LBMA

Alchemist

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In this issue

The LBMA will be launching its new and exciting website very shortly. It delivers a new look, design and structure to make it more user friendly, making it easier to access information and navigate round the site. We hope that you will like it.

The Great Financial Crisis of 1914

By Professor Richard Roberts, Institute of Contemporary British History, King's College London

In July 1914, as it became clear that a European war was on the cards, London, the world's foremost international financial centre, suffered an acute financial crisis. The financial markets froze, shares crashed and depositors were unable to access their funds for days. The London Stock Exchange shut and stayed shut for five months. It was feared that a run on the banks had begun, threatening the country's payments and credit mechanisms – and all as Britain teetered on the verge of war and then plunged into the Armageddon.

Despite its unrivalled severity, the financial crisis of 1914 is virtually unknown. The reason is straightforward – it is simply absent not only from general texts but also from most of the specialist literature. Several journalistic accounts appeared in 1915, but ever since it has been overlooked – until now, the 100th anniversary.

Why? Well, presumably because the financial crisis was overshadowed by the diplomatic crisis and then the military conflict. The life and death struggle was more important and dramatic than the financial disintegration. Every political, social, cultural and economic dimension of life was in crisis in summer 1914: there was nothing especially notable about the financial sector being in trouble. Moreover, the crisis was effectively managed and, as it turned out, there was no headline-making casualty. There was no Barings or Lehman Brothers.

Nevertheless, it was the most severe systemic financial crisis that London has ever experienced. And not just London. Some 50 countries around the world had financial crises with runs on banks and stock market slumps. It was the most extensive and acute global financial crisis ever.

Breakdown

The countdown to war began with the assassination of Austrian Archduke Franz Ferdinand in Sarajevo on 28 June. The markets took the murder in their stride. After all, there had been Balkan crises in each of the previous three summers and all had been defused.

Market perceptions of the risk of war were transformed by Austria's belligerent ultimatum to Serbia on the evening of Thursday 23 July. This was the 'Minsky moment' when greed tuned to fear – collateral damage from the diplomatic crisis before a shot had been fired. There was an immediate international scramble for liquidity – meaning the dumping of assets and the withdrawal of credit. Continental bourses crashed and there were runs on savings banks.

In London, the foreign exchange and money markets broke down early in the week beginning Monday 27 July. Then on Friday 31 July, the London Stock Exchange, for the first time in its 117-year history, shut its doors. Displaced brokers and jobbers milled around in Throgmorton Street like "swarming ants around the destroyed heap". (See main photo above)

The English joint-stock banks, which included some of the world's largest banks, became increasingly concerned about their vulnerability to a run on deposits. Their assets were becoming more and more illiquid, while their liabilities were mostly demand deposits.
From Wednesday 29 July, the banks rationed payment to depositors of gold sovereigns, £1 gold coins that were the key circulating medium, and paid out instead in Bank of England £5 notes, the smallest denomination banknote. Since a £5 note was equivalent to around £400 in today's money, it was useless for everyday transactions, so recipients made their way to the Bank of England to change their notes for sovereigns, as they were free to do under the classical gold standard. This resulted in long queues that presented the appearance of a run on the Bank. A *Financial Times* reporter found "...a queue of people, some 200 to 250 strong, resignedly awaiting their turn to obtain access to the magical counter where cash was being poured forth in a steady stream...".
"Gold, gold, gold, gold, Bright and yellow; hard and cold."

This was undoubtedly what was wanted, and when a red-cloaked official shouted ironically, "Silver! Anybody want silver? Plenty of silver going cheap", a dead silence followed and on many faces was to be observed a sardonic smile. No, cheap silver was not wanted and the outflow of the precious yellow metal continued...

A *Financial News* journalist reported witnessing an evening newspaper vendor shouting "Run on the Bank. Run on the Bank" to the crowd of onlookers outside the Bank of England. He summoned a policeman, who arrested the newsboy.

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Crisis management fell initially to the Bank of England, which lent liberally against assets presented by banks. In accordance with the current doctrine of lender of last resort, it raised

the bank rate from 3% to 4% and then to 8%. The Governor also asked the Prime Minister and Chancellor to suspend the Bank Act, which would allow the Bank to print more notes to relieve the pressure for liquidity from banks and businesses. The political authorities' condition, based on past precedent, was a 10% bank rate. This was duly implemented – the highest rate in the world. The Governor was furious with the joint-stock banks for pulling their call loans to City firms, contrary to his request, to boost their liquidity. The central bank retaliated by limiting lending to the banks. As Europe went to war, the City went to war with itself.

Crisis Containment

With the City at loggerheads and the banking system in danger, management of the crisis moved to the Treasury. Saturday 1 August saw the start of the summer holiday weekend. Monday's bank holiday was extended by a further three days, providing a breathing space for the formulation of crisis management measures. In the middle of the unprecedented four-day public holiday, at 11 p.m. on Tuesday 4 August, Britain declared war. These were days of innumerable and interminable meetings in the City, with the Treasury making preparations for the reopening of the banks and money market on Friday 7 August. "These are exciting if interesting times," wrote the Deputy Chairman of Lloyds Bank. "I never thought I should have so many Bank Holidays together or that there should be so much Bank about them and so little holiday! I have spent them from morning till late at night in meetings and conferences."

The principal crisis containment measures, devised and introduced during the long bank holiday, were the issuance of Treasury currency notes and a 'general moratorium'. The Treasury notes were small denomination notes that were paper substitutes for the sovereign [£1] and half sovereign [50p] gold coins. Bearing the signature of Sir John Bradbury, the Permanent Secretary, they became known popularly known as 'Bradburys'. (See photos on pages 5 and 6)

The general moratorium was a legalised suspension of contracts aimed to protect debtors until commercial conditions calmed down, but also as a further safeguard for the banks against a run on deposits. Such a measure was unknown in Britain and newspapers offered guidance to bewildered readers. *Punch* magazine expressed the public puzzlement with a satirical array of *vox pop* suggestions as to the meaning of the word 'moratorium': "It's a big ship...one of the Cunaders"; "Sister ship to the Lusitania"; "A place for burying people – a sort of big tomb where they put dead kings. There's one at Windsor."

In the run-up to the reopening of the banks on Friday 7 August, ministers vociferously denounced the hoarding of gold in speeches in the House of Commons. The press joined in with enthusiasm. 'The Folly of Hoarding' was the headline to a thundering editorial in *The Times*. "Everyone should understand the simple position. All the gold should be in the banks and available for the state as a whole," exhorted the *Evening News*. "In the same way as people are sending their sons to fight in case it should be necessary, so they should pay their gold into the banks, in case the state should require it."

"In the run-up to the reopening of the banks on Friday 7 August, ministers vociferously denounced the hoarding of gold in speeches in the House of Commons."

The *Globe* featured a prominent display box captioned 'The Duty of Every Good Britisher'. "Today when the £1 notes are ready at the banks it is the duty of every good Britisher to take all the sovereigns that he or any of his family possess to the nearest bank and change them for £5 or £1 notes," stated the City editor. "Do not let your friends alone to this, do it also yourself. It is a duty, a small one it is true, but in the aggregate the result will be helpful to the country, and your country must be your first care today. All the gold coin we possess is required for the use of our forces in the field and for the purchases required by the country abroad." The campaign was successful; not only was there no run, but gold coin was paid into the banks in return for new Treasury notes.

The photo above shows the queue at the Bank of England of people seeking to change £5 notes for gold.

Photo shows a £1 Bradbury.

Suspension of the Bank Act, which prescribed a fixed ratio between the Bank of England's gold reserves and the volume of notes in circulation, meant the suspension of sterling's adherence to the gold standard, since it would not be possible to redeem the expanded note issue for gold. Suspension of the gold standard was urged by the banks to prevent internal and external drains of gold, but this was strongly opposed by Bradbury because it would undermine sterling's position as the lynchpin of the international financial system, and since devaluation was likely, would harm Britain's ability to borrow abroad should it become necessary (as it did). John Maynard Keynes, a young Cambridge don who was an unofficial helper to the Treasury team during the crisis, penned a vital memorandum that persuaded the Chancellor, David Lloyd George, against suspension of the gold standard. Keynes argued that as a huge creditor to the world, London would be the recipient of gold flows once the crisis abated, as proved the case. Prior to the crisis, the Bank's gold reserve was £38 million. By December, it was a record £73 million. In the event, the suspension of the Bank Act was never implemented. Although Britain remained on the gold standard throughout the war, regulations made impossible in practice for private citizens to obtain gold.

The re-opening of the banks on Friday 7 July was anxiously awaited. It featured in a novel by H G Wells, *Mr Britling Sees It Through*: "When the public went to the banks for the new paper money, the banks tendered gold – apologetically. The supply of new notes was very insufficient, and there was plenty of gold."

Revival

With the banking system secured, the authorities turned their attention to the revival of the City's moribund financial markets and the removal of the emergency measures when it was safe to do so.

Revival efforts focused on the money market. The perceived problem was the £350 million of 'derelict' pre-war bills of exchange that were clogging banks' balance sheets. Many were on account of foreign firms that would not remit funds at maturity. It was believed that this 'incubus', as Lloyd George put it, was preventing the creation of new bills and inhibiting the banks from lending to business.

On Wednesday 12 August, the Chancellor announced what he called the 'Cold Storage Scheme'. By this 'heroic intervention', as a leading commentator put it, the Bank of England, under Treasury guarantee, offered to buy almost any pre-war bill. This would concentrate problem bills at the Bank of England and boost the liquidity of the banks. Banks rushed to offload bills. By early September, the Bank of England held £133 million of bills, almost 40% of the money market.

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A second 'heroic intervention' was launched on 5 September. The objective of the 'Enlarged Scheme' was to recapitalise some specialist banks to allow them to endorse new bills providing finance for business. This was done through loans from the Bank of England, again under Treasury guarantee, which provided the funds with which they could pay off outstanding bills. In total, some £200 million was provided to the banks by the state through these revival schemes. This was 9% of GDP. It was state intervention in the financial system on a hitherto unimaginable scale.

Remittance to London was facilitated by the opening of Bank of England gold depositories across the Empire. Depositors received a credit at the Bank that could be used to meet obligations in London. Over the autumn, the foreign exchanges returned to pre-war levels.

The general moratorium was scheduled to run for a month. But removing it proved problematic because fears of a run on the banks revived every time there was a reversal on the battlefield. It was judged that to remove it and then have to re-impose it would be economically chaotic. Hence, the moratorium was twice extended. It was eventually lifted, without incident, on 4 November.

A key stimulus to the revival process was the beginning of usage by the state of the mechanisms of the City to finance the war. On 19 August, there was an auction of £15 million of Treasury bills. By the end of the year, there was £100 million outstanding and, in 1919, there was £1.2 billion outstanding. November 1914, while the Stock Exchange was still closed, saw the first War Loan bond issue. At £350 million, it was, Lloyd George proudly told the House of Commons, the world's biggest ever fund-raising. However, due to various miscalculations, the issue was a fiasco, though this was kept from the public. Despite much arm-twisting of the banks, only £237 million of the loan was subscribed for, leaving a shortfall of £113 million – no less than £38 billion in today's money. To disguise the failure, the Bank of England's Chief Cashier and his deputy *personally* subscribed for the missing millions, being secretly provided with funds. It was, observed a senior official, "the Treasury's blackest secret".

The final normalisation step was the re-opening of the Stock Exchange. This eventually took place, with strict restrictions on dealings, on Monday 4 January 1915. The Great Financial Crisis was over.

Perspectives

Overall, the management of the financial crisis of 1914 has to be judged a success. The emergency measures "Saved the City", as Lloyd George boasted in his memoirs. First, the measures forestalled the dreaded run on the banks and the potential collapse of the country's payments and credit mechanisms. Second, they preserved the institutional structure of the City's markets, both as regards functions and firms.

No major bank or financial firm failed in 1914. This was an important achievement since such failures can have serious contagion effects. It was the outcome of massive and unprecedented state intervention in the financial system. The City survived the crisis more or less intact, but its business was transformed from financing the global economy

Photo shows a ten shilling Bradbury.

into financing the British and Allied war effort. This was not the initial motive behind the containment and revival measures, but it became strategically crucial as the war dragged on and became more and more an existential struggle.

Major international financial crises are uncommon events. 1914 saw one. So did 2007/08 and we are still living with the fallout. The causes of the two crises were plainly very different, but there are echoes in their unfolding and management by the authorities.

Both crises featured bank illiquidity, systemic illiquidity and a credit crunch. And both crises saw measures to address these problems. The objective of the Bank of England's Special Liquidity Scheme of 2008 was to improve the liquidity of the banking system. It aimed to do so by helping banks to finance illiquid 'troubled assets' on their balance sheets, notably their investments in mortgage-based securities. It was the same purpose as Lloyd George's Cold Storage Scheme of 1914, which aimed to remove the 'derelict' bills from their balance sheets.

The Bank of England's Funding for Lending Scheme was introduced in 2012 to incentivise banks to boost their lending to the real economy by providing them with funding. It has a distinct resemblance in purpose to 1914's 'Expanded Scheme', which provided loans to specialist banks to help them resume their role in credit provision. Such parallels illustrate the relevance of past precedents for current policy-makers.

The bank support schemes of 1914 injected substantial liquidity into the banking system. The Treasury's intention was that the funds would help the banks to resume lending to business. But instead, the banks placed much of the funds on deposit with the Bank of England for safe-keeping. Between August and December, bankers' deposits at the Bank of England more than trebled from £30 million to £105 million.

This was not the outcome that the Chancellor expected from the array of measures that had been taken to support the banks. He was infuriated by the complaints he received from business about the banks' refusals to lend and gave the bankers' leaders a sharp dressing down at the Treasury. He even hinted at state control if they did not fulfil their side of the bargain. Reporting on the meeting to the Commons, he stated that:
"I think we have done for the banks as much as ever they could have expected of us. We did not do it in order to strengthen their position or to increase the dividends. We did it in order to enable them to finance the trade of the country during a difficult period. If the government is prepared to take risks, they must take risks as well..."

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They were sentiments that might well have been expressed by Alastair Darling or Mervyn King. Indeed, the Governor told the Treasury Committee that the support provided by the Bank of England was designed "not to protect the banks, but to protect the economy from the banks".

City economist Brian Reading has observed that the 1914 Treasury currency notes "smack of Quantitative Easing". Both measures provided additional liquidity to the financial system. Later in the war, the Treasury notes significantly boosted inflation. Many predict a similar eventual outturn to QE.

But, of course, there are notable differences. One is the post-crisis economic recession that typically follows a banking crisis. There was no such recession in 1914 – there was the Great War.

Professor Richard Roberts specialises in financial history with contemporary relevance.

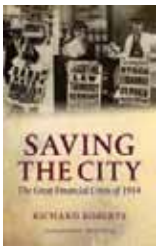
His latest book is: *Saving the City: The Great Financial Crisis of 1914* (Oxford University Press, 2013). Mervyn King has called it 'lucid and masterly.'

Richard has had faculty positions at Sussex and London universities, as well as fellowships at Cambridge, Princeton and the Bank of England. He also worked for BP as an economist.

His many publications on financial history include histories of the Bank of England, Schroders and Orion, a Euromarkets consortium bank. His contemporary books *Wall Street* (2002) and *The City* (2008) are published by *The Economist*. Collaborations with David Kynaston include co-authorships of *City State* (2001) and the forthcoming official history of HSBC (2015).

Special reports for City consultants Lombard Street Research include long-term perspectives on the breakup of monetary unions, fiscal consolidations and international trade confrontations. His most recent report was: *Did Anyone Learn Anything from the Equitable Life? Lessons and Learning from Financial Crises* (2012).

Other activities include editorial adviser on the digitisation of the *Financial Times and The Economist*; and Advisory Board memberships of a Gulbenkian Foundation project and OMFIF (Official Monetary and Financial Institutions Forum).



Adapted by Prof Richard Roberts from his new book "Saving the City - The Great Financial Crisis of 1914" published by Oxford University Press. Available from all good bookshops or OUP: 01536-452-640; trade.orders.uk@oup.com.

The two photos featured in this article on pages 3 and 4 are reproduced here by kind permission of Professor Richard Roberts.

Voices of the London Bullion Market

By Michele Blagg, Research Associate at the Institute of Contemporary British History (ICBH)

The success of the City of London in maintaining its pivotal role as the world's leading bullion market for over 200 years has been an astonishing achievement. Over the last 30 years, the London Bullion market has undergone a radical transformation from a British elite system, once based upon mutual trust and gentlemanly understanding, to a transnational forum.

'Voices of the London Bullion Market' aims to capture, contextualise and explain this transformation. The recent 25th anniversary of the London Bullion Market Association offered a time for reflection and celebration of the Association's achievements. Robert Guy, one of the original architects of the LBMA and the very first chairman, in his article for the special Silver Anniversary edition of the *Alchemist*, discussed some of the difficulties the London market had faced and shared his memories of the formation and early years of the Association.

The LBMA now plans to build on such memories to capture the transformation from the inside. It invites members of the Association past and present, as the generation of workers that shaped and experienced change, to tell their stories. Dr Michele Blagg, a research associate at the Institute of Contemporary British History at King's College London, has been commissioned to conduct an oral history project on behalf of the Association. The collection of interviews with participants involved in historical events has long been a complement to written records, adding personal detail and enhancing understanding of causes and contexts. In recent years, oral testimony has become even more important as the capture and management of email and mobile communications tends to lag behind more traditional record-keeping.

Since January, Michele has compiled a list of participants and events connected to the LBMA. She has immersed herself in the Association's archives, consulting past copies of committee meeting minutes, early newsletters and articles from the *Alchemist*, and locating a variety of literature and media reports from other sources.

Should you like to participate in this project, or share memories, photographs, old newsletters or other artifacts, Michele can be contacted at: voices.project@lbma.org.uk .

The Dealing room at Sharps Pixley circa 1982. Notice the lack of computers and bowler hats. It is amazing to think that how the bullion market would cope now without the use of computers.

Michele Blagg (BA(hons), MA, PhD) is a visiting Research Associate at the Institute Of Contemporary British History(ICBH). As part of a collaborative doctoral award granted by the Art's and Humanities Research Council, she was based at the Rothschild Archive, London. Her doctoral research focused on the Royal Mint Refinery, operated by N M Rothschild & Sons between 1852 and 1968, and how it adapted to the changed London gold market. Her areas of interest are in financial and business history with special regard for the actors and networks located in the London market. Her publications include 'Gold Refining in London: The End of the Rainbow, 1919-20' in The Global Gold Market and the International Monetary system from the late 19th century to the present (forthcoming, 2013); 'The Royal Mint Refinery, a business adapting to change' in Business Archives Council, Sources and History. She teaches on the ICBH MA in Contemporary British History and assists with the Witness Seminar Programme. She sits on the Business Archives Council Executive and is involved in the annual 'Meet the Archivists' workshop held in the City that aims to explore ways in which research students can identify and use business records in a variety of different research fields.

Bullion market dinner in the mid 1980s to mark the retirement of Dennis Suskind of J. Aron. Many of the most familiar and influential figures in the London bullion market are shown in the photograph including some of those who helped to set up the LBMA. Pictured left to right are Les Edgar, Chris Tors, Keith Smith, Stewart Pixley, Dennis Suskind, Robert Guy, Guy Field, Robert Stein, John Bishop, Alan Baker, Neil Newitt, K C Wu, Jack Spall, Doug Bull, Brian Nathan and Robert Beale.

Diary 1988

As prepared by Michele Blagg

On 14 December 1987, the London Bullion Market Association was formally incorporated. In light of changes in the supervision and regulation of the financial markets that took place in the United Kingdom that year, the five members of the London Gold Market, together with other participants in the trading of precious metals in London, instituted a Steering Committee to explore the possibilities and problems involved in the creation of a new market association. Committee members were selected on the basis of their personal experience of the Market, rather than as representatives of a particular company. The number was limited to six in order to "achieve swift progress without unnecessary bureaucracy". The Steering Committee was made up of Robert Guy – Chairman, Guy Field – Vice Chairman, Keith Smith, Jack Spall, John Wolff and Neil Newitt.

From the Steering Committee's inception, The Bank of England, which held responsibility for the supervision of the wholesale bullion market, was involved in the Association's affairs and assisted in the drafting of the relevant Code of Conduct. Observers continue to attend Management Committee Meetings to the present day. In addition, the Committee has maintained close contact with H M Customs & Excise in respect of exemption to Value Added Tax for members of the Association.

January

Membership application forms were available. Potential members were made aware that existing Associate Membership of the London Gold Market/London Silver Markets did not ensure membership of the new Association. In addition to the Management Committee, a number of specialised committees were formed to deal with particular aspects of the Market. These included Membership, Finance and Physical, Public Affairs and Market Development. In each case, the expertise of other bullion market practitioners was, and continues to be, called upon. In order to qualify for market maker membership, companies had to fulfil a set of criteria that would entitle them to be listed as such by the Bank of England. All members paid an entry fee of £2,500 plus an annual subscription.

The Memorandum of Association defined the remit of the LBMA as:

> Deemed to encompass, but shall not be limited to, those companies partnerships and other organisations which are actively engaged, in trading or refining or melting and assaying or fabricating or transporting, or vaulting gold and /or silver bullion within, or with or for persons in, the United Kingdom.

while the Articles of Association set out in more detail the way in which the LBMA would operate. It was very much hoped that the new LBMA would receive strong support from both the market and its customers. Membership of the LBMA was two tiered:

1. Market Maker Member: A person which, at the time of admission to membership is a "market maker" and which is a "listed institution".
2. Ordinary Member: A person which at the time of admission of membership is actively engaged in the activities defined in the Memorandum of Association.

The membership and Articles defined the role of the Association and among the specific objectives were:

- Promotion, encouragement, development and advancement in every possible way of the affairs of all those engaged in every aspect of the bullion market in the United Kingdom.
- Provision of a forum for the discussion of all matters concerning members of the Association.
- Dissemination of information to members on matters of mutual interest.
- Representation of the common interest of members in dealing with governments and other authorities.
- Taking of actions to ensure the provision and smooth running of a market in gold and silver, including the formation of rules and codes of conduct.
- Publication of any material concerning the market and its members.
- Liaising with the Bank of England and Customs and Excise as necessary.

March

Progress had been made in the formation, membership and function of the Association. The Membership Committee had considered 36 membership applications and a further 23 awaited further consideration. The Physical Committee now presided over the London Good Delivery List and the London Gold Market passed all responsibility over to the new Association.

April

The Bank of England published its list of Listed Institutions and the LBMA formally admitted to membership 13 Market Maker Members together with 48 Ordinary Members.

May

The Inaugural Dinner at Goldsmith's Hall took place. The Guest of Honour was The Rt. Hon Robin Leigh Pemberton, Governor of the Bank of England. One hundred and seventy-eight representatives of the Members and Guests attended, with some travelling from Australia, Japan, Switzerland and the United States to be present. The evening received wide coverage by the media.

Pictured at the first LBMA Biennial Dinner, Goldsmiths Hall, 12th May 1988, are left to right Keith Smith, Robert Guy, Christopher Green, Peter Hambro, the Guest of Honour, the RT Honourable Robin Leigh Pemberton Governor of the Bank of England, Jack Spall and Rolf Schriber.

September

The Association hosted its first seminar at the Savoy Hotel. Mr Timokhine, Senior Manager Precious Metals at Vnesheconombank (Bank for Foreign Economic Affairs, Moscow), outlined the Bank's central role in the handling of the Russian State's gold business and then participated in a question and answer session. The event was well supported, with feedback from members indicating that the evening was appreciated and the Association should hold further seminars from time to time.

A New Gold Rush? More Demand for the Precious Metal than People Realise

By Daniel Marburger, Director, CoinInvestDirect.com

Daniel Marburger, Director of CoinInvestDirect.com, heralds the arrival of a new type of gold investor. He explores why people are shopping for gold on the internet, looks at future challenges and explains why he's confident the gold price will keep the new buyers interested.

Some recent meetings with journalists from national newspapers have confirmed my belief that gold is indeed the marmite of investments. One journalist from a very well-respected daily newspaper, for example, refused to entertain the idea of writing about gold within the context of personal finance simply because, he said, the price isn't interesting anymore.

A cursory glance at our orders, however, will tell you a very different story. The price of gold is certainly not at the high levels we saw in 2008, yet our customers are ordering more than ever. At the time of writing, orders for gold were up by 25% week on week compared with the same period last year. Gold sales per ounce have actually increased by 60% and silver sales by 20%, throughout the year.

When looking for an explanation, it is fair to say that our customers are currently seeing the price as a good buying opportunity. Yet, we believe that the reason for gold's new popularity as an investment is that it is becoming firmly entrenched as part of the portfolio of the everyday investor. Ordinary investors, who at one time were precluded from access to the precious metal, are now considering its benefits. And here's the rub, we think there's far more demand for gold than people actually realise.

Searching for a safe haven

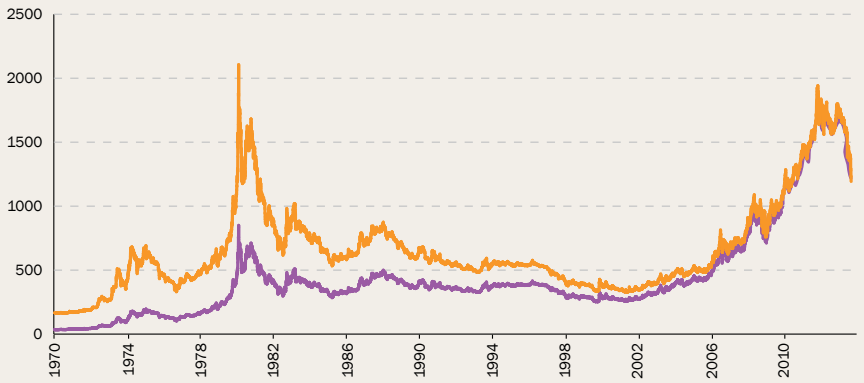
So what's changed? Fifteen years ago, the gold investment market was very different. Everyday investors had limited access to gold and many regarded it as an irrelevance. Research compiled for CoinInvestDirect.com by the Centre for Economics and Business Research (CEBR) shows that the average price of an ounce of gold between January 1970 and December 2005 was $300. The precious metal peaked at over $800 (over $2,000 in today's prices) during the 1980 OPEC oil crises. A largely stable price, therefore, exacerbated the age-old objections that gold did not generate income and that it incurred additional costs for storage.

However, since the financial crisis of 2008, gold has been boosted by a period of economic uncertainty. The price was driven up by investors seeking a safe haven for their funds. Further, weakness in Western economies restricted returns on investments in financial assets such as equities, and returns on government bonds were pushed to record lows as interest rates collapsed and central banks pursued aggressive bond-buying strategies, or quantitative easing, to support economic growth.

> *"In July 2013, Ben Bernanke, then chairman of the Federal Reserve, told the Senate Banking Committee that "nobody really understands gold prices and I don't pretend to understand them either."*

As central banks moved to increase the supply of money, the value of money fell relative to other goods and services. This effect mounted pressure on investors to diversify their assets, boosting demand and therefore the price of gold. In addition to this, the price of gold experienced a sharp spike as markets learned of the impending bankruptcy of Lehman Brothers. In the ensuing financial turmoil, investors fled to the safety of gold, which pushed the price per ounce up by over $100 within a matter of days. The collapse of Lehman

Chart 1. Price of gold, daily since 1970, $ per troy ounce



Brothers actually increased the price of gold by 18.6% within just one week.

However, as optimism started spreading in early 2013, gold prices suffered from a downward movement, followed by reasonable stability in the second half of last year. Despite the recent falls, the latest data suggest that, in September 2013, the price of one ounce of gold averaged $1,316. This represents a 324% increase in nominal terms since 2002. Interestingly, prices today are over 70% higher than on the day of the collapse of Lehman Brothers in mid-September 2008.

Encouraging first-time investors

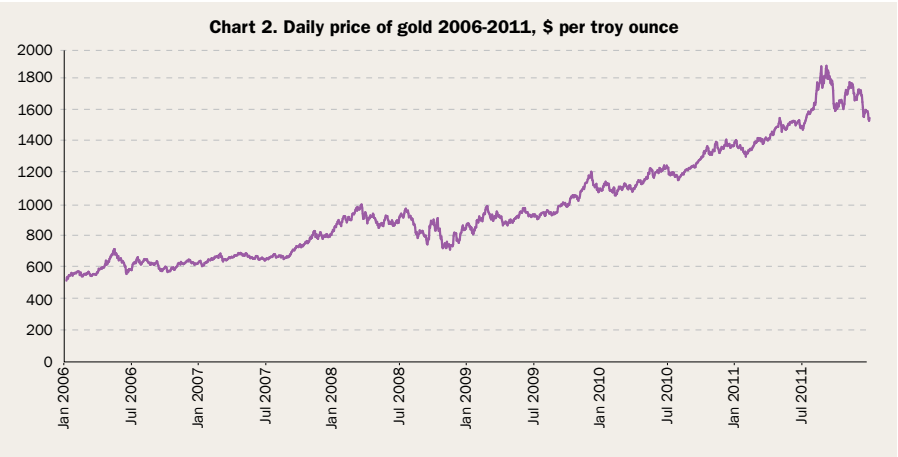
As the years between 2006 and 2011 became a period of dramatic price increases, writing about gold became fashionable and people started to think about how they could access the precious metal. And thanks to the arrival in 2004 of gold-backed exchange traded funds (ETFs), people who wanted to buy gold could now do so. ETFs, regulated financial products designed to provide investors with exposure to the price performance of spot gold bullion, seemed to overcome the difficulties of finding a cost-efficient and secure way to participate in the gold bullion market without having to take physical delivery of gold.

Buying gold in a new way

In 2006, Dr Ulrich Byszio came to the UK to seek a way to democratise gold investment and give people the opportunity to invest in the commodity itself. As a result, he set up the internet-based CoinInvestDirect.com, which enables people to buy gold and silver online.

Ulrich Byszio established credible relationships with leading mints around the world. This approach ensures that, as an official distributor, CoinInvestDirect.com can provide genuine high-quality gold bars and coins in large quantities.

As a purchaser of substantial quantities of gold, the company is able to ensure its cost-effectiveness and pass savings on to its customers. In addition, it has set up gold storage and insurance options for its customers.
.
While ETFs undoubtedly helped to change the gold investment landscape, we found that many investors prefer to hold gold in their own hands. Therefore, CoinInvestDirect.com and other companies like it have introduced this new way to buy gold. Gold can now be purchased online as easily as food, clothes, toys and music, with the bars or coins arriving by post just 48 hours after a customer has placed their order.



Such was their popularity that, by 25 June 2010, physically backed funds held over 2,000 tonnes of vaulted gold for private and institutional investors. Today, the largest of the physical gold bullion-backed ETFs is SPDR Gold Shares (GLD), which is traded on major stock exchanges around the world, including London, New York, Zurich, Paris and Mumbai.

At the time of the launch of the first ETF, the main objections to investing in gold were that it did not generate income and that it was costly to store and insure. Yet, despite this, the precious metal's dramatic price rise two years later encouraged many investors to take advantage for the first time. So, from the perspective of the investment industry, ETFs have certainly helped to bring gold investment into the mainstream by giving people easier access. Further to this, gold's new popularity was aided by regular articles in national newspapers and online journals, which extolled the benefits of its inclusion in an investment portfolio.

Who are the new consumers?

Someone recently asked me if all gold investors were doom-mongers – people who feared the future and were motivated by an inherent fear of financial Armageddon. We find the opposite to be true. Indeed, gold investors are ordinary people who run companies, financial or otherwise. They can be everyday employees, high earners or low earners, some of whom invest a substantial part of their overall portfolio in gold. What they do have in common, though, is a desire to protect their wealth.

On average, we find that our customers spend £5,000 every time they invest. Gold currently exceeds silver in popularity and most customers opt for the 100 gram gold bar along with the 1oz maple leaf gold coin. And what most people do not realise is that British legal tender gold coins, such as the Britannia or Sovereign, are exempt from capital gains tax, which ultimately makes them more tax-efficient than ETFs.
A recent article in *The Telegraph* said: "A balanced portfolio should hold an allocation of about five per cent in assets such as gold. The future is uncertain and gold is the most effective insurance against that." Interestingly, most of our customers tend to invest around 5% of their wealth in gold.

> *"The price of gold is certainly not at the high levels we saw in 2008, yet our customers are ordering more than ever."*

We also tend to see lots more interest and activity when the price is low. We believe that the reason we are seeing an uptake in investor demand right now is because our customers regard price stabilisation as a buying opportunity. To illustrate this, our figures show that there are generally 100 buyers to every one seller at today's prices.

Significant growth from emerging markets

Looking ahead, we believe that one of the biggest hurdles for the gold industry generally is to educate customers about the complexities of the gold price itself. In July 2013, Ben Bernanke, then chairman of the Federal Reserve, told the Senate Banking Committee that "nobody really understands gold prices and I don't pretend to understand them either". If the chairman of the Federal Reserve can admit to such perplexity, it is not surprising to find that the gold price can baffle everyday investors.

> *"We believe that the reason we are seeing an uptake in investor demand right now is because our customers regard price stabilization as a buying opportunity"*

We recently asked the Centre of Economics and Business Research (CEBR) to produce a report about gold. Our aim was to address the concerns of our customers and look at the fundamentals propping up the gold price. We wanted to explore some of the macroeconomic determinants of the price of gold and the causes of its more recent movements, both up and down.

The report suggests that gold demand tends to increase against a backdrop of economic, financial and geopolitical uncertainty, which is certainly not news to anyone familiar with the gold market. It also discovered that gold becomes a more attractive substitute for storing value when risks associated with assets such as government bonds increase in the face of political uncertainty and debt concern. Further to that, gold demand has a tendency to increase when there is a risk of high inflation and this, in turn, increases its value compared to a currency that is at risk of losing value.

What did come as a surprise to us, however, was how attractive gold has become as a store of wealth in emerging markets where financial sectors are somewhat less developed. Indeed, the BRICs economies alone have almost doubled their share of world gold reserves since 2003. In addition, there is a robust growth of demand from emerging markets, where consumer appetite shows little sign of slowing.

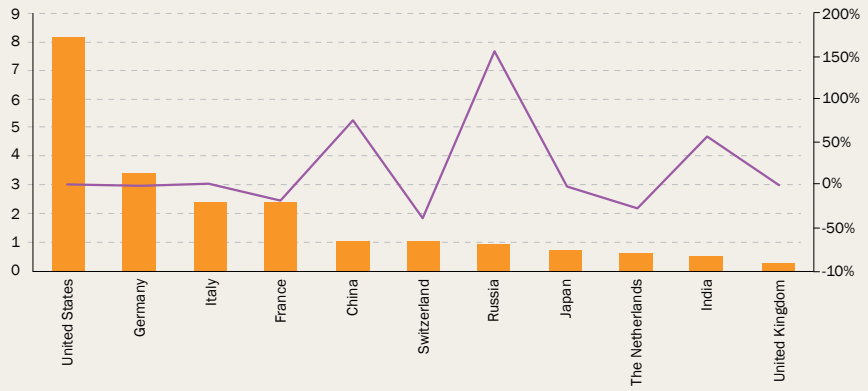
Going forward, demand for gold is likely to become more reliant on the personal consumption and savings of individuals and central banks in emerging markets. According to the CEBR report, recent demand for gold has been high in Asia and the Middle East, stoked by continuing economic development within these countries. Demand for gold has risen from both individual consumers – in the form of jewellery, bars and coins – as well as from central banks that have added gold to their reserves to diversify their portfolios.

The report has also pointed out that, given gold's finite nature, the increase in demand from emerging markets is unlikely to be matched by an increase in supply. As a consequence, increase in demand will inevitably lead to a boost in price in order for the market to reach an equilibrium whereby the total quantity demanded matches that available for supply.

Who holds the biggest reserves?

Advanced economies still have the largest amount of total gold holdings, largely as a result of the historic tradition of linking currency to gold. The US holds the world's largest amount of gold reserves, estimated at around 8,000 tonnes, followed by Germany, Italy and France, which each hold more than 2,000 tonnes. China completes the top five with just over 1,000 tonnes. When looking at the change in gold reserves, however, the report shows a different picture. Advanced economies, such as the US and Germany, have maintained the same level of gold holdings, whilst Switzerland, France and the Netherlands have all reduced their holdings between 2003 and 2013.

Chart 3. Gold holdings by selected countries, thousand tonnes (Q2 2013), and percentage change from Q2 2003 to Q2 2013



Interestingly, and starting from a low base, CEBR's report shows that emerging markets have made strong gains. Since 2003, Russia and China have increased their gold reserves by 157% and 76% respectively. An increasingly positive attitude to gold as a defence against inflation has resulted in the BRICS economies almost doubling their share of the world's gold reserves from 4.7% in 2003 to 8.8% in 2013.

Looking ahead to online shopping

The CEBR report reveals that the dramatic rise in emerging market demand has been an unsung factor in the surge of the price of gold over the past decade. With growth in these markets driven by strong fundamentals, emerging demand looks poised to continue to support the price of gold going forward.

In countries with less developed financial systems, gold will retain its appeal as a relatively risk-free store of this newly created wealth. In addition, the trend that has seen central banks worldwide being net purchasers of gold in recent years is likely to continue sustaining demand for the precious metal into the future.

> *"The report has also pointed out that, given gold's finite nature, the increase in demand from emerging markets is unlikely to be matched by an increase in supply."*

Overall, the CEBR report shows that the diminishing prospect of ever greater monetary stimulus, which serves to prop up asset prices and hold down returns on other assets, will be countered by the momentum of emerging market growth. And here, the appetite for gold looks set to continue to support demand going forward.

Aside from the industry's challenges to help educate customers and others about the complexity of the gold price, it is important for companies like ours to stay in the vanguard of the precious metals industry. The next step for the industry is to take online shopping for precious metals to the next level by allowing customers to buy and receive silver without paying VAT.

Ultimately, though, it has to be the role of companies operating within the gold industry to ensure that this marmite of investments is understood and considered as part of any investment portfolio.

Daniel Marburger joined Jewellers Trade Services in London in January 2011 with a specific responsibility to develop the CoinInvestDirect.com business. Before that, he was a banker within the private wealth management division of Commerzbank AG, formerly Dresdner Bank.

IRFA Special Issue on Gold

By Professor Brian Lucey, Professor of Finance, Trinity College, Dublin

There has, in the last decade, been a remarkable resurgence in interest in gold as an asset class. The rise and fall of the gold price, questions of gold bubbles, the comparisons of the Euro to a new gold standard, the growth of China as a gold consumer, and the increased growth of gold related products have prompted significant numbers of academic papers on this metal. In this regard it seems timely to put together a set of papers that reflect the state of the art on the financial economics of Gold.

Papers are therefore invited for a special issue on International Review of Financial Analysis on Gold. Papers should be submitted via the elsevier EES system by 1 September 2014.

The Special Issue will be edited by Professor Brian Lucey, Editor in Chief, Professor Jonathan Batten, Special Issues Editor and Professor Dirk Baur, Associate Editor.

Papers should address the financial economics or econometrics of gold, gold derivatives, the gold market, the relationship of gold to other assets, the role of gold mining stocks, the microstructure of the gold market, forecasting of gold, the monetary role of gold and the role of gold as an investment asset. We welcome both theoretical and empirical approaches.

All papers accepted will, prior to publication, be required to be accompanied by a video abstract or audioslide (see http://www.elsevier.com/about/content-innovation/audioslides-author-presentations-for-journal-articles / or http://www.elsevier.com/about/content-innovation/author-videos)

Papers should be submitted via http://ees.elsevier.com/finana/, selecting Gold Special Issue as article type. Please note that the standard submission fee remains in place for this special issue. We reserve the right to accept papers but to place them in regular issues of IRFA as opposed to the Special Issue.

Please feel free to contact any of the special issue authors if you wish to discuss the suitability of a paper for the special issue.

Has There Been a Decade of London PM Gold Fixing Manipulation?

By Peter Fertig, Director, QCR Quantitative Commodity Research Limited

On February 28, Bloomberg reported on a study co-authored by New York University Stern School of Business Professor Rosa Abrantes-Metz and Albert Metz, a managing director at the rating agency Moody's Investors Service. In their not yet published draft research paper, the two authors claim that "The structure of the benchmark is certainly conducive to collusion and manipulation, and the empirical data are consistent with price artificiality" and that "It is likely that co-operation between participants may be occurring". We have come to the conclusion that their findings could be explained and are not a valid proof of manipulation of the pm London gold fixing.

The authors of the study refer to unusual price activity around 3:00 pm in London when the afternoon setting of the gold price is taking place. They have not observed these trading patterns during the morning fixing. Furthermore, large price moves during the afternoon fixing were overwhelmingly to the downside. Screening intraday data from 2001 to 2013, they found those patterns from 2004 until the end of the data sample. In a telephone interview, Professor Abrantes-Metz said: "There's no obvious explanation as to why the patterns began in 2004, why they were more prevalent in the afternoon fixing and why price moves tended to be downwards." Thus, the two authors concluded in their research paper that unexplained moves may indicate illegal behaviour by the five banks involved in the gold fixing working actively together to manipulate the benchmark.

> *"There's no obvious explanation as to why the patterns began in 2004, why they were more prevalent in the afternoon fixing and why price moves tended to be downwards."*

Mainstream academic theory is that financial markets, and gold could be included in this group, are efficient. Anomalies are only temporary and as soon as the market has discovered them, they are exploited and disappear. Nevertheless, many academic studies have also found that anomalies in stock markets persist even many years after their discovery. One of those anomalies is the year-end effect, in which stocks that have already performed well during the year tend to rally further towards the year-end. The reason behind this move is that institutional investors that had been not invested in or had been underinvested in those equities buy the stock for reasons of window dressing to show in their reports that they had also held the top performers in their portfolios. This behaviour is absolutely legal and is not regarded as market manipulation. This leads to our first objection against the conclusion of Abrantes-Metz and Metz. Detecting anomalies in price behaviour might be an indication of illegal behaviour, but it is by no means evidence that prices have been manipulated.

Furthermore, that Professor Abrantes-Metz could not explain the unusual price patterns is more an indication of the authors' lack of familiarity with the gold market than an indication of price manipulation.

Ross Norman, the CEO of Sharps Pixley, has already provided a good explanation why the unusual price behaviour has been detected for the pm fixing only and not for the morning fixing. The afternoon fixing covers trading in both financial centres, London and New York, and thus provides commercial participants in the gold market with higher liquidity and, thus, the chance to get a better price. In addition, many producers are located in North America and the afternoon fixing is more convenient for their time zone. While gold at the Comex division of the CME also trades electronically during the London morning hours, the liquidity is higher at the futures exchange during the afternoon fixing. This is another reason for commercial participants to prefer to buy or sell gold at the pm fixing.

However, one might argue that with higher liquidity the occurrence of price spikes should be reduced and not increased. What might sound like a compelling argument at first quickly turns out to be flawed on closer inspection, for several reasons:

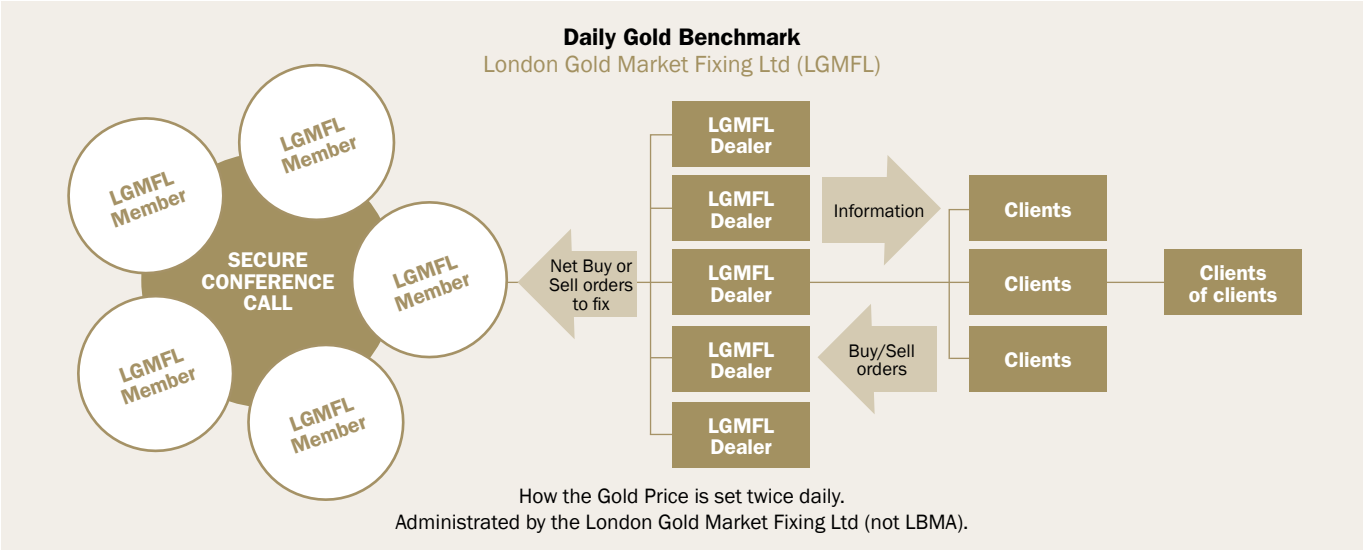
First, if a larger order has to be executed, the price impact would be greater in a less liquid market situation. Thus, a buyer or seller would still obtain the better price if it is executed in the afternoon fixing despite moving the price considerably from the level prevailing shortly before 3 pm in London.

Second, the development of the price of gold could be explained by the prices of some financial instruments and other commodities. In our quantitative fair value model, the weekly or monthly price development of gold is well explained by the S&P 500 index, the US dollar index and crude oil price. Also GARCH-X models show that these factors have an impact on the daily return and volatility of gold. Thus, we are not surprised that intraday spikes in the gold price occur during the afternoon gold fixing.

When the afternoon fixing starts in London, it is 10 am in New York (except for a couple of days during the year when the shifts to daylight savings time and back take place on different dates in spring and autumn). Some of the market-moving US economic data is released at this time. If this economic data deviates from the consensus forecast then the stock and forex markets react strongly. Sometimes, data releases confirming the consensus can also trigger stronger price moves in the stock and/or forex markets. Thus, it should not be surprising that participants at the gold fixing also react to those moves if a new price is called at the fixing, and bids and offers could be adjusted.

Also, the behaviour of institutional investors in the US stock market could provide an explanation for the price spikes at the London afternoon fixing. Trading at the NYSE starts at 9:30 am in New York. However, some studies have found that institutional investors don't enter the stock market until around 10 am –at around the time the fixing in London starts. Often the US stock market reverses direction around this time. Furthermore, a popular strategy among intraday traders is to trade breakouts of the trading range during the first 30 minutes. Price reversals and increased volatility of the US stock market could also have an impact on the price of gold during the fixing period.

Abrantes-Metz and Metz also point out that the spikes are more to the downside than to the upside. As Bloomberg has written, "on days when the authors identified large price moves during the fix, they were downwards at least two-thirds of the time in six different years between 2004



How the Gold Price is set twice daily.
Administrated by the London Gold Market Fixing Ltd (not LBMA).

and 2013. In 2010, large moves during the fix were negative 92 percent of the time." This is not really surprising if one considers who participates in the London fixing on the commercial side. During the period under investigation, many central banks had been sellers of gold. For this group, the fixing is one means to sell larger quantities and to obtain an 'official price' for their audits. But also mining companies sell their production in larger quantities at the fixing, as hedging and financing operations are often tied to the fixing price. The typical buyers such as jewellers or ETFs are less reliant on an objective price set during the fixing and could also be active in unreported spot market transactions.

> *"On days when the authors identified large price moves during the fix, they were downwards at least two-thirds of the time in six different years between 2004 and 2013. In 2010, large moves during the fix were negative 92 percent of the time."*

Another argument often used in articles and blog contributions is the movement of the gold price during the period of the fixing. But again, this is not an indication of price manipulation, but reflects more a lack of understanding. In a few articles, we even found statements that the LBMA is an exchange. However, this is not true. The London Bullion Market Association is an industry association and not an exchange. It is also not responsible for the gold and silver fixing. This misunderstanding might result in the perception that some exchanges hold auctions at certain times and call the price of this auction the fixing price. However, the London gold fixing is not an auction. At an auction, the participants submit the quantities that they would buy or sell at a certain price. These bids and offers have to be submitted at a certain time and then the price is determined that would lead to the highest quantities traded. Usually, all orders are settled at the same price. This procedure is for example applied at the Xetra trading platform of Deutsche Boerse. There, the prices of the closing auction often deviate considerably from the last price of the official trading session and, in some cases, are even outside of the trading range of the day. Nevertheless, the German watchdog BaFin, which has reviewed the London gold fixing, has not yet raised the slightest suspicion or even started any investigations that could suggest this practice might be a manipulation.

The London gold fixing is a process of price discovery. The chairman calls a price close to the actual spot quotations when the fixing starts. Then the five member banks submit the quantities they would buy and sell based on the orders of their clients or for their own accounts. For fixing the price of gold, the difference between supply and demand has to be less than 50 bars – around 620kg. This is usually not immediately the case. In the case of excess demand, a higher price is called and a lower price is called if supply exceeds demand. The five banks involved in the fixing then contact their clients with the new price called and collect new bids and offers, which are then submitted to the chairman. This process of adjustment to find the fixing price takes some time. Usually, the gold price is fixed within 10 minutes, but the fixing could last up to one hour depending on the market situation. This procedure had also been applied by official exchanges. For example, the Frankfurt Stock Exchange used this procedure for the official fixing of the Deutsch Mark exchange rates until the introduction of the euro.

However, markets do not stand still during this process. Especially, trading in the gold futures is continuous and prices are disseminated within milliseconds. This information is also available to the clients of the five banks conducting the fixing and banks active in spot gold trading display indicative bid and ask prices. Thus, when a new price is called, the clients of the banks are well informed about the current market situation and can adjust the quantities they want to buy or sell at the new price called accordingly. Usually, the banks don't know the exact quantities their clients want to buy or sell in total when a new price is called.

If one defines market manipulation as an attempt to move the price to a certain level, the five banks would have to agree on this price before the fixing starts. In order to push prices artificially lower, this would also require that they were willing to sell an unknown quantity of gold, which would expose them to significant price risk. At best, they might know the total quantity supplied and demand at the first price called. That gold is not fixed at the first call and that prices move and more new prices are called is not an indication of price manipulation. Just the opposite, it is an indication of no wrong doing by the fixing group!

All in all, we come to the conclusion that the findings of Professor Abrantes-Metz and Metz could be well explained and are not a valid proof of manipulations at the pm London gold fixing. Normally, a flawed academic research paper is not a problem. However, Professor Abrantes-Metz advises the European Union on financial benchmarks. If this research paper leads to accusations against the five banks of the London gold fixing and the EU imposing fines, then it would be a scandal.

Peter Fertig, Director, QCR Quantitative Commodity Research Limited Before founding QCR - Quantitative Commodity Research Limited in June 2007, Peter worked for over 20 years in the research department of Dresdner Kleinwort. He was Chief Fixed Income Strategist at Dresdner Kleinwort. As a strategist he covered commodity markets, focusing on precious and base metals. Within that framework, he gave presentations to institutional investors worldwide. He has also commented on market developments on TV and is regularly interviewed by Reuters and Bloomberg. He also holds workshops on quantitative analysis of commodity markets.

2014 Forecast Summary

By Aelred Connelly, Public Relations Officer, LBMA

Metal	Average Price in 1st Week January 2014 (2-9 Jan incl)	Average 2014 Forecast	2013 Year Average
Gold	$1,230	$1,219	$1,411
Silver	$19.87	$19.95	$23.79
Platinum	$1,406	$1,490	$1,487
Palladium	$732.00	$774.81	$725.29

Forecast contributors are predicting gold and silver prices to remain broadly flat during 2014, but are more bullish about the prospects for PGMs, forecasting modest increases in price for both metals.

The gold price closed 2013 at $1,201.50/oz, 28% lower than in the first week of the 2013, bringing to an end 12 years of consecutive price growth. On average forecast contributors are expecting gold prices to remain broadly flat in 2014, which contrasts with a much more bullish outlook in recent years. Analysts are forecasting average gold prices to be $1,219/oz, 0.9% lower than the first week of 2014, and to trade in an average range of $1,067 to $1,379 during 2014.

Analysts cite the possible strengthening in the US dollar, the extension of US tapering of QE into 2014, weak global inflationary pressures, over supply of gold and further possible ETF liquidation as factors which could restrain gold prices. But the price could be supported by continued strong demand from China, a relaxation in India's import duties as well as the prospect that low prices could constrain mine output and supply of scrap. So an increase in price cannot be ruled out particularly if such "positive" influences take centre stage.

Of the four metals, silver was the worst performing in 2013, ending the year 36% lower. But analysts expect silver prices to follow the lead of gold and stabilise in 2014 to an average price of $19.95, broadly flat compared to its price at the start of the year.Contributors also think that silver will be the most volatile of the four metals, trading in an average range of $16.37 to $23.94. Prices could come under strain because of the large surplus supply in the silver market and industrial demand for silver could be hit if global GDP growth is weak. The added risk is that if prices weaken this might encourage silver ETF holders to liquidate their positions, which would depress prices further. But forecasters also think that prices could benefit from strong global industrial growth, particularly from the photovoltaic sector, which may also attractinvestor interest to offset some of the possible downside factors.

Analysts are more bullish about the prospects of the PGM metals, and expect both metals tofinish the year above their average price in 2013, as well as their price at the start of 2014. Analysts predict that platinum prices will average $1,490 in 2014, 6% higher than its price at the start of the year, and to trade in the range $1,300 to $1,650. The prospect of disruption to supplies from strikes and industrial unrest combined with growth in photovoltaics and autocatalyst demand are cited as factors which could help support prices.

Forecast contributors also expect the palladium price to benefit from shortage of supply, particularly given limited mine supply and waning exports from Russian state stocks. Coupled with anticipated strengthening from sales to the automotive gasoline sector, analysts are forecasting palladium prices to average $774.81 in 2014, up 5.8% from where it started the year and around $50 above its average price in 2013.

To find out more about what will happen to prices for precious metals this year, and what the factors are likely to affect their price, read the views of the experts in the Full Forecast Survey which is available now on the LBMA website.

Forecast 2013 Review

Metal	2012 Average Price	Average price in 1st week of January 2013 (a)	Average Forecast 2013	Actual 2013 Year Average	2013 Winning Forecast	2013 Forecast Winners	Company
Gold	$1,669	$1,665	$1,753	$1,411	$1,600	René Hochreiter	Allan Hochreiter (Pty) Ltd
Silver	$31.15	$30.36	$33.21	$23.79	$27.00	René Hochreiter	Allan Hochreiter (Pty) Ltd
Platinum	$1,552	$1,575	$1,682	$1,487	$1,538	Glyn Stevens	INTL Commodities
Palladium	$644.33	$689.64	$744.03	$725.29	$725.00	Tom Kendall	Credit Suisse

The London Bullion Market Association is delighted to congratulate the winning analysts in the 2013 Precious Metals Forecast. The aim of the Forecast Survey is for contributors to predict, as accurately as possible, the average price and range (low and high price) for the year ahead for the four main precious metals. The prediction closest to the average price wins (based on the average $ daily pm fixing price). In the event of a tie the most accurate forecast range is taken into account. Congratulations to the four winning analysts. The most impressive performance came from René Hochreiter who scooped two prizes for both gold and silver. Glyn Stevens claimed the prize for platinum and Tom Kendall picked up the winning prize for palladium.

After many years of accurately forecasting the price direction for all metals, many contributors were caught out last year by the collapse in the average price during 2013 (compared to the prices in the first week of 2013), with gold falling 15%, silver by 22% and platinum by 5.5%. This meant that the average forecasts were significantly out of line with the actual average prices for the year, particularly gold which was astray by -$342. Only palladium ended the year higher than it started it (+5.2%).

So it certainly paid to err on the bearish side. But with most analysts adopting a bullish perspective, it was not surprising that the winning forecasts for gold, silver and platinum went to those analysts who had forecast the lowest average prices, even though they were still some way off the actual price for the year. By far the most accurate forecast came in the palladium category with Tom Kendall forecasting the price within 29 cents of the actual average price.

Arguably the most unlucky analyst in this year's survey was Eddie Nagao, who finished runner up in three categories (gold, silver and palladium). Eddie even forecast the same price as Tom for palladium but lost out in a tie break because of a wider price range.

The LBMA is grateful to Metalor Technologies SA for its generous donation of four 1 oz gold bars which were awarded to each of the 2013 Forecast winners.

2013 Forecast winners, Glyn Stevens and Tom Kendall collecting their prizes of a 1 oz gold bar from Ruth Crowell, Chief Executive of the LBMA. Rene Hochreiter is based in Johannesburg and was unfortunately unable to accept his two prizes in person.

An Historical Review of the LBMA's Precious Metals Forecast Survey

By Aelred Connelly, Public Relations Officer, LBMA

Can you recall the momentous events of 1997? If you are struggling, let me jog your memory. Tony Blair wins a landslide victory at the General Election bringing to end 18 years of Conservative power. The UK transfers sovereignty of Hong Kong, the largest remaining British colony, to the People's Republic of China. The IRA declares a ceasefire in Northern Ireland. Diana, Princess of Wales, dies in a car crash in Paris. Bill Clinton is relected as US president. But these events are a mere sideshow to the most momentous event of 1997 - the launch of the LBMA's Annual Precious Metals Forecast Survey.

The Survey began life as an *Alchemist* article in 1997. A dozen participants contributed trading range forecasts for gold and seven for silver, as well as providing their thoughts on general market trends for the year ahead. With the pm gold price starting the year at $366.55 analysts predicted that gold would trade during 1997 in the range $330 -$405. The average price for the year out turned at the bottom end of the range at $331.3, down 9% on the year. For silver, with the price starting 1997 at $4.77, analysts forecast that the price would be in the range, $3.80 to $5.00. The actual average price for 2007 out turned towards the top of the range at $4.89, marginally up on the year.

Among the first contributors were Andy Smith (then of UBS), Ted Arnold (Merrill Lynch & Co), Serge Topolanski (Societe Generale), Tom Griffo (Cargill Investors Services Inc.) and Rhona O'Connell (T. Hoare & Co Ltd). And the Survey was truly international with contributors located in New York, Hong Kong, Tokyo, Sydney, Johannesburg and closer to home, Paris, Zurich and London. The international dimension to the Survey continues to this day even if the contributors have changed. Rhona is the only person from the original group of analysts who is still contributing.

For the 1998 Forecast Survey, the arrangements became more formalised. In addition to providing a forecast high and low in each metal for the year ahead, contributors were asked to provide an average forecast price for each metal. For the first time, a 1 oz gold bar was awarded to the contributor whose average came the closest to the actual average price for both gold and silver. In the event of a tie, the forecast trading range was taken into account. These rules continue to apply today.

In 1999 with the survey growing in size and popularity, it divorced from the *Alchemist* and became a separate publication. That year the number of contributors swelled to two dozen contributors in gold and 20 in silver. Since then, the number of contributors has continued to grow. For the latest 2014 Survey, there were 28 analysts contributing to gold and 25 to silver. In 2002, the Survey was extended to include two more precious metals, platinum and palladium. So contributors now had twice as much chance of winning a prize (or twice as little chance, depending on how you look at it). Since 1998, there have been a total of 56 prizes awarded to 31 different analysts.

There have been six analysts who have each won two prizes in the same year. Matthew Turner began the trend in 2004, securing the first prize for gold and palladium. He was followed by Ross Norman in 2007 (silver and platinum); Bob Takai in 2008 (silver and palladium); Philip Klapwijk in 2009 (gold and silver); Rohit Savant in 2011 (platinum and palladium) and most recently Rene Hochreiter in 2013 (gold and silver).

The LBMA's Public Affairs Committee is responsible for carefully considering all applications to contribute to the Survey. The decision whether to approve an application is

Table 1: The Precious Metals Premiership Table, 1998 to 2013

		Total number of forecast contributions (a)	1st	2nd	3rd	TOTAL
1	Norman, Ross	48	5	4	3	26
2	Klapwijk, Philip	52	5	2	3	22
3	Hochreiter, Rene	36	5	2	1	20
4	Panizzutti, Frederic	48	3	1	5	16
5	Takai, Bob	48	4	0	1	13
6	Kendall, Tom	24	3	0	2	11
6	Reade, John	27	1	3	2	11
6	Smith, Andy	24	2	2	1	11
9	Steel, James	28	1	3	1	10
9	Stevens, Glyn	18	2	1	2	10
11	Turner, Matthew	34	3	-	-	9
12	Hawkes, Neil	15	2	1	-	8
12	Holmes, David	12	2	1	-	8
14	Lasserre, Frederic	12	1	2	-	7
14	Savant, Rohit	12	2	-	1	7
14	Williamson, Alan	20	1	1	2	7
17	Jollie, David Dr	12	1	1	1	6
17	Nagao, Eddie	8	-	3	-	6
17	Naqvi, Kamal	22	-	2	2	6
20	Aubertin, Philip	4	1	1	-	5
20	Briggs, Stephen	24	1	1	-	5
20	Fertig, Peter	20	1	1	-	5
20	Graf, Adam	12	1	1	-	5
20	Rhodes, Jeffrey	28	1	1	-	5
20	Zumpfe, Alexander	16	-	2	1	5
26	Arnold, Ted	8	-	1	2	4
26	Bahr, Robin	20	1	-	1	4
26	Christian, Jeffrey	40	1	-	1	4
26	Firman, Carl	8	-	1	2	4
26	McCaffrey, Helen	6	-	2	-	4
26	Proettel, Thorsten	8	1	-	1	4
26	Tully, Edel	28	1	-	1	4
26	Widmer, Michael	8	-	1	2	4

(a) The number of forecasts is based on the following. Between 1998 and 2001, forecasters could only submit forecasts for gold and silver. After 2002, they could submit forecasts for platinum and palladium too. Most contributors submit forecasts for all metals, although some submit for only one or a combination thereof. Some contributors sometimes intermittently change from submitting forecasts for all metals to forecasting one or two. When moving between jobs, some analysts stopped contributing for a year and then started again. Those shaded no longer contribute to the Survey.

based on a combination of the relevant expertise, the analytical and forecasting ability of the individual concerned, as well as the reputation and standing of the institution that they represent. Such an application process ensures the continued integrity of the Forecast Survey as one of the most prestigious Surveys in the precious metals market.

Table 1 is based on a scoring system that takes into account first, second and third place finishes in each of the four metal categories between 1998 and 2013. Three points have been awarded to the winner, two points for runners up and one point for finishing third. This is certainly fairer than simply concentrating on the number of 'wins' as there are several contributors who have lost out on the winning prize by the narrowest of margins in recent years. Based on this scoring system, 64 contributors have earned at least one point, although owing to space constraints only those contributors who have scored four points or more feature in the table. Those contributors who appear as shaded in the Table no longer contribute to the Survey.

Top of the pile is Ross Norman, closely pursued by Philip Klapwijk and Rene Hochreiter, each of them having won an impressive five 1 oz gold bars. But Ross is out in front by virtue of more 2nd and 3rd place finishes. In an exciting fight for the top spot, this is the precious metal market's equivalent of the English football Premiership where three clubs, Arsenal, Manchester City and Chelsea are currently vying for top spot.

It will certainly be interesting to see who fares best in the 2014 Survey. The average gold price that forecasters have predicted is $1,219. Ross is the only one of the top three to expect the price to be higher, going with a forecast of $1,274. Both Rene and Philip are more conservative, with bearish predictions of $1,150 and $1,176 respectively. Indeed, they have all adopted a similar stance with their forecasts for the other three metals. Only time will tell whether the relatively bullish forecasts of Ross will help him cement his position at the top of the table or whether the chasing pack will close down his lead.

They say that there are "*lies, damn lies and statistics*", so perhaps I should add some caveats. It is worth noting that some analysts have contributed more forecasts than others. It is therefore not surprising that the top places in the table are dominated by long-standing contributors, which makes the performance of relative newcomers such as Rene Hochreiter (3rd), Tom Kendall (joint 6th) and James Steel (joint 9th) worthy of particular attention. It is certainly possible that they would be even higher up the table had they participated in more surveys. This comment equally applies to other contributors, in particular John Reade and Andy Smith, who both lie in joint 6th place, despite not having contributed to the survey in recent years. Perhaps they should start doing so again! Others worthy of particular mention are Phil Aubertin in 20th place despite having only participated in one survey. In 2010, Phil managed to win the gold prize and finish second for platinum. Adjusting the scores to show the number of points per forecast would see Phil out in front by some way (more on that later). A mention should also go to Glyn Stevens who lies joint ninth place in the table despite only providing forecasts for two metals (platinum and palladium).

Interpretation of the results is very subjective and the scoring could be manipulated in many different ways to take into account any number of other factors but basing the placings on points earned from the top three placings is certainly a simple and reasonably fair approach. An alternative approach would be to show the points earned relative to the number of forecasts that each analyst has participated in. Table 2 shows how many points contributors have scored (based on the scoring mechanism in Table 1) per forecast contribution. Not surprisingly, Phil Aubertin comes out on top having earned 5 points from the four forecast contributions in 2010, earning him an average score of 1.25 per forecast contribution. Unlike Table 1, the top of the table shows a bias towards those who have participated in relatively few Surveys, so it could be argued that there is a bias from such a small data sample. Of those who featured at the top of Table 1, Rene Hochreiter and Ross Norman also feature in the top 10 on the adjusted ratings. The bottom half is dominated by those who have been frequent contributors. And talking of which, if you are in the bottom half of the table, don't forget there are many more contributors who did not even make it onto the table as they had scored 3 points or less (some none at all but they will remain nameless!).

The best of luck to all participants in the 2014 Precious Metals Forecast Survey and particularly to Jonathan Butler, Carsten Fritsch, Sonia Hellwig, Nikos Kavalis, Mitul Kotecha and Edward Mier who are all contributing to the Survey for the first time. Let's hope they can pick up some points and make it onto the table next year.

The results of the 2013 Survey and a preview of the 2014 Survey can be found on page 17. And watch out for the next edition of the *Alchemist* as I will be undertaking a historical review comparing how contributors' forecasts stack up against the actual price outturns.

Table 2: Points per forecast contribution, 1998 to 2013

		Total number of forecast contributions (b)	1st	2nd	3rd	TOTAL	Points per forecast
1	Aubertin, Philip	4	1	1	-	5	1.25
2	Nagao, Eddie	8	-	3	-	6	0.75
3	Holmes, David	12	2	1	-	8	0.67
3	McCaffrey, Helen	6	-	2	-	4	0.67
5	Lasserre, Frederic	12	1	2	-	7	0.58
5	Savant, Rohit	12	2	-	1	7	0.58
7	Hochreiter, Rene	36	5	2	1	20	0.56
7	Stevens, Glyn	18	2	1	2	10	0.56
9	Norman, Ross	48	5	4	3	26	0.54
10	Hawkes, Neil	15	2	1	-	8	0.53
11	Arnold, Ted	8	-	1	2	4	0.50
11	Firman, Carl	8	-	1	2	4	0.50
11	Jollie, David Dr	12	1	1	1	6	0.50
11	Proettel, Thorsten	8	1	-	1	4	0.50
11	Widmer, Michael	8	-	1	2	4	0.50
16	Kendall, Tom	24	3	0	2	11	0.46
16	Smith, Andy	24	2	2	1	11	0.46
18	Klapwijk, Philip	52	5	2	3	22	0.42
18	Graf, Adam	12	1	1	-	5	0.42
20	Reade, John	27	1	3	2	11	0.41
21	Steel, James	28	1	3	1	10	0.36
22	Williamson, Alan	20	1	1	2	7	0.35
23	Panizzutti, Frederic	48	3	1	5	16	0.33
24	Zumpfe, Alexander	16	-	2	1	5	0.31
25	Naqvi, Kamal	22	-	2	2	6	0.27
25	Takai, Bob	48	4	0	1	13	0.27
27	Turner, Matthew	34	3	-	-	9	0.26
28	Fertig, Peter	20	1	1	-	5	0.25
29	Briggs, Stephen	24	1	1	-	5	0.21
30	Bahr, Robin	20	1	-	1	4	0.20
31	Rhodes, Jeffrey	28	1	1	-	5	0.18
32	Tully, Edel	28	1	-	1	4	0.14
33	Christian, Jeffrey	40	1	-	1	4	0.10

(b) The number of forecasts is based on the following. Between 1998 and 2001, forecasters could only submit forecasts for gold and silver. After 2002, they could submit forecasts for platinum and palladium too. Most contributors submit forecasts for all metals, although some submit for only one or a combination thereof. Some contributors sometimes intermittently change from submitting a forecast for all metals to forecasting one or two. When moving between jobs, some analysts stopped contributing for a year and then started again. Those shaded either ceased contributing in recent years.

LBMA Charitable Donations

By Aelred Connelly, Public Relations Officer, LBMA

Since it was formed in 1987, the LBMA has made donations each year to a range of charitable causes. In 2001, the charitable giving was put on a firmer footing when a system of fines was agreed with contributors to the 11:00 forward curves whereby they would pay a fine if they failed to contribute more than three times in a calendar month. In the last 12 years the LBMA has paid more than £90,000 in donations to charitable causes.

These initially consisted of donations to charities in memoriam of past members of the market but was then widened to include charities associated with members of the Association and more recently to also support charities dealing with international disasters and humanitarian causes.

In recent years, income from forward curve fines has tailed off and the Management Committee agreed that the charitable donations should continue using the LBMA's own funds. In 2013, the LBMA donated £5,000 to each of the following charities:

- **The Charity of William Hobbayne** was established in 1484 to help care for the poor. It runs a community centre and provides grants to the poor, elderly and homeless people in the Hanwell area of west London. David Jollie, a member of the LBMA's Public Affairs Committee, is closely associated with the work of the charity. www.hobbaynecharity@btinternet.com

- **Epilepsy Action** is the UK's leading epilepsy organisation and exists to improve the lives of everyone affected by the condition. It is a member-led organisation represented by people suffering from epilepsy, their friends, families and healthcare professionals. The donation was made in memoriam of Christian Pfiefer, of Jefferies Bache, who died on 19 April 2013. www.epilepsy.org.uk

- **DEC Red Cross Philippines typhoon fund**. The donation was made to assist the work of the Red Cross in supporting those affected by the Haiyan typhoon, which left a trail of destruction across the Philippines and 4 million people homeless. www.redcross.org.uk

Previous LBMA Donations

In previous years, the LBMA has made donations to the following charities:

Action Aid, a charity with projects in more than 40 countries, provides food, shelter, work, healthcare and education for the needy.

Arthritis Research works to take the pain away from people living with all forms of arthritis and help them to remain active. It funds high-class research, educating health care professionals and providing information to people with arthritis and their carers. The donation was made in memoriam of Chris Saubergue. www.arthritisresearchuk.org

Cancer Research funds scientists, doctors and nurses to help beat cancer sooner as well as providing cancer information to the public. The donation was made in memoriam of Terry Smeeton, former Head of Gold & Foreign Exchange at of the Bank of England, who died on 12 September 2007. Later, in 2008, the LBMA contributed to the fund-raising efforts of David Longhurst's daughter, Sarah, who ran in a sponsored race called 'Race for Life', raising £27,360 for cancer research. www.cancerresearchuk.org

Chad Relief Foundation (CRF) is an independent non-profit, non-governmental organisation whose objective is to provide assistance to refugees from the Central African Republic in South Chad. www.chadrelief.org

Childhope is a children's charity that supports street children and working children. www.childhope.org.uk

Crohn's and Colitis UK is the working name for the National Association for Colitis and Crohn's Disease (NACC). Founded in 1979, the charity provides information and support, funds research and brings together people of all ages who have been diagnosed with IBD, their families and friends, and the professionals involved in their care. The donation was made to Ross Norman who was running in the Great North Run to support the charity. It took Ross just three days, four hours and 27 minutes to complete the Great North Run. The only run he has managed since is running for his train at Liverpool Street. www.crohnsandcolitis.org.uk

Essex Spina Bifida supports those affected by spina bifada and offers wider support to the families of those suffering from the condition. The donation was made in memory of Andy Hoare's son.

Friends of Hillside is a special community school that caters for pupils who have severe, profound and multiple learning difficulties, some of whom have specific sensory, physical and behavioural conditions. www.hillsidespecial.org.uk

One of the many events organised by Epilepsy Action Charity

Kids Get Going provides sports wheelchairs for children and young adults, encourages participation in sports, and assists with the design and development of wheelchairs. The donation was made to Alan Wallis of Comdaq, who was running the London Marathon in support of the charity.
www.kidsgetgoing.com

Hospice Association of the Witwatersrand, based in Johannesburg, South Africa. Originally set up by Stan and Shirley Henen to provide hospice care and support for the local community. It became known as Greendale House and now has more than 150 full-time staff, including doctors, nurses, social workers and psychologists.
www.hospicewitwatersrand.org.za

Japan Tsunami Appeal set up by the British Red Cross to support those affected by the tsunami that hit the east coast of Japan in March 2012.
www.redcross.org.uk

Jennifer Trust supports those affected by Spinal Muscular Atrophy (SMA). It provides free information and ongoing support to families affected by SMA.
www.jtsma.org.uk

LOOK provides support and information to improve the lives of families with visually impaired children and young people by providing support, expert advice and activities to help those affected to reach their full potential.
www.look-uk.org

One of the many activities supported by the William Hobbayne charity.

St Mungo's supports thousands of homeless people in London and the South of England by providing sheltered accommodation in hostels and specialist services to tackle specific issues, for example, poor health, dependency and unemployment. It also runs an emergency service to help people on the streets in desperate situations.
www.mungos.org

Starfish Greatheart Foundation is an international development charity that brings life, hope and opportunity to children who have been orphaned or made vulnerable by HIV/AIDS.
www.starfishcharity.org

Forthcoming LBMA Member Events in 2014

In addition to the Singapore Forum in June (see advert on page 13) and the annual Conference in Lima in November (see advert on page 22), members of the LBMA may wish to mark in their diaries the following events during 2014.

Annual General Meeting
Glaziers Hall – 11 July 2014

The LBMA's AGM will take place at 16:30 at Glaziers Hall, 9 Montague Close, London Bridge, London, SE1 9DD.

This will be followed by an informal drinks reception at 17:30. See LBMA News on page 24 for further details.

LPPM/LBMA Cocktail Reception
New York – 18 September 2014

The LPPM, together with the LBMA, will be holding a joint Cocktail Reception for their members and invited guests on Thursday 18 September 2014 from 17:30 to 20:00, in the Villard Ballroom, New York Palace Hotel.

Any members wishing to receive an invitation please contact admin@lppm.com

LBMA Biennial Dinner
Guildhall – 1 December 2014

The LBMA's biennial dinner will be held this year at the Guildhall, Gresham Street, PO Box 270, London, EC2V 7HH.

There will be a Cocktail Reception at 18.30 followed by dinner at 19.30. As usual, this will be a black tie event, and is open to Members, Associates and their guests.

DIARY OF EVENTS 2014

MARCH
17-20
10th Asia Mining Congress
Singapore
www.terrapinn.com/2014/

APRIL
6-7
Dubai Precious Metals Conference 2014
Dubai, UAE
www.dpmc.ae/

8-11
Denver European Gold Forum
Zurich, Switzerland
www.europeangoldforum.org/egf13/

MAY
12-13
Metals & Minerals Conference
New York, USA
www.metalsandmineralsevents.com/ny

19-23
LPPM Platinum Week
London, UK
www.lppm.com

20-22
11th International Gold & Silver Symposium
The Westin Lima Hotel & Convention Centre
Lima, Peru

29-30
Hong Kong Precious Metals Summit
Hong Kong, China
www.precioussummit.com/

JUNE
7-10
IPMI 38th Conference
JW Marriott Grande Lakes, Orlando, Florida
www.ipmi.org

24-25
LBMA Bullion Market Forum
Singapore
Marina Bay Sands Hotel, Singapore
events@lbma.org.uk

JULY
11
LBMA AGM
Glaziers Hall, London
events@lbma.org.uk

AUGUST
4-6
Diggers & Dealers Forum 2014
Kalgoorlie, Australia
www.diggersndealers.com.au/

11-14
XII International Platinum Symposium
Yekatennburg, Urals
Russia
http://conf.uran.ru

SEPTEMBER
10-12
China Gold Congress & Expo 2014
Beijing, China
www.china-gold.org/en

10-12
Precious Metals Summit
Park Hyatt Beaver Creek
Colorado, USA
www.precioussummit.com

14-17
Denver Gold Forum 2014
Hyatt Agency, Denver, CO, USA
www.denvergold.org/gold-forums/

17
CME Group Precious Metals Dinner
New York, NY
www.cmegroup.com/metals

18
LPPM/LBMA Cocktail Reception
New York Palace Hotel, New York
admin@lppm.com

18
IPMI's 2nd NY Platinum Dinner
New York Palace Hotel, New York
www.ipmi.org/

22
International Mining Conference
Melbourne, Australia
www.imarcmelbourne.com/

OCTOBER
20-23
LME Week
London, UK
www.lme.com/lmeweek.asp

20-23
China Mining Congress & Expo
Tianjin Meijiang Convention & Exhibition Center
Xiqing District, China
www.chinaminingtj.org/en/

NOVEMBER
4-5
Europe Precious Metals Summit
Switzerland
www.precioussummit.com/

9-11
LBMA Precious Metals Conference 2014
Western Lima Hotel & Convention Centre, Lima, Peru
www.lbma.org.uk

DECEMBER
1
LBMA Biennial Dinner
Guildhall, London
events@lbma.org.uk

Regulation Update

– The LBMA's Responsible Gold Programme

By Ruth Crowell, Chief Executive, LBMA

Since the publication of the last *Alchemist*, the following refiners have successfully passed the LBMA's Responsible Gold Audit Programme:

- Aurubis AG, Hamburg, Germany
- C. Hafner GmbH + Co. KG, Pforzheim, Germany
- Heraeus Ltd, Fanling, Hong Kong
- Heraeus Precious Metals GmbH & Co. KG, Hanau, Germany
- Ishifuku Metal Industry Co., Ltd, Soka Saitama, Japan
- LS-NIKKO Copper Inc, Onsan, Korea
- Rand Refinery (Pty) Limited, Germiston, South Africa
- Republic Metals Corporation, Miami, USA
- SEMPSA Joyería Platería SA, Madrid, Spain

The refiners listed above have successfully passed an LBMA independent third-party audit for 2012 production, confirming they comply with the LBMA's Responsible Gold Guidance. The audit reviewed the refiners' production over a 12 month period.

At the end of 2013, the LBMA received an overwhelming number of audit reports from Good Delivery refiners. Of the 68 existing Good Delivery Gold Refiners on the List, 53 have undergone a Responsible Gold audit.
The outstanding 15 refiners are in contact with the LBMA. Some of them have requested and received an extension to combine their 2012 & 2013 audits. Others had an automatic extension given they had a later financial year. All Good Delivery Gold Refiners were given twelve months following their 2012 financial year close to undergo a Responsible Gold audit. For some refiners, this means submission by 31st March, 2014. While low level instances of non-compliance were identified, on the whole the Good Delivery List received positive reviews from the auditors, with no instances of zero-tolerance having been identified.

The LBMA has encouraged the outstanding refiners to undergo a Responsible Gold audit as soon as possible, regardless of financial year. This is to assist any US clients who need to meet the conflict mineral rules for Dodd-Frank Section 1502.

Through mutual recognition of other industry initiatives, the LBMA also recognises that refiners have achieved compliance with the Responsible Gold Guidance by achieving either the Responsible Jewellery Council's Chain-of-Custody certification or Electronics Industry Citizenship Coalition (EICC) CFSI audit protocol.

Responsible Gold Guidance – Background

The LBMA has taken its role as accreditor of the world's gold refiners and expanded the scope of its requirements, to include OECD Due Diligence, by the creation of the Responsible Gold Guidance. The Guidance operationalises and extends the OECD Gold Supplement for refiners and builds on existing Anti-Money Laundering and Know Your Customer management systems and auditing practices. It also makes what is a voluntary system (the OECD Guidance) mandatory for all LBMA Good Delivery gold refiners wishing to be accredited for the London Bullion Market. This framework is intended to assure investors and consumers that all London gold stocks are conflict-free due to compliance with an audited, conflict-free process. The Guidance however, goes beyond conflict and also addresses other responsible sourcing issues such as money laundering and terrorist financing.

ICGLR-OECD-UN GoE Joint Forum on Responsible Mineral Supply Chains
The next OECD meeting on Responsible Mineral Supply Chains will take place in Paris, during the period 26-28 May. The LBMA will update Members and Refiners as to the schedule of the meeting when it is announced.

LBMA News

By Ruth Crowell, Chief Executive, LBMA

MEMBERSHIP

On 16 December, Trafigura PTE Ltd was admitted as an Associate.

GOOD DELIVERY LIST

On 19 December 2013, the gold refineries of Nihon Material Co., Ltd of Japan and Ohio Precious Metals, LLC of USA were admitted to the Gold List.

On 27 January, the silver refinery of SAXONIA Holding GmbH of Germany was added to the Silver List. Additionally on 17 February, the gold refinery of Republic Metals Corporation of the USA was admitted to the Gold List.

COMMITTEES

Management Committee

As well as reviewing the work of the Sub-committees below, the Management Committee held one of its regular strategy sessions in December to discuss the challenges facing the industry and the future vision for the association. One key decision from that meeting was to revisit Membership criteria with a view to allow more refiners to become Full Members of the Association. Another key point was to have more involvement and focus on the international bullion market. This influenced the decision to hold a Singapore Bullion Market Forum on 25 June in addition to the annual Conference in Peru later in the year.

The Committee has also grappled with deciding the best way forward for the LBMA's involvement in forward benchmarks. Having formalised procedures in order to meet July deadlines for IOSCO compliance, the Committee is investigating a number of options, including the future administration of the GOFO benchmark.

Regulatory Affairs Committee

The Regulatory Affairs Committee has focused primarily on ensuring that GOFO and the end of day Forward Curves are compliant with the IOSCO benchmark principals. This has involved formalising the contribution and administration procedures for both datasets. The LBMA has created a mandatory Code of Conduct which Forward Market Makers will be contractual obligated to follow. It has also drafted a Best Practice documents for contributors to follow for their own internal controls.

The other main area of focus for the RAC has been the Responsible Gold Guidance. For further information, please see the Regulation Update on page 23.

Finally the RAC has also reviewed the recent draft regulation for CFTC position limits as well as Basel III implementation which was announced earlier in the year..

Physical Committee

In its three meetings during the first quarter of 2014, the Committee has continued to monitor a record number of applications for Good Delivery accreditation. Including the two refiners mentioned above which achieved accreditation in this period, the Executive has been processing six gold applications and seven silver applications from refiners in seven different countries. In addition, ten refiners are currently preparing applications which are yet to be submitted.

A new version of the Good Delivery Rules was recently uploaded onto the website. This edition, officially dated December 2013, contains a substantial number of changes and clarifications. These are shown in detail in the preamble to the Rules and are also included in a pdf document showing the history of all the versions of the Rules since 1934 which is also available in the Good Delivery section of the LBMA website. The Committee also oversees the LBMA's Proactive Monitoring of existing refiners. Recently a number of related issues have been addressed, including the impact of currency changes on refiners' tangible net worth, assaying accuracy and bar quality.

In relation to the work of the London market vaults, further progress has been made in the development of an accreditation scheme for vault staff. This will involve both online learning and testing of vault operators. Also in the vaulting area, there is another recent addition to the website in the form of an application form which can be used by member companies with vaults who wish to apply for Approved Weigher status. This form describes both the information that needs to be provided by such applicants and the procedure which is followed by the Executive for assessing their weighing competence.

The Physical Committee works closely with the Referees group which met in London to consider a number of technical matters related to the Good Delivery System. The main topic was the programme for the next Assaying and Refining Seminar which will be held in London in mid-March 2015. Referees considered the draft report on the third annual Proficiency Testing Scheme for fire assayers, in which 41 laboratories participated, including, for the first time, those of some of the Supervisor companies. The group also reviewed progress with AuRM3 (the latest gold reference material to be produced under the auspices of the LBMA). This has a fineness of approximately 995 with certified quantities of 12 of the elements commonly found in such gold. The project steering committee under the chairmanship of Dr Mike Hinds of the Royal Canadian Mint is currently reviewing the analytical results provided by the 11 participating laboratories and it is expected that the reference materials will be available for delivery to advanced purchasers by June.

Public Affairs Committee

The PAC have been focusing their attention on the planning of the next conference, which will be held at the Westin Lima Hotel & Convention Centre in Lima, Peru on 9-11 November, 2014. This will be the first time that the LBMA has held its conference in Latin America and represents the fulfilment of a promise made to the Peruvian industry in 2009 (when the financial crisis resulted in the conference being switched to Edinburgh). The Committee are in the process of preparing the speaker programme for the conference taking into account feedback received from delegates attending the conference in Rome. In addition, the Committee are looking at ways to improve both the networking opportunities as well as the use of technology at the conference.

The Committee is also assisting with the preparations for a Bullion Market Forum which is to be held in Singapore on 25 June, 2014. The forum will be held at the Marina Bay Sands Hotel in Singapore. The purpose of the forum is to focus on and encourage the development of the Singapore bullion market. Registration opens in March and programme details will follow in due course. Similar meetings have been held in the past in Moscow, New Delhi and Shanghai to focus primarily on local bullion market issues.

The Committee has also agreed to again hold a joint cocktail reception with the LPPM on 18th September, in New York, for their members and invited guests. This will be along similar lines to the one held in New York last year. Please see page 21 for details.

The PAC approved three charities last year to benefit from the LBMA's charitable fund. Full details can be found in the article on page 20.

Finance Committee

The main focus of the Finance Committee has been helping to prepare for the 2013 audit which will be presented to the Committee by the auditors at its next meeting in April, when it will also consider, for approval, the 2014-15 forecast budget. The Committee has also been reviewing the budget for LBMA events scheduled during 2014.

Annual General Meeting

The Annual General Meeting of the LBMA will take place in

Glaziers Hall, 9 Montague Close, London Bridge on Friday, 11th July at 16:30. This is an ideal opportunity for any interested staff in Member and Associate companies to hear about what the LBMA has been doing and to meet representatives of other member companies. This year it will be the turn of the four Ordinary member representatives to be elected (or re-elected). In line with the usual procedures the documentation including nomination forms for the management committee election will be circulated to the LBMA contact in each member company in advance of the meeting. The AGM will, as usual, be followed by an informal drinks reception at 17:30.

LBMA Staff

Sunny Field will join the LBMA Executive as its new Operations Director on 12 May. Prior to joining the LBMA, Sunny acted as Operations Manager at Mitsubishi Corporation International (Europe) Plc.

Another staff change to report is the recent appointment of Juliet Pithers as the LBMA's Finance Officer. Juliet is responsible for all finance related matters including preparation of management and end year accounts, budgets, forecasts and VAT returns.

Market Moves

Peter Macho joins ANZ

Peter Macho has joined ANZ to work in Sydney as a senior metals trader to manage flow and pricing inquiries from the bank's Asia/Pacific clients and sales teams. The Sales/Trading desk in Sydney now comprises John Levin, Nick Socratous and Peter Macho, with a combined precious metals experience of over 65 years between them.

Wallace Ng joins Gerald Metals

Gerald Metals is pleased to welcome Wallace Ng as Vice President in charge of precious metals trading in Shanghai. He started with Gerald on November 1, 2013 and brings 20 years of market experience to the group. Previously with ABN Amro, Fortis Bank, Mitsui and UBS, in his position as head of precious metals trading, he will be responsible for business management and development, expanding upon his already strong foothold in the region in precious and base metals.

Stephen Branton-Speak joins BOCI

Stephen Branton-Speak has joined Bank of China International (BOCI) as an adviser to help expand its commodities business. His initial focus will be on investor products and physical metals.

Keep Calm and Carry On

Editorial Comment by Ruth Crowell, Chief Executive, LBMA

As the LBMA's New Chief Executive, it's an honour for me to speak directly to the market. So much has happened in such a short space of time since I took over the reins at the turn of the year and so much more lies ahead on the horizon. The "normal" LBMA Executive work continues apace. As well as the annual conference which this year will take place in Peru in November we are also organising a Bullion Market Forum in Singapore on the 25 June. We are also taking on more new members and refiners to join the ranks of the Membership and the Good Delivery List. The LBMA committees meet on a regular basis to tackle the ever growing list of issues facing the bullion market. You can read about all of these issues in more detail in LBMA News.

As you will see from the front cover of the *Alchemist* we will be also be launching our new website very soon. This has involved a major overhaul of the design, format and structure of the current site, making it much easier for those accessing the site to find the information that they are looking for. In addition, we have added new features including more imagery and an automatic price feed for the gold, silver and GOFO prices. I am very excited about the new website and I trust that you will find it a major improvement on the current site which has begun to look tired in recent years.

> *"For my first editorial I would like to concentrate on regulation which is affecting all commodity markets and taking up an increasing amount of the Executive's time."*

For my first editorial I would like to concentrate on regulation which is affecting all commodity markets and taking up an increasing amount of the Executive's time. After all, whilst those in the housing market often think in terms of location, location, location, for the commodities markets, its regulation, regulation, regulation.

"My experience has been that businesses can deal with regulation. What they can't deal with is uncertainty." - Benjamin Lawsky, Superintendent, State of New York Department of Financial Services.

While Mr Lawsky's comment was made in relation to the bitcoin market, the sentiment equally applies to the commodities markets. There has been a good deal of uncertainty in the market in recent years following the financial crisis and the subsequent raft of US and EU regulations. Indeed, since the US Dodd Frank Act of 2010 the market has been faced with conflict minerals regulations, OTC derivative regulations, Basel III implementation and most recently IOSCO benchmark regulations.

> *"The London bullion market dealt with the fallout from the financial crisis and it will deal with the regulatory changes that it now faces. It is important however, that a calm, strong response and a long-term perspective are maintained."*

Fortunately, the LBMA had the foresight to respond to this wind of change and defend the interests of the bullion market by setting up the Regulatory Affairs Committee (RAC) in January 2011 to tackle the brunt of the extra regulatory burden. The LBMA has also enjoyed a close working relationship for many years with both the Bank of England and the FSA (now FCA). When gold was included in the US Dodd-Frank legislation, this threatened to destabilise the global gold market. The LBMA responded to this by extending Good Delivery accreditation to cover responsible sourcing, through the creation of the Responsible Gold Guidance. The Guidance provided refiners with a tool to demonstrate not just compliance with regulations on conflict minerals, but other responsible sourcing issues, such as those relating to anti-money laundering. The long-term vision and expanded scope means that the market has not only tackled one threat, but has also put systems in place to adapt to future threats too.

There have been other Dodd-Frank regulations in relation to derivatives as well as recent EU regulations, including EMIR, which have focused on reporting requirements for forward markets. We still await final MIFID definitions although it is not clear at this stage what exactly will be included. The RAC and the LBMA Executive will continue to keep a close eye on regulatory developments and respond to them as and when appropriate.

Of particular interest in the current regulatory climate are commodity benchmarks. And the bullion market like the rest of the commodities market is preparing itself for compliance with IOSCO benchmark principles by the July deadline. For the LBMA, this means ensuring that GOFO and the end of day forward curves are compliant with IOSCO principles. In this respect work continues on preparing a code of conduct to provide guidance both to contributors and to the LBMA Executive on the various aspects of compiling and publishing these benchmarks. In parallel with this work the Gold and Silver Fixing Companies are undertaking a similar review to ensure that the gold and silver fix benchmarks which they administer are also compliant.

This increased regulatory focus has inevitably attracted media attention. Recently, there has been some negative press coverage, such as the recent allegations of manipulation of the London gold fixing price. There is no evidence to suggest that this is the case and on page 14 you can read an article written by Peter Fertig who counters such allegations with a detailed explanation of the price setting procedures.

The London bullion market dealt with the fallout from the financial crisis and it will deal with the regulatory changes that it now faces. It is important however, that a calm, strong response and a long-term perspective are maintained. There are important decisions ahead of the market as we look forward to the challenges facing us in 2014 and beyond. However, I have no doubt that the market will respond to each of the challenges it faces with the same determination and cooperation that it has always done. This evokes the opening lines of *If* by Rudyard Kipling, *"If you can keep your head when all about you are losing theirs and blaming it on you"*. It is important that we keep our heads and trust that the bullion market will continue to thrive as it has done throughout its long history.

Ruth Crowell, *Chief Executive*
Ruth is the Chief Executive of the LBMA with responsibility for the strategic commercial development of the Association, Regulatory Affairs, Intellectual Property, Communications and Events.

She acts as the LBMA's main contact for regulatory affairs related issues and the Association's work on supply chain due diligence, especially with regard to the LBMA's Responsible Gold Guidance. She also represents the Association at industry, governmental and multi-stakeholder regulatory forums. Most recently she served as the co-facilitator of the OECD Interim Governance Group as well as the co-facilitator of the Gold Supplement Drafting Committee.

She has an MSc in History of International Relations from the London School of Economics and a degree in English Literature from Kenyon College in Ohio.

facing facts

William Tankard, Research Director, Precious Metals Mining, Thomson Reuters, GFMS

Gold Mining Costs

During the first nine months of 2013, global total cash costs averaged $768/oz, compared to $740/oz during the same period in 2012, a rise of 4%. Total cash costs averaged $747/oz in 2012, and continued to increase into 2013, reaching a peak of $796/oz in the first quarter. However, results from Q2 and Q3 indicate that this upward trend has faltered, with a slight fall in total cash costs, although much of this is likely attributable to higher output and consequently lower unit costs. This represented a substantial slowing of the cost escalation seen in recent years, reflecting industry-wide attempts to reduce production costs as margins continued to contract due to a combination of rising costs and a falling gold price. Total production costs, which comprise depreciation and amortization in addition to total cash costs, showed a similar trend, reaching $997/oz in the first nine months of 2013, a 5% rise year-on-year. By either metric, a decrease was seen in the second and third quarters (as shown in the chart), although as the gold price has continued to trend downwards, simple cash margins have been squeezed, from a peak of $1,032/oz in the third quarter of 2011 to $591/oz in the same period last year.

At the time of writing, we approach 'reporting season' with many of the producers due to declare results for fourth quarter activities in the coming week. At this time we expect a number of companies to confirm further reductions to unit costs and provide additional information on what is being done to drive further sustained improvements. Across the major gold miners, the corporate message is fairly consistent, with a focus on efficiency, capital discipline, margin preservation and, in some cases, portfolio rationalisation. As a general rule we expect producer guidance to be surpassed in fourth quarter results.

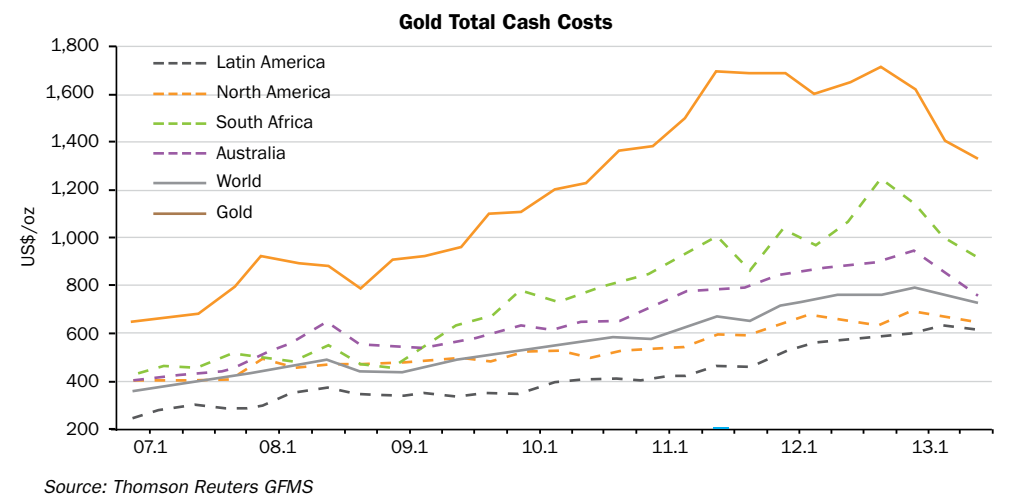
Where we do see potential for further upset is on asset impairments. The average all-in cost, a proprietary GFMS metric that includes ongoing capital costs, indirect costs and corporate costs, is estimated to have averaged approximately $1,350/oz in 2013, a 9% increase on the all-in cost for 2012. We expect much of this increase to result from asset write-downs, reclamation and remediation costs, as producers closed marginal operations. Excluding such factors, we expect the all-in cost to be in the region of $1,200/oz for 2013, but expect this figure has potential to be reined in for the following year. Similarly, projects are being reviewed with growing scrutiny. Advanced projects where the vast majority of capital has already been spent continue to be pushed through to completion. Further upstream though, producers have been taking an increasingly critical view on opportunities that still require significant investments outstanding, with prominent examples of this being the deferral of Barrick's Pascua Lama and Polyus Gold's Natalka projects.

If gold prices continue to slide, which we do expect to be the case as stimulus measures are removed from the western markets, the pressure on producers will clearly become more substantial. However in addition to saving costs in absolute terms, we note that it is possible to drive down unit costs simply by producing more (as the platinum industry attempted albeit with little success in 2010/11). Grade may often be the easiest way to achieve this (although as a practice 'high grading' has in recent years been avoided since it shortens asset life), and will happen at many operations as a corollary of reserve cut-off grades being lifted. Plant recoveries can in many cases be optimised further and in recent months we have spoken to some producers that are carrying out low capital plant improvements that, through improved recoveries, will deliver payback on capital investment within a matter of months. An increase to throughput rates will have a partially beneficial effect through economies of scale and this appears to have started to become a theme in recent quarters.

At an Indaba presentation last week in Cape Town AngloGold Ashanti offered good clarity on the efforts being made to rein costs in further. Having last year made substantial reductions at its head office, it detailed that corporate and exploration costs will have more than halved by 2014 versus 2012 with a planned reduction of $460million. Elsewhere, it detailed a targeted $500million a year of sustainable operating savings, with around two-thirds of that to come from the mining, processing and finance functions. The company is far from alone in this planning: all producers are now striving to thrift costs where possible. After ten years of relative largesse throughout the industry, made possible through the gold price rally, we expect improvements to be readily achievable.

In summary, we think that even with some smaller and mature mines likely to close this year (in part owing to lower gold prices), thanks to cost reduction efforts global production is likely to remain resilient at levels similar to 2013's record of around 3,000 tonnes, before the effects of a thinned project pipeline will later take its toll on production volumes. As was the case in the late 1990s, producers will find ways to 'trim the fat' in order to maintain margin.

William Tankard, Research Director, Precious Metals Mining, Thomson Reuters GFMS
Having joined GFMS Ltd as a Metals Analyst in 2005 to cover the mining sector, William was brought across to Thomson Reuters in GFMS' 2011 acquisition and holds the role of Research Director – Precious Metals Mining, within Thomson Reuters' Commodity Research & Forecasts division. He has accountability for the mining team's research output of global production, mining costs and producer hedging research across the precious metals.



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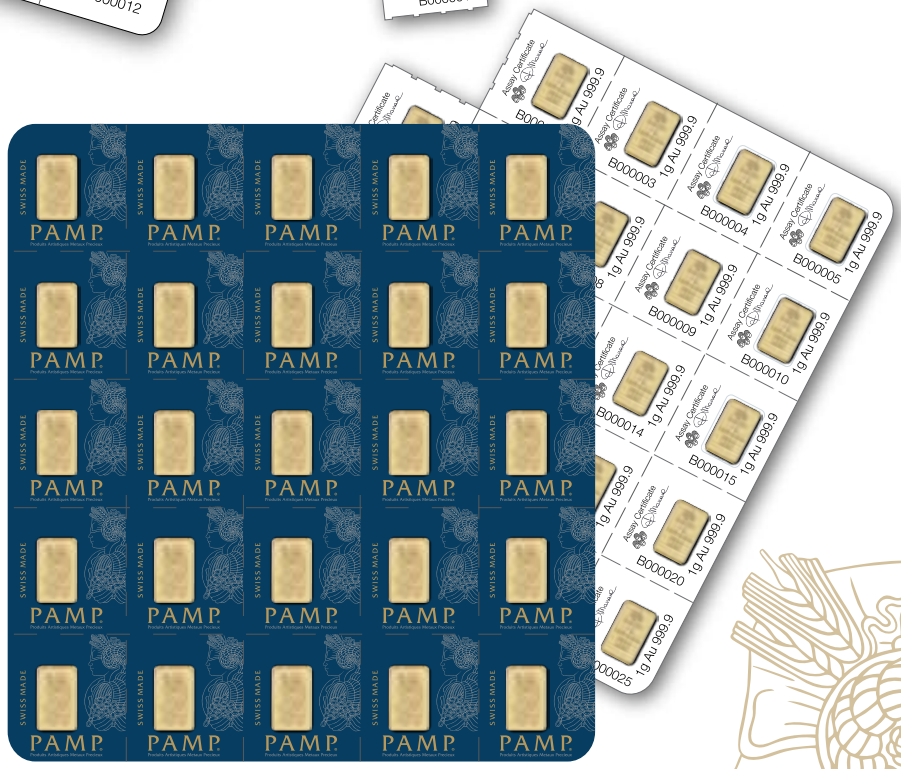

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