Alchemist
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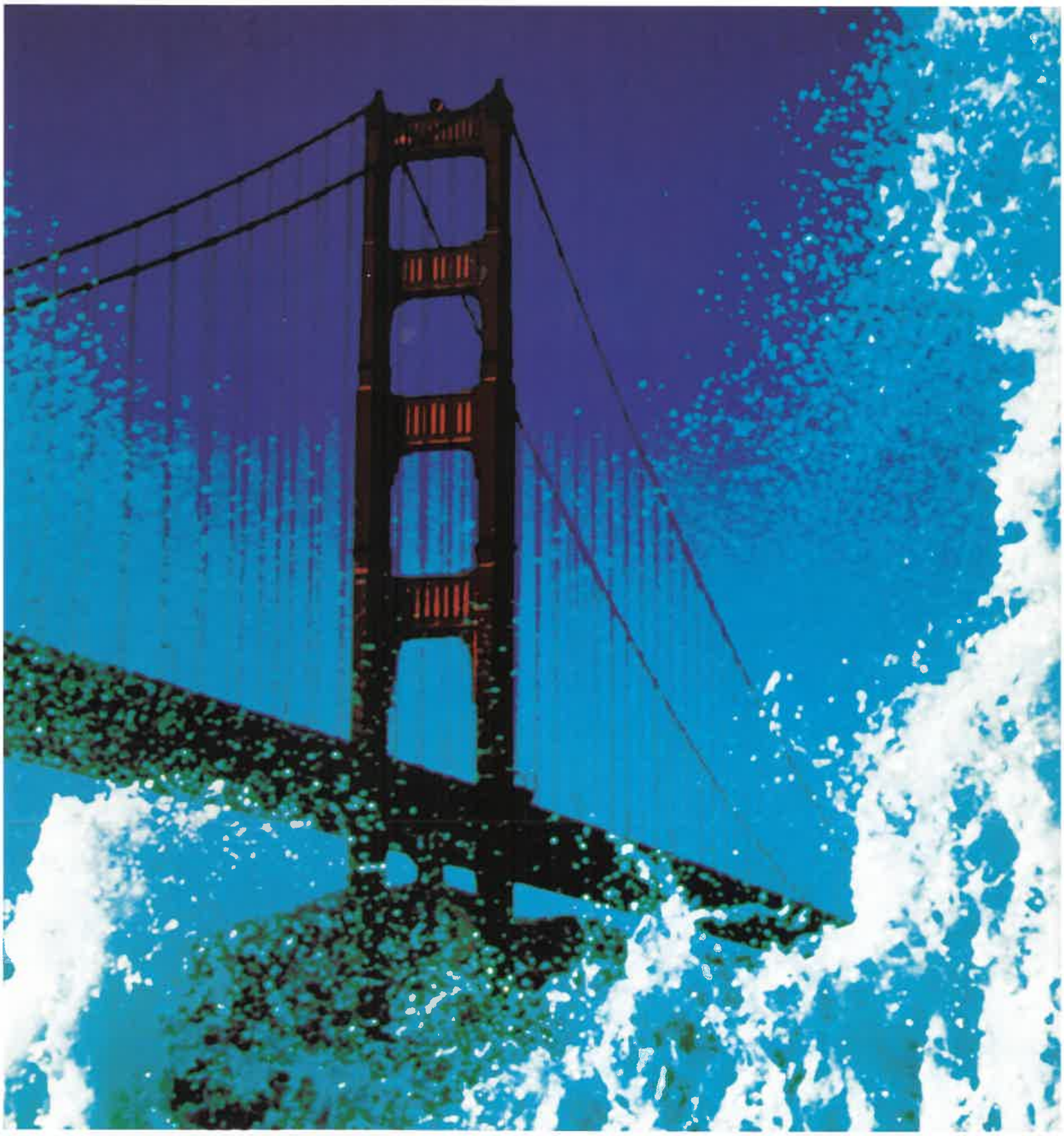
LBMA

In this issue



The Golden Gate Bridge, San Francisco
Next year's LBMA Precious Metals Conference will be held at the Stanford Court Hotel, San Francisco on 10–11 June.

see article on page 11

Istanbul 2001

A Review of the LBMA Precious Metals Conference

By Susanne M Capano, Editor

Is it not time that we pool our collective resources and experiences, our mutual visions and our expectations? – Paul Streng, Rand Refinery

Over 350 delegates from 38 countries came together for two days to discuss the industry's most vital issues at the LBMA's Precious Metals Conference 2001. A total of 11 plenary and parallel sessions covered a wide range of topics – such the likelihood of the Joint Central Bank Agreement being extended (and in what form), the potential for fuel cells, and the impact of e-commerce on the precious metals markets.

One of the most popular sessions covered the official sector. A follow-up interview with one of the speakers, Giacomo Panizzutti, appears on the next page. Another popular speaker was Franco Nevada's Pierre Lassonde, who discussed the difficulties faced by mining companies in deciding whether to expand by acquiring an existing company or project or carrying out exploration. His speech follows on page 6.

While most presentations were from market practitioners, a notable exception was British industrialist Sir John Harvey Jones, who observed during the opening session that the solution had been found for the gold price: to hold the LBMA Conference in Istanbul and keep everyone away from their desks for as long as possible. All that remained was to extend the Conference for several months, and all the attendees could look forward to a prosperous time ahead.

Sir John first gained prominence in the UK by transforming ICI from a loss-maker into a profitable company during his tenure as chairman. However, he is best known for his Troubleshooter television series, during which he analysed and advised struggling companies. His forthright comments on the gold market from the Summary Session can be found on page 9.

Our thanks to the many participants who completed feedback forms on the Conference, which will provide an important input into the planning of next year's programme in San Francisco (see article on page 11). June 2002 seems far away at the moment, but with more potential topics than time, the programme will no doubt go through many revisions before being finalised. Any input from *Alchemist* readers would be helpful (and the earlier, the better) ■

Above, the Conference reception at the Ciragan Palace on Monday evening, left, the Conrad Hotel.

Photography courtesy the Conrad Hotel, Stephen Brady and Robin Nash

Above, delegates at the opening session. Below, Turkish-style coffee break.

There was a bonus for those who completed the feedback forms – thanks to the generosity of CSFB, a prize draw was held for a one-ounce gold bar. However, the prize wasn't awarded by the LBMA – since the winner, Andrea von Planta, is from CSFB's Valcambi refinery, it seemed more appropriate for him to award the bar to himself!

A Precious View

An Interview with Giacomo Panizzutti, Head of Foreign Exchange and Gold, Bank for International Settlements

By Susanne M. Capano, Editor

The views expressed in this interview are those of the interviewee and do not necessarily reflect those of the Bank for International Settlements or the official sector.

Q In your speech at the LBMA Conference in Istanbul, you spoke about the likelihood of central bank gold reserve sales and their impact on the gold price. Could we review your opinion on that topic again for readers who were not at the Conference?

A As of March 2001, total official gold holdings amounted to slightly over 32,500 tonnes. Out of the 32,500 tonnes, almost half (15,420 tonnes) belong to the 15 European signatories of the Agreement and to Greece. By the end of March 2001, some 605 tonnes had already been sold under the Agreement, leaving 1,395 tonnes to be sold by September 2004.

Another 8,137 tonnes belong to the United States and 764 tonnes to Japan. The US had already announced its intention not to sell or lend gold and Japan made a similar declaration the day after the Agreement was announced. With the International Monetary Fund already having debated this and realised some income from revaluing its reserves (3,217 tonnes), further action is unlikely.

Before I continue, let me emphasise that, except for countries which made official statements in the recent past, I have no special knowledge, one way or the other, about the intentions of central banks with respect to their gold holdings, and that I am simply drawing inferences from their past attitudes and publicly available information.

Given the significant cultural role of gold in the Indian economy, it is difficult to envisage the Indian authorities rushing to dispose of their gold assets (358 tonnes). Following the address delivered by a senior official at the recent City of London Central Banking Conference, we should also exclude Venezuela as a potential seller of gold reserves (321 tonnes). The BIS owns 192 tonnes and has no intention to sell. This amounts to a total of 28,409 tonnes of gold that is unlikely to be disposed of in the near future.

It should be noted that the 28,409 tonnes in question represent approximately 87 percent of total official holdings and are in line with the figure of 85 percent published by the World Gold Council in its first quarterly publication.

Q What about the remaining holdings?

A I would divide the remaining official holders into two groups: those whose past attitude and/or public information suggest that they are unlikely to sell, and those whose intentions are unknown. The group unlikely to sell consists of ten central banks owning a total of 1,728 tonnes. I believe that Australia, Kuwait, the Philippines, Singapore, Saudi Arabia, South Africa, Thailand and Turkey have no intention of selling their gold reserves. Lebanon and Taiwan probably also fall into this category.

I should add that, while the holdings of the largest owners of gold are reasonably accurate, there have been concerns over the quality of data supplied by a number of smaller holders, resulting both in under and over-estimating.

This leaves us with the last category: holders with unknown intentions. This group consists of 2,363 tonnes held by some 60 different central banks, the largest of which are China with 395 tonnes, Russia with 389 tonnes, Algeria with 174 tonnes and Libya with 144 tonnes. Obviously, these figures are in a constant state of flux; thus some discrepancies are inevitable.

It can be assumed that these smaller holders will not suddenly decide to sell all their gold reserves simultaneously. Even if some of them were to decide to dispose of their holdings, the impact on the gold price is likely to be marginal. This leads me to conclude that between now and the end of 2004 we are unlikely to experience any price shocks. Nor should it be excluded that some central banks may decide to increase their gold holdings.

Q There is also considerable interest in information about lending activity by the official sector, and there have been various estimates of how much gold has been placed in the market. Can you give any comment on this?

A As not all central banks or international monetary institutions publish figures on gold lending, it is not easy to make an accurate estimation of total gold lent in the market. The figure of approximately 5,200 tonnes published in recent studies seems, however, to be a reasonable estimate. This figure includes placements from the private sector, which are estimated to be around 500 tonnes. The remaining 4,700 tonnes are equivalent to 14.5 percent of the 32,500 tonnes held by the official sector.

Let us now have a closer look at the list of possible lenders. As already mentioned, we can exclude the United States, the IMF and Japan. Together they hold 12,118 tonnes of gold. The total amount of gold lending of the signatories of the Central Bank Gold Agreement in September 1999 was 2119.32 tonnes and, in accordance with the Agreement, has of course not been exceeded by the signatories since. As of 30 June 2001, the 15 signatories were holding a total of 15,316 tonnes of gold. Therefore, out of a total of 27,434 tonnes of official holdings (12,118 held by the USA, Japan and IMF and 15,316 by the signatories of the Agreement), only 2,119 tonnes have been placed in the market. Even if 50 percent, or 2,533 tonnes, of the remaining 5,066 tonnes in official reserves had been placed in the market, official placements should not be far away from 4,700 tonnes of gold.

Q What do you think is likely to happen when the Central Bank Gold Agreement expires in 2004?

A There are three possible scenarios: the Agreement is not extended, it is extended in exactly the same form as at present, or it is extended in a modified version.

If the Agreement were not extended in any form, the market would certainly find that disappointing. Should the Agreement be extended in its present form, it would be positive – as long as both supply and demand for gold have not changed substantially in the meantime. I believe that the most likely scenario is that the Agreement is extended in some modified version. This could have both positive and negative implications for the market. On the positive side: a reduction in the amount of gold to be sold would provide some longer-term support for the gold price. The markets might also consider an increase in the number of signatories to be positive. A reduction in the lending activity of the signatories would also tend to support the price, but as this would prove unwelcome to the market, we can probably exclude this possibility. Among the possible negative outcomes: should one of the existing signatories drop out, that could be damaging. But the likelihood of such a change seems limited. Any increase in the size of sales or lending activity would be seen as negative unless it had been prompted by a lasting sharp increase in demand or by a substantial reduction in supply. ■

GIACOMO PANIZZUTTI

Giacomo Panizzutti was born in Italy in 1946 and educated in Switzerland. In 1968, he joined the BIS, where he spent most of his career in the Banking Department. Between 1970 and 1990 he had various responsibilities in the Money and Capital Market Divisions. In 1990 he became Deputy Head of the Foreign Exchange and Gold Division and, in 1994, he was promoted to Head of Foreign Exchange and Gold Markets. In this capacity he is responsible for all gold and foreign exchange transactions with central bank and commercial bank clients. He was the recipient of the NYMEX Distinguished Leadership Award for 2000.

The BIS

Established in 1930, the Bank for International Settlements (BIS) is the world's oldest international financial institution. The Bank fulfils its mandate to foster international monetary and financial cooperation by:

- Providing a forum for information exchange and cooperation among central banks around the world
- Acting as a centre for economic and monetary research
- Providing or organising emergency financing to support the international monetary system
- Performing traditional banking functions, including reserve management and gold transactions, for the account of central bank customers and international organisations.

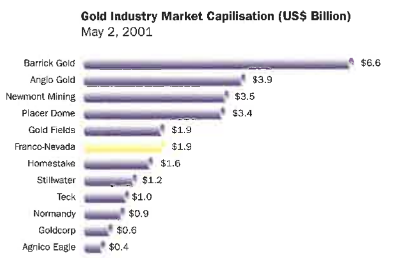
At present, around 120 central banks and international financial institutions place deposits with the BIS. The Bank maintains a dealing room in Basel, offering a full range of banking services, as well as a smaller dealing room at its Representative Office in Hong Kong SAR.

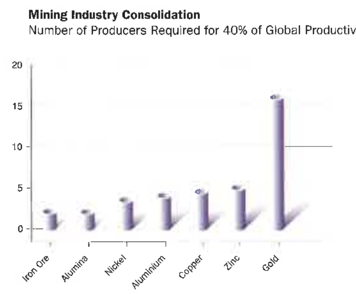
Mergers & Acquisitions versus Exploration & Organic Growth

Pierre Lassonde, President & Co-Chief Executive Officer, Franco-Nevada Mining Corporation Limited

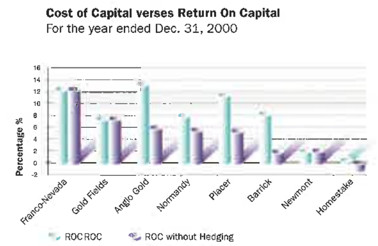
Is a mining company today better off buying a ready-made project – or spending money exploring for one? Every CEO in the business asks himself this question at every annual planning meeting. Each company ends up with a different answer based mainly on their real or perceived strength. There's no right or wrong answer – in the end, what matters most is whether or not the company can create shareholder value using its various approaches.

There is a very strong case to be made for mergers. The mining industry on a global basis is undergoing the same sort of consolidation that has been happening in other industries such as banking or oil and gas. In the base metal industry, names like Rio Algom, Asarco, Cyprus, Alamax, Reynolds and North have all disappeared in the last 18 months. What is emerging are three large companies – RTZ, Anglo-American and BHP-Billiton which have market capitalisation of over US$25B, dwarfing the rest of the industry.

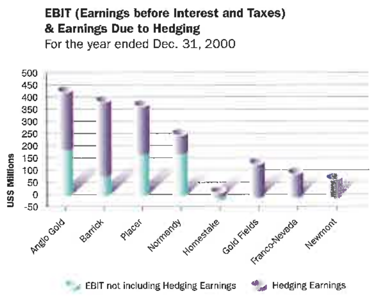




Looking at individual metals, it becomes clear that, globally, each commodity is becoming increasingly dominated by just a handful of producers. Interestingly, the returns generated by the various metals seem to be directly proportional to the number of participants. The one commodity that seems to be crying out for consolidation is gold. It takes more than 17 participants operating dozens of mines to produce about 40 percent of the world's gold production.



The consequences of this fragmentation can be vividly seen in the poor rates of return achieved by the various participants. The average cost of capital in our industry is ten percent. It fluctuates between nine percent for companies with pristine balance sheets and high margins, for example Franco-Nevada, to 12 percent for the more leveraged companies. Looking at last year's results at a time when gold averaged US$280, and removing the hedge gains for those who have used them, not one single company apart from Franco-Nevada ever came close to its cost of capital. In plain English, for every ounce these companies produced, they destroyed shareholder value! At today's gold price of US$265, this destruction of value is simply accelerating. While the hedgers seem to be doing better, in reality, their gains are financial and just mask the poor returns of their mining assets.



The picture is even clearer when you look at the earnings of these companies and separate out the hedge gains. The top three companies have now become financial companies making more money managing the float on their hedge book than on mining!

How you manage your company at US$375 gold is quite a bit different than at US$265 gold. The simple truth is that the over-enthusiasm of the 80's when gold was over US$400 an ounce led to an unprecedented investment boom that has left us with painful legacies. In the last five years, US$4.3billion, or approximately 20 percent of this industry's book value has been written-off. If most companies calculated reserves at today's gold price of US$265 versus the US$300 an ounce currently used, there would be a lot more write-downs.

Recent Acquisitions

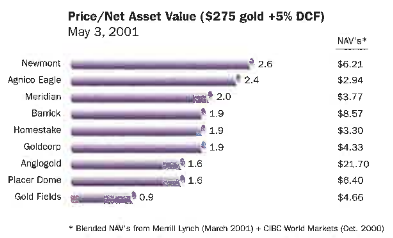
Purchaser	**Homestake**	**AngloGold**	**Barrick**	**Placer Dome**	**Newmont**
Vendor	Argentina Gold	Acacia	Sutton Res.	Getchell Gold	Battle Mtn
Location	Argentina	Australia	Tanzania	USA	Americas
Primary Mine	Veladero	Bulyanhulu	Getchell	Vera/Nancy	
Equity Cost (US$m)	200	478	336	1063	670
Debt Assumed (US$m)	0	– 26	0	27	199
Cost to complete (US$m)	–222	0	250	230	206.5
Total Cost	422	504	586	1320	1075.5
Reserves (moz)	3.3	3.8	3.8	6.5	6.1
Resources (moz)	5.91	11.4	8.8	9.5	0
Current Production (kozpa)	0	550	260	800	415
Future Production (kozpa)	270	555	400	800	415
Cash Costs (US$/oz)	150	220	165	200	170
Total Costs/oz Reserves	76	133	76	203	176
Resources	43	44	154	139	
Cash Earnings at US$270/oz (US$m)	32.4	28	28	56	42
Years to Repay Total Cost (yrs.)	13	18	14	24	26

If it's difficult to make a decent return on your existing assets at the current gold price, you can already guess that it's nearly impossible to do so when you have to purchase them, more often than not, at a premium to their value.

The best way to illustrate the acquisition dilemma in today's gold price environment is with examples, shown in the table below. The five acquisitions or mergers shown are the latest done in the gold industry – and it is noteworthy that none of these have a value of more than US$500M. The two projects that have so far shown the best upside in terms of exploration success are Homestake Mining's Veladero and Barrick's Bulyanhulu.

Yet, at US$270 an ounce gold, these projects in their present form will only have paybacks of capital in the 13- to 14-year range and return on capital in the very low single digits. At those levels of return, management has a tendency to look at the acquisition costs as sunk costs, which means that they do not include them in the calculation of returns. They then write-off the asset and justify construction on the capital to be invested alone. Of course, if you do that too many times, guess what – you go broke or you devalue your share price if you've used your paper as acquisition currency!

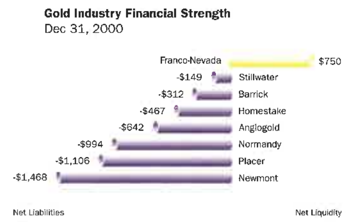
The table is also a good indication of why it is so difficult for consolidation of the industry to carry on at these low gold prices. Unless you can buy the assets for a nominal amount, it is nearly impossible to make any money.



The asset price dilemma can readily be seen by comparing the current share price of the nine largest gold companies to their net asset value using US$275 gold and five percent discounted cash flow. The premiums range from a high of 2.6 times for Newmont to a low of 0.9 times for Gold Fields with an average of over two times for the lot.

Another way to look at the current share price using the same five percent discounted cash flow is that it's discounting a US$325 gold price. In effect, the public is willing to pay on average double what a stock is worth in the hope that gold will rise to US$325 in the short term. Hope springs eternal!

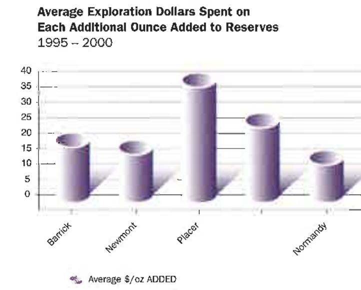
This is all the more surprising given that we've been in a 21-year bear market, the last four of which have been brutal. Managements have had painful lessons inflicted on them by the slowly eroding gold price and on the whole have become gun shy. In the face of stock valuations that are twice what they're worth, we would think that management would use their paper as currency to purchase some of the junior or intermediate companies that have reasonable valuation.



One of the reasons could be that few companies have the liquidity to back a share offer or even develop new projects. Net liquidity for our purpose is defined as working capital – the sum of current assets minus total liabilities, including known contingent environmental liabilities. When you consider that only one of the top eight gold companies, i.e. Franco-Nevada, has positive net liquidity, there aren't too many companies who can in effect write a cheque.

We used to think that those environmental liabilities were so far in the future that they did not matter much. But in a US$270 gold price environment, the ore reserves of most companies start to diminish, compressing mine lives and moving forward the environmental liabilities. All major gold companies will be closing down mines in the next five years.

So far, I've only talked about acquisitions. It's been shown that 80% of all acquisitions are beneficial to the vendors only. Is exploration a better way to grow?



To establish a level playing field, I looked at the average exploration dollars required to add each new ounce of gold reserves over the last five years by the largest gold companies. I used their entire exploration budget for each year, not differentiating between grass root or greenfield (exploration carried out in an area that has never been explored before) and head frame or brownfield exploration (exploration done around existing facilities). If a company purchased reserves in any one year – such as Barrick at Bulyanhulu – I did not add this cost to the ounces.

The best results are from Barrick, Newmont and Normandy, which is also the most efficient at US$12.50 per new ounce. These three companies concentrate their exploration budgets around their existing mines and – because of their large land holdings within the most prolific gold belts – they have superior results.

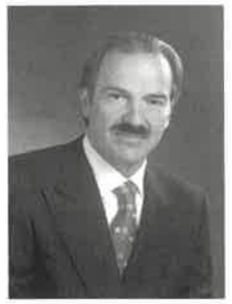
Placer's US$37 per ounce is by far the highest and reflects the withdrawal of reserve ounces from La Christina in Venezuela and the downgrading of Getchell ounces from reserves (ounces in the ground that have been economically engineered and are known to be profitable at current prices) to resources (ounces known to be in the ground from a geological standpoint but which have not had economic parameters define their worth).

If these ounces are added to an existing mine with its entire infrastructure in place, they are likely to be very economic. However, if they form part of a new deposit, they are likely to be economic only if the total costs do not exceed US$225 per ounce. That would have to include operating costs, capital costs, sustaining costs, exploration and overhead. Given that on average the latter four costs centres add up to about US$90 per ounce, it means that a project would have to have cash operating costs of US$135 per ounce or better to be economic in today's gold price environment. There aren't too many of these mines found in a decade, and there is the rub.

Even though the exploration ounces are likely to be cheaper than the bought ounces, their timing, i.e., their discovery, is unpredictable. Echo Bay and Battle Mountain, for example, have spent years and enormous amounts of money without ever finding a world-class deposit. You can be as good, as efficient and as smart as anyone and, yet, if luck is not smiling on you, it can be for naught.

As mentioned earlier, there are no easy or right or wrong answers to the question of acquisition versus exploration. What is clear, though, is that at US$270 an ounce, neither choice is likely to give a satisfactory rate of return. This is not a matter of "in the long run", as there will be no long run for most gold mining companies if the gold price stays at these levels for another five years.

Before the industry thinks of growth, its first matter of business should be to return to a level of profitability that will give shareholders a reason to own these stocks. ■



PIERRE LASSONDE

Pierre Lassonde is President and Co-Chief Executive Officer of Franco-Nevada Mining Corporation Limited. Mr. Lassonde is a co-founder of Franco-Nevada and Euro-Nevada Mining Corporations Limited (which amalgamated in September 1999 to form Franco-Nevada Mining Corporation Limited). Franco-Nevada has extensive precious metals interests in the world's major gold camps, including the Carlin Trend of Nevada.

Mr. Lassonde began his illustrious career in mining as a Cost Engineer with Bechtel Corporation and then Senior Planning Analyst with Rio Algom Ltd. In 1980, and for the ensuing ten years, he was President of the Gold Division of Beutel, Goodman & Company Ltd. where he managed two of North America's top performing gold funds. He is the author of the Gold Book, The Complete Investment Guide to Precious Metals. He is also a Canadian philanthropist in whose honour the University of Toronto has named the "Lassonde Mineral Engineering Program", designed to promote awareness and education in the field of mining engineering.

His directorships include: Franco-Nevada, The Gold & Silver Institute, World Gold Council, The Toronto Hospital Foundation, Laboratoires Aeterna Inc., Enghouse Systems Limited, Normandy Mining Limited and the Prospectors and Developers Association of Canada (1994-2000). He is a member of the Association of Professional Engineers of Ontario, the Canadian Institute of Mining & Metallurgy, the Prospectors and Developers Association of Canada and the Toronto Society of Financial Analysts.

Troubleshooting the Precious Metals Industry

By Sir John Harvey-Jones

I do not want to pursue a career in the gold industry. An industry that employs so many bright, nice and intelligent people ought to be facing a bright future. I am not so sure

I am going to concentrate on gold because, long ago, PGMs and silver did many of the things gold producers ought to have done. Also, for PGMs and silver, there has long been development of market sectors, wide diversification of end-use of products, no vast overhang of supply against demand and we have seen none of the same fragmentation.

Brands require continual refreshment – yet your brand concept was written in the bible.

Businesses should respond in a particular way to the laws of supply and demand and the availability of finance. There are two separate businesses in respect to gold, which are not linked as intimately as I would expect:

One is an extremely sophisticated, developed, innovative and aggressive financial and support service business, which has done well so far.

The second is a classical physical business, which has not behaved in a business-like fashion and is running out of time. This gold business has not moved through the maturing stages of normal businesses.

Increasingly, the real gold business faces the necessity for return on capital being high enough to attract funding. It must begin to make the price rather than react to it, manage supply and demand, manage capacity and create wealth. Mining and production of gold have not created wealth in real terms for many years.

Basic Economics

Although almost everyone in the business knows what has to happen, I see no willingness to take action. Businesses must be changed by those inside them, but external factors can force changes on us if we do not face the inevitable.

There is nothing so unique about gold that we should suspend all standard economic ideas with reference to it. Economic forces are inexorable. You can forecast them and take actions to minimise their effects but if you ignore them, they will change you.

Gold has been around a very long time, but the business has changed less than any other I have looked at. Owing to the history and relative scarcity of old gold, you have had lavish and inefficient structures for a long time. You are fragmented vertically and horizontally, with more steps in the chain than any normal business.

Everyone seems to accept that any gold discovered must be mined regardless of supply/demand and price. Even though you have double the refining capacity you use, new refineries are being produced and no one shuts one down. The whole industry operates for cash.

Consolidation – the First Priority

The art of troubleshooting concerns focus and persistence, sorting out the priorities of actions and following them through whatever happens.

Businesses as old as yours should be structured so that 80 percent of production is controlled by five large businesses, with a clear leader. There should be industry consensus on the state of the market. The other 20 percent leaves room for innovation. In contrast, 30 percent of your business comprises the eight largest producers. You may not believe consolidation is possible – but if I were to attend this meeting 40 years from now, you would be consolidated. The sophisticated financial superstructure sitting on the gold business may have helped defer inevitable actions.

There is nothing so unique about gold that we should suspend all standard economic ideas with reference to it.

But sooner or later, fragmentation must be addressed. Whether it concerns takeovers, the formation of larger groups or co-operative groups, at minimum, there must be far more central focus on business direction.

Take a Long-Term View

The real supply and demand situation in gold, the non-diversity of outlets, the sheer size of the overhang, with central banks wishing to reduce holdings, does not seem to scare you. You believe that someone will keep the industry afloat while you make money out of short-term fluctuations in price. But you do not need to grasp at straws; you need a lifeboat. You require persistent and consistent leadership of the type the LBMA and the financial business provide.

The financial arm is dedicated to supporting the physical business. Central banks believe they can disinvest and that the industry will be able to recycle all of the gold. Yet we have already seen why expenditure patterns will change. Moreover, there has been no historic attempt to market gold. The financial business allows you to rearrange the deck chairs on the Titanic.

Too Little Done to Stimulate Demand

In this area, your actions are inadequate and too late. Jewellery provides 85 percent of your demand. Thus, not only should you back-sell into that business, you must help them rationalise themselves. Economic forces are beginning to work on the jewellery business, but years out of date. Nevertheless, other factors contribute to why rationalising the jewellery business is vital. Demographics illustrate major changes in culture. We cannot assume that, without intervention, demand for investment gold jewellery will continue forever. Brands require continual refreshment – yet your brand concept was written in the bible.

We have all seen heavy blows dealt to gold's image in our lifetimes. It is no longer required as a safe haven against inflation. In a world of greater exchange rate fluctuation, a gold-backed currency may be of benefit. When the World Gold Council announced their marketing plans, they omitted to mention action in the East. Worse, the stated marketing strategy would not work over there. Moreover, the competition for discretionary spending in that part of the world is far wider than we imagine.

At least, there should be a universal logo, which promotes the virtues of gold.

Develop Industrial Uses

There has been great development in potential industrial uses for gold with relatively little effort over relatively little time. If some of these new outlets were developed, there is a chance you can create better, sounder and more diverse demand, including electronics, nanotechnology, catalysts, new materials and fuel cells, each of which will sell in the millions.

Move Away From Jewellery

There is plenty of room for better growth and more diversity in more secure areas than jewellery. It scares me to put a vast amount of effort and ingenuity into discretionary items.

Supply

If the supply side were genuinely concerned about cost structure, they could genuinely reduce it. However, this requires operating for return and not cash.

You seem to believe that the market can absorb any amount of gold. It is good news that most new prospects are in high-risk areas and even the supportive financial institutions you employ will baulk at such political risks.

Nonetheless, one cannot forecast any foreseeable shortage of gold. You must reduce the physical surplus, but you will not bring the business into equilibrium by kerbing production.

E-Commerce

E-Commerce will not totally change your business, but failure to take part will place you in further peril. Unfortunately, it will not be good news for everyone. B2B e-commerce increases competition and decreases margins, sometimes dramatically.

A transparent market increases turbulence, of which there is a lot already. You have a magnificently intelligent system in your market, which tells you just what is happening, but not who is driving change. This issue will become more important as e-commerce takes hold. E-gold could use up a considerable amount of gold if it is made to work. Actual consumption of gold would be better, but this is a gift-horse – don't look it in the mouth.

Why the Inertia?

I believe that you all know what needs to be done. Thus, I have to ask why you have not done it. I have seen a large number of businesses across the world in this situation and the reason is always the same – the comfort level is still too high. I suspect that the pain level must get a lot worse before it gets better.

I do not believe that you deserve that. The future lies in your hands. I am sorry to be depressing – I admire people in this industry a lot. However, it is time to catch up with the rest of us in the new century. ■

The Next Rush

The LBMA Precious Metals Conference 2002

by Stewart Murray, Chief Executive

The Stanford Court Hotel, San Francisco, June 10-11

After organising two extremely successful conferences in Dubai and Istanbul – each representing major bullion fabricating and trading centres in what might loosely be called Asia, the LBMA decided it was time for a change.

Our basic policy on the choice of a venue for the Conference remains, however, that we should go to places that are important to the businesses that our members serve and that we should involve the local association which represents the bullion industry in the arrangements. Needless to say, the venue chosen must be accessible for most of our potential audience – which means that it should be served by a major hub airport.

Given the strength of support for North American venues in the feedback forms returned to us after the Istanbul Conference, we looked in detail at a number of alternative venues in Mexico, Canada and the United States. Our initial search focussed on places such as Toronto, Denver, Vancouver and Rhode Island in view of their well-known associations with the bullion business. However, the very success of our Conference has brought with it a new problem – the relative lack of venues which can accommodate us "under one roof" – meaning both the conference sessions and the accommodation for the bulk of delegates attending

With the benefit of hindsight, we now realise that to get a choice of such venues for a conference of 400-plus delegates, we have to book well over a year in advance (and as a result, we are now already investigating venues for the 2003 Conference).

But for next year, we were in the end very lucky to find a fabulous venue in San Francisco – the Stanford Court Hotel in the prestigious Nob Hill area, a short but steep cable-car ride from the downtown financial district. The hotel is a perfect fit for the Conference – both in relation to its meeting facilities and the number of bedrooms. In effect, for the period of the Conference, we will virtually "own" the hotel – a great advantage for any conference organiser!

It's a long time, namely 152 years, since San Francisco was the focus of the world's gold prospectors and much of California's gold was worked out within a few years of its celebrated gold rush. But for anyone who might think that the US is not an important player in the world bullion market, it should be remembered that the mines of nearby Nevada contribute some 75% of US gold production. On the demand side, the high-tech industries of Silicon Valley – just a few miles south of San Francisco –represent a major area of consumption, as does the jewellery business centred in Los Angeles. One very positive aspect of the choice of San Francisco for next year's Conference is that it will result in an increased attendance from the gold and silver mining industries of Latin America and, also, from Asia, where gold remains an important metal for the region's miners, refiners, fabricators and central banks. Finally, the LBMA is delighted that the Gold and Silver Institutes will hold their 2002 annual meetings in association with our Conference. This will ensure a very high level of participation on the part of the North American producing, refining and bullion-trading businesses. ■

Scenes of San Francisco: Above, looking across the Golden Gate Bridge towards Richardson Bay, Marin County
Above right, the Embarcadero

photos courtesy The San Francisco Convention & Visitors Bureau

Emmanuel Nyamusika

by Susanne M Capano, Editor

In Tanzania, birds are a reliable early warning system.

One morning, Emmanuel Nyamusika, a geologist at work on Ashanti's Geita project, heard the birds around him making strange noises. Working alone, taking samples in the middle of a deep trench, he knew something must be wrong. Not knowing what to expect, he slowly turned around, only to face a 14-foot python coming down the trench towards him.

His first thought was to get out its way. He leapt out of the trench and began peppering it with rocks. Once the snake was dead, he decided he'd had enough work for one day, and headed back to camp.

Emmanuel is the ninth recipient of the LBMA Bursary, which was initiated in 1988 and covers fees and provides a monthly subsistence allowance for graduate students in mining disciplines from developing countries. When he obtained his undergraduate degree in1992, only eight other geologists graduated with him – not many for a mineral-rich country of Tanzania's size.

At that time, the government had newly embarked on a policy of encouraging foreign investment and interest was growing rapidly. Emmanuel's first position was with Down to Earth Mining, a joint venture with an American investor, where he worked on gemstone projects. To gain experience in gold, he joined Cluff Mining, where he stayed for two years until the company was taken over by Ashanti. He has worked on the Geita project during the exploration, development and mining phases. His work has included evaluating soil and bedrock samples to first establish the precise location of the orebody, then to determine the proper angle at which to mine.

With the constant development of the technology used in mining, Emmanuel felt it important to continue studying. He needed to go abroad in order to work with the latest software, but saving enough to pay for his studies while supporting a family wouldn't have been possible. During the past year, he has been working towards an MSc degree at the Royal School of Mines, Imperial College London, where he has become the first and only student to take the new Mineral Production Management option. His studies have included mineral processing, engineering design and optimisation of resources (determining how a resource can be mined most economically). The course has included field work in Ireland and South Africa as well as classroom studies.

Emmanuel will complete his dissertation in mid-September and return to life in Tanzania, where he hopes his studies will enable him to work more efficiently. He's already well versed in dealing with snakes.

Market Moves

Rhona O'Connell

Rhona O'Connell has joined the World Gold Council as Market Analysis Manager.

She joins the Council from stockbrokers Canaccord Capital (formerly T. Hoare and Co., of which she was a founding partner) after almost eight years as metals markets analyst. Her earlier experience in the gold market includes Consolidated Gold Fields, Rudolf Wolff and Shearson Lehman Brothers.

Paul Plewman

Paul started with Investec Bank in March 2001 and is involved in pricing and marketing gold and base metal structures. Prior to joining Investec, Paul worked for Standard Risk and Treasury Management Services (SRTMS) and was primarily involved with gold structured trading and risk management. Paul was with SRTMS for just under 3 years and was based in Johannesburg. He previously was a computer programmer developing software for gold trading and risk management. Paul studied at Trinity College, Dublin and has a BAI in computer engineering and a BA in mathematics.

Andrew Huxtable

Andrew Huxtable joined Investec Bank (UK) Ltd as Commodities Settlements Manager on 24 April.

He worked for JP Morgan from 1980 to 2000, beginning in the forex back office and then moving to the gold operations department. In 1989, he became manager of inventory control with responsibility for precious metals clearing and physical stocks, and in 1996, he took on additional responsibilities as mid/back office manager for base metals and energy. He was also JP Morgan's representative on LBMA Physical Committee.

After leaving JP Morgan, he worked for Mitsui & Co (UK) London as mid/back office manager during their transition to Mitsui & Co Precious Metals Inc.

Kevin Roberts

Kevin joined Investec Bank Limited London in April responsible for marketing commodities, with primary focus on precious metals. Prior to joining Investec, he worked for UBS Warburg Ltd in London where he was a director responsible for precious metals sales. Kevin started his career at Mase Westpac Limited in 1985 and worked in the metals group at Phibro AG from 1992 and Credit Suisse from 1995.

Jeremy East

Jeremy has joined Commerzbank SA in Luxembourg , as Vice President responsible for precious metals trading activities.

Jeremy was previously with Phibro, part of Citigroup in London where he worked for over 20 years. He started as a graduate trainee with Philipp Brothers in 1980. After joining the gold department, he progressed through roles in spot, marketing and forwards, and in 1991 he became manager of the department in London, which by the end of the 1990s had expanded to also encompass base metals trading.

Adrien Biondi

Adrien has rejoined Commerzbank International SA in Luxembourg (CISAL) to strengthen their forward and physical activities.

Adrien began his career in bullion at CISAL, working there for four years, then spending two years at the bank's London branch. After leaving Commerzbank, he worked for a short period at Lombard Risk Systems on a software project before joining Rabobank International London as head forward dealer for almost two years.

Golden Fundamentals or Technical Excellence?

By Craig Ferguson, Head of Commodities Technical Analysis, JP Morgan Chase

The search for new ways to trade markets is always relevant, but should be profitable as well. In recent years, one of the most significant debates has been whether technical analysis can be used to trade markets profitably – whether these markets be equities, fixed income, FX or metals markets. The debate is basically between the fundamentalists, who argue that markets are ruled by issues of supply/demand, and technicians, who claim technical analysis can be successfully applied to all, or at least most, markets.

What is technical analysis? How does it fit into hypotheses of market operation such as the Efficient and Random Market Theories? What are the main methodologies that are currently being applied? And what are the results of such methodologies in terms of profitability?

By discussing these issues, we can then answer the final question that is relevant to all of us in the trading community - how can we use technical analysis to trade the gold market profitably?

What is Technical Analysis?

Technical analysis is the study of market action primarily through the use of charts for the purpose of predicting future price trends. It suggests that fundamental factors are totally discounted into the market price, that markets move in identifiable trends which are corrected periodically, and that history has a way of repeating itself. [1] The technician believes that concentrating exclusively on price action, regardless of fundamental factors, is all that is required to form a view on the market because the fundamentals are already fully reflected in the price.

It isn't correct to state that a technician does not believe in supply and demand, or the fundamentals of a share, commodity or FX rate. He simply believes that since those fundamentals are reflected in the price, studying a whole raft of fundamental factors and then apportioning weight to each factor is an irrelevant exercise if studying the price alone produces similar or better results. In effect, if the price is declining, fundamentals must be bearish, and if prices are rising, fundamentals should be bullish.

Market Theories

Technical analysis is a direct challenge to the Random Walk theory, which claims that price changes are serially independent and that the current price is not a reliable indicator of future price direction. It challenges the Efficient Market hypothesis as well, which states that prices fluctuate around their intrinsic value and are unpredictable. The reason technical analysts have a problem with this view is that it suggests that since market action is not repetitive or trending, but rather random, trends should not occur. Indeed, if such theories worked, then even fundamental forecasting techniques would be useless, as they indicate a pattern rather than randomness. Technical analysts make identifying trend moves their prime goal - hence the expression, 'the trend is your friend'.

Main Methodologies and Their Results

The focus on finding trend moves, and the notion that history repeats itself, explain the rationale behind predictive techniques such as Elliott Wave Theory and pattern analysis. These techniques suggest that because price movements are a reflection of crowd behaviour, and that crowds effectively repeat the same mistakes at market peaks and troughs, the patterns that result from such behaviour can be used for their predictive ability.

Take patterns that are the easiest to identify – head and shoulders and double bottoms, which have been used by classical chartists to identify major turning points in markets. For example, in the gold market, the presence of a double bottom formation between the $254 February 19th low and the $254.50 April 2nd low was used by many classical chartists to suggest that a stronger rally was likely to occur. The implication of the pattern was that once $275 (the high point between the two lows) was taken out during the rally of the week of 21 May, a further gain of $21 was likely to occur. Although fleeting, those gains did unfold with the market making a high around 298/299 that week.

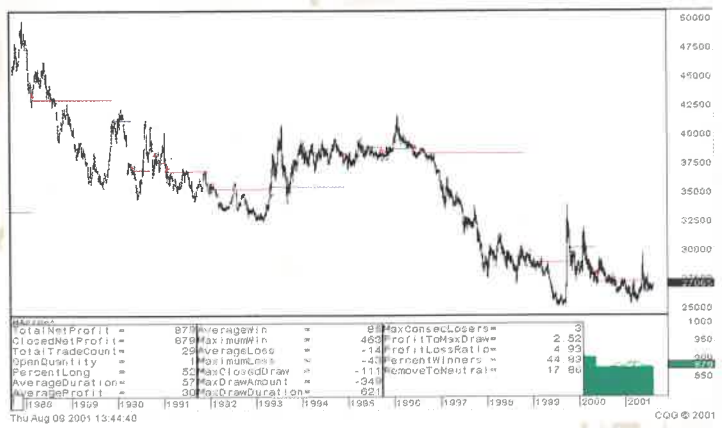
Interestingly, efforts have been made to study the effectiveness of these patterns and whether they have predictive ability. One such study has been performed by Andrew Lo from MIT [2], who has suggested that modelling classical head and shoulders and double top patterns often used by technical analysts did provide practical value, and as a result could provide 'incremental information' for trading purposes. Again, though such testing has not been applied to the gold market as far as we know, there should be no reason why it could not be, given that the same patterns frequently occur in gold.

On the Elliott Wave side of things, no such mechanically tested programs have yet been applied. We won't elaborate on all the complexities of Elliott Wave theory here, but JP Morgan does utilise Elliott Wave theory as the cornerstone of our technically based predictions for gold and other markets. At present the effectiveness of the technique relies heavily on the skill of the practitioner in identifying the trend and corrective wave sequences that compose the technique. However, there are mechanical programmes that are able to produce the expected price movements arising from previous price patterns, one of these in particular being the Advanced GET system.

Other studies have been done on a more simple raison d'être - whether support and resistance levels actually work and have predictive ability. A recent study by NY Fed Economist Carol Osler [3] illustrated that there was empirically based microeconomic foundation for the notion that FX trends reverse at support and resistance levels, and also that trends gain momentum once support and resistance levels are crossed. This is effectively an examination of one of the end products of technical analysts' work - support and resistance levels – which most analysts include in their daily research work. However, it does not discuss how the analyst comes up with that support or resistance level. The other issue is whether such analysis can be applied from the FX market for example, to the gold market. While we know of no similar study dealing with the gold market, we see no reason why the same principle should not be equally applied.

In addition, followers of purely mechanical techniques, such as moving averages, also have a role to play. For example, if you backtested a crossover-based system of simple moving averages over the last 30 years, you would find that using such a system during that period actually provided substantial returns. We performed such a basic study on daily and weekly gold market data, using a variety of timeframes between 10 and 200 days (i.e. 10, 20, 30, 50, 100 and 200), using the first 10-period average as the crossover. This means that we tested the crossing of the 10-period through the 20-period, then the 10- through the 30-period and so on, up to 200 periods. We found that using such a methodology would give positive returns in all combinations, over daily and weekly timeframes.

Interesting. But let's look more closely at one of the most successful combinations as a case in point and examine the issues.



Using a 10-week average crossing a 50-week average and holding a continuous position – long or short – during the period, the total net profit of such a system would be approximately $876 since the 1970s. This was achieved having only 44.83% winners, a profit-to-loss ratio of 4.88 times. However, there is a substantial difference between the gains made by the average winners (+$85) and the loss sustained by the average losers (-$14). Trade duration averaged 57 weeks, the ratio of profit to drawdowns (losses) was 2.51 times and the maximum drawdown was $43.

These statistics show a couple of things. Firstly, the gold market has trended heavily during the last 31 years, both up and down, hence suiting trend-following measures such as moving averages. However, there is no guarantee that the market will continue to do so. Secondly, almost all of the $876 of profit resulted from four trades between 28/9/70 and the 22/12/80, when profits of $766 were recorded. Results since that time have showed substantial variation. If you took away about 18% of the most successful trade recommendations, you would lose all the profit. Thirdly, over the last 31 years there were only 29 trades registered by the system, suitable for longer-term players but less so for short-term players. Fourthly, holding such positions may impose substantial drawdowns in excess of those actually realised.

However what we can say is that using such a mechanical trading system did effectively achieve its function – to identify a trend and stay in it, with realised winners making far more than realised losers, thereby achieving substantial profits. Recent studies have concentrated on exactly these sorts of themes in order to establish whether technical analysis as a school of methodologies can provide benefits to the investment community.

Putting Technical Analysis into Practise

Technical analysis is increasingly becoming a vital component in how market participants trade gold. Non-users looking to implement or incorporate technical analysis techniques into their operations have a number of options, and it is a matter of choosing the system or technique that best suits the user. Statistical evidence, and a growing number of studies from official and academic sources are increasingly demystifying the use of technical analysis in the gold market, and we are finally getting a clearer picture of the benefits in terms of cold hard profitability that technical analysis can and should provide to market participants. ■

Footnotes

(1) John J. Murphy, Technical Analysis of the Futures Markets, 1986 New York Institute of Finance

(2) Andrew Lo, Foundation of Technical Analysis: Computational Algorithms, Statistical Inference, and Empirical Implementation, Journal of Finance 55(2000), 1705-1765

(3) Carol Osler, Currency orders and Exchange Rate Dynamics: Explaining the Success of Technical Analysis, March 2001

Craig Ferguson
Craig has worked for JP Morgan for seven years, trading government bonds for two years, spot FX for 3 years, and has worked with JP Morgan on the technical analysis side since July 1999. He currently spends his time on commodities (metals, grains, softs), FX and European Fixed Income technicals.

A History Course

By Dr Jürgen Heraeus, W.C. Heraeus GmbH

The following article is based on a speech given by Dr Heraeus at the Heraeus lunch during Platinum Week in London on 16 May. This year marks the 150th anniversary of the company's founding.

An etching from 1919 showing the Heraeus family pharmacy, the Einhorn-Apotheke (Unicorn Pharmacy) in Hanau, a town in the German state of Hesse east of Frankfurt. The pharmacy celebrated its 250th anniversary in 1910.

▲ Company founder Wilhelm Carl Heraeus (1827 – 1904)

Heraeus was founded by my great-grandfather, Wilhelm Carl, who succeeded in melting platinum in his pharmacy, a real breakthrough at that time. Up until then, platinum had had to be forged, a process that was only carried out in London and Paris.

Wilhelm Carl came from an old family of pharmacists in which the trade had been passed on from father to son for generations. The family tree can be traced back to the 16th century. The Huguenots, who founded the city of Hanau in Germany during the 17th century, introduced the art of gold smithy and thus platinum to Hanau.

In 1888 domestic platinum sales amounted to 400 kg, while platinum exports were 600 kg. The metal was exclusively extracted from Russian minerals. The price then was 800 marks per kg, which nowadays would be $11 per ounce. Unfortunately, there is no stock worth mentioning left from that time, and the price of the metal in our books is now somewhat higher.

However, the problems in the platinum business have not changed. Old Heinrich Heraeus, my grandfather, remembers a dispute regarding the platinum content of sponge that had been sent in by customers. His father (that is my great-grandfather) had entered its content in the books as 100 percent platinum, but the analysis showed a content of only 97 percent. This topic of discussion between father and son 130 years ago is still the daily bread of a platinum refiner doing business today.

Platinum was used in jewellery production as early as the late 18th century, and its popularity increased during the 19th century. And due to its chemical and physical characteristics, new industrial applications were constantly being found.
With the construction of apparatuses for the concentration of sulphuric acid and an increase in the production of the electric light bulb, the demand for platinum rose enormously. Russian material had always been available in sufficient amounts, but in 1885, the Russians suddenly withheld their material and spread the rumour that platinum was in short supply.

The Heraeus company chronicle states that all companies on the world market needing platinum doubled and tripled their orders seeking to increase stocks at any price.
The price tripled within a few weeks, but fell back to its old level of $11 per ounce a few months later.

As usual, everyone wanted a scapegoat. It was said that Johnson Matthey spread the wrong information, and that Heraeus as the biggest consumer was responsible for causing a platinum boom and simultaneously making high profits. I assure you that I am telling this story for the first time today and that I only recently discovered it in our old chronicles. You may therefore assume that Heraeus has not been responsible for the rise in platinum group metal prices over the last two years. You may further assume that we did not give the Russians the idea of withholding platinum in order to provoke a shortage in supply.
Wilhelm Carl Heraeus sent his brother-in-law, Charles Engelhard, to the US in order to deal with the American market on behalf of Heraeus. As everybody knows, he was very successful. At that time, he was the only representative for a European company who was actually in the US and, therefore, Heraeus was able to win market shares easily. The chronicle states that: "Soon the competitors lost most of their sales". As always in these cases, a mutual undercutting in prices ensued with no real profit for any company.

The question was raised whether it would not be advisable to come to a common understanding that would result in a sales agreement for the American market. Therefore, the European competitors met in France in 1894 in order to draw up a contract which excluded mutual undercutting and which included a fair split of the profits. Again, I am quoting history and am not making suggestions! Those gentlemen did not have any anti-trust problems with their agreement.

The agreement went down in the annals of history as the "platinum convention" and it is nice to read that these negotiations always took place in Paris as Messrs. Desmoudes would not be persuaded to take the dangerous voyage across the Channel. In return, my grandfather writes, the French always paid generously for breakfast expenses.

Charles Engelhard was 24 years old when he emigrated to the United States. He began his training by trading diamonds and pearls, which was his father's business. My grandfather gave Charles Engelhard 2,000 marks, the funds needed for his trip and his first weeks in the US. It then remained to be seen if, in addition to his personal activities in diamond trading, he could also prove useful to Heraeus.

As already mentioned, platinum sales rose very quickly and customers who had been buying in London or Paris now bought from Heraeus. Firstly, Mr Engelhard acquired the Gross & Meier Company, which was not very important in the platinum industry, but the company's founder and owner came from Hanau and had been living for some decades in the US. This company was merged with the Baker Company whose owners, the brothers Baker, kept some shares in the merged company, which was then called American Platinum Works.

Baker held 3/7 of the capital and Mr Engelhard and the three European companies of the convention each held 1/7. Mr Engelhard was named general manager of the company with a salary of $1,200 a year and a commission of 5 percent for the first 1,000 kg platinum, 10percent for the next 1,000 kg and 15 percent for the following 500 kg sold by the three companies to the US.

In this way Mr Engelhard quickly became wealthy. In 1903, the Baker brothers sold their remaining shares to Mr Engelhard and the European consortium. It is interesting to read that they agreed on a detailed due diligence, as they were really surprised at the amount of profit announced.

▲ The 50th company anniversary in Hanau, 1901

After the First World War, Heraeus lost the shares, and Mr Engelhard later took over all the shares in the Engelhard company. During the bad economic conditions that followed the war, Charles Engelhard supported the Heraeus company with a loan, which was later changed into a 15 percent share of the company. The Engelhard family held these shares until Charlie Engelhard died in the early 1970s. After his death I was able to buy them back from Jane Engelhard, his wife. Looking back, the price of 20 million marks for 15 percent of the Heraeus shares seems to have been extremely good.

Also at the turn of the century, the Siebert company was founded in Hanau as well as Rössler, as a mint in Frankfurt. Both companies later joined to form the Degussa company, which traded under the name of the former Rössler company for a long time. Today they are winning new markets with a new ownership under the modern name of dmc2.

I do not want to go into too many details regarding the development of Heraeus. During the Second World War the company was completely destroyed by two big attacks in December 1944 and March 1945. In 1945 we had a staff of 125 employees. By 1951, the year of our 100th anniversary, our staff had increased to 1,100. Not a single employee was working abroad at that time. In 1972 fewer than 200 employees worked abroad. Today more than 5,000 employees are working abroad, with more or less the same number working in Germany.

Today the precious metal business belongs to W. C. Heraeus and Heraeus Metallhandelsgesellschaft. It is by far the business with the biggest sales and has been our most important profit centre in recent years. We chose "Innovation – a Precious Tradition" as the motto for our anniversary year. We believe in the innovation and the success of the platinum group metals business for the next 50 years, and we intend to be one of the big players in this market.

We have also held a leading global position in our other business areas, especially quartz glass but also the dental and sensor business. The company's capital is still owned by the family and a few foundations close to the family. At the end of last year, we did not have any bank liabilities, so we are well prepared for the years ahead.

The community of platinum metal producers, users and – in the end – consumers is small and tightly knit. London Platinum Week, rich in tradition, is significant for this. Those who handle platinum – who buy, sell and use it – must be respectable and reliable. There must be confidence between all members of the community – customers, suppliers and those doing the analyses. The customer who has his material recycled must feel confident that it will be returned after an appropriate time.

I would like to thank all those present with whom we have many different kinds of business connections for their trust in Heraeus over the past decades. I hope these excellent relationships will last for many decades to come. ■

Dr Jürgen Heraeus

Dr Jürgen Heraeus is the fourth generation of the Heraeus family to head the company. He was named chairman of W.C. Heraeus GmbH in 1983.

Under his chairmanship, the company was reorganised from the ground up, making concerted moves into the Asian economic region and becoming a recognised global player in its core competencies – precious metals, dental materials, quartz glass, sensors, and medical technology.

In January 2000, Dr Heraeus was named chairman of the Supervisory Board of Heraeus Holding GmbH.

Mutual Attraction

An Interview with Frank Holmes, Chairman and CEO, U.S. Global Investors

By Susanne M. Capano, Editor

US Global has two gold funds. What's the difference between them?

The US Global Investors Gold Shares Fund (USERX) was the first one – in fact, it was the first no-load gold fund launched in the US. In 1974, the inflationary environment was perfect for a gold fund. Peter Lynch, who at that time was very profitably managing Fidelity's famous Magellan Fund, later lamented that during the 1970s, no matter what he did, gold shares kept outperforming Magellan.

This fund focuses predominantly on mid- and large-capitalised senior gold producers, primarily in South Africa, North America and Australia. Our top three holdings currently are Harmony Gold, GoldCorp Inc. and Franco Nevada.

The other fund, US Global Investors World Gold Fund (UNWPX), was launched approximately a decade later. It has a more global perspective and invests in three types of companies – exploration, development and producing. It has holdings in Australia, Kazakhstan, Africa, North America and Latin America, and will choose some junior and intermediate companies for added growth potential.

While the UNWPX fund is more risky in its profile, USERX tends to have more volatility because of fluctuations in the South African rand.

How are the funds' investments chosen?

Both funds have teams of fund managers and analysts with backgrounds in geology, engineering, mineral economics and mining finance. They carry out an extensive screening analysis on each of the companies under consideration. For instance, for a producer, the team examines its production profile going forward, its cash flow, its leverage should the gold price rally and the potential for that company to increase reserves. Well-chosen companies have the potential to outperform a bear market.

For example, Meridien is a company that we like and are seeking to increase our exposure to. They have a strong growth profile, they've paid off their debt and they have good cash flow. We also like GoldCorp. They are a low-cost producer and they are increasing reserves and production – and, based on progressive analysis, those are the key tenets for success in this category. In a sideways gold market, those companies that have the strongest gold profiles – in production, cash flow or reserves – will give the best stock performance.

The team meets weekly to review macro-economic factors and daily to review the holdings in the portfolios. We use a model that is very growth-oriented to determine the fund's industry weightings and to screen specific stocks.

What types of products do you use? Do the funds invest in bullion?

In addition to the actual shares in gold producers and exploration companies, we use long-term equity options called LEAPs [long-term equity anticipation securities] to minimise excessive portfolio turnover, and gold warrants.

The funds have invested in bullion in the past, but there hasn't been any in the portfolios for some time. We see more potential for movement in equities than in the bullion market. However, we are able to invest in bullion should we feel that there is the potential for a move.

Do you have any preferences for certain geographic regions or markets?

Certainly there are geographic considerations. Political risk shows up in the valuation people are willing to pay for the same ounce of gold. For example, an ounce of gold in Nevada will be worth considerably more than an ounce in Kazakhstan. Other countries where companies are discounted include Columbia and Zimbabwe.

Do you take into consideration whether or not a producer hedges?

Some investors can see hedging as a disadvantage, and that can cause the shares of some companies to underperform the market. After what happened to Ashanti and Cambior a couple of years ago, investors are still wary.

What factors do you consider to be key in making your investment decisions?

We follow developments in the bullion market every day. Central bank activity, producer hedging, and real rates of return in gold – those are the three most important factors we monitor. If lease rates break above their 10-day moving average, we will start to lower our cash positions.

The environment for gold funds has obviously changed dramatically since your first fund was launched. How do you market gold funds to potential investors today?

In general, we have found that it's best to market the funds to more sophisticated, long-term investors. We market the funds to them primarily on the basis of portfolio diversification. It's been shown that having a small exposure to gold – in the range of three to five per cent – tends to lower the volatility of a portfolio and enhance its returns. However, should the amount of the holding increase to over 10 per cent of the overall portfolio, volatility will actually increase.

For this type of investor, the gold shares offset the other stocks in the portfolio. When the gold stocks in a portfolio are doing poorly, then the NASDAQ and other stocks in that portfolio are probably performing spectacularly. When the other stocks fall, the gold shares should provide some income.

Some investors are technically oriented – so when the gold price moves above its 50-day moving average, we see positive money flows into the gold funds.

How are staff members trained?

There is an in-house exam that staff members involved in shareholder services have to pass. They have to know what the critical driving factors are for each of the funds and what economic factors will drive the fund performance up or down. ■

Frank Holmes' background includes investment banking, corporate finance and research analysis. He was president and chairman of the Toronto Society of the Investment Dealers Association and a member of the Toronto Stock Exchange's Listing Committee. He moved to Texas ten years ago to purchase a controlling interest in US Global, a registered investment adviser that manages approximately $1.3 billion for the US Global Investors and US Global Accolade funds, a mutual fund family of 13 no-load mutual funds.

LBMA News

By Stewart Murray, Chief Executive, LBMA

Membership Changes

Ordinary Members

EBS Dealing Resources International Limited became a new Ordinary Member on 1 August 2001. The address is 55-56 Lincoln's Inn Fields, London WC1A 3LJ (telephone (0)20 7426 1600).

Brambles Security Services UK Ltd is now known as **Securicor International Valuables Transport Ltd**. The address and telephone number remain the same.

GNI Limited is now located at Old Mutual Place, 2 Lambeth Hill, London EC4V 4GG. The telephone number is (0)20 7002 3000.

The telephone number for **Triland Metals Limited** has changed to (0)20 7653 3343.

International Associates

As from 10 August, following its sale to the US OM Group, dmc2 Degussa Metals Catalysts Cerdec AG is known as **OMG AG & Co KG**. All other details remain the same.

Good Delivery List

New Member

Hong Kong – Gold

Johnson Matthey Hong Kong Limited was approved for inclusion on the Good Delivery List for gold as from 15 August 2001.

Name Change

Brazil – Gold

Following the takeover of its parent company by the US-based OM Group, dmc2 Brasil is now known as OMG Brasil Ltda with effect from 10 August 2001. The brand mark is unchanged.

Separate Listings

Japan – Silver

The two refineries in the Mitsui Metals and Mining Group are now listed separately.

The Kamioka Refinery in Gifu Prefecture has the brand mark EMK with the letter K preceding the serial number while the Takehara Refinery, located in Hiroshima, has the brand mark EMK with the letter T before the serial number.

AGM

The Annual General Meeting of the LBMA was held at the City Club on 14 June. The representatives of 33 Members and International Associates who attended heard presentations from the Committee Chairmen on the work of the LBMA. The Meeting also approved the annual report and financial statements for 2000 which had been audited by Messrs Kingston Smith who were reappointed as the Company's auditors. Lastly, after a ballot of members, a new Management Committee was elected consisting of:

Martin Stokes (who was subsequently re-elected as Chairman of the Committee and the Association)
Kevin Crisp (who was appointed as Vice-Chairman)
John Coley
Peter Fava
Nick Frappell
Colin Griffith
Rick McIntire
Clive Turner

The Chief Executive is ex-officio also a member of the Committee.

Management Committee:

The Committee has been busy with the long-term planning of future events. These include next year's Conference (which will take place in San Francisco in June) and the Biennial Dinner in September. Plans for Conferences in future years have also been discussed to ensure that suitable venues can be booked well in advance. In addition, discussions have taken place about how the LBMA might mark the Queen's Golden Jubilee in June next year.

In recent months, the Committee has been considering the merits of updating the International Bullion Master Agreement which was developed in association with Clifford Chance in 1994. The outcome of these discussions was, however, that it would be preferable to investigate the possibility of updating the 1997 ISDA Bullion Addendum, perhaps by incorporating precious metal leases and deposits.

With the impending enactment of the Financial Services and Markets Act at the end of November, the Committee has agreed that it would be appropriate for the LBMA to assist parties in dispute wishing to appoint a suitably qualified arbitrator.

The award of a bursary of £15,000 to support a post-graduate student at the Camborne School of Mines for the coming academic year was approved at the meeting in July (see the article on the current recipient on page 12).

The Good Delivery Lists for gold and silver lie at the core of the London bullion clearing system and are used as a standard of refining quality around the world. Given their importance, the Committee has been discussing, at the recommendation of the Physical Committee, ways of ensuring that the Lists continue to serve the purpose for which they were designed. This is particularly in relation to the much greater geographical spread of refineries included on the Lists in recent years. As a result, the Committee has agreed to a wide-ranging review of the system which is used for assessing candidates and for the regular monitoring of companies on the Lists.

The Committee is continuing to work proactively to make the OTC bullion market more user-friendly and secure. A brain-storming session to review the role of the LBMA and longer-term goals will take place in mid-September. Members and other interested parties are invited to send their suggestions to the Chief Executive.

Committee Membership

The Finance Committee is now back to full strength under the continuing chairmanship of Colin Griffith. The new member is Terry Carroll, who is the Financial Controller in the Investment Banking and Markets Division of HSBC Bank. ■

Golf

Our hold on the Foster Smith trophy proved to be short lived as the LME took revenge in emphatic manner in our annual golf match. The team of John Coley, Colin Griffith, Doug Bull, Gary Orford, Graham Miles, Jeff Rousel, Brian Burns and Roy McPhearson arrived at Blackmoor Golf Club in Hampshire in good spirits and even at lunchtime, despite a small deficit of 2 1/2 to 1 1/2 points, were still upbeat about retaining the trophy. However a combination of too much lunch and excellent play by our opposition proved our downfall as the team was ignominiously whitewashed leaving a final score of 6 1/2 to 1 1/2. Nevertheless it was all played in excellent spirits with old acquaintances renewed and we are indebted to ScotiaMocatta for their help in sponsorship of the event.

We hope for better luck at next year's event, which will be held at Coombe Hill on Thursday, 3 October 2002! ■

Up With the Birds, Hoping for a Birdie

The *Alchemist's* indefatigable golf reporter, John Coley, has done it again – this time for charity, playing four rounds in 12 hours at the Captain's Golf Marathon at Blackmoor Golf Club.

John and his team teed off at 0600 for a day spent in appalling weather, their shared goal to score as many stableford points as possible over as many holes as could be played in a single day.

Nobody here knew what a 'stableford point' was, and it doesn't really matter. What does matter is that John and his caddies (Trevor Holt, Jon Barrett, and David Tefler) raised nearly £3000 of them for Impact, an organisation that provides specialist and tailor-made seating and wheelchairs for handicapped children at Treloars Hospital in Alton. ■

DIARY OF EVENTS

SEPTEMBER 2001

3-6 NIGERIAN MINERALS EVENT; NIME2001
London, UK
Tel: +44 1444 416678
Fax: +44 1444 441162
Email: enquiries@conferencbusiness.co.uk
Web: www.nime2001.com

4-5 Conference – Developing the Central Asian & Central-Eastern European Mining Industry
Almaty, Kazakhstan
Tel: +31 26 36 53 444
Fax: +31 26 36 53 446
Email: energywise@wxs.nl
Web: www.energywise.nl

5-7 Kazmin-Kazmet 2001 – The 7th Kazakhstan Mining and Metallurgy Exhibition
Almaty, Kazakhstan.
Tel: +44 20 7596 5213.
Fax: +44 20 7596 5128.
E-mail: oleg.netchaev@ite-exhibitions.com

10-14 XXV Convención de Ingenieros de Minas del Perú, Mining: Society and Development.
Lima, Peru.
Tel: +51 1 349 4262.
Fax: +51 1 349 3721.
E-mail: convmin@amauta.rcp.net.pe.
Web: www.conv-min-com

12 Platinum Group Metals Seminar
New York, NY
Hosted by The International Precious Metals Institute and CPM Group
Tel +212 785 8320
Fax: +212 785 8325
Email: lramos@cpmgroup.com

13-16
Bangkok Gems & Jewellery Fair
Impact Exhibition & Convention Center, Thailand
Tel: +662 267 5080/1
Fax: +662 267 5078
Email: contact@thaigemjewelery.or.th
Web: thaigemjewelery.com

16-20
Vicenzaoro1/2/Orogemma
Ente Fiera Vlcenza, Vicenza, Italy
Tel: +39 0444 969 111
Fax: +39 0444 563 954
Email: vicenzafiera@vicenzafiera.it
Web: www.vicenzafiera.it

19 GFMS Precious Metals Seminar
Trinity House, Tower Hill, London, UK
Tel: +44 20 7539 7820
Fax: +44 20 7539 7818
Email: laurette.perrard@gfms.co.uk
Web: www.gfms.co.uk

OCTOBER 2001

2 LME Metals Seminar 2001
London, UK
Tel: +44 20 7264 5555
Email: claire.hobday@lme.co.uk
Web: www.lme.co.uk

15-20 Expo Mineria 2001 and XXIII Convencion Nacional
Acapulco, Mexico
Tel: +52 5543 9130.
Fax: 5543 9135.
E-mail: expo@geomin.com.mx
Web: www.geomin.com.mx

17-19 GME 2001 - Goldfields Mining Expo
Kalgoorlie, Western Australia
Tel: +61 8 9021 2466.
Fax: +61 8 9021 1402.
E-mail: admin@gmexpo.com.au
Web: www.gmexpo.com.au

18-19 The 2001 Metals Outlook Summit
London, UK
Tel: +44 1932 893 876.
Fax: +44 1932 893 893
E-mail: cust.serv@informa.com
Web: www.ibcglobal.com/metalssummit

NOVEMBER 2001

6 CPM Group's Gold Survey
New York, NY
Contact details as above

7 The Future of Gold: A Roundtable Hosted by the International Precious Metals Institute
New York, NY
Contact CPM Group for details

6-7 International Mining, Petroleum and Energy Legislation Congress
Lima, Peru
Tel: +511 222-6484
Email: prod2@stimulus.com.pe
Web: www.snmpe.org.pe/english/events/legislation.htm

14 First Anglo-Canadian Mining Investment Conference
London, UK
Tel: + 44 20 7628 1128
Fax: + 44 20 7638 0756

14-18 Expomin America 2001
Santo Domingo, Dominican Republic
Tel: +809 565-7283
Fax: (+809) 683-0659
E-mail: ucm@codetel.net.do

25-26 New Opportunities Conference
California, US
Tel: (+1 305) 669 1963, ext. 212
Fax: (+1 305) 669 7350
Email: johnpanaro@iiconf.com
Web: www.iiconf.com

26-27 NewGenGold 2001 - Case Histories of Discovery. Conference & Exhibition
Perth, Western Australia
Tel: +61 8 8130 6307
Fax: +61 8 8379 4634
Email: newgengold@amf.com.au
Web: www.newgengold.com

19 The Tenth City of London Central Banking Conference
National Liberal Club, London
Tel: 01225 466 744
Fax: 01225 442 903
Email: enquiries@cityforum.ltd.uk
Attn: Veronica Scott/Genevieve Pascoe
Web: www.cityforum.ltd.uk

27-29 10th Shanghai Metal Expo
Shanghai, China
Tel: +852 2511 7427.
Fax: +852 2511 9692.
E-mail: cp@cpexhibition.com

15th August 2001

Editorial Comment by Martin Stokes, Chairman, LBMA

Three decades ago today President Nixon suspended the convertibility of the US dollar with gold, setting the world on a course towards a regime of floating currency exchange rates. The US trade deficit at the time was US$1.4 billion per year – an outflow which if sustained, could not be covered by the US gold reserves – at least not at the fixed price of around $43 per ounce.

Since 1971, US trade deficits have continued to rise, as US consumers, with buying power partly dependent upon credit, have supported the global economy. Funding this deficit has required enticing global investors to move funds into US stocks and bonds, which has in turn supported a strong dollar. From time to time, as in 1985 at the time of the Plaza Accord, this dollar strength proved seriously distortive and required interim measures to stem the tide.

In 1998, the US current account deficit reached 2.50 percent of US GDP and in 2000 this deficit – a rather alarming $430 billion – climbed to 4.50 percent of GDP. To a large extent, current account deficits in recent years were offset by investments in the capital account as US companies, especially in the technology sector, attracted overseas buyers. Such equity investments have, to say the least, become less attractive of late.

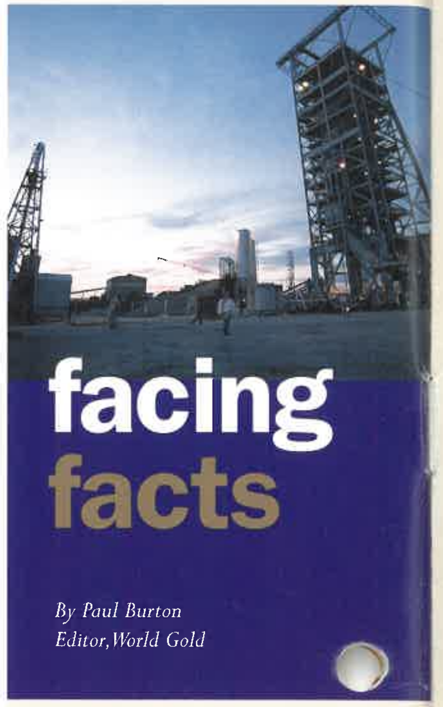
Therefore, since the start of this year, overseas investment in the US has been focused more towards the bond market, where performance so far has generally been good on account of the Federal Reserve's aggressive easing actions. However the US$ yield curve remains stubbornly steep, partly indicative of investors' concerns that inflationary pressures may build up if the Fed overshoots.

Yesterday the IMF issued its annual report on the US economy suggesting that the current account deficit is unsustainable and could trigger a dollar devaluation. Other economic data seem unlikely to offer much encouragement for the US – and there has even been market speculation of a Greenspan retirement. The coming months could well be a volatile period for currencies and bonds and with this environment may eventually prove to be more supportive of hard assets such as precious metals.

Such hard assets may also find favour among risk-averse investors who are concerned about the general global slowdown and eroding credit quality – examples of which have been seen recently in Turkey and Argentina.

In the last ten years, investment in bullion as an asset class has been virtually non-existent: in fact, disinvestment would be a more accurate term to describe activity in this sector. Though the challenge still exists for the market to create more accessible retail products, it seems likely that the current global economic picture will spark some bullion investment demand, probably from those seeking diversification in their portfolios. Indeed we are already seeing some evidence of this phenomenon as the rising open interest in NYMEX's gold contract points to substantial hedge fund buying in recent days.

Cynics will point to the many false dawns seen in the bullion markets in the last 15 years, but in my opinion, the global atmosphere is now more supportive of demand from an investment perspective than for some considerable time. A variety of factors suggests that more interesting times may be ahead. ■



facing facts

By Paul Burton
Editor, World Gold

One of the clearest messages to come out of the LBMA's May conference in Istanbul was the need for the gold industry to consolidate. Keynote speaker Sir John Harvey-Jones was adamant that the number one priority should be a process plan to deal with fragmentation.

Perhaps heeding his words, Canada's Barrick Gold, the industry leader in terms of market capitalisation, has since made a bid for another North American major gold producer, Homestake Mining. And as Facing Facts went to press two Australian miners, Delta Gold and Goldfields, confirmed that they were in merger talks.

The US$2.3 billion all-share Barrick proposal represents the biggest consolidation move since the aborted Franco-Nevada/Gold Fields transaction was first announced this time last year. Barrick is willing to pay a 31 percent premium for Homestake in order to gain an extra 2.2 Moz of annual production. The merger, if approved by regulatory authorities and Homestake shareholders, will create a 6.0 Moz/y gold producer that will be the biggest in North America, and second only to AngloGold (gold production of 7.2 Moz last year) in the world.

The new Barrick will have a market capitalisation of roughly US$8.8 billion, more than double the South African and that of North America's second largest producer, Newmont Mining. The market capitalisation figure is significant because it takes Barrick to within a whisker of the 'magic' US$10 billion mark that is widely regarded as the level at which general funds and institutional investors start to get interested.

One of the deal drivers was almost certainly the potential advantages to be gained by consolidating the two companies' ownership of the Veladero project on the Chilean-Argentine border (60 percent Homestake, 40 percent Barrick), and developing the project in conjunction with Barrick's adjacent Pascua-Lama project. Development of the latter project was postponed at the end of last year owing to the weakness in the gold price. At the end of 2000, combined reserves at Pascua-Lama and Veladero were 23 Moz, according to Homestake.

The combined mineable reserves of the new Barrick will contain almost 80 Moz of gold and are located 54percent in (politically stable) North America and Australia, 33percent in South America and 13percent in Tanzania. The deal represents Barrick's first excursion into Australia, the world's third largest producing country.

Meanwhile, Barrick has just opened its first African mine. Bulyanhulu, in Tanzania, contributed a maiden 64,000 oz to Barrick's June quarter production of almost 960,000 oz. Production at the US$280 million mine is expected to rise to 400,000 oz in 2002.

Another African mine that opened recently is Yatela, in Mali, operated by joint owner AngloGold (40percent), with IAMGOLD as the other 40 percent mining partner. The mine cost US$73 million to construct and is expected to produce an average of 230,000 oz/y for six years.

In Australia, AngloGold has commissioned the expansion of the plant at its wholly-owned Sunrise Dam mine as part of a US$58 million expansion of mining operations to produce 280,000-300,000 oz/y. The mine was acquired at the end of 1999 with Acacia Resources, but two of the other mines included in that package are not considered a good fit with AngloGold's plans and are earmarked for closure or sale.

AngloGold may, however, pick up some other operating assets in Australia as it is one of eight major gold producers assessing the gold assets of diverse mineral producer WMC. Australia's third largest gold producer is keen to either sell or joint venture its three pure gold mines that together produced roughly 675,000 oz of gold in 2000. As well as outsiders, a merged Delta Gold and Goldfields would likely be interested in bidding.

On the North American continent AngloGold is to invest US$194 million in a 40percent expansion of its Cripple Creek and Victor mine. To help finance such a busy development schedule AngloGold has secured a US$400 million revolving loan.

Another company involved in an expansion programme, and which has also raised a substantial amount of financing, is Canadian Agnico-Eagle. It has secured a US$125 million line of credit after earlier raising equity financing of US$82 million for expansion of the LaRonde mine, in Quebec, by 21percent to a planned 400,000 oz in 2004.

South African major, Harmony has also shown that there is renewed investor appetite for certain gold shares by raising US$144 million to complete the restructuring of its balance sheet after borrowing R2.1 billion earlier this year to fund the acquisition of the Elandsrand and Deelkraal mines from AngloGold, and to cover a cash offer for New Hampton Goldfields.

In recent years, Harmony, like AngloGold, has diversified geographically away from its traditional South African base in the Free State province. It is fair to say that the old mines of this region are struggling to survive. AngloGold has considered divesting itself of Free State mines such as Bambanani, although a recent improvement in profitability means that it may hang onto it rather than accept Harmony's offer for the mine. AngloGold, has, however, announced the closure of part of Joel and Gold Fields has drastically reduced the ore reserve estimate at neighbouring Beatrix mine, taking a writedown of US$240 million in the process.

This degradation of some South African operations follows a period that has seen angry rhetoric over new minerals legislation and wage increases, highlighting the difficulties that the world's largest producing industry faces.

The main thrust of the legislative reform is to move from the current law, under which mineral rights may be owned by individuals or companies in perpetuity to one in which they are owned by the State and leased by those seeking to exploit them.

Although the mining industry there has accepted the need for change and is supportive of State ownership, it had been concerned about some of the practical details, principally those relating to the lack of mechanisms for guaranteeing security of tenure and the level of ministerial discretion. The two sides do seem to have reached a compromise now on these areas of concern. And agreement was reached at the last minute in the bi-annual wage negotiations between mining companies and the National Union of Mineworkers, thus averting a potentially damaging strike. ■

The *Alchemist* is published quarterly by the LBMA. For further information please call Susanne M. Capano, Editor, Stewart Murray or Andrea Smith
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