut-in, Australia's average cash costs would quickly fall.

Profitability

With average cash costs of around A\$350/oz and non-cash D&A (depreciation and amortisation) charges of around A\$104/oz, the sector would not be profitable if it had to rely on current spot prices of A\$440/oz. We estimate the current break-even cost for Australian production to be around A\$500/oz (some 14% above current spot prices). Hence, the only way that Australia manages to report profits (on average) is by delivering gold into hedge books at prices of around A\$560 – A\$580/oz.

Sustainability of Profits

As has been previously noted, the hedge environment has changed to such a degree that whilst hedge books can grow in size, it is unlikely that the average deliverable prices can be maintained. Hence, after about three years, Australian companies will hit the wall with regards to profitability. If current spot prices were to continue for the next four years, we estimate that cash costs would have to drop below A\$300/oz to maintain profits (assuming non-cash P&L costs remain constant at around A\$150/oz).

Around 60% of Australia's production, or 150 tonnes, is unprofitable at current spot prices. This is the amount we see subject to risk in the longer term.

Sector Response – What can be done? What may happen?

Get your house in order

Before mines begin to close, we expect to see a number of defensive measures initiated to lower costs. These include reduction in corporate overheads, exploration budget cuts, deferral of waste removal programmes and reduced capital expenditures, to name a few. Other measures are outlined below. All of these measures typically have the effect of reducing mine life and eroding reserve/resource bases.

High-grading

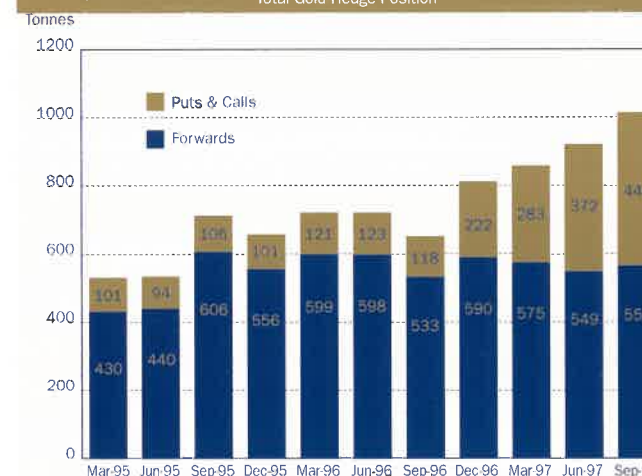
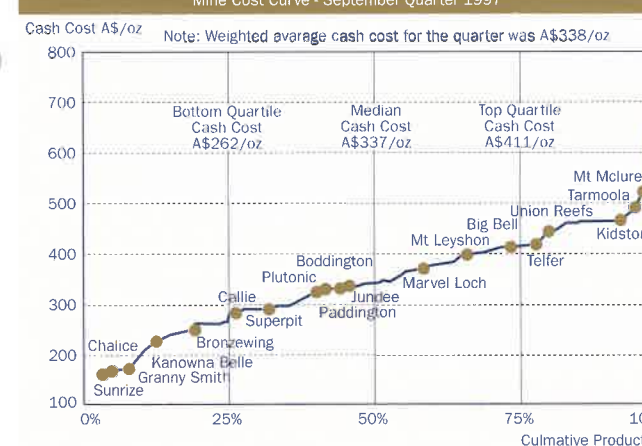
High-grading has a very negative connotation in the Australian market, being generally viewed as destroying the value of an ore body by being overly avaricious. Our view is that high-grading is a response to the external environment and at times is essential. We expect to see a number of operations begin high-grading their deposits next year, resulting in reduced reserves and mine life.

Close-out hedge books

Once these first steps are completed, the next stage probably involves closing out hedge books – a desperate option, as it involves cashing in a life insurance policy in order to survive. There will always be some companies that choose to close out hedge books, not as an act of desperation but as a bet that the gold price is too low.

Shut marginal mines

This step is likely to be contemplated initially by larger companies having a portfolio of mine assets, rather than single mine companies, who would not take such a drastic step early on in the current cycle.

Fig.3 Australian Gold Sector**Fig.4** Australian Gold Sector

However, shutting down a mine is not an easy task. Key impediments include the expenses associated with closing out mining, power and labour contracts, as well as incurring environmental liabilities and longer-term care and maintenance costs.

Expand low-cost production

The lower the gold price goes, the more likely it is that fund and managerial attention will be drawn to growing low-cost assets. For example, we expect to see expansion in Plutonic Underground (additional 5.4 tonnes), Great Central's Bronzewing mine (a further 2.3 tonnes) and Acacia's Sunrise mine (2.2 tonnes).

Start new low-cost mines

Deposits less than around A\$320/oz are probably the only new assets that will be developed in the current environment. Newcrest should add around 14 tonnes of low-cost gold from Cadia and Ridgeway to Australia's total output (ie, almost 5% of country production) by the year 2000. Likewise the development of Plutonic's Centenary deposit will add a small amount of low-cost gold onto the market.

Outlook

The future of the Australian gold sector depends directly on how long the current gold price is maintained. In the short term, one to three years, we expect only minor cuts of around 10 – 20 tonnes for a total of 280–290 tonnes, reflecting the protection of hedging. The lower figure reflects the net effect of the closure of the most

marginal operations and the addition of some low-cost ounces at Ridgeway, Plutonic, Bronzewing, etc.

Medium term (three to five years), we would expect potential cuts to reach approximately 75 tonnes, thereby reducing total production to around 225 tonnes. The biggest cuts would be at operations with cash costs above the current spot price. Hedging would only be expected to provide protection for a limited number of companies.

Under a disaster scenario, where the current low price is maintained for over five years, we can envisage massive cuts (up to 60%) to Australia's production. Only those operations that can make a profit on spot prices can be maintained, which currently equates to roughly 40% of Australia's production. This forecast would bring total Australian production back to 1988 levels at 150 tonnes of gold. ■

Tim Churcher

B.Sc., M.Sc., D.I.C., M.B.A., M.Aus.I.M.M.

Tim Churcher completed his Bachelor of Science (Geology) with distinction at the Royal Melbourne Institute of Technology in 1986, prior to joining North Limited in 1987 as an exploration geologist in Kalgoorlie. He moved to Gold Mines of Kalgoorlie in 1988 as Project Geologist in the Forrestania region, where he was responsible for gold and nickel exploration.

In 1990, Tim left Australia to study at the Royal School of Mines in the United Kingdom. Upon graduating with a Masters of Science in Mineral Exploration, he commenced work with The Mining Journal in London as a research Co-ordinator. During this period he completed further studies at the Cranfield School of Management, graduating with a Masters Degree in Business Administration.

Tim joined J B Were & Son in 1995, and is responsible for analysis of the gold sector.



Quick Study...

A Gold Fixed/Floating Interest Rate Swap

by Peter Hillyard, Vice President and Manager Precious Metals, Bank of America

Interest rate swaps, which became popular in the Euromarkets during the early 1980s, have the dual benefits of hedging risks as well as enhancing trading opportunities. Essentially, the risk of an underlying asset can be bought or sold – without trading the asset itself.

A central bank may need to retain the liquidity of its gold, therefore it places deposits for three or six months and often rolls forward with the same counterpart. An interest rate swap offers the opportunity for it to take advantage of positive yield curves and convert the short-term lending rates from one bullion bank into long-term rates through another, without having to transfer its gold reserves from those short-term investments.

Definition

An interest rate swap is an agreement between two parties to exchange one stream of interest payments for another with different characteristics, but in the same currency. Usually, the cash flows are linked to interest payments on a regular frequency, either monthly, quarterly, semi-annually or annually and can be different on the pay and receive side.

One party pays a fixed interest rate at specified intervals over an agreed period and the other party pays a floating rate set for each of the periods, calculated on a notional principal amount.

Because the parties exchange only the interest payments without exchanging the underlying debt (asset), interest rate swaps do not appear on the balance sheets of the participants, although the cash flows from the swap transaction show up on the profit & loss accounts (income statements).

If payment days coincide then only a net payment is made representing the difference between the fixed and floating rates.

Hypothesis

A central bank prefers to place gold on deposit in the market for a six-month period, rolling it forward for a further period at maturity. However, it holds the view that gold interest rates will fall. It enters into an interest rate swap with a bullion bank whereby it receives a fixed rate of interest on the notional principal value. They pay interest on the same notional principal, calculated on a floating reference rate derived from the mean London Inter-bank Forward Gold Lending rate (GOFO) and the London Inter-bank Offered Rate for dollars (LIBOR). The central bank thereby converts its floating rate lending into a fixed rate and thus minimises its exposure to falling short-term interest rates.

Terms

Notional Principal per Calculation Period:	32,000 troy ounces (Total Notional Principal: 128,000 troy ounces)
Effective Date:	2 March 1998
Termination Date:	29 February 2000
Period End Date:	Semi-annually, commencing 28 August 1998 to, and including, the Termination Date

Fixed Amount Details

Fixed Rate Payer:	The bullion bank
Fixed Rate Payer Payment Dates:	Two Business Days immediately following each Period End Date
Fixed Rate:	2.05% p.a. paid semi-annually

Floating Amount Details

Floating Rate Payer:	The central bank
Floating Rate Payer Payment Dates:	Two Business Days immediately following each Period End Date
Floating Reference Rate:	Six months dollar LIBOR less six-month GOFO mean (LIBOR - GOFO)
Pricing Dates:	Each London Business Day during the Calculation Period
Documentation:	1992 ISDA Master Agreements

How is it priced?

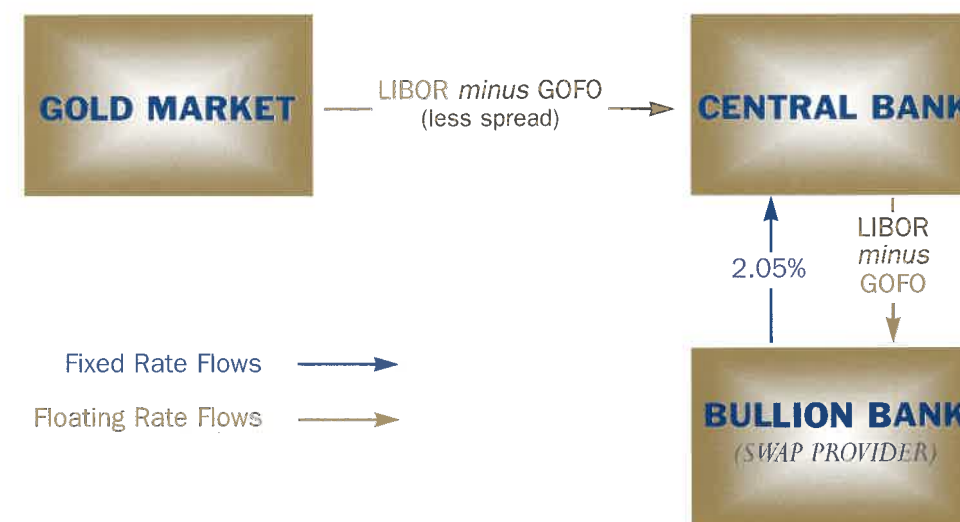
A swap contract is nothing more than a strip of forward contracts. The market prices swaps according to supply and demand; bullion banks raise or lower rates depending on whether they wish to pay or receive fixed.

It is possible to simulate the pay-off profile by using a strip of gold interest rate forwards or futures. However, these must be priced to accommodate the costs of meeting margin calls as well as managing several deals and cash flows, instead of a single one as in the case of a swap.

There are also additional factors that must be taken into account when pricing or using commodity swaps. In the case of a gold fixed

floating swap, the holders of the underlying asset derive value from having the gold available for use. This influences the pricing of the swap and can make it deviate from its simple theoretical value.

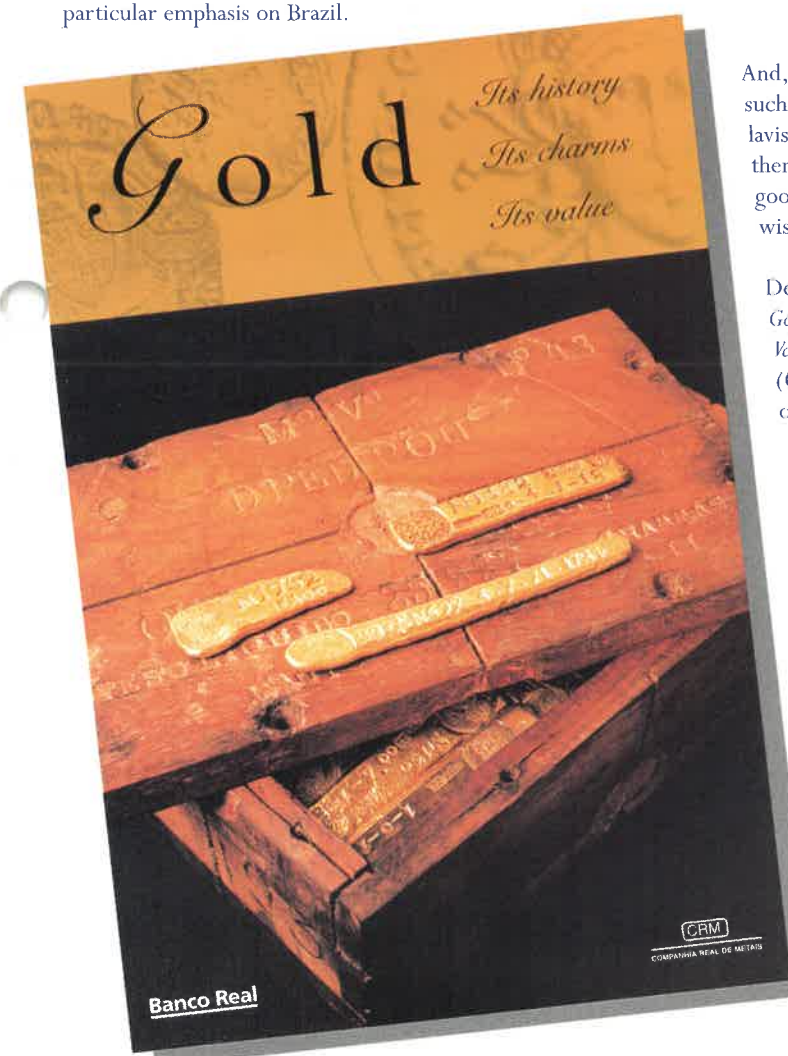
Why would a bullion bank benefit by arranging such a swap? It bridges a gap between two sets of customers: central banks with the short-term maturity preferences and gold producers which generally prefer to borrow longer term to match their maturity profile. ■



They wrote the book on gold

It's often said that the history of mankind is the history of war. But why not look on the bright side? According to the newly published coffee-table book *Gold – Its History, Its Charms, Its Value*, the story of civilised man runs hand in hand with the history of gold.

From King Tut's tomb on the frontispiece to a trading term glossary at the end, the book's 150-plus pages give full-scale, full-colour treatment to the metal. Its four sections cover the subject well, with particular emphasis on Brazil.



And, as one would expect with such a photogenic subject, the lavish use of photos – many of them full page, tell an equally good story for those who only wish to window shop.

Details on obtaining a copy of *Gold – Its History, Its Charms, Its Value* are available from CRM (Companhia Real de Metais) or Banco Real. ■

WEBWARD HO

An LBMA website is now under development.

Current plans call for a mid-year launch of a content-driven site featuring historical data on gold and silver prices, membership news and information, back issues of the *Alchemist*, and links to related sites. There will also be a 'mailto' feature allowing immediate email contact with the LBMA offices.

"This is part of our program of expanding services," says LBMA Chairman Peter Fava. "The site will be primarily targeted to our members and to the gold and silver trading community as a whole, but like everything on the Net, it will allow us to reach a worldwide audience."

As always, the comments and suggestions of our members and readers – on this and other subjects – are welcome.

You can email us at: alchemist.lbma@btinternet.com.

Bar excellence...

Bank Mounts 500-Bar Display

Entry is Free. Samples are not.

The International Gold Bars Collection

SOMETIMES ALL THAT GLITTERS REALLY IS GOLD Beginning 20 February, an exhibition of the world's largest collection of gold bars goes on display at the Bank of England Museum. The display – the largest ever focusing on gold and its uses – also contains stunning samples of gold jewellery and examples of gold's uses in industry. It continues until May, and entry is free. "This exhibition shows that gold is not merely dug up in one part of the world and buried in a vault in another, but is an integral part of everyday life. It is used in medicine, dentistry, the desktop computer and even space exploration," says John Keyworth, the Museum's curator. "Clearly gold is an important part of many cultures. Even beggars in India have their own bit of gold."

The bars range from the 400-oz London Good Delivery bar (which weighs 12.5 kgs) to the smallest minted bars (0.3 of a gram – about the weight of a postage stamp). More than 90 companies from 28 countries will be represented.

The exhibition is at the Bank of England Museum in Bartholomew Lane, EC2 (adjoining the Bank of England in Threadneedle Street). It will run from 20 February to 14 May, Monday to Friday, except on public and bank holidays. Opening hours are from 10.00am to 5.00pm. ■



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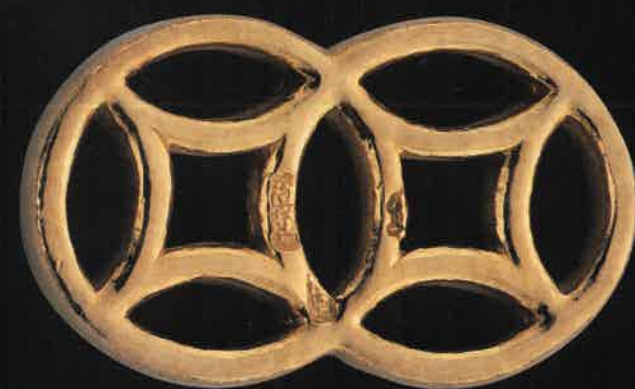
1. Doughnut bars Hong Kong
2. Twin-Coin bar Thailand
3. Yin Yang bar Japan
4. 'Model' bar South Korea
5. Bas-relief bar Thailand
6. Boat bar Hong Kong
7. Nugget Australia



5.



6.



2.



4.



7.

This Space for Rent

The Museum is available for evening functions from Monday to Friday, with groups of up to 200 guests free to explore the Museum and its interactive exhibits. Smaller gatherings and dinner parties can be held in the more intimate Rotunda.

For an information pack, including a menu and wine list (featuring the aptly named 'Old Lady Selection'), contact Lyn Austin on 0171 601 5793.

Global Forecast: 1998

Compiled and edited by Susanne M. Capano

Last year at this time, the *Alchemist* rounded up a dozen brave souls willing to predict the upcoming year's highs and lows for our favorite precious metals. This year, with bravery seemingly in greater supply (was it something in the eggnog?), we bring you 19 analysts from far and near – from Jo'burg to Toronto and New York to Sydney. Oh, right – and London. The considered opinions of our analysts follow. And, if you find you disagree, talk to us next year. We'll be glad to make it an even 20.

Ted Arnold Merrill Lynch & Co LONDON GOLD range \$250–\$345 (average \$300)

The year should see great volatility. The bear market will continue but, at some point, economic logic would call for capacity closures of at least 300 to 400 tonnes. The longer we go without real capacity closures, the longer the bear market will last.

SILVER range \$5.80–\$7.50 (average \$6.50)

Thanks to the presence of the 'big players' and their bull market game plan, we would expect to see a much higher average price vs. 1997's average around \$5.19. Two major worries for the bulls, however. The first is rising mine supply next year and the second is the impact that rupee devaluation

will have on Indian demand in 1998. Generally speaking, above \$7.00 silver should start to flow again from India into the West, although we don't think at this stage that our forecast high of \$7.50 will be held long enough for that to happen.

Andy Smith UBS LONDON GOLD range \$240–\$340 (average \$300) SILVER \$3.75–\$7.00 (average \$5.00)

If the Financial Times obituary "Death of Gold" (December 13) is to get the tallow rising in contrarian bulls, there has to be some sign that gold is not the safest one way bet – down – of almost any currency in modern times.

This depends on three issues: central banks, central banks and central banks. Bad intent *vis à vis* their inherited stockpile is compounded by increased gold lending. This subsidises the short positions of scapegoated funds and lamented mines selling forward to stave off closure. Central bank risk is open-ended in timing and amount of sales. Unless this risk is ring-fenced, gold will continue to have

more floors than Harrods (and more sales too). At minimum, gold lease rates must rise to squeeze speculators and bring forward mine closures. All indications are the opposite.

Will the new European Central Bank provide the ring-fence? Sales from Australia and Argentina, plus revolutionary changes of attitude in Switzerland and the US, show that those taking a fresh look at gold's role in reserves choose not to start from here, globally.

A surer thing is that the end of gold's annus mirabilis may see some New Year buying of this year's investment 'dogs'. Since gold (especially equities) has more fleas than most, a blip above \$320 may be possible (helped by a reversal of gold:silver ratio plays – a weaker rupee reduces India's dollar 'must sell silver' stop).

Surest of all, of course, is that gold bears will face a humbling month or two in 1998, after two years in the honeypot.

Rhona O'Connell T. Hoare & Co Ltd LONDON GOLD range \$270–\$340 (average \$310)

The gold market will remain under a cloud until the position of the European Central Bank becomes clearer. The

fundamental physical side has had a lot of excess metal to absorb over the past 12 months (apart from the impact of short sales), and the market therefore starts the year at a disadvantage. With the exception of mainland China, the fall in Asian currencies will constrain physical purchases somewhat, and it would be unrealistic to expect any seasonal upward re-rating. From the positive angle, gold hedges are being increasingly re-purchased and this, coupled with profit taking from short-side traders, will give some comfort. Without a clear signal from the Official Sector one way or the other, though, sentiment will remain mixed.

SILVER range \$5.25–\$7.00 (average \$5.75)

Silver is the Cinderella of the metals markets. She spends years below the stairs and then has one heck of a party when she goes to the Ball. However, when midnight strikes she leaves faster than she arrived –

and while she loses a shoe, other may lose their shirts. At the end of 1997, silver is backed up by fair fundamentals and is probably only half-way through the dance. However, it is wise to remember that, in April 1987, the market moved through a 110% range (in both directions) in the space of two trading sessions. There is sufficient metal in above-ground hoards to ensure that any speculative rallies, while potentially explosive, will be brief and the price is unlikely to end the year any higher than it starts it.

Bob Takai Sumitomo TOKYO GOLD range \$260–\$310 SILVER range \$4.50–\$7.00

The reason for choosing this range is extremely simple. In last year's *Alchemist*, the highest forecast was \$405 and the lowest \$330 – an average of \$367.50. In silver, the corresponding prices were \$5.80 and \$3.80 – an average of \$4.80. The average gold and silver fixes during December 1996 were \$369.17 and \$4.8225 respectively. People tend to choose symmetrical numbers with sensible spreads either side of the current price.

On a more serious note, and although I regard myself as a contrary trader, I do not think that gold will now display the quality of a rubber band. Of course, there may be some technical rebounds on the way down, but the reality is that gold has lost its monetary value and it will not come back. Only concerted efforts by central banks can halt this landslide.

Silver, on the other hand, has long been undervalued despite its good fundamentals. 1998 will be a year for the white metals, not just silver but platinum and palladium as well.

David Giese Smith Borkum Hare Merrill Lynch JOHANNESBURG GOLD range \$285–\$325 (average \$305)

The dominant impact on the gold price is sentiment. Currently, the relative stability of the US dollar and the low rate of inflation in the US remove the 'safe haven' nature of holding bullion. The bears have realised that the stability in the currency market means that there is no reason for the gold price to rise. Therefore, major short positions have developed and the negative sentiment towards gold is perpetuated.

If there is a major default in delivery, a sudden spike in the price could see gold up to \$320–\$330. However, unless there is a change in sentiment towards gold investment, the price is unlikely to hold up. Our perception is that there could be a steady recovery in the bullion price during 1998 due to worldwide economic recoveries.

Bruce Ikemizu Mitsui & Co., Ltd TOKYO GOLD range \$260–\$330

Looks very gloomy. More central bank selling expected but hopefully physical buying will support the market.

SILVER range \$5.00–\$8.00

Tightness is strengthening the market. In good contrast with gold, silver looks very bullish.

Frédéric Lasserre Societe Generale PARIS GOLD range \$280–\$340 (average \$315)

We expect gold prices to retrace down to \$280 by the beginning of 1998. During the year, the gold market will still be in fear of further central bank sales, mostly from emerging countries. We expect the European Central Bank Board to announce at the beginning of Q2 98 that the ECB will hold a larger than expected share of gold reserves. This might induce a rally up to around \$340.

SILVER range \$4.60–\$7.00 (average \$5.80)

We expect 1998 to be a very volatile year due to historically low levels of stocks and an eighteenth consecutive year of market deficit. Silver demand will remain robust, especially from the photography industry (28%) in India and China, and from jewellery (32%) from the US market. The price may drop at the end of Q1 98 due to a release of the current squeeze.

Hanspeter Hausheer SBC Warburg Dillon Read ZURICH GOLD range \$250–\$300

Gold has fallen to a 12-year low with no signs of a turnaround. The market is under the influence of three negative factors.

• Sentiment of central banks towards gold has clearly changed. More and more want to reduce their gold holdings or eliminate them. This will continue to impact the market negatively, since 34,000 tonnes of gold remain in central bank vaults.

• In the last few years, demand growth for gold from South East Asia was tremendous. This changed during the second half of 1997, as a result of the financial crisis in this region. I expect to see remarkably lower demand out of this region during 1998. With no compensation from other regions, overall demand will fall.

• There is still an increase in hedging from mining companies. Therefore, liquidity in the market will remain high.

In this environment, with investors still on the sidelines, the price trend is still lower.

SILVER range \$5.50–\$6.50

Silver, with better fundamentals, has decoupled from gold. Comex silver stocks, which loomed negatively over the market for years, have fallen to a long-term low. Physical demand is still healthy, but could be affected by the Asian financial crisis as well, as approximately 20% of worldwide physical demand comes from Japan and South East Asia. As a result, worldwide silver demand could stagnate in the coming year. However, institutional traders seem to like silver much more than gold and have driven the price to an eight-year high. Considering the participants involved, I do not exclude short-term rallies or dips out of the above range.

Jeffrey Christian CPM Group NEW YORK GOLD range \$280–\$330 (average \$327)

We believe that fundamentals dictate higher gold prices. Prices under \$300 are below threshold levels needed to sustain mine supply, and simultaneously serve to stimulate large-scale increases in demand from both jewellers



GOLD

	low	high	avg
London	240	350	302.50
Tokyo	260	330	290
Jo'burg	285	325	305
Paris	280	340	315
Zurich	250	300	(275)
New York	255	330	306
Sydney	250	320	290
Toronto	260	350	310
Hong Kong	270	345	312.50
Averages	261.11	332.22	300.67

Low

High

Averages

SILVER

	low	high	avg
London	3.75	7.50	5.53
Tokyo	4.50	8.00	6.125
Paris	4.60	7.00	5.80
Zurich	5.50	6.50	(6.00)
New York	5.20	8.00	6.20
Toronto	5.25	7.50	(6.00)
Hong Kong	5.00	9.00	(7.00)
Averages	4.83	7.64	6.08

Low

High

Averages

The above lows and highs represent the single lowest and highest estimates for each city. The average represents the mean of all individual averages (where no average was provided, the midpoint between high and low has been substituted).

and investors. Indeed, these supply and demand trends were emerging in December.

The key to prices remains with investors, who were content to hold assets in US government bonds and equities during 1997. Investor demand in gold rose only nominally from the very low levels of the previous year.

Central bank sales, while a limiting factor, historically prove secondary in determining gold prices. In 1967, sales led to a rush by investors and resulted in an end to gold convertibility for the private sector and the end of fixed gold prices. In 1978-79, gold prices quadrupled even as central banks were selling enormous amounts. As these examples show, the reason for low gold prices during 1997 was not so much heavy central bank sales as low buying interest by investors.

Investors remain interested in gold. They have just been canny, waiting for financial market conditions to signal that gold's turn has come. These signals may emerge in 1998.

SILVER range \$5.20-\$7.00 (average \$6.00)

The silver market has been heading for a major shift since the beginning of the 1990s, with annual fabrication demand outpacing newly refined supplies entering the market. Enormous inventories compensated for this annual shortfall for many years but, from 1990 through 1997, perhaps a billion ounces of silver has been sold from these stockpiles and used. This has left the silver market in extremely short supply as of the end of 1997, and 1998 may be the year in which the price effects of these trends become fully felt.

Ian Amstad Bankers Trust International PLC

LONDON GOLD range \$250-\$300 (average \$275)

Gold will remain out of vogue for a while longer and bottom out at around \$250 in about a year from now. Certainly, the Asian shock will keep inflation tamed. In real terms, the gold price is double where it was before Bretton Woods collapsed and unpegged from \$35 an ounce. Back then the world was moving into an inflationary environment, now we are in a disinflationary environment.

Factors which could boost gold include:

- A protracted Asian crisis causing social instability in the region.
- Excess liquidity creation/debt monetisation in Japan.
- Overly accommodative monetary policies in Europe and North America.
- A protracted bear market in developed country stock markets from over-valued levels.
- War - Middle East break-up.
- The failure of the Euro with ugly recriminations.

Ivars Bergmanis HSBC James Capel

LONDON GOLD range \$280-\$350 (average \$330)

The price appeared to be stabilising around \$320 in October, but news of potential Swiss sell-offs, ECB gold reserve doubts and a 124-tonne sale by Argentina's central bank provided fresh fodder for investment funds looking to short the metal again. Where will we see the bottom? Year-to-date gold demand from the developing countries has already registered record levels and global investment demand

has also picked up strongly. On the flipside, any persistent currency weakness, particularly in India, is likely to slow offtake and delay a price recovery. The heavy shorting performed by the funds and forward selling by producers has set the scene for a powerful shortcovering rally. This will be the key to restoring the price to an equilibrium we estimate to be around \$350. When is such a rally likely to occur? The risk/reward of shorting gold at present price levels is getting worse due to strong physical demand and potential mine production cuts. Resolution of the ECB structure (at the earliest May-June 1998) is another turning point to watch carefully.

SILVER range \$4.80-\$6.80 (average \$5.00)

Although silver has more of an industrial appeal than gold, it too is not insulated against organised attempts to push the price in a particular direction. Silver has seen a string of market deficits (dis-hoarding playing the balancing role) and falling visible warehouse stocks. We believe that fund/syndicate activity may well be trying to anticipate the timing of this pinch-point. Previous attempts to corner this market were not too successful. Further, we would not be surprised to see heavy producer selling prevent prices from rallying too sharply. Be careful out there.

Keith Goode Bell Securities

SYDNEY GOLD range \$280-\$320 (average \$300)

The action taking place at the end of 1997 and beginning of 1998 is the key to determining gold's movements during the balance of the year. Will the shorts in the market get squeezed, or are funds prepared

to ride their positions? What will the Asians do if their currencies continue to collapse?

The market has been focusing on central banks. Specifically, many participants are wondering what role gold will play in the formation of the ECB. What percentage of reserves do the European central banks want to keep as gold? The more gold is held, the easier it will be to boost confidence in the new currency. Perhaps some of the down-playing of gold as an asset is sabre-rattling: not so much a genuine interest in selling the metal as a move designed to encourage lower prices, which would in turn serve to restrict gold exposure within the European central banks.

Egizio Bianchini Nesbitt Burns

TORONTO GOLD range \$260-\$350 (average \$325)

Overall, gold should see a more volatile year. Three major issues face the market:

- How will EMU be resolved, and what role will gold play? What percentage of reserves will members hold in gold? If the formation of the new currency is done in an orderly manner, gold will not come under the same pressures in 1998 as in 1997.

- How sustainable will the dramatic rise in jewellery demand prove, particularly in Asia?

- What course of action will producers follow? With prevailing low prices, some drop in production is likely, but if gold stays around the mid-\$280's for some time, there will be a slow whittling down, not a sharp fall-off. Producers

now realise they must be realistic about the gold price. Their actions will greatly influence market direction.

SILVER range \$5.25-\$6.25 (average \$5.50)

Silver fundamentals look good but not spectacular - not enough to take silver up to \$9.00 or \$10.00 an ounce, as some forecasts are calling for. The late 1997 rally was not exclusively caused by real demand - it was accelerated by fund buying. Therefore, the key questions facing silver are: How much do the hedge funds own? When will they start to liquidate? Aside from the funds, the other major influence on the price will come from the Indian subcontinent, where currency levels over the course of the year could have an impact on consumption.

Howard Levine Bear Stearns Commodity Sales

NEW YORK GOLD range \$255-\$325 (average \$285)

I suspect that the low in gold will be reached in the first half of the year, as the price is pressured by continuing fear of central bank sales, bearish fall-out from Asia's woes, the dollar's strength and the deflationary trend in commodity prices. Later in the year, a recovery could well ensue if global demand is not overly affected by the current business slump in Asia, if central bank sales abate from their 1997 pace and if production begins to be crimped by inadequate returns.

SILVER range \$5.20-\$8.00 (average \$6.40)

After a decade of annual production deficits, silver now is beginning a cyclical upturn in prices and

a renewal of investor interest. Unless the global impact of the current business slump in Asia proves unexpectedly severe, prices should uncover substantial investor demand in the lower \$5.00 area and find the pretext later this year to considerably exceed last year's price.

Helen McCaffrey N M Rothschild & Sons

LONDON GOLD range \$250-\$320 (average \$300)

Volatility will characterise the gold market in 1998, dominated by concern regarding increased mobilisation of official sector gold, including both lending and outright sales. As large speculative positions have weighed heavily on the market over the last six months, spikes outside this range cannot be ruled out. We expect the ECB to hold only a small proportion of its reserves in the form of gold, leaving most of the current gold reserves in the national central banks. Speculation over their actions could hang over the market for an extended period.

SILVER range \$5.00-\$6.50 (average \$5.40)

Global demand almost certainly reached record highs in 1997, and the fundamentals should continue to support prices during 1998. An expected significant rise in mine production from mid-1998 and the possibility of a correction resulting from unsettled Asian economies are not sufficient to close a sizeable gap between fabrication demand and supply from mine production and scrap recovery - therefore, stocks will again be driven lower. These economic

fundamentals have excited speculative interest in silver resulting in explosive prices, which should spill over into the first few months of 1998. Prices will become due a significant correction as the market froths higher.

Virginia Howarth Bankers Trust Securities

SYDNEY GOLD range \$250-\$320 (average \$280)

A range of factors have generated extremely negative sentiment:

- Sales of gold reserves by central banks overwhelmed demand. At this point, there is no convincing argument to expect these sales will end as gold is a poor investment relative to government bonds.

- During 1997, gold lost its 'safe haven' status as it did not respond positively to the currency turmoil in Asia or volatility in the equity markets.

- The expected deflationary impact of Asian exports when combined with the trend towards government fiscal restraint indicate a deflationary impact on OECD inflation, thus eliminating the need for gold as a hedge against inflation.



• Following the currency depreciation in Asia, the higher cost of gold in local currency terms has already dampened fabrication demand, exacerbated by slowing growth.

Two factors have the potential to boost the gold price:

• At such low prices, production may be wound back (the industry weighted average cost is \$267). Strong hedge books and a perception that low prices are a short-term phenomenon may keep this from impacting supply for some time.

• Gold and other markets could respond positively to a turnaround in sentiment towards Asia, likely when IMF packages are perceived to be seriously implemented. A short-covering rally would briefly amplify such a move as the ratio of short-to-long non-commercial positions on COMEX is seven times.

Felix Freeman Scotia Capital Markets TORONTO
GOLD range \$270–\$320.

The gold price should continue to weaken during the first half

of 1998. Pressure will be maintained from ongoing central bank disbursements (both selling and lending), causing gold to most likely reach the lows during the second quarter. During the second half of the year, some of the downward pressure should be alleviated by two factors: announcements of mine closures and the completed structuring of the ECB.

A price recovery to \$320 or even a bit higher would follow, but this rally could be tempered by continued or worsening Asian currency problems or renewed central bank disposals.

SILVER range \$5.50–\$7.50

The current silver rally has been outpacing fundamentals due to fund buying – can this rally create its own momentum? If the buying during 1998 is more or less restrained, the above range is realistic, but a lack of restraint would push prices even further to the upside.

Michael R. Marsh The Bank of Nova Scotia – Scotia Mocatta HONG KONG
GOLD range \$275–\$345 (average \$330)

Old bulls never die – they just fade away! I see gold opening at the lower end of its range and having a steady recovery throughout the year. The prevailing low price is causing both declining mine output and an increase in physical demand, particularly in Asia. The economic hardships taking place in some regions will not persist forever.

SILVER range \$5.00–\$9.00

Although silver is not very popular in this region, logically any currency with a high interest rate must eventually move higher.

Raymond Chan Gold and Silver Exchange

HONG KONG GOLD range \$270–\$320

In the two previous years, gold had one overall trend for the year, but I expect 1998 to be more volatile. Initially, the market will continue to test the downside.

Lower prices helped fuel strong demand in Asia during the end of 1997 – creating up to a \$2.50 premium to world prices. From January to October 1997,

approximately 330 tonnes were consumed in Hong Kong, an increase of 30% over the previous year. Estimates for the full year are roughly 380 tonnes – as much as a 35–37% increase year-on-year.

However, normal seasonal factors will cause gold demand here to drop after Chinese New Year at the end of January, and shortly after that I expect gold to touch the low.

In the middle of the year, the key will be the finalisation of accounts for the Euro as member banks position themselves and their individual currencies, and decide on the percentage of reserves the ECB should hold in gold. In this context, I doubt if it makes sense for them to sell gold to receive USD to form a new currency. Nervousness in the market during this time may cause shortcovering from hedge funds, causing the market to push back above \$300. After that, gold may move lower again during the third and fourth quarters – I am not overly optimistic that the rally can last, given the attraction for producer selling. ■

The Gold Book Annual

by Frank Veneroso, Veneroso Associates

No longer do gold market participants try to understand their market in terms of traditional investment determinants (inflation, the dollar exchange rate and political shocks), as was the case in the past. The market regards the outlook for gold as a function of supply/demand forces, and one supply force stands out: the flow of central bank gold. This has led to a state of profound pessimism stemming from the belief that the world's central banks will sell off their gold. Other supply/demand forces, if they are bearish, garner attention as well. Recently, the Asian currency and financial crises have been focused on as adverse shocks to demand.

It is because of this radical shift in thinking that we have devoted the first issue of the Gold Book Annual to the supply/demand fundamentals for gold. The gold market is functioning much like any commodity market: a huge supply of metal from the liquidation of a vast above-ground stock is straining the absorptive capacity of the market's principal commodity use – jewellery. A good parallel is the palladium market, where a vast Russian hoard of the metal has been under liquidation in recent years, providing the market with 40% of its aggregate supplies and depressing the price – until Russian supplies diminished in early 1997 and the palladium price exploded.

This year's edition of the Gold Book Annual tries to accomplish three basic goals:

• Identify supply/demand variables whose values are erroneously estimated and widely misunderstood and estimate the true levels of supply and demand in the gold market.

• Understand and explain the short run dynamics that govern the way the gold price responds to changes in these relevant supply/demand variables.

• Understand the long run trends in the gold market that project future supply/demand conditions and explore their implications for the future price of gold.

Following is a synopsis of the main points covered in each chapter:

Chapter One, The Gold Supply/Demand Framework, establishes the case that global gold demand far exceeds previous consensus estimates, thus implying a deficit in the market that is twice prevailing estimates.

Chapter Two, The Incredible World of Gold Borrowings, argues that gold is flowing from central banks at a rate far higher than anyone now believes, mostly in the form of borrowed gold. Outstanding gold loans are two to three times consensus estimates. These unappreciated flows of borrowed gold constitute the 'hidden' supplies that correspond to the underestimated demands discussed in Chapter One. Most of these gold borrowings can be construed as short sales of some form or another. If they continue to grow, they will represent a source of gold market instability at some point in the future.

Chapter Three, Reconstructing Gold Supply/Demand, 1993–1997, demonstrates how these new supply/demand estimates are consistent with so much else we know about the gold market.

Chapter Four, Inventory Tides and the Option Hammer, moves toward the issue of gold price dynamics. It is widely believed that gold demand is extremely sensitive to changes in the gold price, so that a sharp or even complete abatement in official supplies would have only a moderate impact on the gold price. We analyse these short run sensitivities and argue that most of them are of a transitory nature.

Chapter Five poses the question, "Where Would the Gold Price Go if the Flow of Official Gold Were to Cease?" In our 'model' of gold's supply/demand dynamics, if supplies of official gold were to cease entirely, price elastic demand rather than price inelastic mine supply would be the primary factor in determining new price equilibrium. Our conclusion is that after some lag, the gold market would clear at a price of \$600 an ounce.

Chapter Six, The Strong Secular Trend in Gold Consumption, shows that growth in global gold demand, excluding both official and western investment demands, has been in the order of 5% per annum whenever the gold price has been constant in real (inflation adjusted) terms over the past 25 years. This trend growth rate amply exceeds that of any other major commodity, as well as that of global GDP growth. It is likely that this trend growth rate will persist in the decade to come.

Chapter Seven is entitled "Dealing with the Disequilibria of 1997". In 1997, strength in the US dollar and the currency crisis in Asia depressed global gold demand. This chapter argues that both these negative factors will prove to be transitory.

Chapter Eight, Future Gold Supply/Demand Balances and Their Implications for the Gold Price, deals with the long-term future trend of mine and scrap supply. Historical records show that the trend rate of gold mine supply is likely to be half that of demand. If the real (inflation adjusted) price of gold remains constant, then today's large deficit in the gold market, which was zero only five to 10 years ago, will widen progressively and rapidly as the years pass.

Chapter Nine, Past Patterns and Future Prospects for Official Gold Sales, reviews attitudes of central banks regarding gold. There is much here that is not positive. Many central banks view gold negatively as a barren asset devoid of any return. However, it appears likely that recent undisclosed official sales have been of European origin, are EMU related and will abate or cease in the coming year or two.

Chapter Ten, The Positive Real Return to Gold, considers the key issue of gold's inherent long run rate of return. Central bankers and the 'shorts' in the market believe incorrectly that gold is barren only because their expectations are based on the bear market of recent years and not on a longer-term perspective. A longer-term perspective should encompass not only the recent bear market years but the bull market of the 1970s – a bull market which was unprecedented in magnitude for virtually any major asset class.

Chapter Eleven, End Games, brings to bear all of the above analyses and simulates future supply/demand balances and future gold price scenarios. These simulations show that, under a persistent low \$320 price scenario, today's large gold market deficit expands at a rate sufficient to exhaust central bank coffers of physical metal within a decade. At this point, the gold price must explode far above a price equilibrium that exceeds \$1,000 per ounce. The odds are that long before this extreme end game is played out, today's sellers, becoming aware of such a possible outcome, will modify their behaviour. This would lead to an abatement of official supplies, resulting in an earlier rise. In all such cases, when a market that has been far removed from its long run equilibrium returns to this equilibrium, it overshoots it and by a large margin.

Amidst the prevailing gloom in the gold market, these conclusions are shockingly bullish. We want to stress two things: first, our conclusions have been arrived at through a dispassionate analysis and second, our analysis need not have bullish implications for the short run. To a great degree, short run developments lie with the central banks themselves: if they choose to sell gold intensely and lend it freely, they will depreciate the current value of the bullion they hold even if it is inevitable that it will eventually command a much higher price. ■

The Gold Book Annual is available for US\$350 from:
William Murphy, 53 Austin Street, Portsmouth NH 03801
Telephone 603-430-8482 Facsimile 603-430-8598

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

Silver Spot

“As a fairly small market, silver is prone to manipulation”...

Booming silver market ‘rigged’
The Guardian, 13 January 1998

Supply Squeeze in Silver Market
Has Fingers Pointing at U.S.
Fund *Wall Street Journal Europe*,
13 January 1998

At issue in the CFTC’s investigation is whether economic fundamentals justified the 29% silver price spike over November and December

CFTC Boosts Surveillance of
Silver-Futures Market *Wall Street Journal*, 12 January 1998

Suggestions that something untoward was happening in the silver market surfaced some months ago.

US lawyers act on silver market
manipulation *Financial Times*, 12
January 1998

Silver falls sharply on big US
fund sales *Financial Times*,
9 January 1998

Price of silver at eight-year high
Financial Times, Christmas Eve,
1997

Syndicate in push to lift price of
silver *Financial Times*, 3 December
1997 ■

Gold Quotes

Three central banks hoard gold
in case of euro disaster
Telegraph, 23 January 1998

Anglogold to cut output by
17% as price declines *Financial Times*, 23 January 1998

Pegasus Gold in bankruptcy
filing *Financial Times*, 19 January
1998

Gold falls to lowest for 18 1/2
years *Financial Times*, 10 January
1998

Thailand urges gold donations
Financial Times, 8 January 1998

Homestake bid gives gold
mining sector a lift *Financial Times*, 29 December 1997

Study calls for free gold trade
Financial Times, 18 December 1997

Death of gold *Weekend FT*, 13
December 1997

Gold price slide spurs Barrick
buy-back plan *Financial Times*,
12 December 1997

“Were gold ever to
rally, the move could
be explosive. But such
a rally will not come
because central banks

**suddenly rediscover
faith in gold. They like
the current situation.
It will come only if
belief in the wisdom
of central bankers is
shaken, if not
destroyed.”** In Alan We

Trust. So Why Own Gold? *The New York Times*, 10 December 1997

Price of gold drops to lowest
for 18 years *Financial Times*,
10 December 1997

Jittery Gold Market Is Awaiting
European Bank’s Reserve Move
Wall Street Journal Europe,
4 December 1997

News of Argentina Sale Sends
Gold Plummeting *International Herald Tribune*, 4 December 1997

Study adds up the Nazis haul
of looted gold *Financial Times*,
2 December 1997

Gold Drops Below \$300 For
First Time Since ‘85 *Wall Street Journal Europe*, 28 November 1997

“To say the bullion
price has cratered
would be a slur on
the hole-in-the-ground
community, to say it
has fallen out of bed

**would be disrespectful
to disturbed sleepers.”**

Gold loses lustre as central
banks “sweat” it *The Guardian*,
27 November 1997

JCI turns its back on gold
mining *Financial Times*, 27
November 1997

Weak bullion puts pressure on
gold shares *Financial Times*, 27
November 1997

Anglo American to cut JCI link
Daily Telegraph, 27 November
1997

Will gold still shine in future?
Express, 26 November 1997

Anglo combines groups to
become top gold producer
Financial Times, 26 November
1997

“Many developed
economies, including
America, France and
Switzerland, still hold
more than 40% of
their total foreign
reserves in gold,
and these massive
reserves are keeping
the price artificially
high. In any other
market, such huge

**stocks would
eventually cause the
price to collapse.”**

Losing the Midas Touch *The Economist*, 22 November 1997

Bankers dispute gold’s role in
ECB *Financial Times*, 20 November
1997

Demand for gold at record
levels *Financial Times*, 20
November 1997

South Africa’s gold hopes
thwarted *Financial Times*,
18 November 1997

“The news this week
that the Bundesbank,
Germany’s central
bank, had begun
to lend gold to the
market was taken
bearishly with some
market professionals
saying this was a step
towards outright
selling.”

Gold touches lowest for 12 1/2
years *Financial Times*, 15/16
November 1997 ■

LBMA News

by Chris Elston, Chief Executive, LBMA

Membership

On 1 December 1997, following its acquisition by The Bank of Nova Scotia, Standard Chartered Bank – the Mocatta Group relinquished its Market-Making Membership in favour of The Bank of Nova Scotia – ScotiaMocatta. The address and telephone number of the newly named entity remain unchanged at Mocatta House, 4 Crosby Square, London EC3A 6AQ and 0171-638 3636. Much relief all round that the historic name is not lost.

At the same time, The Bank of Nova Scotia resigned its Ordinary Membership.

On 1 December, Guardforce International (UK) Limited became an Ordinary Member. Their address is: Unit 8, Blackburn Trading Estate, Northumberland Close, Stanwell, Middlesex, TW19 7LN; telephone 01784 420020.

On 1 January, Barclays Physical Trading Limited gave up its Ordinary Membership. Barclays retains its Market-Making Membership in the name of Barclays Bank PLC.

Total membership now stands at 12 Market Makers and 50 Ordinary Members.

Good Delivery List Changes

Addition:

Gold – Uzbekistan: Almalyk Mining and Metallurgical Complex (AMMC), with effect from 28 October 1997.

Transfers to Lists of Former Melters and Assayers of
Good Delivery Bars:

Silver – Further to the notice in the last *Alchemist* –
Poland: Zakłady Metalurgiczne Trzebinia
Yugoslavia: Trepca, both with effect from 10 November 1997.

Gold and Silver – United States: Engelhard – CLAL USA, with effect from 9 December 1997.

Committees

Management Committee

The Committee continues its oversight of the work of the specialist sub-committees and in the latest period has had before it the following topics:

•Bullion Addendum to the ISDA Master Agreement: after a long gestation period and numerous drafts, the final version is now with the printers and should be available shortly.

•EU VAT Harmonisation for Gold: with the UK’s presidency of the European Union during the first half of this year, this is likely to become a very live topic.

•Bullion Accounts Agreement: a new standardised agreement has been drawn up covering allocated gold and silver, arising from the fact that from 1 June 1997 the custody of investments became an authorisable activity regulated by the SFA. It no longer has exemption under Section 43 of the Financial Services Act.

•Regulation: The Committee has responded to the new Financial Services Authority’s invitation by submitting our views on how the new regulatory regime should cover the bullion market.

Fixing: We have been asked to clarify that, although the gold and silver fixings are carried out by LBMA members, they are not covered by the LBMA’s constitution and are not therefore official activities of the LBMA. They are separate activities governed by:

Gold: Deutsche Bank, HSBC Midland, N M Rothschild and Sons (chairman), Republic National Bank, and ScotiaMocatta

Obituary

The LBMA records with regret the death on 10 January of Air Commodore ‘Tubby’ Mermagen, CB, CBE, AFC at the age of 85.

The nickname came from his stocky build on joining the RAF in 1930, but he was not too tubby to play wing three-quarter for the RAF and for Richmond.

After retiring from the Royal Air Force in 1960, Herbert Waldemar Mermagen joined Sharps Pixley as a director, staying on when Sharps was acquired by Kleinwort Benson. After 10 years in the bullion market, where he attended the daily gold fixings, Mermagen retired to Gloucestershire and played golf into his eighties.

Mermagen’s main career with the RAF was a most distinguished one. He took part in the early air battles of the war during the evacuation from Dunkirk and was instrumental in establishing fighter stations and introducing the Spitfire. But before the war had progressed very far he was promoted above the level where he could expect to take part in combat flying. He ended the war as AOC British Air Command, Berlin, and his last two appointments were AOC RAF Ceylon and Air Officer Administration RAF Transport Command.

‘Tubby’ Mermagen is survived by his wife Rosemary and their two sons, to whom we extend our sympathy.

LBMA News

by Chris Elston, Chief Executive, LBMA

Silver: Deutsche Bank, HSBC Midland, ScotiaMocatta (chairman)

Finance Committee

The good news is that, as Colin Griffith, Chairman of the Finance Committee, has reminded members, subscriptions for 1998 remain unchanged for the seventh successive year.

Brian Reid has left the Finance Committee on his departure from Merrill Lynch – with our thanks for his all-too-short service.

Physical Committee

Work is proceeding on the accreditation of five Russian Refineries to replace the former USSR State Refineries that were transferred to the Former Lists on 1 January 1997.

Apart from continuing to process two other outstanding Good Delivery applications, the Physical Committee is making progress with its examination of a possible electronic clearing system. In addition, it is about to start a second round of its questionnaire to refiners. And with the conclusion of its review of silver delivery standards, the working party is considering turning its attention to gold.

Public Affairs Committee

Paul Copsey (N M Rothschild and Sons Limited) has resigned from the PAC on his transfer to a new position in NMR – our thanks for his services. The PAC is now seeking applications for this post. Please direct all enquiries to Chris Elston at the LBMA Executive.

Although your Chief Executive was sadly unable

to be present, he is assured that the Annual Disco at the Directors' Club on 14 November 1997 was the usual deafening success. He did see at close hand the organisational effort that went into it. Thanks, Stella!

The Autumn Seminar at the Dickens Inn on 20 November 1997, at which Paul Burton, Editor of the Mining Journal *Gold Service*, spoke on 'New Gold Supply, Pipeline or Pipedream,' was both an educational and a social success. We are aiming to follow this up with our usual Spring Seminar on the Thursday of Platinum Week, 21 May 1998. Speakers, subjects, and venue are under consideration. In the meantime, please mark your diaries.

The Chairman, Peter Fava, hosted a dinner on 19 January (see photo on page 2) to mark Terry Smeeton's imminent retirement as head of the Bank of England's Foreign Exchange Division, as well as Alan Baker's and John Fairley's long and distinguished service on the Management Committee. Some 40 invited guests heard Peter thank Terry for all he had done to promote the London Bullion Market. Terry responded that, judging by the company around the table, the market seemed to be in good shape.

The LBMA's Biennial Dinner will be held on Thursday 23 April at the Gibson Hall, when our principal guest will be Mr. David Clementi, Deputy Governor of the Bank of England. The evening will start with a Cocktail Reception at the Bank of England Museum, where the Industry Collection of Gold Bars Worldwide will be on display (see pages 10 & 11). ■

DIARY OF EVENTS

19 February–14 May 1998

The International Gold Bars Exhibition at the Bank of England Museum, Bartholomew Lane, London EC2 (see article, page 10 & 11)

5–7 April 1998

The Gold & Silver Institutes 1998 Annual Conference, The Ritz Carlton, Naples, Florida, USA

23 April 1998

LBMA Biennial Dinner at the Gibson Hall, Bishopsgate, London EC2

14 May 1998

LBMA Annual Golf Day, Clondon Regis Golf Club, Surrey

21 May 1998

LBMA Spring Seminar (details to be arranged)

22–23 June 1998

FT World Gold Conference, Rey Juan Carlos I Hotel, Barcelona, Spain



ISN'T IT ABOUT TIME THEY DECIDED IF THEY WANT A BULLION VAULT?

LBMA Hires Public Relations Manager

The LBMA is pleased to announce that Susanne M. Capano has been hired as Public Relations Manager.

Susanne's career includes precious metals trading and marketing positions in New York, Luxembourg and London for Morgan Guaranty, Handy & Harman, and N M Rothschild, among others. For the past year, she has been a member of the Public Affairs Committee and Editor of the *Alchemist*, during which time she has continued to upgrade the content and look of the journal.

In addition to continuing as Editor and further refining the quarterly *Market Statistics* sheet, her expanded duties include the design, development and maintenance of an LBMA web site, and managing press and media relations, where she will establish a more pro-active presence for the Association. Said LBMA Chief Executive Chris Elston, "I am sure LBMA members, and all of the people inside and outside the market who know Susanne will join me in welcoming her aboard and wishing her continued success with us." ■

The *Alchemist* is published quarterly by the LBMA. For further information please call Susanne Capano, Editor, Chris Elston or Stella Thompson LBMA Executive 6 Frederick's Place London EC2R 8BT Telephone: 0171 796 3067 Fax: 0171 796 4345

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