



Alchemist

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Red tape or Red ribbon?

Christmas is coming but so are the final SEC rules on conflict minerals. Will it be another prosperous New Year for the gold market? Find out inside.

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Achieving more together

What a difference 10 years can make

By Pierre Lassonde, Chairman, Franco-Nevada Corporation

The following is an edited version of a keynote speech made at the LBMA (LPPM) Conference in Montreal on 19 September 2011.

Introduction

It is very fitting for me to be here today because I was also a speaker 10 years ago at the LBMA conference in Istanbul. It was a wonderful venue and a magical place that left a permanent reminder with me, as I met a very attractive banker there who was to become my wife. Attending a gold conference in those days was very much like going to church. The rooms were mostly empty with a few old people at the back who prayed a lot.

The Gold Price in 2001

In May 2001, the gold price was barely over \$250. The Dow was sitting at just over 10,735 and it had just crossed over 10,000 a few months earlier. The US three-month T-Bill was about 3.8% and today, as you know, it is about zero. The Fed fund rate was set at 6% and that is also now about zero. The US dollar was the currency of choice. It bought €1.12 in those days. Europe for Americans is cheap – it was a bargain. Today, of course, it buys you about 40% less.

In 2000, the US population was about 280 million. It consumed 7.2 billion barrels of oil per year, or 25 barrels per person, while China with 1.2 billion people consumed 1.6 to 1.8 billion barrels or 1.5 per person. In the last 10 years, the US has actually gone down to 22.6. Higher prices do work miracles, do they not? In China, consumption has not quite doubled – but almost – to 2.7 barrels per person. That is just to give you an idea of what is happening in China and the impact of China on the whole world of commodities, not just gold.

Finally, China's foreign exchange reserves stood at a paltry \$166 billion 10 years ago, and are over \$3.1 trillion today. Now, I will give you just a little rapid overview of 2001 and what was happening then. The central banks were selling 479 tonnes of gold. The average cost of production for gold was \$319. The gold producer hedge book totalled over 3,000 tonnes, and mine production was peaking at 2,600 tonnes per year.

Changes in the Gold Market

Overview

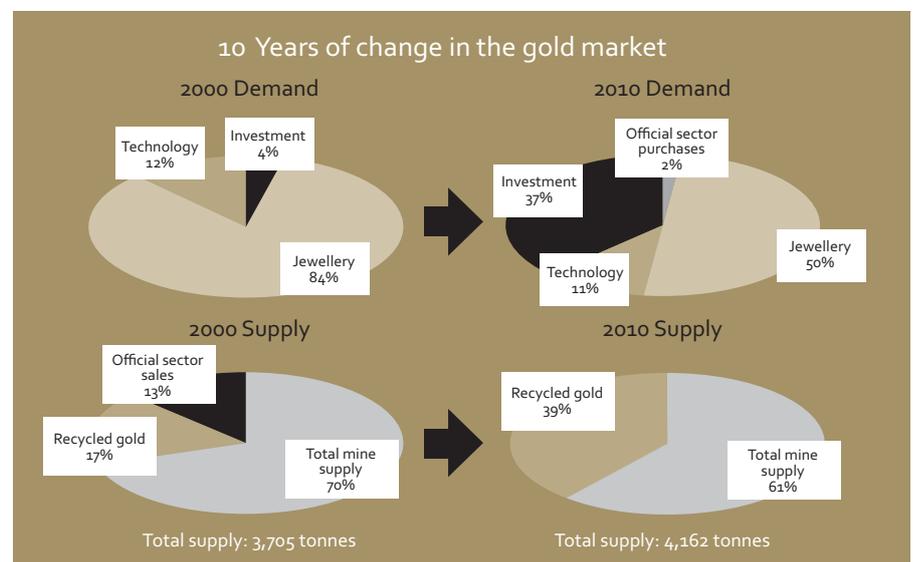
The reason why I am looking at that is to look at the lessons of the last 10 years and see what may happen over the next 10 years. What are the lessons to be learnt and the changes in the gold market that we see over the last 10 years? Well there are five big things. Firstly, central banks have gone

from sellers to buyers. Secondly, producer hedging is dead. It is deader than a doorknob. Thirdly, investment demand has grown from 4% to 37% of overall demand. That is a huge, tectonic change.

The counterparty to that is jewellery demand, which has collapsed from 84% to less than 50% of total demand this year. Finally, the role of recycled gold in the supply side has gone from 17% to 39% of total supply. That is huge, specifically for the refiners. What has not changed? Technology demands have stayed constant at about 12%. Mine production is essentially flat. It was 70% and is now 61% only because recycled gold has taken so much more. I will now go a little bit deeper into each of the components and give you a bit more of the flavour.

European Central Banks

Looking at central banks, from 1990, the European central banks started to exhibit what I would call the jailbreak syndrome: who can sell that useless yellow metal the fastest before the price dropped to zero and the tens of thousands of tonnes that were held in the vaults of their banks would turn to dust. The lure of the US dollar was so great. It paid interest and it was the reserve currency of choice, so they wanted to get rid of that yellow stuff gathering dust, and so they did. If you total it up, they sold over 5,000 tonnes and have lived to regret it.



I should have entitled my next slide ‘the biggest losers’, but the point is made. If only they had kept their gold. The biggest surprise is who leads the parade of the biggest losers. People always think it is the UK, but the UK actually came in third. The Swiss and the French led the parade. The total notional loss of \$1,800 gold is over \$200 billion. It makes the Greek crisis look like chump change. However, it is just as instructive to look at who is not there: Germany and Italy, the second-largest holders of gold after the USA. Interestingly, Italy had been in trouble in 1970s and it had to do a loan collateralised with gold. Guess which loan they repaid first? It was their gold loan. Today, Italy has 2,500 tonnes of gold in its vault worth over \$150 billion. That is enough to plug a hole or two. It is my absolute view that in the next two years, you will see Italy use its gold to once again plug some of their holes in their budget because they are going to have to. It also comforts me that the European central bankers responsible for the sale of the gold of their countries have since been promoted to handle the financial crisis. The gold market is in good hands!

Asian Central Banks

As the 1990s and the first decade of the 21st century were defined by European bank selling, I believe that the next 10 to 20 years will be defined by Asian central banks buying. Most of the Asian countries have emulated Japan in its mercantilist policies of the 1970s and 1980s, and have accumulated very large foreign exchange reserves. The global financial crisis of 2007 and 2008 has highlighted the vulnerability of the reserve currency, the US dollar. It has also highlighted the fragility of the euro, leaving only gold as the currency of last resort. It is our view that the Asian central banks will move over time to a 15% weighting in gold as a minimum. If you look today at the European central banks and each of the countries, their gold weighting is probably closer to 50% in their reserve exchange. I would say that the Asian central banks will move first to 15%, but I would not be surprised if they go higher than that. Just

with 15% weighting, if you look at their current reserves, that would represent 17,000 tonnes of gold to be purchased over the next 10 years. Any significant retrenchment in the gold price, in my view, will be seen as an opportunity to boost their gold reserves.

Gold hedging

Central banks, as I noted earlier, were not the only sellers in the 1990s. A number of producers thought that they had found the equivalent of the financial elixir of perpetual profits in the form of gold hedging. The peak was reached in 2000 at just over 3,000 tonnes of gold. It was mostly borrowed from the central banks at minuscule interest rates because they could not care less, it was so worthless, in order to capture a contango in the 3% range. Just to remind you, hedging was first introduced in finance as a risk-mitigating instrument. If you do not take a view on price and you constantly hedge, it is a zero-sum game. However, the producers took a view – the wrong view. They ended up accumulating colossal losses that they had to make up by diluting shareholders’ equity, and we all know too well which company ended up having to do a \$5 billion equity to pay off their hedge book losses. It is a good thing they did it at the time they did it, because today it would be \$10 billion.

So there are two reasons why hedging today is essentially dead. Firstly, the gold company shareholders do not want their company to hedge their production. They want to have full leverage to the gold price, and they are punishing companies that would even think of that by decreasing the price-earning ratio of the company, which makes them less likely to be competing for assets with other companies. Yet, the real reason is that there is no contango left. The price today and tomorrow is actually a flat price, while the actual price keeps going up. So you are much better off not hedging. With a zero-interest-rate policy announced by Bernanke for the next three years and possibly even longer, I do not see a return of hedging for quite a number of years.

Investment demand has gone from 4% to 37% of total demand, but I think it has got an even brighter future. When you look at global asset allocation and wealth, gold today accounts for a minuscule 1% of total wealth. A simple doubling, going from 1% to 2%, of this position would represent purchase of 31,000 tonnes of gold at today’s price.

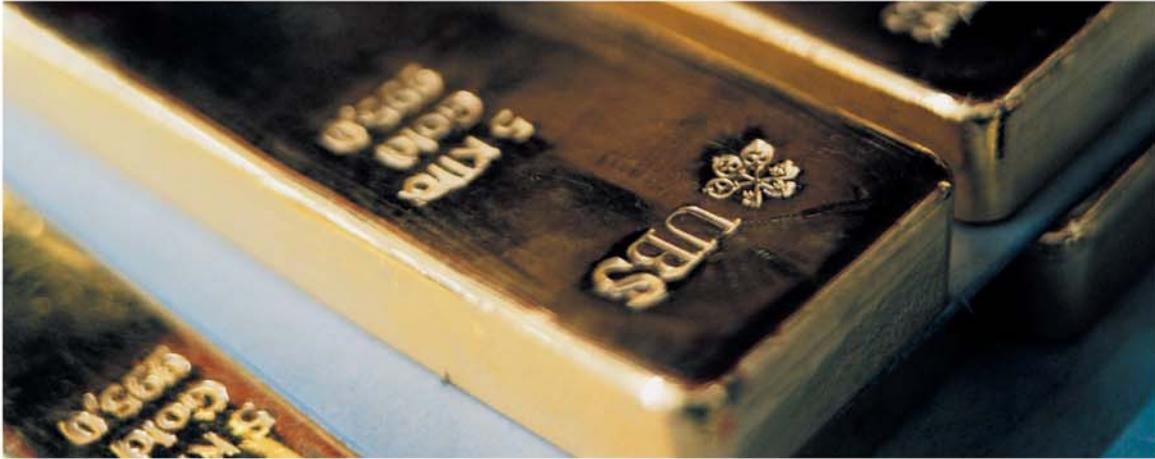
The Gold ETF

To me, the most remarkable development of the last 10 years, and I will admit that I am a tad biased here because I had a bit of a hand in its creation, has been the advent of the gold ETF. The first of its kind was the World Gold Council-backed GLD, which is now listed on a multitude of exchanges. For the first time in history, one can buy gold 24 hours a day, seven days a week, with a minuscule friction cost. The idea when we created this ETF at the World Gold Council was, and I still remember telling the members of the Council, that if we want gold to be an alternative currency to the US dollar and to the euro, gold has to be completely and totally liquid. You have to be able to buy it 24 hours a day, seven days a week – only then will we have a currency that can compete with the dollar, and that we did. It took two and a half years and \$15 million to get it through the SEC. You can imagine that when the SEC found out that the gold price was fixed twice a day, they went bananas. That did not compute in their regulations. That is why it took so long to get it through, but we did, and for a while a month ago, the gold ETF was the largest ETF on the planet.

In little more than seven and a half years, the gold ETFs have accumulated in total some 2,300 tonnes of gold that have been purchased for a value of well over \$145 billion. The global financial crisis of 2007 and 2008 brought down the financial systems and a lot of currencies. The central banks flooded the market with liquidity and cash in a bid to divert a 1930s-style depression. Gold, once again, is performing its role as the ultimate reserve currency, just like it did in the 1970s and in the 1930s. Let us face it: these days, currencies are like families. All of them are more or less dysfunctional and each has its own therapy. Gold, when you look at it, looks pretty good. That is why people are buying it. Investment demands have also exploded.

Demand for Gold

Investment demand has gone from 4% to 37% of total demand, but I think it has got an even brighter future. When you look at global asset allocation and wealth, gold today accounts for a minuscule 1% of total wealth. A simple doubling, going from 1% to 2%, of this position would represent purchase of 31,000 tonnes of gold at today’s price. Inconceivable? I think not. I think it is going to happen. It is happening. That is another source of gold demand that we are going to see coming year after year for the next five to 10 years. Every year there are around 3,500 tonnes of refined gold produced, and if 50% of that is going into investment demand, then the amount consumed in other uses is bound to decline.



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That rest is jewellery. The funny thing about jewellery is that it responds to economics 101: the lower the price, the more the demand; the higher the price, the lower the demand. When gold was \$250 in 2000, 84% of total demand was jewellery. For a few years, the gold price went up and jewellery demand went up. That is because it validated earlier purchases. People said that they had bought a necklace at \$250 and now it is worth £300 so they thought they should buy another one, so then it went to \$350. That worked for a number of years until the gold price got too high. At that point, jewellery demand started to go down, except in two countries – China and India. You can clearly see it is all happening today in those two countries, where demand for jewellery continues to increase even as the gold price increases. Between them, in 2010, they bought in 1,100 tonnes of jewellery compared with 200 tonnes in the US and Europe combined. It is happening there.

In 2004, when I was Chairman of the World Gold Council, I visited a store in Beijing run by Mrs Wong. In that year, that three-storey store of gold and jewellery only sold 1 billion yuan of jewellery. The yuan in those days was 8.2 to \$1. This year, that same store will sell over 10 billion yuan of jewellery. The yuan is a little stronger than it was then; it is down at about 6.0 to \$1 today. Think about it – 10 times the amount of jewellery in a space of seven years in one store. When you look at it from a combined 20% of total consumer demand, today between China and India, you are looking at 60%. It is going higher. I think that, within the next five to 10 years, between China and India, you will be looking at well over two-thirds to 70% of total consumer demand for gold. In the US and Europe, gold is going to be a very high-class item, much like diamonds are today and some of the nicer stones. That is what is likely to happen.

Technology

We have talked about the five things that have changed the most. Now let me just refer to the couple of things that have not done much in the last five years. I am talking about technology. If you look at the technology sector, essentially about 11% or 12% of gold has been used in technology over the last 10 to 30 years. It does not seem to change. However, starting in early 2000, the World Gold Council decided to try to help the people that write papers about gold. We decided that we would publish those papers and help them connect so that people knew what was happening in the world of gold.

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Think about it – 10 times the

amount of jewellery in a

space of seven years in

one store.

That has made

a big difference.

The number of

papers and patents

that have been issued and

awarded for the utilisation

of gold in medical and

commercial use is the

equivalent of mining

exploration.

I believe that at

some point in the

future a significant new

application will be

found that will have an

impact on gold

demand, so that not

only are you going to

have jewellery and

investment demand,

but you are going to

have another significant

commercial use of gold.

As an example, the first

gold-based auto catalytic

converter went into

commercial production

for the 2012 model year.

A medical application would

be a game-changer. For

example, if there was

something like a gold-tipped

Viagra pill, that would be game-

changing. That would have a huge

impact. Maybe it will happen, but

when I look at the number of papers

that are written and the number of

patents, I think it will happen, but I do not

know when.

Gold Production

On the supply side, we have said that essentially we have had flat production. That is not quite the reality because we have had seven or eight years of decline in world production, but then in the last two years, there has been very strong growth again. In effect, it is the same as it was 10 years ago. That is all nice, but the reality is that the reason the producers have been able to increase production is because they have dropped their grades and they have let their costs go up. They have kept the margins, but the margins have not expanded as much, so as a consequence, the stock has not done very much if you look at the gold equities. That is a big surprise.

Looking at the

1980s and 1990s, in each

of those decades, they found at

least one super deposit of 50

million ounces plus. That is a gold

strike. At Yanacocha, they were

producing 3 million ounces of

gold. We have not had one

since 1993, which is 20

years ago.

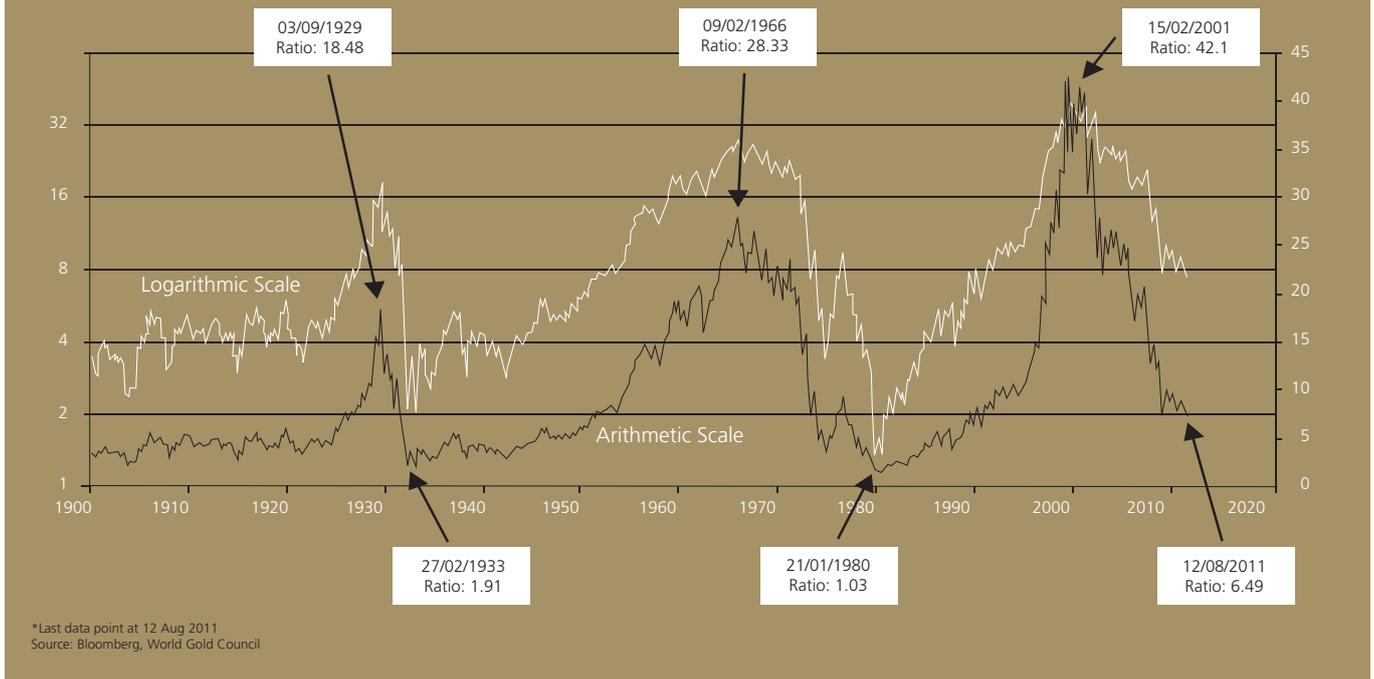
If you look at Newmont,

today it is at \$62 and that is the same as in 2004. In 2004, gold was \$450. Today it is \$1,800. How can that be? If you look at the head grade, it went from 1.5 grams to 0.8 grams and everything costs more. The most surprising thing in terms of the mining company over the last 10 years is the lack of major new discoveries. That is a big problem for the industry. Looking at the 1980s and 1990s, in each of those decades, they found at least one super deposit of 50 million ounces plus. That is a gold strike. At Yanacocha, they were producing 3 million ounces of gold. We have not had one since 1993, which is 20 years ago. Where are they? We used to find three to five 15 to 30 million ounce deposits a year. It has been more like one, two or three at the most in the last 10 years. When you look at that, you really wonder what is going to happen. We can keep increasing production by about 2% for the next five to 10 years. That is a very subdued rate of production unless the industry puts more money into R&D and starts to find more deposits. It is not going to happen otherwise.

The Market and Gold

I just want to finish with a chart of the Dow Jones industrial average divided by the gold price. It is a very simple way to look at the relationship between financial assets and hard assets in the form of gold, and what they look like over time. Looking at the chart across the page, there are a number of very interesting points. Firstly, you can see that there are times to own financial assets, like

Dow vs Gold



from 1980 to 2000, when the ratio went straight up for 20 years – so just buy financial assets. From 1946 to 1966, it was another great time. By the same token, there are times where you should really be in hard assets and forget the financials and banks. From 2001 to today, that has certainly been the case.

The other interesting point is looking at the last bull market in hard assets, which lasted 14 years from 1966, when the Dow hit 1,000 for the first time, to 1980, when the ratio peaked in terms of gold ratio to the Dow at one-to-one. The same thing happened in 1934. If you look at the 1930s bull market, you have to look at silver to get the length because gold was fixed in those days. The length of the bull market would have been about 16 years. Therefore, we have two previous bull markets of 14 years and 16 years respectively. Let us say that there is maybe another four to six years left in this bull market on average. Furthermore, the reason we wrote the letter in 1999 was to say to our shareholders that it took 42 ounces gold to buy one unit of the Dow. In 1980, it was one to one. The Dow was 800 and gold was \$800. In 1934, the Dow had gone from 370 in 1929 to 37 and gold was up at \$35; it was 1.1-to-one.

So, where do I think the gold price is going? I think it is going back to parity with the Dow at one-to-one. The Dow today is 10,700. From a ratio of 42 in 2001 to 6 in August 2011, the corresponding change in the gold price was a rise from \$250 to \$1,850. It has gone up by \$1,600. If the ratio goes down from 6 to 1 (with the Dow unchanged), the gold price is going to go up by about \$8,000. So it has got as much to go in ratio terms as it has already gone up.

I believe there is going to be a strong correction at some point. It will then set up this last, explosive phase of this bull market that will take the gold price to numbers that few people imagine.

My parting word is that this bull market is far from over. There is one more thing that you should note, however, as a note of caution. In the 1970s bull market, there was one very strong correction. The gold price went down 50% from 1974 to 1976, and a lot of people went bankrupt in those two years. We could have a correction of that magnitude in this bull market. We do have a correction and I believe there is going to be a strong correction at some point. It will then set up this last, explosive phase of this bull market that will take the gold price to numbers that few people imagine.



Pierre Lassonde
Chairman
Franco-Nevada

BA, BSc, U of Montreal 1971, MBA U of Utah 1973, P.Eng 1976, CFA 1984, Hon PhD Engineering U of Toronto, Montreal, Ryerson, Hon PhD Business, U of Utah.

Mr. Lassonde co-founded Franco-Nevada Mining Corporation in 1982. Over the next 20 years Franco-Nevada provided shareholders with a 36% annualised rate of return. The company was acquired by Newmont Mining Corp in February 2002 and Pierre became President and Vice Chairman in 2007. He served as Chairman of the World Gold Council from 2005 to 2009.

In 2008, Pierre led an investors group bringing back Franco-Nevada to the public market with a \$1.2 billion IPO and became its Chairman. The current market capitalisation of Franco-Nevada is over \$5 billion.

Mr. Lassonde's philanthropic interest in education and the arts is well known. He has been Chairman of the Quebec National Art Museum since 2005. He was made a Companion of the Order of Canada in 2002 and Officer of the Quebec Order in 2008.

Producer Pressures

- The Inside Story

By Stuart Murray, Chief Executive Officer, Aquarius Platinum Ltd

The following is an edited version of a speech made at the LBMA (LPPM) Conference in Montreal on 19 September 2011.

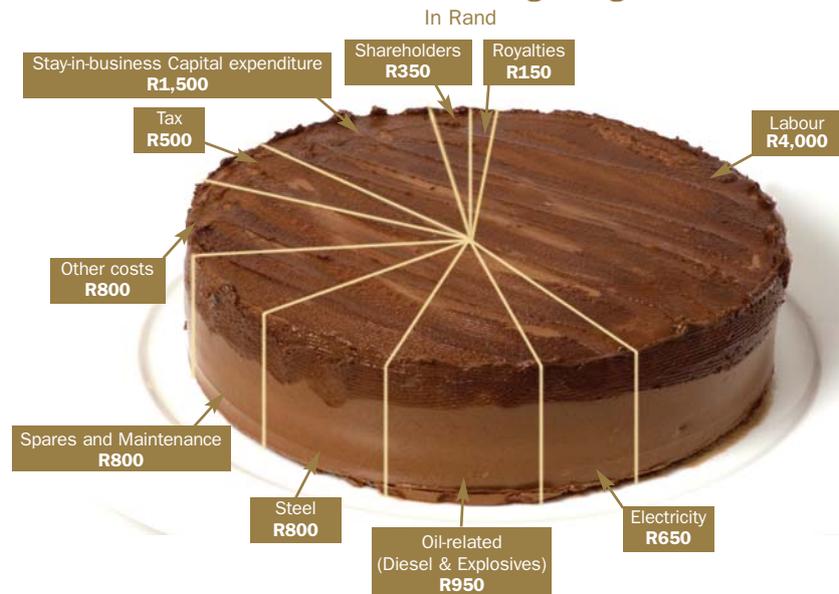
Introduction

Last evening, I bumped into somebody who asked Derek Engelbrecht and I if we were lost at this conference, because they felt it was just a gold conference, so very good of the LBMA to include us for this afternoon session.

We are in North America, the prestigious capital of the world. As some of you know, my colleague Gavin Mackay is a reformed lawyer – no offense to those lawyers present – and he is terrified of what I might say, so in addition to this, I do apologise to a few folk. I have knocked off some statistics, figures, half-truths and whatever from people, including the likes of Mr Trevor Raymond of Amplats, so it is not all my work here.

So how did I end up here? It is because of women. Yes, I am weak. Yes, I am easily led astray, but the lovely Margaret Davis and Edel Tully press-ganged me into this and naturally I could not say no. The last time I spoke to the LPPM, I talked about Tax Freedom Day, the day on which the earnings of a platinum company finally belong to the shareholders, and we concluded it was somewhere in December, so this year we are going to talk about the platinum cake.

The Platinum Cake - Enough to go around?



The Platinum Cake – How Delicious Is It?

For those of you who follow South Africa, you will know this is a theme based on that well-known, prominent politician of ours, Mr Julius Malema. He made a statement about sharing the delicious cake and so I am going to talk a little bit about what this cake actually amounts to.

I also realise you have heard a lot of this stuff before. The whingeing and moaning of the South African platinum producers: “*We are making no money, the world is coming to an end, the sky is falling in*”, so at times I may go a little bit off-piste and talk a little bit about the nationalisation debate. Julius Malema is the proponent of nationalising the mines in South Africa and has gone on record as being in favour of expropriating the farmland without compensation. It sounds almost as if we were living in that country to the north of us on the other side of the Limpopo. I am actually giving you two presentations for the price of one, which you would expect as we are a low-cost producer and we are a little bit cheap.

The Rand Basket Price

The cake reflects about 10,500 rand per PGM ounce, as it was last week. It is lovely and it is not all gold. It is only about 1%

gold and I will remind you that it is a mix of platinum, palladium, rhodium, ruthenium, iridium and the like, and at today’s prices that ounce is only worth \$1,490 and not \$1,800. People wonder why the platinum industry is looking a touch anaemic just now, but I will remind you that gold does not equal platinum in this current crazy world. We are receiving circa \$300 an ounce less for a run-of-mine ounce than you would find on a traditional South African gold mine, despite having head grades that are similar and cash costs per ton that are similar. In addition, the process of extracting the PGMs is far more lengthy, complicated and more expensive than gold; hence, our margins are currently significantly less than those in the gold industry.

Royalties

However, is that cake enough to keep a miner happy? What happens is you have your revenue line and then the folk start lining up to feed at your trough. Let us start with royalties. That is government in one form or another.

Royalties are modest in South Africa. They are however EBIT-based and because our EBITs are low, royalties are low. In the event that the margins improve in this industry, royalties will become an ever-

increasing part of the equation. In Zimbabwe, the folk at the trough have now got royalties up at 5% of gross and are talking about much higher levels.

Labour

Then you move on to the other sort of folks, labour, and it is much talked about. In Zimbabwe, approximately 35% of cash costs are labour. On a deep-level platinum mine in South Africa, labour could be as much as 60%. Over the last 10 years, we have watched labour costs exceed CPI to the amount of roughly a 90% increase over CPI. At last count, on-mine labour is up probably 150% to 160% in South Africa, clearly an unsustainable proposition going forward.

Electricity

Electricity was once cheap in our part of the world, but we are now facing electricity costs that are on a par with the US or Europe, and that is before our dear state-owned enterprise Eskom requests another 25% per annum for the next two years, catapulting us into probably some of the highest cost power in the world.

For electricity-intensive industries such as platinum and gold in South Africa, it is an unsustainable situation going forward. This is not an example of the benefits of nationalisation.

I will talk just a little bit about the nationalisation debate. It is much talked about. Those of you in the gold industry watched Mr Chavez nick the Venezuelan gold industry. Let us think about what Julius is proposing for us.

In the 1950s, Chile created Codelco and you have watched Codelco's share of the Chilean copper production go from 75% to 25% to 30% now. Even the Chilean President is now criticising the inefficiencies, griping about the stagnant production and the climbing costs of the Chilean copper industry. Chile did, however, in parallel, allow the creation of privately owned copper enterprises in Chile, which, as you well know, have flourished in the intervening period.

In the 1960s, Zaire, now the Democratic Republic of the Congo, was producing circa

500,000 tonnes a year of copper. By 1989, it had got that down to 20,000 tonnes a year, and Gecamines is effectively pretty much bust to this day.

Zambia is a case study of the ill effects of nationalisation; Mr Kaunda took 51% of the copper mines in 1974. He managed to turn a 700,000-tonne copper industry into a 220,000 tonne a year industry in 25 years. Tellingly, since privatisation, the output of copper in Zambia has doubled in 10 years to around 400,000 tonnes.

In an Investec study, it quotes that 'the South African government is already creaming approximately 55-80% of the turnover of the average South African mining company in terms of its total take', which is a great deal of money considering the fact that they have taken none of the risk.

In the 1960s, Ghana was a 900,000-ounce gold producer, for those aficionados of that base metal, and became a 300,000-ounce producer by the 1980s, so in 20 short years. Since the reprivatisation of the Ghanaian gold industry, production has risen to 2.9 million ounces, up tenfold. I think it is proven to you that privatisation and private enterprise work better than nationalisation.

Tax

The cake that Julius would like us all to share is slowly disappearing.

For governments, enough is never enough in regards to taxation. It is a fact of life, and as you know what they say: *'Life is a bitch and then you die.'* I think the important thing is that, in terms of a study from Business Leadership South Africa, if the South African mining industry had been in state hands through the period of the global financial crisis, the cash deficit that the South African mining industry had for the 2009 year – in excess of 20 billion rand – would have had to be funded by the taxpayer. That would have amounted to probably 15% of the annual tax take. In a country that is worrying about hospitals, infrastructure and the like, I am just not sure what the politicians are thinking when they say they should be in the mining game too.

In an Investec study, it quotes that 'the South African government is already creaming approximately 55-80% of the turnover of the average South African mining company in terms of its total take', which is a great deal of money considering the fact that they have taken none of the risk. I would leave you to judge what nationalisation amounts to.

I think this is the most important thing that people have missed about the South African platinum industry. Everyone is focused on margins. They think you are having a very nice time. You have a gross margin of 20% or 25%. What they forget is that the South African mining industry is going deeper. It is getting more costly and there are additional social costs. Grades are declining and the stay-in-business capital – the capital you must spend to replace the ounce you take out today in order to have a productive future – is the iceberg under the water. It is the elephant in the room.

On a post-CAPEX basis, the platinum industry in South Africa is barely making any money right now. The reality is that the market has woken up to this. I am not sure the consumers of these metals have fully awakened to the fact that, unless we get substantial and significant returns for the risks taken, this is all that the shareholders will be left with. By my calculations, it is about 4%. For Julius, that is probably more than enough. I think the reality for us is, for the risks taken, for the effort that goes into mining platinum, returns greater than 3% or 4% are needed.

Business Leadership South Africa quoted a 7% return for the platinum mining industry. At a presentation in New York last week, Ospraie quoted 5%. When you consider that copper, iron ore and maybe even gold produce better returns, it is a reality that prices must move up or the rand must weaken – or both – in order for the world to get enough of this metal in the future for the clean air applications that we heard about earlier today.



Stuart Murray

CEO

Aquarius Platinum Ltd

After obtaining his degree in Chemical Engineering from Imperial College, London, Mr. Murray commenced his career in 1984 with Impala Platinum Holdings Limited. Following a 17-year career in the South African platinum industry, Mr. Murray joined Aquarius Platinum Limited in May 2001 and was appointed Chief Executive Officer.

The conference by the industry for the industry

LBMA Precious Metals Conference 2012

In Association with the LPPM

11-13 November
Grand Hyatt Hotel
Hong Kong

*The London Bullion Market Association
13/14 Basinghall Street
London EC2V 5BQ
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*www.lbma.org.uk
conference@lbma.org.uk*



There's a place for all market players at the LBMA (LPPM) Conference – Registration opens in July

LBMA
Silver Anniversary Celebrations
10 December 2012, London

Save the Date

The LBMA will mark the 25 year anniversary in 2012, with a special series of events. There will be a Bullion Market Seminar on the afternoon of 10th December. This will be followed by black tie cocktail reception and dinner at the Mansion House in the evening.

LBMA Members, Associates and their guests are invited to attend. See the LBMA website for further information on the events as well as the upcoming GD Refiner silver anniversary gift competition.

DIARY OF EVENTS

NOVEMBER 2011

13

8th Dubai-City of Gold Conference
Almas Tower, Dubai
www.dubaicityofgold.com

14-15

The Gold Symposium 2011 Sydney
Luna Park
Sydney, Australia
www.symposium.net.au

14-16

Commodities Week
New York
www.terrapinn.com

24

7th Heraeus Precious Metals Forum
Hanau
www.heraeus-trading.com

24

MDM Bank & Russian Trading
System,
Annual Russian Bullion Seminar
Moscow, Russia

DECEMBER 2011

30/11-02/12

6th China Gold & Precious Metals
Summit
Shanghai, China
marketing@igvision.com
www.chinagoldsummit.com

JANUARY 2012

23-26

Mining Exploration Roundup 2012
Westin Bayshore, Vancouver
www.amebc.ca

FEBRUARY 2012

6-9

Mining Indaba Conference
Cape Town International
Convention Centre,
Cape Town, South Africa
info@miningindaba.com
www.miningindaba.com

MARCH 2012

1

LBMA Annual Party
London, UK
events@lbma.org.uk
www.lbma.org.uk

13

Bloomberg Precious Metals
Conference
New York
www.bloombergblink.com

APRIL 2012

17-21

Denver Gold Group European Gold
Forum 2012
Zurich, Switzerland
www.denvergold.org

MAY 2012

14-17

LPPM Platinum Week
London, UK

17-19

World Mining Investment Congress
London
sarah.pegden@terrapinn.com
www.terrapinn.com

JUNE 2012

9-12

IPMI Conference
JW Marriott, Las Vegas
www.ipmi.org

AUGUST 2012

24-26

9th India International Gold
Convention 2012
HICC Novotel, Hyderabad, India.
www.goldconvention.in

SEPTEMBER 2012

9-12

Denver Gold Forum 2012
Hyatt Regency, Denver, CO
www.denvergold.org

18-21

Fifth International Platinum
Conference,
Sun City, South Africa
www.platinum.org.za

NOVEMBER 2012

11-13

LBMA Precious Metals Conference
Grand Hyatt Hotel
Hong Kong, China

DECEMBER 2012

10

LBMA Silver Anniversary Event
Black tie cocktail reception
and dinner
Mansion House, London, UK



LBMA (LPPM) Precious Metals Conference 2011

By Ruth Crowell, Commercial Director, LBMA

In 2010, delegates predicted that the price would be US\$1,450 and were US\$344 off the actual gold price of US\$1,794.00. This year, LBMA delegates predicted that the gold price will be US\$2,019 by the time of the next LBMA Conference. Let's hope they have been sufficiently bullish this time round.

The 2011 LBMA (LPPM) Precious Metals Conference was held in Montreal, Canada during the period 18-20 September. The Conference continued to break attendance records for the third year in a row as the 2011 event attracted a total of 535 delegates, from more than 38 countries.

The Conference opened with the Welcome Reception, at the Centre Sheraton, sponsored by the LBMA's Canadian Good Delivery Refiners, Johnson Matthey and Xstrata Canada. The Opening Session featured keynote speaker Pierre Lassonde, Chairman of Franco-Nevada, as well as with remarks from Barbara Ridpath, Chief Executive of the International Centre for Financial Regulation. Stuart Murray CEO, Aquarius Platinum Ltd, won the prize for Favourite Speaker for his speech on The State of The Southern African Platinum Industry. Dr Edel Tully, Global Precious Metals Strategist for UBS, also won the prize for Most Entertaining Speaker. Pierre Lassonde's speech was also voted as the most useful speech in the conference feedback and is reproduced along with Stuart Murray's speech, on pages 3-7 and 8-9 respectively.





Precious Metals Review

The most highly rated session was Session 7: Threats, Myths and Opportunities – the Grand Debate. Here Tim Wilson, Managing Director, JPMorgan, orchestrated a commanding performance of serious, thought-provoking, yet entertaining debate. Thanks to all the panellists, who included: Grant Angwin of Johnson Matthey; Trevor Raymond of Anglo Platinum Ltd Capital; and Jon Spall of Barclays Capital.

Conference Dinner & Cirque Eloize Show

Monday evening's festivities celebrated both Canada's northern heritage and Montreal's famous circus tradition. Networking began at the Cocktail Reception, with a special appearance of one of the Royal Canadian Mint's One Million Dollar Coins. Delegates were privileged to be able to pose for pictures with not only one of the five limited edition 100kg gold coins, but also two of Canada's finest Royal Mounted Police officers, dressed in red serge for the occasion.

This was followed by the Conference Dinner at Montreal's historic Windsor Station. Between courses, delegates were treated to a Cirque Eloize – Winter Wonderland show.

Our congratulations and thanks to all the speakers and sponsors involved in the Conference.



Conflict Gold

- The Good, the Bad and the Ugly

By John Bullock, Attorney – Precious Metals Specialisation

The following is an edited version of a speech made at the LBMA Bullion Market Regulation Workshop: Responsible Gold held in Montreal on 19 September 2011.

Introduction

Gold has been a beautiful, valuable and desired metal for thousands of years. But the origin of gold, the circumstances of its extraction and the sometimes problematical history of its dealings have never faded from view. Recent years have seen particular attention given to environmental concerns, but also to money-laundering, social responsibility, and more. Now, added to those issues, is a renewed emphasis on the role of gold in inciting human conflict, most specifically in the conflict in Africa. It is an emphasis to which the worldwide gold industries must react with positive attention and effort.



The Ugly: The Democratic Republic of the Congo

*“The horror! The horror!”*¹ That memorable literary description of conditions along the upper Congo River is a reminder that it has been the scene of brutal conflict for more than a hundred years. For the last 15 years, the Democratic Republic of the Congo (DRC), primarily in its eastern region, has experienced the First and Second Congo Wars. Those wars have at times involved the armies of nine nations², multiple ethnic and tribal militias, at times simply marauding bands of armed men who *“kill, abduct, torture and rape civilians, and burn and destroy villages”*³. Currently, the worst perpetrators are units of the national army of the DRC, the Forces armées de la République démocratique du Congo (FARDC)⁴. For the local populace, there has been little difference among them⁵. Millions of people have died in the Congo wars, many from disease and starvation⁶. Mass rape has been regularly used to intimidate and control the population⁷, and even now, five years after the ‘peace accords’ and the end of formal war, and with the presence of UN peacekeeping forces, an estimated nine percent of the population of the war-torn area is the victim of sexual violence annually⁸. As the UN Group of Experts recently reported: *“All parties to the conflict continue to commit frequent and flagrant violations of international humanitarian law, many of which involve the targeting of (non-combatant) women or children.”*⁹

The Bad: Gold in the Middle

The Congo Wars started in 1996 when ethnic civil war in Rwanda spilled over into eastern DRC, and the brutal warfare between Tutsi and Hutu armies became international. But after toppling the Mobutu government in Kinshasa in 1997, conflict in the eastern DRC didn’t end; it settled into a seemingly endemic condition, with no government able or willing to stop it. And gold is a factor in that condition. The DRC has large reserves of easily mined minerals and their exploitation has long been a prime activity in that country, dating back to Belgian King Leopold in the 19th century, to 20th-century national independence under Mobutu¹⁰, to the present day. The mining of DRC mineral reserves has historically created a great deal of wealth, albeit primarily for a very small number of people. The mines are now increasingly controlled by armies and armed groups, although mined by a desperate and vulnerable population, and their products are stolen from that population to feed appetites for guns and wealth. The UN Group of Experts says that *“in the Kivu provinces, it appears, almost every mining deposit is controlled by an armed group”*¹¹. Beyond direct control, there are protection fees paid by mining pit managers, forced civilian labour, theft and extorted illegal ‘taxes’, *“an increase in pillaging and looting attacks by armed groups on mineral traders or transporters”* and *“use of intermediaries to invest and purchase minerals”*¹².

1. Joseph Conrad, Heart of Darkness, dying words of trading company agent Kurtz to narrator Marlow. The conflict mineral of that day was ivory.
2. In addition to the DRC itself: Angola, Burundi, Chad, Libya, Namibia, Rwanda, Uganda and Zimbabwe.
3. U.S. Department of State, 2010 Human Rights Report: Democratic Republic of the Congo, April 2011
4. United Nations Group of Experts on the DRC, Final Report – S/2010/596, November 2010; Tony Gambino, Background Case Study: Democratic Republic of the Congo, World Bank, World Development Report 2011, p.11: “The Congolese Army continues to commit horrible abuses against civilians, including sexual violence” and p.12: “the primary perpetrator of these abuses today is the Congolese Army itself”.

5. A number of militia groups have been nominally incorporated into the national army, without effective change of control. One of its most prominent generals, Bosco Ntaganda, has been under indictment by the International Criminal Court for five years, for war crimes committed as a militia warlord, but walks free in Goma. ICC Case: ICC-01/04-02/06.
6. International Rescue Committee, “While the precise number will never be known – it is clear that millions of people died unnecessarily because of the war.”
7. “All parties continued to use mass rape and sexual violence with impunity, often as weapons of conflict, and to humiliate and punish individuals, victims, families, and communities.” U.S. Department of State, 2010 Human Rights Report: Democratic Republic of the Congo, April 2011.

8. United States Government Accountability Office, Report to Congressional Committees, The Democratic Republic of the Congo, Information on the Rate of Sexual Violence in War-Torn Eastern DRC and Adjoining Countries, July 2011, citing a study by McGill University, August 2010.
9. UN Group of Experts, Interim Report – S/2011/345, June 2011, para. 92.
10. Gambino, Background Case Study: Democratic Republic of the Congo, 2011, p.3. Under Mobutu, “the government existed as a structure for individual enrichment and patronage.”
11. UN Group of Experts, 2010 Interim Report – S/2010/252, May 2010, para 77
12. UN Group of Experts, 2010 Final Report – S/2010/596, November 2010, para 173.

In terms of worldwide production, DRC gold is almost insignificant. The U.S. Geological Survey has estimated DRC annual mine production most recently at 2 tonnes¹³. Another informed estimate of DRC national production is 8 tonnes¹⁴. In the conflict-affected eastern region, one estimate is 6.5 tonnes¹⁵. A leading human rights NGO has estimated 5 tonnes¹⁶. The UN Group of Experts, with on-the-ground investigators, has said that 4 tonnes of gold are produced in North and South Kivu Provinces¹⁷, the principal area of conflict and control by armed groups¹⁸. That amount is less than one-tenth of one percent of global production of more than 4,000 tonnes. But looking at the DRC from the global view can be misleading; even 4 tonnes of gold has a current London market value in excess of US\$200 million, and in the country with the world's lowest per capita GDP¹⁹, that is significant. And it is a significant source of funds for armed groups; gold has been repeatedly cited by the UN Group of Experts for its association with DRC conflict²⁰. Thus what seems to be a small amount of gold to the world gold industry nevertheless pays soldiers, and buys guns, bullets and luxury goods.

Governments have seemed to be helpless in the face of these circumstances. Even after a decade of United Nations, United States and EU involvement, "eastern Congo's provincial governments as of mid-2010 still struggle to perform basic governance tasks"²¹ and "armed groups...continued to control hundreds of more remote mining sites and to pillage mineral markets, traders or transporters...[with] widespread involvement of criminal networks within FARDC in natural resource exploitation"²².

And that exploitation has been tied to the atrocity, by "a nexus between the illicit exploitation of natural resources by armed elements and patterns of sexual violence"²³. The inability of national, regional and international governments to deal with this utterly failed state has led to a search for other possible approaches, and some

Most of the private sector has no idea of the mining sources of the minerals that it uses, and so the efforts to break links between consumer goods and DRC mines must begin with finding those links, through supply chain due diligence.

now see the private sector as holding a key to a solution – cut off the finance of armed groups, by ending their participation in mineral transactions. Of particular interest, some DRC minerals are very important for modern industrial societies: tin, tantalum, tungsten and gold. And so industries that use these minerals, especially multinational industries that sell products to consumers, have become the target of campaigns to save the DRC through private sector control of its economic base.

Most of the private sector has no idea of the mining sources of the minerals that it uses, and so the efforts to break links between consumer goods and DRC mines must begin with finding those links, through supply chain due diligence. In its final report of 2009, the United Nations Group of Experts recommended "that the Security Council request Member States to take necessary measures to clarify the due diligence obligations of companies under their respective jurisdictions which operate in the Democratic Republic of the Congo mineral trading sector. The Group further recommends that Member States request companies to adopt codes of conduct detailing the procedures adopted to prevent indirect support to non-governmental armed groups through the exploitation of natural resources"²⁴. Last year, the United States Congress declared gold, wherever its origin might be, to be a "conflict mineral", and directed that the use of gold in all products manufactured by U.S. publicly

traded companies be publicly reported²⁵. Furthermore, if the origin of that gold is the DRC or any adjoining country – an area comparable to the 48 contiguous states of the United States, with a population of 200 million – the Congressional directive is that a detailed audited report of its relationship to conflict must be submitted to the U.S. Securities and Exchange Committee (SEC). Congress based this requirement upon its "sense that the exploitation and trade of conflict minerals originating in the Democratic Republic of the Congo is helping to finance conflict characterised by extreme levels of violence in the eastern Democratic Republic of the Congo, particularly sexual- and gender-based violence, and contributing to an emergency humanitarian situation."

And the concern with conflict has reached, at least potentially, well beyond the DRC. The Organisation for Economic Cooperation and Development (OECD) has turned its attention to the extraction of minerals in conflict circumstances, in unnamed countries but wherever they might be or arise, and has adopted and issued a guidance for governments and industries regarding what they should do: *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas*²⁶. The Guidance is made expressly applicable to gold²⁷.

The consequences of gold being a "conflict mineral" are substantial. Estimates of the cost of Dodd Frank Act due diligence vary widely, but are likely to be in the billions. The U.S. Securities and Exchange Commission, in its proposed regulation to implement the requirement, estimated the total economic burden of due diligence and reporting to be only US\$46 million²⁸, but the National Association of Manufacturers estimates the total to be at least 20 times higher: US\$9-16 billion²⁹. Beyond the direct economic cost of due diligence are the broader consequences, not least the unintended shame, of being associated with atrocities. The UN Group of Experts has declared its intent "to identify the domestic,

13. USGS Minerals Yearbook 2009, Table 8.

14. Philip Olden, Implications for the Supply Chain of Gold and Other Precious Metals, Report to OECD, August 2010, citing GFMS for 2009.

15. BSR, Conflict Minerals and the Democratic Republic of Congo, May 2010

16. The Enough Project, reported by CBS News – 60 Minutes

17. UN Group of Experts, 2010 Final Report – S/2010/596, November 2010, para. 293.

18. "In North and South Kivu, the illegal exploitation and trade of natural resources by armed actors, including criminal elements of the FARDC, continued to prolong the conflict, facilitate the purchase of small arms to commit abuses, and reduce government revenues needed for increasing security and rebuilding the country." U.S. Department of State, 2010 Human Rights Report – Democratic Republic of the Congo

19. International Monetary Fund, World Economic Outlook Database-April 2011; World Bank, World Development Indicators.

20. UN Group of Experts, 2010 Final Report – S/2010/596, November 2010, para. 38, 49, 68, 84, 119, 133, 178, 180, 181, 185, 197, 199, 201, 203, 204, 205, 207, 210, 212, 218, 219, 225, 226, 227, 229, 230, 231, 232, 234, 235, 240, 241, 243, 245, 246, 247, 287, 293-302.

21. Gambino, Background Case Study: Democratic Republic of the Congo, 2011, p.7.

22. UN Group of Experts, Interim Report - S/2011/345, June 2011, para. 64.

23. Margot Wallström, UN Special Representative on Sexual Violence in Conflict, quoted in U.S. Department of State, 2010 Human Rights Report: Democratic Republic of the Congo, April 2011

24. UN Group of Experts, 2009 Final Report – S/2009/603, November 2009, recommendation 6.

25. Dodd Frank Wall Street Reform and Consumer

Protection Act, Section 1502. The law declares that ores of tin, tantalum, tungsten and gold, and their derivative products, are "conflict minerals" for which countries of origin must be investigated.

26. Adopted May 2011.

27. A Gold Supplement with more detailed and mineral-specific guidance is being prepared. The OECD Guidance as adopted contains specific guidance in a supplement for tin, tantalum and tungsten, but gold was considered so different that a separate working group has been created to write a supplement.

28. SEC: "We estimate the PRA burden for the audit and due diligence requirements to the industry would be approximately \$46,475,000." 75 FR 80966, December 23, 2010

29. NAM comment to SEC, <http://sec.gov/comments/s7-40-10/s74010-183.pdf>, p 2, 23-28

regional and international buyers, brokers and financiers that directly or indirectly facilitate armed actors' involvement in resources trade and make it profitable"³⁰. Margot Wallström, UN Special Representative on Sexual Violence in Conflict, very recently called for punishment: "Those who [trade in conflict minerals] should face consequences from national police and international sanctions regimes."³¹ The UK government aligns the conflict minerals issue to action under the very stringent UK Bribery Act³². Because of the direct involvement of the national DRC military in conflict and human rights abuse, U.S. Government action under the Foreign Corrupt Practices Act (FCPA) is a possibility. And even if governments hold back in their enforcement, private litigation against a supply chain participant may include claims of involvement in human rights abuse under the Alien Tort Statute, claiming a "violation of the law of nations"³³. And there is as well a strident campaign by non-governmental organisations and 'activists' to attack and damage the reputations of manufacturing corporations that use conflict minerals, through shareholder scrutiny, negative media and consumer boycotts.



The Good: Gold Industry Initiatives

The formal gold industry is not a part of the DRC conflict gold supply chain, at least not intentionally. DRC gold is mined artisanally, informally and illegally, and is smuggled out of the country, primarily to Dubai.³⁴ But gold is a fungible commodity that trades internationally in thousands of daily transactions, among some parties who are unconcerned with the circumstances of its origin, even when they know of it. Even with the efforts of the formal gold industry to avoid involvement with the DRC,

suspicion remains.³⁵ And not entirely without justification; earlier this year, a United States-registered, Houston, Texas-based Gulfstream jet was stopped just before takeoff on the runway at Goma, North Kivu, carrying 435kg of gold, intended destination unknown. If a jet airplane that is capable of intercontinental flight can land and take off at Goma airport, there are no destinations beyond the range of DRC conflict gold.

This reality is being addressed in a number of worldwide gold industry initiatives. The Responsible Jewellery Council (RJC), the World Gold Council (WGC) and the London Bullion Market Association (LBMA) have each launched or amended existing initiatives to encompass conflict, and to guide gold supply chain due diligence. And an electronics industry initiative, responding directly to the U.S. Dodd Frank Act, has created its own initiative to investigate, audit and certify gold used by manufacturers of electronic devices as DRC conflict-free.

The RJC is a worldwide association of more than 300 mines, refiners, manufacturers and retailers that several years ago established a code of practice for its members, based upon a full range of corporate social responsibilities: business ethics, human rights, and social and environmental performance. The RJC requires that its members' operations and practices be verified by its accredited auditors to a comprehensive standard, and certifies their compliance. The RJC is developing an additional chain-of-custody standard for transactions among its members, to add additional assurance that gold is responsibly produced and conflict-free, with an anticipated completion in early 2012.

The WGC, a worldwide association of gold-mining companies representing the majority of gold mined throughout the

world, has issued a draft Conflict Free Gold Standard that declares its principles to be respect for human rights, no involvement with armed groups, transparency of government payments, and acceptance of only gold that conforms to those principles. The WGC Standard requires that a company assesses its area of operations for conflict, assesses itself for policies, systems and management skills to avoid conflict, and ensures responsible conflict-free management at all stages of production: mining, transport and refining. As with the RJC, the WGC anticipates completion and initial application of its standard in early 2012.

The LBMA, an association that accredits the highest tier of gold refiners – with 61 refiners on six continents designated as Good Delivery – has created a draft Responsible Gold Guidance. This guidance is directed at its LBMA-accredited refiners, and will require that they be conflict-free in their operations and sourcing, with verification by a third-party audit. The LBMA Guidance follows the general structure recommended by the OECD: create a strong management system; assess risks associated with all sources; respond to and mitigate risk, especially risk associated with conflict; engage an independent third-party audits of those efforts; and publicly report the audit results. The LBMA anticipates application of this requirement as of 1 January 2012, with implementation to follow during the year.

The electronics industry response is being carried out by two non-profit organisations: the Electronic Industries Citizenship Coalition (EICC) and the Global e-Sustainability Initiative (GeSI). EICC-GeSI has formed a Gold Working Group with gold industry participation and has created a Gold Refiner Audit Protocol. This initiative is directed squarely at Dodd Frank Act compliance, and

Over the next six months, there will be a great deal of activity by governments, intergovernmental bodies (OECD, UN) and industry organisations to address and bring some order to the association of gold with conflict and abuse of human rights.

30. UN Group of Experts, Interim Report, S/2011/345, June 2011, para 65

31. Letter to the New York Times, Aug. 11, 2011; Ms. Wallström's letter was then endorsed by a coalition of human rights organisations that included a comment to the SEC, August 24, 2011.

32. <http://www.fco.gov.uk/en/global-issues/conflict-minerals/intro-to-conflict-minerals/>

33. See, for example, Doe VIII v. Exxon Mobil Corp., No. 09-7125, 2011 WL 2652384 (D.C. Cir. Jul. 8, 2011), in which residents of Indonesia claimed human rights abuse by members of the Indonesian army who provided security to an Exxon gas operation, and asserted that Exxon aided and abetted such abuse.

34. "The Group has investigated networks that transport gold from the eastern part of the Democratic Republic of the Congo through regional capitals such as Kampala to refineries in the United Arab Emirates and Hong Kong, and considers it likely that other networks may be transporting it elsewhere too." UN Group of Experts, 2010 Final Report – S/2010/596, November 2010, para. 296.

35. "The Group is also aware that many refineries worldwide have policies in place to refuse to buy gold from the Democratic Republic of the Congo, or indeed from anywhere in the Great Lakes and East African regions where they do not know its precise origin. Yet traceability once gold leaves a refinery is, in the opinion

of gold experts, impossible, unless the refinery is treating gold from a single source. Even then, it seems, there is a strong likelihood that refined gold from a single source will at a later date be blended with gold from other sources." UN Group of Experts, 2010 Final Report – S/2010/596, November 2010, para. 296

thus at conflict gold from the DRC. It too is grounded in the OECD structure, with the expectation that gold refiners will create strong management systems and will assess all of their sources for risks. The EICC-GeSI protocol then looks at four geographical zones, based upon proximity or association with the DRC, with increasing levels of risk assessment and due diligence, ranging from normal commercial practices to on-ground assessments and DRC site audits. As with the RJC, WGC and LBMA initiatives, an independent third-party audit to verify high standards of due diligence is required. The EICC-GeSI Gold Refiner Audit Protocol is anticipated to be complete before the end of 2011.

All of these initiatives vary somewhat in their approach, but all are now collaborating with the others, so that gold industries' efforts to be conflict-free, and verifiably so, can be both rigorous and efficient as well as productive. All of these industry initiatives are also actively participating in the OECD Gold Working Group, so that the *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas* and the forthcoming Gold Supplement, anticipated in early 2012, will continue to be a central point of focus and collaboration.

Concerns and Conclusions: What's Next?

Over the next six months, there will be a great deal of activity by governments, intergovernmental bodies (OECD, UN) and

industry organisations to address and bring some order to the association of gold with conflict and abuse of human rights. There are still issues of particular concern in this activity. Beyond the DRC, what other areas of conflict and high risk might require application of enhanced due diligence? This is a very serious question for many stakeholders, because the designation of the DRC as such an area has created a flight of industry from it and a *de facto* boycott that has exacerbated the economic difficulties of the region. So while there is concern to prevent gold from finance of conflict, there is as well a concern that honest production of gold and the well-being of people and countries not be unduly damaged. That concern arises especially in the circumstances of artisanal mining, which is both vulnerable to conflict and abuse of human rights, and not capable of the high levels of organisation and formality that enhanced due diligence seeks.

So the efforts being made now with attention to the DRC are also learning experiences, guiding all participants in what might be done in other circumstances, and what should not be done. It is understood that the DRC conflict is horrendous and also, unfortunately, that it is not ending soon. These are very long-term undertakings. But it should also be understood that a direction has been set: there is certain to be a greater expectation of gold supply chain due diligence, by all participants in gold industries, from mine to investment to retail.

Law and guidance to require such due diligence are being prepared now, as are gold industry tools for response. The primary conclusion for gold industries is to participate where possible and in every case to watch closely for developments.



John Bullock Attorney – Precious Metals Specialisation Private Practice

John Bullock is a United States attorney with a twenty-five year specialisation in precious metals. He has provided in-house and outside legal counsel to precious metals companies, industry associations and governments, and for 20 years has been Chair of the Environmental and Regulatory Affairs Committee of the International Precious Metals Institute. In the new area of conflict gold, he is an active participant in initiatives of the LBMA, the intergovernmental Organisation for Economic Cooperation and Development, the electronics industry, the Responsible Jewellery Council and the World Gold Council.

Matthieu Tirant to Commerzbank AG Luxembourg

Matthieu Tirant joined the PM desk of Commerzbank AG Luxembourg as a physicals trader on 1 September, 2011. He will be strengthening the physical team led by Diana Kratz. Matthieu started his banking career at Société Générale in Paris as documentation analyst; he then moved in 2008 to Commerzbank AG London as trade support analyst. His latest assignment was trade support for Precious metals desk in Luxembourg.

Nick Hammond to Baird & Co

Nick Hammond has joined Baird & Co, as Chief Operating Officer. With 20 years' experience in the private wealth arena and an MBA from Columbia, Nick joins Baird from C. Hoare & Co, where he ran the Knightsbridge Office, and prior to that he was Head of Portfolio Management.

Paul Beesley to Baird & Co

Paul Beesley has joined Baird & Co. from Fastmarkets (thebulliondesk.com). Paul will be responsible for Private Client sales. Previously, he was with Mocatta & Goldsmid for nearly 20 years.

Mike Marsh has retired from Baird & Co. Mike spent over 35 years in the bullion market starting with Johnson Matthey Bankers. He was twice at ScotiaBank and Deutsche Bank for several years. We wish Mike a long and happy retirement in Australia, where has emigrated to be near his grandchildren.

Market Moves



Kenji Kusaga to Metalor Technologies Japan Co

Kenji Kusaga has become president of Metalor Technologies Japan Co., following the acquisition of NECC coating business by Metalor. Kasuga san has over 30 years' experience in operation and general management with NECC in precious metal coating and catalyst business. With his new role, Kasuga san will lead the development of chemical business in Asia. He reports to Jacques Michel, Executive Vice President of the Advanced Coatings division of Metalor Group.

Regulation Update

- Responsible Gold

By Ruth Crowell, Commercial Director, LBMA

The LBMA continues its work on gold supply chain regulation by engaging with the SEC, OECD and various industry bodies, and through developing the Responsible Gold Guidance for LBMA Gold Refiners.

In October, the LBMA attended the SEC's roundtable on conflict minerals and submitted two letters to the SEC focusing on bullion market concerns regarding the upcoming legislation. To ensure that the LBMA Responsible Gold Guidance works in conjunction with the other industry initiatives, the LBMA is also working closely with the World Gold Council, Responsible Jewellery Council and the EICC. In October, the WGC, RJC and LBMA submitted a joint letter to the SEC, showing its support for the OECD Due Diligence Guidance and the forthcoming Gold Supplement. The LBMA is heavily involved in the drafting of the OECD Gold Supplement, which is expected to be published in early December.

LBMA Responsible Gold Guidance

In order to ensure that all LBMA GD refiners' Good Delivery bars are free from conflict gold, the RAC and the Referees have developed guidance on the due diligence to demonstrate this. It is envisaged by the RAC that the LBMA Guidance should form a foundation of legal compliance that is credible to the outside world and feasible for all Good Delivery Refiners. The LBMA Guidance formalises and consolidates existing high standards of due diligence amongst all LBMA Good Delivery Refiners. This new requirement of Good Delivery is an extension of the existing accreditation systems in place, which currently monitor refiners' financial standing as well as their ability to produce cast and assay Good Delivery bars.

Outline of LBMA Responsible Gold Guidance

Based on OECD five-step framework

- Step 1:** Set up strong management systems
- Step 2:** Identify and assess risks in the supply chain
- Step 3:** Design and implement a strategy to respond to identified risks
- Step 4:** Arrange an independent audit of the due diligence
- Step 5:** Publish a report on policy and actions

The drafting of the Responsible Gold Guidance is now at an advanced stage. The LBMA is holding a series of meetings with GD Refiners in China, Russia and Japan to gain feedback on this guidance. In particular, the LBMA is continuing to work on the artisanal mining section of the Guidance. A final draft of the Guidance will be circulated to all GD Refiners by 15 December. For a copy of the current guidance, please visit www.lbma.org.uk. Adherence to the Responsible Gold Guidance will become an official requirement for Good Delivery on 1 January 2012.

The Guidance is based primarily on the OECD Due Diligence Guidance issued in December 2010 as well as existing Anti-Money Laundering Regulations. The structure of the guidance closely follows the OECD five-step framework for risk-based due diligence in the mineral supply chain. Where there is higher risk, then more due diligence is required and vice versa.

Adoption & Implementation Timeline

- Dec 2011** Expected Publication of OECD Gold Supplement
- 15 Dec 2011** LBMA will publish final Responsible Gold Guidance
- 1 Jan 2012** LBMA Guidance becomes an official requirement of Good Delivery
- 13 Jan 2012** Deadline for LBMA GD Gold Refiners to indicate they accept and will implement the guidelines
- 31 Dec 2012*** First Voluntary** GD Refiner Audit Reports for 2011 due
- 31 Dec 2013*** First Mandatory GD Refiner Audit Reports for 2012 due

* For some refiners, this may be 30 April, as an LBMA Audit Report will be due no later than one year after the closing of the refiner's financial books.

** While an audit report for a refiner's 2011 production is not mandatory, it is encouraged, particularly for refiners who need to meet Dodd Frank requirements.



ISTANBUL GOLD REFINERY



Precious Metal Management

- Conveniently located by the International Airport in Istanbul, we are a well financed refinery with an excellent reputation.
- Istanbul Gold Refinery (IGR) is ISO 14001 certified and recognized by the Republic of Turkey Ministry of Environment and Forest for its commitment to national environmental protection.
- IGR possesses quickest turnaround for all your mining needs. IGR has a capacity to operate 24/7 all year around which enables IGR to finance large lots with fast payments.
- Customers of IGR may observe their material being processed at any time from start to finish.
- Staff at IGR is truly dedicated to customer service and is ready to exceed your expectations.
- IGR refines and recycles materials from the Jewelry and Mining we have the expertise and capacity to handle precious metal lots of any size or type. Rapid settlements, accurate assays, fastest payment and dedicated staff.
- IGR consistently provides the most accurate returns because of an efficient and precise sampling techniques and analysis.

IGR's technical expertise, along with, state-of-the-art refining facility ensures superior treatment of all precious metal refining lots. Istanbul Gold Refinery Corporation is the largest and fastest growing precious metal refinery in Turkey.



LBMA

ISTANBUL GOLD REFINERY

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LBMA News

By Stewart Murray, Chief Executive, LBMA

MEMBERSHIP

Associates

On 27 September, 2011 Blackrock Inc. of the USA was admitted as an Associate.

On 29 September, 2011 the following four companies were admitted as Associates: Al Bahrain Jewellers of UAE, Ohio Precious Metals LLC of the USA, Shree Ganesh Jewellery House Ltd of India and Zaveri Pvt Ltd of India.

On 1 November, 2011 the following three companies were admitted as Associates: United Precious Metal Refinery Inc of the USA, Mastermelt Ltd of the UK and Bullion Management Group Inc of Canada.

On 15 November, 2011 Nomos Bank, OJSC was admitted as an Associate.

On 16 November, 2011 Industrial & Commercial Bank of China (ICBC) was admitted as a Full member.

These additions brought the membership to a total of 135 companies, comprised of 61 Full Members (of which 11 are Market Makers), 70 Associates and four Affiliate Members.

GOOD DELIVERY LIST

The Istanbul Gold Refinery was added to the Gold List on 8 September, 2011.

COMMITTEES

Management

The Committee met in September directly after the annual Conference. As usual, the Committee's work largely consists of reviewing and guiding the work of the subcommittees and making decisions based on their recommendations. A particular focus in recent meetings has been the formulation of a policy on 'conflict gold' based on discussions in the Regulatory Affairs Committee and with representatives of the Referees group. See the Regulatory Affairs Committee section.

The Committee reviewed the success of the 2011 Conference (see review on pages 12-13) and

looked into plans for a larger event in Hong Kong during the period 11-13 November, 2012. The Committee also discussed plans for the LBMA Silver Anniversary in late 2012. The Committee agreed to hold a cocktail party and a special black tie dinner on 10 December 2012 to mark the founding of the LBMA in 1987.

The Committee has also agreed that, rather than holding a Bullion Market Forum in New York early in the New Year, as had previously been discussed, the LBMA should focus instead on organising meetings with US regulators.

Regulatory Affairs

The RAC met in October to discuss a variety of regulatory issues. These included primarily the LBMA Responsible Gold Guidance as well as the LBMA's work within the OECD Working Group on Conflict Gold. The LBMA's Responsible Gold Workshop held in Montreal directly following the Conference was very well attended and allowed a broad and open discussion of this issue by GD refiners and other members of the market. In late November and early December, the Chief Executive will be meeting GD refiners in Moscow Shanghai and Tokyo to inform them about the latest developments on this very important topic as well as getting feedback from them on the LBMA's proposed Responsible Gold Guidance, a draft of which was circulated to all GD refiners on 26 August, 2011.

For more on the LBMA Responsible Gold Guidance and other regulatory issues facing the precious metals market, see the Regulation Update on page 18.

Physical

The Committee has met each month this year with the exception of August. The work of the Committee, other than GDL applications and Pro-Active

Monitoring, has focused on vaulting. A meeting of London vault managers took place in October. Amongst other things, these meetings allow vault managers to ensure that a consistent approach is taken to the important issue of physical bar quality. The October meeting focused on the quality of assay marks on silver bars, the development of an expanded version of the LBMA's publication providing a visual guide to the acceptability of GD bars and the possibility of providing the vaults with photographs and drawings of GD refiners' kilobars. Kilobars are not an acceptable form of gold for settlement of loco London contracts, but they do feature in the trading of a number of members. As a result, some of the vaults may be storing these bars. The Executive is now looking at the practicality of collecting information from GD refiners about their currently produced kilobars.

Public Affairs

Following the announcement of the vacancy on the Committee in the last issue of the Alchemist, four applications for the position were received. The Management Committee subsequently accepted the PAC's recommendation that David Jollie of Mitsui should be invited to join the Committee.

The Committee's work has been dominated by intensive discussions on the speaker programme for the successful Montreal Conference (see review on pages 12-13). Recently, the Committee has reviewed the feedback from the 2011 event in order to assist the planning of next year's conference in Hong Kong. In particular, the Committee has agreed to make the 2012 conference last a full two days as well as to investigate further networking opportunities. This is in response to the continued growth in the number of delegates attending and the need to have more efficient ways

of fostering contacts between them. The Committee continues to welcome suggestions from the market as to other ways to improve the value of the Conference to the members and their clients. Please contact the Executive if you have any suggestions.

Finance

The Committee met in September to review the three-year forecast in light of the income and expenditure for Q1 to Q3 2011, particularly in relation to the successful Conference in Montreal. The Committee also reviewed the budget implications for the Executive's move to somewhat larger premises, which it is hoped will take place in early 2012. The LBMA has grown significantly in the 10 years since moving to Basinghall Street and the Management Committee has agreed in principle to relocating with a view to having more space for the staff and better meeting facilities for visitors.

Referees

The Referees group held its regular quarterly meeting in Ottawa directly following the LBMA Conference in Montreal. The main items discussed were the proficiency testing scheme for gold fire assayers, the development of new gold reference materials suitable for X-Ray fluorescence analysis and the introduction of scientifically determined allowed criteria for permitted bias in assay tests (both for applications for accreditation and for the proactive monitoring of 999.9 gold refiners).

The proficiency testing scheme will be implemented in early 2012 and will allow participants to compare the accuracy of their fire assaying with their peer group. It is expected that around 40 GD gold refiners will participate. The results will be compiled by the UK agency, FAPAS, which has

very extensive experience in proficiency testing in the area of food and beverages.

VAT Group

Discussion has continued within the VAT Group about the development of a new Memorandum of Understanding on the VAT treatment of bullion market transactions. The aim is to produce a document that will cover both the LBMA and LPPM metals and that will be accepted by both these markets and by HM Revenue and Customs as a practical guide for members. This discussion has been protracted because of the need to resolve two difficult issues (relating to the storage of allocated precious metals other than gold and transactions between non-members that are under the effective physical control of members). It is hoped that a final version of the MOU will be available for distribution to all members early in the New Year.

GDL Commercialisation

NYSE Liffe US LLC has become the first exchange to be licensed to use the LBMA Good Delivery

List as part of its own accreditation arrangements. The LBMA is grateful to NYSE Liffe for this expression of confidence in the value of the List and for its support of the LBMA's Good Delivery work.

Committee Vacancy

Jeremy East transferred from the Finance Committee to become the Management Committee's representative on the Membership Committee. There is therefore a vacancy on the Finance Committee. Anyone from a member company interested in applying should send an email to the Chief Executive with a brief statement of their bullion market experience.

Annual Party

And now for something completely different: a most important date for the diaries of all Members and Associates. The unmissable event of the bullion market year, the LBMA's annual party, will take place on 1 March, 2012. Details of the venue will follow in the next issue of the Alchemist.

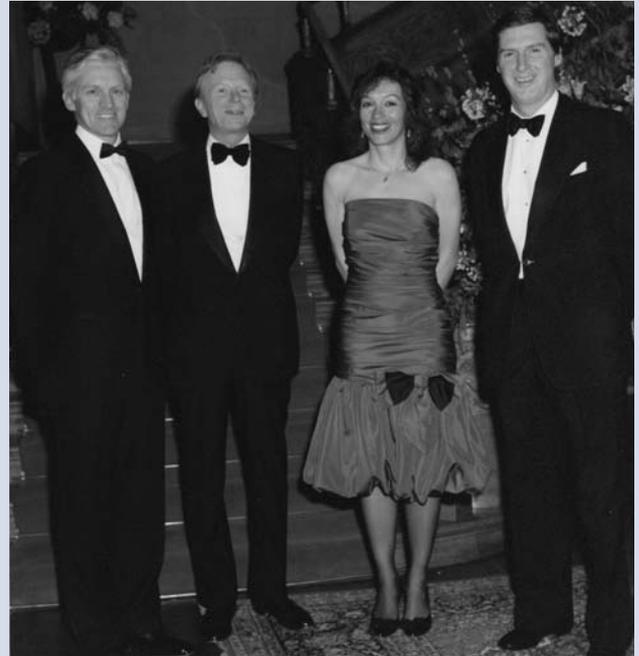
London Precious Metals Clearing Limited

London Precious Metals Clearing Limited has announced that the cut-off time for the acceptance of transfer instructions on Friday 23 December and Friday 30 December, 2011 will be 14:00 G.M.T.

The London Gold Market Fixing Limited

The London Gold Market Fixing Limited has announced that there will be no afternoon gold fixings on Friday 23 December and Friday 30 December, 2011.

Obituary



Douglas Bull, pictured far left, with colleagues at the 1990 LBMA biennial dinner

Douglas Bull

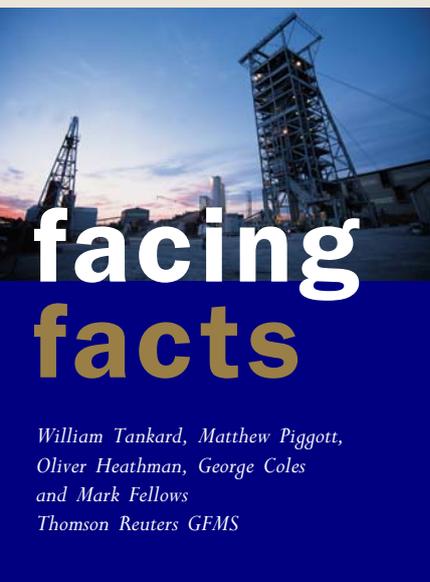
It is with great regret that we announce the death of Douglas Bull, at the age of 75. Doug worked in the London Bullion Market in the 1970s and 1980s for the merchant bank Samuel Montagu, an original member of the London gold and silver markets.

Doug joined Montagu from Eastern Bank in 1966 and, after managing the foreign exchange back office, joined the precious metals dealing team in the early 1970s, becoming head dealer, later rising to director. He was intelligent, decisive and a well-respected member of the market. He retired from City life in 1991.

Doug was, amongst other things, a talented amateur footballer, keen golfer, bridge player, Sudoku solver and dancer.

He died following a long, brave fight against illness and leaves his wife, Shirley, daughter Suzanne and two grandchildren. His son, Robin, died in an accident in the USA aged 22.

By Terence McNelly, who worked with Douglas Bull as Assistant Director of Precious Metals at Samuel Montagu.



facing facts

William Tankard, Matthew Piggott,
Oliver Heathman, George Coles
and Mark Fellows
Thomson Reuters GFMS

Global Gold Mine Production: The Boom Continues to Gather Pace

Thomson Reuters GFMS recently published its *Gold Survey: Update 1* report, which analyses the evolution of the gold market so far in 2011. This article summarises key points relating to gold mine production from that report.

Gold mine production continued to increase in the first half of 2011, rising by 5%, or 63 tonnes, relative to H1 2010. Growth varied somewhat from region to region, with the strongest growth coming from Africa and the CIS, as new projects lifted production in Burkina Faso, Eritrea and Kazakhstan. The most significant losses were recorded in Peru and Indonesia.

South Africa

There was a pause in the almost decade-long trend of falling gold production from South Africa in the first half of 2011, with output essentially flat year-on-year, at 98 tonnes. Although moderate production losses were recorded at several operations, mostly due to restructuring, but in some cases as a result of section 54 stoppages, there were sufficient improvements to offset these, largely from continued build-up from underground

projects. Notable production growth was recorded at Modder East and South Deep, with lesser gains at Kusasaletu (formerly Elandsrand) and Burnstone.

Australia

On the back of strong growth last year, Australian production grew by a further 4% to 129 tonnes in the first half of 2011. Production from a number of brownfield redevelopments contributed to the rise, as White Dam, Edna May, Bronzewing and Carosue Dam, all of which recommenced production in 2010, added nearly three tonnes, while Randalls, the only notable greenfield development to come online in 2010, added over a tonne after pouring first gold in September 2010. Gold production at Olympic Dam more than tripled, having been previously severely hampered by damage to the main shaft.

Offsetting this growth were a number of losses at more established operations, including Sunrise Dam, which was severely impacted by flooding, and Telfer, where production fell by two tonnes.

North America

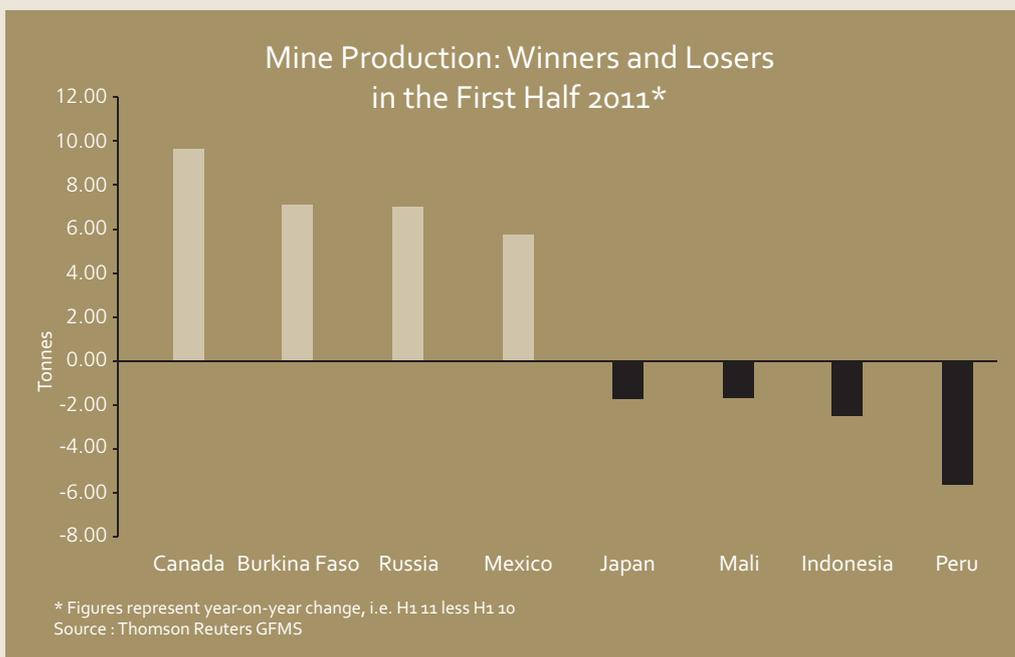
Mine supply from the **United States** totalled 115 tonnes, an increase of 1% year-on-year. Output at Newmont's consolidated Nevada operations

and Bingham Canyon both fell by two tonnes due to a fall in ore grades. Production at Cortez increased by nearly seven tonnes, the largest increase of any mine globally this year, as environmental operating restrictions were lifted.

Canada saw the largest country-level increase globally, as production climbed by 22% to 53 tonnes. Fresh production from Canadian Malartic and La Ronge added two tonnes in aggregate, in spite of both only declaring commercial production in the second quarter of 2011. Gold production at Vale Inco's Sudbury operation climbed to four tonnes, in marked contrast to last year, when production was severely hampered by strike action.

China

Chinese gold mine supply increased by five tonnes, or 3%. The increase came from a 16% rise in output from the country's gold smelters, which treat ores from numerous producers. The country's gold production from non-ferrous metal smelters fell slightly, by 2%. China's larger listed domestic miners fared worse as a group, however, with output falling by 4% driven by Zijin Mining, which reported a 10% fall in mine production from the Zijinshan, Hunchun and Guizhou Shuiyindong units.



Rest of the World: Winners and Losers

Elsewhere, with the exception of Europe, all regions registered increases year-on-year.

Africa achieved the largest regional increase, as strong gains in **Burkina Faso**, **Eritrea** and **Ghana** were only slightly offset by small declines in Mali and Mauritania. Burkina Faso was primarily boosted by five tonnes of fresh supply from Essakane, which entered production in mid-2010, while the continued ramp-up of Inata added over a tonne. In Eritrea, the start of commercial production in February at the Bisha polymetallic mine lifted mine supply from modest levels to around six tonnes in the first half. In addition, output in **Côte d'Ivoire** climbed by three tonnes as the ramp-up of Tongon more than outweighed losses at a number of the country's other mines, where operations were suspended as political tension in the country escalated earlier this year.

Mine production in **Ghana** rose by 9%. Output from the country's second-largest gold mine, Ahafo, rose by over two tonnes, while the Nzema project poured first gold in January, adding over a tonne of fresh supply by mid-year. Africa's largest country-level decline in production was recorded in **Mali**, as output from a number of the country's more established mines fell year-on-year. In **Mauritania** gold production was impacted by lower grades and plant downtime at Guelb Moghrein.

The CIS recorded the second largest regional gain, with marked increases from both Russia and Kazakhstan. **Russian** mine production rose by 9%, to 84 tonnes, as the ramp-up of Blagodatnoye and Malomir added four tonnes. **Kazakhstan's** gold production jumped by 40%, to 19 tonnes, as output from Altyntau Kokshetau (formerly Vasilkovskoye) ramped up.

Mine supply from Latin America grew by 3%, in spite of Peru registering the largest country-level decline globally. **Peruvian** output dropped by nearly six tonnes, on the back of major falls in production at Yanacocha and Lagunas Norte. However, counteracting this were sizable gains in Mexico and Chile, which added nine tonnes collectively.

Asian production rose by less than 1%, as declines in Indonesia and Japan partially counteracted continued gains in China and Turkey. **Indonesian** production fell by 4%, to 59 tonnes, as a two tonne addition at the world's largest gold-producing operation, Grasberg, was wiped out by a six tonne decline at Batu Hijau, where production was impacted by processing a higher proportion of low-grade stockpiled ore. In **Turkey**, mine supply rose by 15% as Çöpler added over two tonnes of new output, having declared commercial production in April this year.

Output in Europe fell by 4%, the only region globally from which production fell.

Looking to the second half of 2011, our forecast is for mine supply to continue its climb, boosted by further gains in China, Canada and Russia. We expect Indonesia to record the only substantial year-on-year decline in the second half and full-year. Further out, Thomson Reuters GFMS expects mine production to continue rising for the next two years at least, supported by a strong gold prices and buoyant mining equity markets.



Oliver Heathman

Oliver joined GFMS (now Thomson Reuters GFMS) in

2009, undertaking precious metals research into global mine production, producer costs and hedging. In addition, he is major contributor to the company's World Gold Analyst publication, a comprehensive quarterly review of the world's main gold and silver producers. Formerly he worked as a Geotechnical Engineer, and holds a BSc in Geology and an MSc in Mining Geology from Camborne School of Mines.



Matthew Piggott

Matthew joined Thomson Reuters GFMS in 2007, and

undertakes research on global mine production and the cost of production, primarily for precious metals, covering the company's annual Surveys, forecasting and bespoke consulting work. In addition, since 2009 he has been responsible for the company's research into producer hedging. Matthew holds an MSci (hons.) degree in Geology from University College London.

The Alchemist is published quarterly by the LBMA. For further information please contact Ruth Crowell, 13-14 Basinghall Street London EC2V 5BQ Telephone: 020 7796 3067 Fax: 020 7796 2112 Email: alchemist@lbma.org.uk www.lbma.org.uk

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The largest selection of bullion bars in the world, from 12.5-kilogram to 1-gram bars, PAMP bars are accepted as 'Good Delivery' by the Swiss National Bank; the London Bullion Market Association (LBMA); the London Platinum and Palladium Market (LPPM), and the markets in New York (COMEX) and Tokyo (TOCOM). PAMP is also recognized as a deliverable brand of the Chicago Board of Trade (CBOT) and the Dubai Gold & Commodities Exchange (DGCX).

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