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Alchemist

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In this issue

The Sikh Gurdwara Golden Temple in Amritsar, Punjab, India. An article about the Bond and Gold Monetisation Schemes in India, by Bhargava N. Vaidya, appears on page 3. The LBMA will also be hosting a Cocktail Reception on 21 August in Goa at the 12th India International Gold Conference.

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LONDON PLATINUM & PALLADIUM MARKET

India: Sovereign Gold Bond Scheme and Gold Monetisation Scheme

By Bhargava N. Vaidya, Proprieter, B.N. Vaidya & Associates

India has significant problems as far as its gold stocks are concerned. It is estimated that the public has stockpiled more than 25,000 tonnes of gold. Each year, India imports between 800 and 1,000 tonnes of gold for domestic consumption, out of which an estimated 300 tonnes is for investment purposes. In terms of value, gold is the second-largest import commodity, next only to petroleum.

These factors have created significant pressures on regulators in India to:

- Reduce fresh imports of gold, and
- Release into the economy the value of gold that is currently locked away in households (i.e. is not generating any value to the economy).

Since 1962, there have been a number of schemes designed to divert gold investment towards more productive economic assets, mainly government bonds. Small saving schemes were launched by the government to target small investors and farmers (through post offices and agents) and dissuade them from investing in gold. However, such approaches by economists or politicians have resulted in little improvement.

Gold imports and the holding of primary gold was banned from 1962 to 1992. And even today, gold imports are subject to restrictions. In the last two years, there have been many new schemes to restrict gold imports, including a dreaded 80:20 scheme. Dore is imported at a premium rate into India, yet gold jewellery from certain countries is subject to much lower rates of duty.

> *"In the last two years, there have been many new schemes to restrict gold imports, including a dreaded 80:20 scheme."*

This article discusses two schemes planned by the government as a potential long-term solution to India's bullion import problems.

The current government has announced two schemes, the Sovereign Gold Bond Scheme and Gold Monetisation Scheme, for public consultation, in order to reduce gold imports into India and divert investment to more productive areas of the economy. The main features of each scheme are summarised below and table 1 compares the features of the Gold Deposit Scheme, which is currently in operation, with the proposed Gold Monetisation Scheme.

Sovereign Gold Bond Scheme

This scheme is designed to reduce the current and future hoarding of gold. We believe it will succeed in this aim because it is very convenient for a typical gold customer to participate in it, particularly since the minimum values to participate in the scheme are low.

The main features of the scheme are:

1. Investment is available in small quantities of 2, 5 or 10 gms at a derived transparent gold price.
2. It is only open to Indian residents.
3. The maximum investment is 500 gms in a year.
4. The interest rate paid is between 2% and 3% per annum.
5. The tenure of the bond is five to seven years.
6. It can be pledged against loans.
7. It offers easy liquidity as it would be traded on a commodity exchange.
8. It is marketed by small saving scheme agents, NBFCs, etc. on payment of commission.

The main advantages to investors are:

1. Gold is bought at a wholesale price even for small denominations.
2. Compared to the alternative options such as ETFs, there are no transaction costs.
3. Interest can be earned.

Under this scheme, any cost of operation or promotion would be on the government's balance sheet and this would make it very easy to market and launch. There are no additional costs associated with launching the scheme as the infrastructure required is already in place.

This scheme will drive away all retail investors from gold ETFs in India as this is a paper gold, which would give interest over and above the gold rate benefit, while an ETF would have load (in India, the load is between 1% and 2.5% negative interest). Gold ETFs have been on a downward trend, but this scheme may give it a death blow in India.

Year	Gold ETF AUM Rupees (millions)
2013	11,647,8. 2
2014	8,676,3.2
2015	6,654,8.7

Source: AMFI

In the past, many jewellers used to run similar schemes that allowed people to participate in a GAP run by a jeweller or to buy a Gold Deposit Certificate from a jeweller. There were many 'mom and pop' stores who had each collected for their use gold in quantities above 100 kgs. This scheme is simply an institutionalised version of what people had been doing before.

Gold Monetisation Scheme

This scheme is designed to collect gold from the stock that is held by Indian households, trusts and temples. It is largely based on a scheme that is currently run by the banks called the Gold Deposit Scheme.

Under the new Gold Monetisation Scheme, it is planned to reel in hallmarking centres so that investors can know what the purity of the gold is and therefore understand the value of the jewellery. This allows them to make judgements such as whether to withdraw their holdings at any point they choose.

Another feature of the scheme is that local refineries will be required to reduce the time taken to refine the gold deposits received and to issue certificates to depositors.

Another change to the current Gold Deposit Scheme is that the minimum amount of gold that can be deposited has been reduced from 500 gms to 30 gms.

The main reasons why the Gold Deposit Scheme has not worked are:

- There is no method to hedge against changes in the rate of import duties, and
- There are currently local taxes on the movement of gold within India.

At present, there are various local taxes levied for all commodities (gold and jewellery are both defined as commodities). When moving from one state to another in India, each city imposes its own local levies, such as *octroi*, which adds to the costs.

There is no platform available to hedge duty movement and, as such, this will have to be done with the assistance of the government.

Another major drawback for the Gold Deposit Scheme has been that the banks that have to run the schemes would prefer to borrow gold from the international market at 1% per annum, rather than working with a large number of retail domestic investors. For example, if a bank accepted a gold deposit of 100 gm from 'x' on 1 January 2012 when duty was 2%, this gold might have been sold/priced with a market participant on 27 February 2012 at the market rate at that time and hedged for gold rate and INR/USD exchange rate. If the import duty increased to 4% on 1 March 2012 (the current rate is 10%), this would represent a loss of 2% to the bank because it has a liability on maturity to replace the gold at local rates.

The initial cost of marketing and balance sheet costs were a financial burden on commercial banks and, as such, they were not interested in promoting the Gold Deposit Scheme.

If the Gold Monetisation Scheme is launched, like a sovereign gold bond by a government body (to reduce balance sheet cost) with necessary tax exemption (on indirect tax), then the Gold Monetisation Scheme would be a huge success.

Bhargava N. Vaidya, Proprieter, B.N. Vaidya & Associates
Bhargava was educated at the University of Mumbai and is a Fellow of the Institute of Chartered Accountants of India. He began his association with the bullion industry in 1992.

He is an advisor to the India Bullion and Jewellers Association, a member of the Member of the Gem & Jewellery Committee of FICCI and other industry bodies such as the Gem & Jewellery Export Promotion Council (GJEPC).

He has assisted many banks in setting up bullion operations, contributed to reforms in the bullion market in India, as well as providing advice to official bodies such as the Forward Market Commission, the Reserve Bank of India and SEBI, helped launch Gold ETFs in India and acted as an advisor to number of players in the Gems & Jewellery sector. He regularly speaks at industry events, for example those organised by the WGC and the LBMA.

Table 1: Comparison of the Gold Deposit Scheme and Gold Monetisation Scheme

	Gold Deposit Scheme	Gold Monetisation Scheme
Purpose	To mobilise the idle gold in the country and put it into productive use. To provide the customers an opportunity to earn interest income on their idle gold holdings.	To mobilise the idle gold in the country and put it into productive use. To provide the customers an opportunity to earn interest income on their idle gold holdings.
Eligibility	Any Indian resident in one of the following categories: • Individuals, singly or jointly (as deceased or living) • Hindu Undivided Family (ie a separate taxable entity) • Trusts • Companies	Any Indian resident in one of the following categories: • Individuals, singly or jointly (deceased or living) • HUFs (ie a separate taxable entity) • Trusts • Companies
Minimum quantity	500 gms (gross) – no upper limit applies	30 gms
Period of deposit	Either 3, 4 or 5 years (option for early withdrawal allowed after 1 year)	Minimum of 1 year
Rate of interest and payment	The current interest rate is approximately 1% per annum. Interest is calculated in gold currency (XAU) and paid in equivalent rupees.	The current interest rates is approximately 1% per annum. Interest is calculated in gold currency (XAU) and paid in gold form (gms).
Issue of Gold Deposit Certificate	Gold Deposit Certificate will be issued by the bank. After issuing the certificate, the gold is melted, assayed and minted at India Government Mint (IGM).	Gold Purity Certificate will be issued by the collection centre (i.e. listed BIS certified hallmarking centre). After producing certificate, the bank will open a Gold Savings Account. Gold may be refined by any authorised refiner.
Loan facility	Rupee loans available up to 75% of the notional value of the gold.	Rupee loans facility proposed.
Tax benefits	Exemptions from income tax, wealth tax and capital gains tax available.	Similar tax benefit under Income Tax Act proposed.

The Growth of the Gold Market in China

By Ms Shen Gang, Vice President of the Shanghai Gold Exchange

This is the transcript of the welcome speech which Ms Shen Gang delivered at the LBMA Bullion Market Forum in Shanghai on 25 June, 2015

Ms Shen Gang delivering her welcome address at the Forum.

It is a great pleasure for me to attend this year's Forum featuring the theme 'Co-operation and Integration of Global Markets in the Context of a More International China Gold Market'. This Forum is a grand gathering where professionals from the gold and precious metals industry around the world meet to address the future development of global gold markets. Officials of the People's Bank of China (PBC) and Shanghai Municipality have attached great importance and provided vigorous support to this Forum – a joint effort by us and the London Bullion Market Association (LBMA) – and have tasked us to hold a successful event. We would like to take this opportunity to hold extensive conversations and discussions with all of you to enhance the co-operation among international gold markets and to identify their hotspot issues, so as to foster a deeper integration between China's gold market and global markets, and to contribute our share to the sustained and healthy development of global gold markets.

Since 2004, China's gold market, with the Shanghai Gold Exchange (SGE) as its nucleus, has grown into a 'positive force' in the global gold market.

It was also in Shanghai back in 2004 that PBC's Governor Zhou Xiaochun attended the annual conference on precious metals hosted by the LBMA. During his speech, Mr Zhou asked China's gold market to make "three transitions", which shed light on the future direction of China's gold market. For more than a decade following that conference, the Shanghai Gold Exchange has been committed to achieving these three transitions by enhancing its systems, introducing innovative products and improving its services. While consolidating its position as the largest exchange for spot gold in the world, the SGE has also been striving to expand market functions, increase market size and refine the "gold market with Chinese characteristics". These efforts have helped deliver the following:

1. An improved multi-tiered gold market system.
Currently, China's gold market has developed a basic multi-tiered market system with the exchange-based SGE spot gold market at the centre supported by the gold futures market of the Shanghai Futures Exchange and the OTC gold market of the commercial banks. Such a system is empowered by the differentiated positioning, mutual complementarity and specific focuses of these various institutions. By providing comprehensive market services through multiple channels, these institutions have addressed the diverse market needs of different types of investors. The gold market is gaining influence in China's financial market and global gold markets at large.

2. Major breakthroughs in marketisation and internationalisation.
As a national-level exchange, we shoulder great responsibility in reforming and developing China's gold market and must therefore adhere to a development strategy centred on marketisation and internationalisation. Marketisation requires that China's gold market grows stronger and more competitive and that the philosophies underpinning these market-based operations be organically integrated with our products, services, systems and talent development, so as to inspire additional vitality in the SGE markets. Internationalisation means the interconnection between domestic and international markets, so as to not only let international investors understand China's gold market, but also enable them to participate, which will help achieve the internationalisation of gold market participants, trading funds, gold pricing, and delivery, storage and transportation.

> *"By providing comprehensive market services through multiple channels, these institutions have addressed the diverse market needs of different types of investors."*

The success of the SGE's international board is the fruit of our dedication to marketisation and internationalisation.

3. Better services to market.
Leveraging the strength of its exchange-based services, the SGE has been continuously expanding the range of trading products and participants and, at the same time, providing such services to OTC markets as price asking functions, leasing, registration, transfer and clearing, thus developing a market service system encompassing both exchange-based and OTC market functions covering trading, clearing, settlement and delivery. This market service system consists of a price matching market, a price asking market and a leasing market, and integrates the domestic main board market with the international board market. Supported by such a system, the SGE has become a market service institution offering diverse market functions such as spot trading, forward (T+2) trading, options trading, leasing, hedging, risk mitigation and investment. It is fulfilling its role as a major trading hub and is receiving growing attention from the international market as a result.

A gold mine in the Qinghai province of China.

4. Substantial support to the real economy. SGE members account for 80% of China's annual gold production and 90% of national gold consumption and refining capabilities. Rapid development of the gold market has revitalised the gold industry and helped a number of large companies in the mining industry to go public, including China National Gold Group, Shandong Gold Group, Zhaojin Mining Industry, Zijin Mining Group and Lingbao Gold. At the other end, gold consumption has also become an important part of the economy. Encouraged by the progress the SGE has made, there is an ever-expanding pool of middle and downstream gold investment products and ornamental products. Amid the rapid development of gold consumption and investment market, a number of domestic brands, including Zhongjin Gold, Caibai Gold, Laofengxiang, Laomiao and Cuilu, have emerged as dominant names in the industry.

5. Favourable policy support that encourages greater openness and innovation. Since the 18th CPC National Congress, the Chinese government has introduced a series of major policies to support economic transition as well as upgrades and proactively improved market accessibility, which have provided solid policy support for the opening-up and innovation of China's gold market. The launch of the international board directly benefited from the renminbi-based Free Trade Account system and other preferential policies in the Shanghai Free Trade Zone. The implementation of the 'One Belt, One Road' initiative and renminbi internationalisation strategy will provide tangible growth opportunities for China's gold market.

We can better appreciate the upward trend of China's gold market by looking at the following statistics, which document the SGE's growth over the past decade:

Between 2004 and 2014, the SGE's gold transaction volume and value increased from 665.30 metric tons and RMB 73.10 billion to 18,500 metric tons and RMB 4.59 trillion, with compound annual growth rates hitting 44.57% and 57.51% respectively over the past 11 years. Since their listing, the transaction volume and value of silver products both rose sharply from 1,028.04 metric tons and RMB 3.61 billion in 2007 to 499,990 metric tons and RMB 1.91 trillion in 2014, corresponding to annual growth rates of 184.71% and 225.61%, respectively, for each of the past eight years.

It is worth pointing out that under the influence of a gloomy global economic outlook and financial climate, the international gold price has entered a downward cycle since 2012, global gold markets posted an overall lacklustre performance, and major exchanges around the world, including the SGE, were not able to sustain their high momentum from earlier periods and most of them faltered under the pressure. During this period of adverse external conditions, the SGE was able to accurately predict market trends and sharpened its marketisation and internationalisation strategy. Driven by the booming demand and great potential of the domestic gold market, the SGE continuously improved its systems, accelerated product innovation and enhanced its services. As a result, the SGE was able to increase its gold trading volume by 82.90% in 2013 and by 59.17% in 2014, in spite of the market downturn.

In 2015, the SGE maintained its growth momentum. In particular, its international board showed great activity and robust potentials. By the end of May, the SGE's aggregate transaction volume increased by 162.29% year-on-year and transaction value grew by 131.04% year-on-year, of which, gold transaction volume increased by 147.41% and silver transaction volume went up by 162.97% year-on-year. The volume of gold deposit and withdrawal maintained at high levels and registered growth rates of 19.39% and 27.49%, respectively. Since the launch of the international board, the SGE has welcomed 52 international members, which recorded a gold transaction volume of 2,901.40 metric tons and transaction value of RMB 695.93 billion, as well as a silver transaction volume of 378.57 metric tons and transaction value of RMB 1.36 billion.

The above statistics fully demonstrate to the world the 'positive force' of China's gold market with the SGE as the nucleus. We sincerely welcome investors from around the world to participate and make further contributions to China's gold market.

> *"Driven by the booming demand and great potential of the domestic gold market, the SGE continuously improved its systems, accelerated product innovation and enhanced its services."*

Our future outlook

Judging by the overall performance of the global markets, the downward cycle of gold prices is unlikely to change for some time. Nevertheless, we are not pessimistic about market growth. On the contrary, from a long-term perspective, we are quite optimistic. Our vision is to firmly implement the marketisation and internationalisation strategy, and to build the SGE into a world-class exchange for precious metals. I am convinced that with the participation of investors from around the world and through our unremitting efforts, this goal can and will be achieved. Our confidence comes from the following considerations:

First, China is the only country in the world with full gold industry "supply chain" and its gold market harbours tremendous potential. At the upstream of China's gold industry supply chain, there are numerous gold producers in almost every province. The top four national producers, with a total annual gold output exceeding 30 metric tons, have developed considerable production capacities. These gold producers have highly diverse backgrounds, including both national and local enterprises, and both state-owned and privately owned enterprises. Thanks to the fierce competition between these gold producers, China's gold production has ranked first in the world for eight consecutive years. At the middle stream, China boasts an advanced jewellery processing industry with its jewellery products representing a significant share in the global market. At the downstream, China possesses the world's largest consumer group. Chinese people have the tradition of appreciating and stashing gold. However, according to the World Gold Council, China's per capita gold ownership is only four grams compared with the world average of 25 grams, which indicates a major untapped potential for China's gold market. China is now the second-largest economy in the world and commands an upper middle income level in the world. With the steady increase in household wealth over the past three decades following China's reform and opening up, future demand for physical gold remains significant and the need for better allocation of gold resources will also become more pressing. Hence, it is fair to say that China will continue to be an important player in supporting the development of the global gold market.

Second, the financial functions of gold have yet to be fully unleashed and the financial innovation of China's gold market holds limitless possibilities. Benefitting from a central trading and delivery platform, the SGE has set up 59 certified vaults across China for the centralised allocation and transportation of physical gold. Our members have been very active in developing gold deposit, gold storage, gold leasing and gold repurchase services. These services have endowed gold with features that are typical of other products of the financial system, such as interest accrual, free exchange and liquidity, fully realising the financial functions of gold. In most other countries around the world, however, gold remains a commodity and, as such, its financial functions are underutilised. As our next step, we will further enhance business innovation and product innovation while fully uncovering the financial utilities of gold to promote the financial innovation of China's gold market.

Third, we will continue to increase the depth and scope of marketisation and internationalisation and further optimise market services. Despite our early achievements in transitioning to a market-based institution and in internationalisation,

many challenges remain and more effort is needed to improve the concepts, methodologies, mechanisms and operations of the Exchange as well as our front-end and backend services. This year, we will concentrate on the following priorities:

1. Inviting more institutional investors to further expand the range of market participants. At present, most of the institutional barriers to the market entry of securities brokers have been eliminated. Our next objective is to invite more securities companies to invest in our gold market and to support securities brokers in testing market-making and leasing services, thereby becoming a leading innovator in the industry. Meanwhile, we will engage in referral efforts and infrastructure building to expedite the participation of institutional investors such as insurance funds, securities companies and trust companies.

> *"By providing comprehensive market services through multiple channels, these institutions have addressed the diverse market needs of different types of investors."*

2. Driving innovations and enhancing services. This involves efforts to optimise existing products through innovation; enhance market liquidity; introduce the pilot programmes of Internet service platforms in a timely manner; accelerate the development of mobile apps; optimise trading channels and services; release precious metals price indices and introduce index-based financial products at opportune times; refine the trading rules for options and warrant products; explore ways to expand the registration and custodial functions of SGE platforms by designing suitable product models and business frameworks; broaden the channels through which individuals and institutions can allocate and use their gold assets; stimulate gold consumption; and accelerate the transformation of Shanghai gold into 'people's gold'.

3. Supporting innovation and growth through improved IT infrastructures. After more than one year of planning and experimentation, we are positioning our third-generation system as the backbone of our IT infrastructure and have been introducing continuous improvement to our IT architecture. This year, the SGE has entered a critical stage for building and revamping its IT systems – in respect of the third-generation system, the SGE has completed the live deployment of the clearing system and price matching system in the first phase of the project; and in respect of the IT architecture, the SGE has initiated the development work in the second phase and made sweeping adjustments to the business architecture and data structure. To adhere to our clockwork-like process of research-develop-deploy, we will soon start the research on our next-generation IT system.

4. Introducing the mechanism for fixing renminbi-denominated price for Shanghai gold at the right moment. Considering the tremendous appetite for gold in China, the fact that the largest spot gold market with investment functions in the world is currently in China and that the renminbi is transitioning into an international currency, and Shanghai's steady progress toward becoming an international financial centre, we believe the conditions are ripe for creating and launching a renminbi-based pricing mechanism for gold. This renminbi-based pricing mechanism for Shanghai gold will create a new pricing system that complements the dollar-based London gold, and will provide the gold industry and market with benchmark prices in renminbi. The PBC is currently leading the charge on this front. At this moment, we have completed preliminary preparations for the related institutions, systems and market participants. We believe the risk is manageable and expect the mechanism to be introduced to the public before the end of this year.

5. Further strengthening international exchanges and co-operation. Co-operating with sophisticated industry peers and mainstream exchanges from around the world is an important means by which the SGE can achieve internationalisation. The SGE's implementation of its internationalisation strategy has led to growing discussions and co-operation with international institutions and exchanges. In fact, today's Forum is an outcome of our close partnership with the LBMA. At the same time, visible progress has been made in our co-operation with the Chicago Mercantile Exchange Group (CME Group) on order routing and the Chinese Gold & Silver Exchange Society (CGSE) on the 'Shanghai-Hong Kong Gold Connect'.

During the launch event for the international board last year, we announced our wish for *'Sharing Opportunities, Embracing the World'*. Today, I would like to draw upon the same spirit. On behalf of the Shanghai Gold Exchange, I sincerely invite global investors to participate and contribute to the growth of China's gold market. I look forward to working hand in hand with our industry peers from around the globe for mutual benefit and development.

Lastly, as the joint host of this Forum, the SGE would like to offer a warm welcome to all delegates attending the event. Please do not hesitate to contact us with any suggestions and feedback. In the meantime, I wish you all a pleasant stay and good health in Shanghai.

Ms Shen Gang, Vice President of the Shanghai Gold Exchange

Ms Shen Gang, Bachelor of Economics and Senior Economist, is the Vice President of the Shanghai Gold Exchange (the "SGE") and General Manager of Shanghai International Gold Exchange Co. Ltd., a wholly-owned subsidiary of the SGE.

Before joining the SGE, Ms Shen Gang spent 20 years at the People's Bank of China (the "PBC"), serving as the Director of the Planning Department, Gold and Silver Supervision Department as well as in the Currency, Gold and Silver Bureau. Her role in the central bank offered her with the perspective and expertise as a regulator of the gold market. In 2001, as a pioneer of the domestic gold market reform and opening-up and one of the founding members of the SGE, Ms Shen Gang drafted the blue print of the establishment of the country's state-level gold exchange, and proactively involved in coordinating and lobbying of relevant authorities for necessary policies to ensure the set-up of the SGE. Since taking the position as the Vice President of SGE in 2002, Ms Shen Gang has chaired many important initiatives including the critical launch of the physical delivery system, the inter-bank price asking trading system and the risk management regime. She was also fully devoted to the successful launch and smooth operation of the International Board. Throughout her career she has received several awards and honors, the most recent are: winner of the "National May Day Labor Medal for Financial Workers" (2013), granted by National Committee of Chinese Financial Workers' Union; "Shanghai Financier of the Year 2014", organised by Xinhua News Agency.

View from an International Bullion Bank

By Jeremy East, Managing Director and Global Head, Metals Trading, Commodities, Greater China and NEA, Financial Markets, Standard Chartered Bank

> *"The turnover on the Exchange, as we heard from our colleagues there, is growing dramatically, even though the physical supplies to the market seem to have tapered off."*

The following is the transcript of the speech delivered by Jeremy East at the LBMA Bullion Market Forum in Shanghai on 25 June, 2015.

Preamble

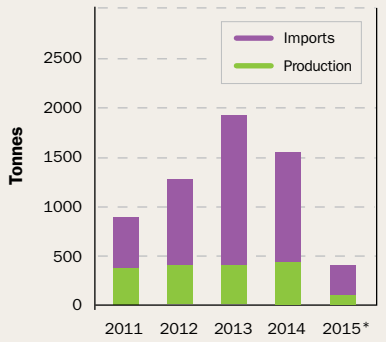
I have been out in Asia for two years now and a lot has been happening. What I would like to do to start with is to look back over the last few years at what has been happening in China. I will then talk a little about how I think the Chinese market is evolving. We will then talk about a familiar topic: renminbi (RMB) and internationalisation, and the International Exchange. From my experience, we have seen a lot of exchanges come and develop new products. Some succeeded and some did not, and I will look at some of the challenges around that. Finally, I will cover where we are now in terms of the market, and what the future might be for China and the rest of the precious metals market.

China

We all know that China is the largest producer and consumer of gold. Back in 2013, something like 40% of global production was consumed in China. Last year, it was slightly less, but still over 30% was consumed in China. This year, our expectation is that this number will decline again, showing physical consumption in China declining year on year from 2013 to 2104 and from 2014 to 2015.

We have seen a mirroring of that situation with recent declining physical supplies into China, after a huge jump in shipments into China in

Chart 1: China Gold Imports and Production



*Jan-Mar 2015

Source: Bloomberg & Standard Chartered Research

2013 and in the same year and a huge amount of gold supplied from the Shanghai Gold Exchange to the Chinese market. We know that the banks have been very proactive in building huge distribution networks. We have seen the jewellery companies expand their retail space. There is huge expansion in China. However, the numbers seem to be indicating that this expansion is slightly slowing. That said, however, over 2,000 tonnes were taken out of the Exchange last year.

Is this a bad thing? When I started gold trading back in the early 1980s in London, we used to trade Krugerrands – physical coins. That was the liquid market and, very quickly, we realised that we had to develop other products and other ways of being able to transact new products, so the market in London developed unallocated, forward markets and options markets, just in the same way that the Chinese market is doing today.

What we are seeing is an evolution of the Chinese market away from being primarily a physical market, towards a more directive and OTC market. The turnover on the Exchange, as we heard from our colleagues there, is growing dramatically, even though the physical supplies to the market seem to have tapered off. That, of course, is being driven, firstly, by new members of the Exchange – new international members – and also by new types of members of the Exchange – securities companies, for example – who are coming with new ideas and products. In addition, we are seeing the Exchange launch new platforms: the forward platform, the leasing platform and the recent announcement of the launch of gold options. On the back of that, we are going to see quite a change in the way the Chinese market does business.

It is not just the Gold Exchange. We have also seen this in the Futures Exchange. Over the last year or so, we have seen a dramatic increase in derivatives and futures volumes, which has not been mirrored in the international markets. For example, COMEX – traditionally, the largest precious metals exchange – has been seeing declines in volume, whereas the Shanghai Futures Exchange has seen continued growth in volume.

Everyone looks at and tries to compare India and China, which I think is not the right thing to do. They are two totally different markets. India is very much a domestic market intrinsically linked to the London market, whereas China has its own very strong domestic market and a focus to grow internationally in the global markets. In terms of the physical aspects of the two markets, it is the wrong thing to compare the India and China markets. It is rather about where these

markets can go: for India, the focus is very much on a domestic market linked to London, whereas for China, the focus is on growth and internationalisation.

RMB Internationalisation

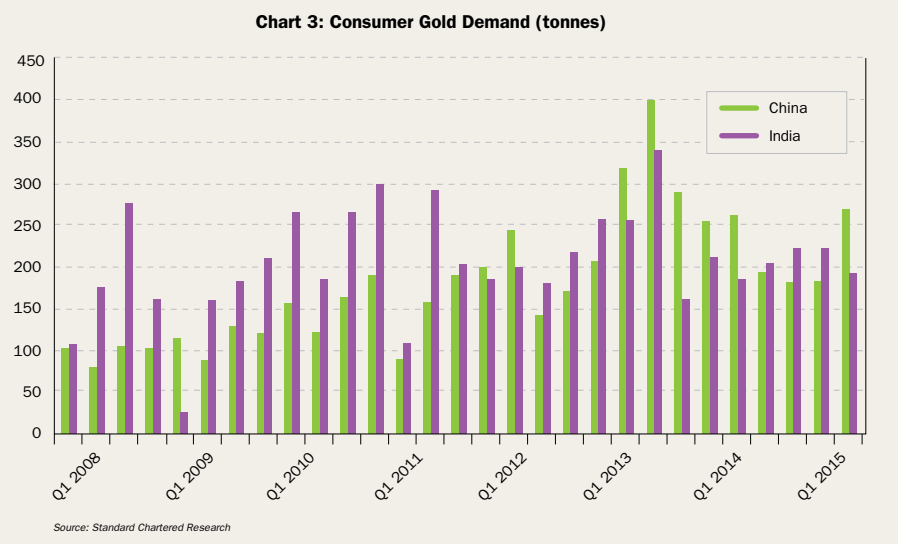
I will now say a few words about commodities. We talked a little earlier about RMB internationalisation and about gold, but gold is just one of the many commodities that China consumes. China is the largest consumer of most commodities globally; for example, crude oil, copper, gold and notably iron ore, 40% of which is imported into China. China is a huge consumer of commodities and, as we know, most of these commodities are, traditionally, priced in US dollars. Therefore, we need US dollars to trade. However, there is a movement to promote the internationalisation of the RMB, so why not start pricing the flows of these commodities in RMB? However, to do that, you need a platform. You cannot just tell the market that they have to trade gold or iron ore in RMB; there has to be a platform for them to do it.

China set up that platform in September 2013 with the launch of the Free Trade Zone in Shanghai. This enabled the free conversion, through free trade accounts (FTAs), of offshore RMB to onshore RMB. This setting up of the Free Trade Zone was really the basis to allow the exchanges to then set up platforms to price commodities. We have seen the launch of the Shanghai Gold Exchange – the International Board – last year, and we expect to see the Shanghai Futures Exchange launch a crude oil contract. I think it is planned for September this year. Again, these contracts are priced in offshore RMB, therefore promoting the internationalisation of the currency.

We as a bank have had many clients who are currently supplying commodities to China come to us looking for advice in terms of how we see the internationalisation of the RMB progressing, and also clients who traditionally trade in US dollars looking to understand what they need to do in the event that they are suddenly paid in RMB rather than US dollars. A very basic setup is required, therefore; for example, the major producing countries of the world – Africa, the United States and Canada – which are supplying commodities to China need to get themselves ready to be able to handle RMB.

Shanghai Gold Exchange

As I said, the Shanghai Gold Exchange opened the doors to the International Board last year, on 18 September. A huge ceremony was held in the building where we had dinner last night. Present were the great and good of the global markets: the Governor of the People's Bank of China (PBOC), the Mayor of Shanghai, the Deputy Governor of the PBOC, and the Chairman of the Shanghai Gold Exchange. I am not sure how I got up onto the stage, but I was there anyway, representing the international community. Now, participants internationally can trade from outside China and have the opportunity to trade onshore in China, which, again, is a new thing and we will look at some of the challenges that they have slightly later. The Gold Exchange International Board is giving a message, saying that China is now set to have a larger influence over the global pricing of commodities, especially here, in terms of gold, as well as global commodities. This is the first step on that journey.



> *"China is the largest consumer of most commodities globally; for example, crude oil, copper, gold and notably iron ore, 40% of which is imported into China."*

International members of the Exchange can trade both the onshore and the offshore market. There are 11 gold contracts: three in the offshore

market and eight in the onshore market. As I said, the launch of the Exchange allows international participation; however, there are challenges around starting a new contract. It is interesting to note that, when the London Metal Exchange launched the aluminium contract back in the early 80s, aluminium did not trade for a year. Now, it is the largest contract on the London Metal Exchange. Even well-known, huge exchanges launching new contracts can struggle to develop new products; however, now, with the perseverance and the engagement of the market, as I said, the aluminium contract is the largest traded contract on the London Metal Exchange.

In the context of the International Board and the new contracts, the Shanghai Gold Exchange International Board has been very successful. Daily turnover is somewhere in the region of 10 to 15 tonnes. Compared to other exchanges that have recently launched gold contracts, the Gold Exchange is by far the most successful. However, it is challenging, because it needs to attract the participation of the international community.

> *"It is interesting to note that, when the London Metal Exchange launched the aluminium contract back in the early 80s, aluminium did not trade for a year."*

Going back into history again, before I started in the market, London was built on the London Gold Fix and on the pricing of South African gold. Being able to supply a benchmark then was a key, fundamental building block of the London market. That really was the driver for the development of the market. What we will see here, as we heard earlier today, is that the launch of a benchmark in China will be a fundamental building block for the Chinese market. That needs to happen, as we see China pricing gold internationally.

There are barriers to entry, and we all know from the banks that there is a huge amount of money that needs to be spent on technology to link in with the exchanges. However, I expect that as time progresses, we will see more and more banks and brokers connecting with the Exchange. Business that in the past may have been executed in the US or in London has the ability to be executed in China. I would not say that this is business that is mutually exclusive, and I do not think that there is a competition – I think it is mutually enhancing. Therefore, the Shanghai Gold Exchange is moving in the right track.

> *"In Hong Kong, we have seen the huge success of Stock Connect, and I can see the future of the Shanghai International Board as really being seen as the connection between the onshore and the offshore markets."*

Where We Are Now

I would just like to finish with where I think we are now. I am suggesting a parallel here: Gold Connect. In Hong Kong, we have seen the huge success of Stock Connect, and I can see the future of the Shanghai International Board as really being seen as the connection between the onshore and the offshore markets. We see this link opening up wider and wider, and that should be seen in the widening context of the internationalisation of the RMB and the opening up of the domestic Chinese finance markets.

As things progress very quickly at the moment, if the currency and the financial markets continue to open up, it is not beyond the realms of recognition to believe that we can see a future merging of the International Board and the Domestic Board. We are already seeing the Gold Exchange work much more closely with the international markets. As we heard, we are seeing that many Chinese refiners are members of the Good Delivery List. We are now seeing a link between the Chinese market and the Hong Kong Gold and Silver Society. The markets in China are reaching out to the international markets.

> *"Who knows: in five years' time, we may be trading on our online platforms not just gold Loco London but gold Loco Shanghai."*

It is, however, not just the markets but also the players. As we recently saw, Bank of China has become a participant in the LBMA price-setting. I think it is just a trend that we will see continue over the coming years, and I think this trend is accelerating. Who knows: in five years' time, we may be trading on our online platforms not just gold Loco London but gold Loco Shanghai. Thank you.

Mr Jeremy East has over 25 years of experience in the metals industry and joined SCB in 2006. His responsibility covers metals trading, hedging, financing and investment solutions covering both physical and derivative products. Additionally, he built up SCB's commodity inventory financing business. The metals trading business has presence in Shanghai, Hong Kong, Singapore, Dubai, London and New York serving its franchise client base mainly in Asia, the Middle East and Africa. SCB is Category 2 member of the LME, member of the LBMA and market making member of the LPPM and was the first international member of the Shanghai Gold Exchange. He recently relocated to be based in HK, to drive the growth of the metals business in Asia.

Before joining SCB, he was Global Head of Precious Metals at Commerzbank and also board member of Argor Heraeus – the Swiss gold refinery, where he focussed on a physical precious metals franchise in India, Turkey and in Russia and CIS.

Prior to that, he started his career with Philipp Brothers, then the largest commodity trading company in the world, where he traded base and precious metals. In 1990, he joined Salomon Brothers to run the precious metals business in London.

He is an International Advisor to the Shanghai Gold Exchange and on the Management Committee and The Membership Committee of the LBMA.

How the Battle Against Counterfeiting in the Coin Industry has Driven Innovation in Security and Validation

By David Janczewski, New Business Development, The Royal Mint

The Royal Mint can trace its history back to 889AD when there became a need for a common currency across the UK. In 1250, the first centralised mint was created and due to the high security needed, it was located within the Tower of London. There the mint remained until 1812 where an expanding demand for UK coins caused the mint to move next door to Tower Hill.

The Tower of London.

In the 1880s, the factory buildings were reconstructed and extended, with new coining presses installed, and melting and rolling capacity increased. Further rebuilding was undertaken at the turn of the century, steam gave way to electricity, dwellings were taken over, and the work of construction and renovation became a continuous process as The Royal Mint endeavoured to cope with an enormous increase in the demand for coin at home and overseas. By the 1960s, little of the original mint remained apart from the dignified Smirke building and its gatehouses in the front.

The need to rebuild The Royal Mint had been recognised in the 1950s, but it was the task of striking hundreds of millions of coins in readiness for decimalisation in 1971, while at the same time not neglecting overseas customers, which brought matters to a head. In 1967, it was announced that a new Royal Mint would be built at Llantrisant, some ten miles from Cardiff, thereby according with government policy of transferring industry from the capital to development areas. Work began on the site almost at once and the first phase was opened by Her Majesty The Queen on 17 December 1968.

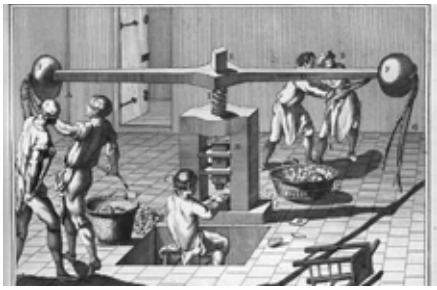
Once the initial requirement for decimal coins had been satisfied, production was progressively transferred from Tower Hill to Llantrisant. Melting, rolling and blanking facilities were completed and commissioned in 1975, and with the new mint capable of the full range of minting activity, the last coin, a gold sovereign, was struck in London in November of that year. The Tower Hill buildings were finally relinquished in 1980.

> *"The new mint, set in rolling green Welsh countryside on the edge of the Rhondda Valley, occupies an area of more than 30 acres."*

The new mint, set in rolling green Welsh countryside on the edge of the Rhondda Valley, occupies an area of more than 30 acres. Its modern buildings house some of the most advanced coining machinery in the world and it has a larger capacity than any other mint in Western Europe.

Security – a game of cat and mouse

With almost all coins made of gold and silver up until the 20th century, security and protection has always been a key priority of the mint. With the incentives to counterfeit money being exceptionally high, there has been a long-running game of cat and mouse between The Royal Mint and the counterfeiter. Technological innovation and mechanisation have proven to be key approaches to ensure The Royal Mint stays one step ahead of the counterfeiter.



One early example of this can be seen in the introduction of a screw press. In the picture above, you can see an original screw press from the late 1600s. With the mechanisation of minting came the ability to create thicker coins and the introduction of major security features such as edge lettering and milling. These two techniques went some way to protect against the major counterfeiting issue of the time – clipping, whereby small amounts of gold and silver were trimmed from the edge of each coin before being passed on as whole.

Sir Isaac Newton

Sir Isaac Newton (pictured below) was appointed Warden of The Royal Mint in the spring of 1696 on the recommendation of Charles Montague, Chancellor of the Exchequer. Public office was new to him, but nevertheless it was an opportunity that he had sought, and Montague's letter of 19 March 1696 notifying him of the king's promise of the vacant post of Warden would not have been unwelcome.

The Royal Mint was then in the Tower of London and it was accordingly to the Tower that Newton came in April 1696 to take up his new duties. It was a time of great activity, for The Royal Mint was grappling with the recoinage of old silver coins dating back to the reign of Elizabeth I and beyond. Auxiliary mints were being set up in various parts of the country, and Newton was quickly caught up in the pressure of the moment. The enormous operation was completed within three years, leaving Newton more time to devote to his main duty of investigating and bringing to justice those who clipped and counterfeited the coin of the realm. His major contribution was to really focus on the overall quality and consistency of the coins that were being made. His belief that the higher the quality of product produced, the harder it would be for a counterfeiter to copy still holds true today and is a fundamental principle that is still applied at the mint.

In 1699, the post of Master of The Royal Mint fell vacant through the death of Thomas Neale. Though technically less senior than that of Warden, it was a more lucrative post because the Master acted as a contractor to the Crown and profited from the rates at which he put the work out to subcontractors. The Mastership was offered to Newton and he took up its duties with effect from Christmas Day 1699. Surviving the political upheavals of those troubled times, he remained as Master until his death in March 1727.

The Trial of the Pyx

Since at least 1282, coins produced by The Royal Mint have been independently checked in a proceeding known as the Trial of the Pyx, which takes its name from the pyx or box in which were kept the sample coins set aside for testing. This is similar to the role the LBMA plays in the Good Delivery system.

Today, the Trial consists of an examination by a jury entirely independent of The Royal Mint to ascertain that the precious metal and cupro-nickel coins made by The Royal Mint are of the proper weight, diameter and composition required by law. The Trial is convened annually and carried out by the Goldsmiths' Company of the City of London, which provides a jury of Freemen of the Company. The jury is sworn in by The Queen's Remembrancer, a senior judge, who presides over the Trial in accordance with directions issued by the Treasury.

The picture above shows something called a trial plate. The trial plate has a confirmed fineness of gold and is used as a control sample against which all the coins are tested.

Coin security features today

There are two primary categories of security that are used in describing and protecting coins today, those that are visible and those that are hidden. A core principle of modern security is that of layers and combinations. Rather than relying on a single security feature, combining several of them into one coin results in a product that is exponentially more secure each time a feature is added.

Overt security

Edge lettering
This was first introduced at scale in 1660 and is added to the coin blank prior to the final minting process. Whilst looking simple, it is technically challenging to create at a consistently high quality.

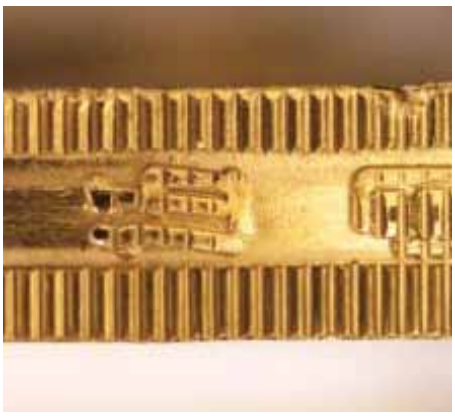
A security feature where letters run around the edge of the coin. The letters are formed into the edge of the coin prior to striking. This is a technically complex process and as a result very difficult to counterfeit.

Latent image
A relatively recent addition to the security matrix, a latent feature allows two images to be combined into one area. The different images appear as you turn the coin. This feature is added to the production tooling, allowing very large quantities of coin to be produced at high speed without stopping.

A high-tech security feature struck into the coin design that significantly deters counterfeiting. A complex and detailed pattern is cut expertly into the coin tooling. The result is an intricate and secure design on the coin that moves and changes when the coin is tilted. It provides the public with a quick and easy anti-counterfeit test and reassurance of the coin's integrity.

Raised edge lettering and beading in a groove
This feature was developed by The Royal Mint to be visually appealing whilst being technically challenging to recreate. The hardest aspect is the need to move significant amounts of metal towards the edge of a coin whilst achieving a high definition finish.

This feature offers a high level of visual security and is extremely difficult to replicate or counterfeit. This security feature was developed within the Royal Mint to provide a significant enhancement in on-going overt coinage security.



Fine engraving
The introduction of new cutting techniques for steel tooling coupled with improvements in computer-aided modelling have enabled the coin designer to incorporate detail not previously possible and similar to a banknote in complexity but with the added benefit of being in three dimensions.

Fine engraving delivers a security feature similar to that seen on banknotes, with the added benefit of 3D design.

Covert security
Covert security refers to features that are not visible when looking at a coin. Whilst they are not used day-to-day by consumers, they provide an additional set of protection and validation features that are useful when coins interact with technology such as vending machines.

Electromagnetic signature
The electromagnetic signature of a specific metal alloy is a simple and effective way to validate a coin's composition. This technique is widely used in vending machines, and in addition to size and weight, coins are distinguished by their metal composition. When passed through a small electromagnetic field, each coin creates ripples or other disturbances that can be detected and analysed. Different combinations of size and metal cause distinct patterns when the coins are passed through such a field. The distinct pattern of a particular coin is called its electronic signature. If a coin does not match a known set of signatures stored in the vending machine's computer, it is rejected.

> *"The Royal Mint is proud to introduce the next innovation in coin security – a security feature for coins that puts it on a par with passports and banknotes."*

The next innovation in coin security

The Royal Mint is proud to introduce the next innovation in coin security – a security feature for coins that puts it on a par with passports and banknotes. The feature is covert so there is no way to identify it just by looking at a coin. The security feature is incorporated within the plating layer of the coin. The feature is embedded consistently throughout the plating layer, making it resilient to wear and able to last beyond the typical 20-year lifecycle of a coin. The feature has been proven at the required high pressures associated with coin production whilst also being destroyed as part of the smelting and destruction process to avoid any issues with contamination. Of particular importance to the coin industry is the ability to sort coins at very high speed without the need to reference a third-party database. This new security technology can validate coins without reducing current machine sorting speeds.

The prototype of the new £1 coin.

The new UK £1 launching 2017

The new UK £1 coin is due to launch in 2017 and will incorporate a number of security features, including at least two alloys, micro-dot and latent feature technology, an intermittent milled edge and of course the new covert high security feature.

With its multiple levels of security, we're proud to describe it as the most secure circulation coin in the world.

Conclusion

The Royal Mint has been battling the counterfeiter for many centuries and has used its security and validation expertise to stay one step ahead.

David Janczewski
Head of New Business
The Royal Mint
David is Head of New Business at the Royal Mint and is responsible for creating and developing new concepts and opportunities that leverage and extend beyond the traditional coin manufacturing base. He has previously held the roles of Head of Strategic Marketing & Head of Product Development.

The Royal Mint is the world's leading export mint, making coins and medals for an average of 60 countries every year. One of the world's oldest and most venerable organisations, with an unbroken history of coin production that dates back over 1,000 years. Throughout this time our reputation for both integrity and accuracy has always endured. This proud heritage means that bullion coins from The Royal Mint remain a byword for trust and reliability all over the world.

Simon Churchill...'The Time has Come'

By Dr Michele Blagg, Research Consultant and Visiting Research Associate at the ICBH, King's College, London

As part of the LBMA's Voices Project Michele interviews Simon Churchill as he reflects on his career in the bullion market. Simon retired in April 2015 having worked in the London bullion market for over 40 years. He has been a great supporter of the LBMA, first serving on the Physical Committee and, since 2009, on the Management Committee.

On 19 August 1974, Simon joined Johnson Matthey Bankers. His first role was in the coin department, which meant daily physical contact with gold and silver. His entry into the market coincided with an eventful period in its history. Between 1973 and 1976, substantial private investment in Europe and elsewhere, and the impending liberalisation of gold in the USA, which meant American citizens were able to buy gold for the first time since 1934, led free market prices to rise to higher and higher levels. Late in December 1974, a peak fixing in London of $197.50 was reached. Simon fondly recalled thinking at the time, 'yes, this is it, the sky is the limit!' The price rise stimulated a rush to buy coin and Johnson Matthey Bankers sold huge volumes, handling all ages of sovereigns, Krugerrands and new bullion coin, and holding stocks of both Austrian and Mexican restrikes, and occasionally US Eagles and Double Eagles. Unfortunately, the anticipated American demand and rush to buy gold failed to materialise and investment interest fell away sharply in 1975, although the trend towards gold liberalisation and its ownership and dealing continued, with markets and trading centres opening in other countries. This created a wider base for dealing and enhanced the opportunities for London as the premier gold market.

> *"Between 1973 and 1976, substantial private investment in Europe and elsewhere, and the impending liberalisation of gold in the USA, which meant American citizens were able to buy gold for the first time since 1934, led free market prices to rise to higher and higher levels."*

After an active start in the Coin department, Simon briefly left it, moving around the bank for six months while gaining experience in other sectors. He soon moved to the Bullion department where he continued his training under the watchful eye of Frank Martin, Manager of the bullion back office. Simon had been pre-warned by a colleague that "Mr. Martin could be a bit tricky at times!". But Simon recalled that they got on reasonably well and while he was 'Mr. Martin' to everyone else, he was always 'Frank' to him.

The Johnson Matthey offices in Royston, Hertfordshire.

Johnson Matthey Bankers (JMB) was incorporated in 1965 and was part of the Johnson Matthey Group, with a trading history since 1817 that concentrated its efforts on the refining, fabrication and marketing of the gold, silver and platinum group of metals. JMB was an authorised bank and member of the London Gold Market, holding a seat on the London Gold Fix and the Commodity Exchange in New York. It traded in precious metals on a global basis with central banks, government mints, commercial banks, international traders, mining organisations and precious metal fabricators.

Simon held a close working relationship with the Johnson Matthey refinery at Royston. Simon remembered that his first visit to Royston was in 1976. He described the process as "extremely interesting" and one that has held a fascination for him ever since. Reflecting on the sight that met him on his first visit, he was reminded that:
"The produce that we are involved in is an interesting product. You can't get away from it. Actually seeing it, holding it, handling it, seeing how it is refined. But the refinery itself was a filthy place. I don't know what I was expecting, but it was a bit of an eye-opener. I remember being shown around one of the melting areas and there was this tray of what looked like soot and I said: 'Soot, are you going to throw that away?' They said: 'No, that is going to be refined, that's twenty per cent gold!'"

Over the years, Simon took a keen interest and learnt more about the refining process, but his main area of expertise was in ensuring physical stock levels of bullion kept pace with customer demand and running the logistical side of the business.

I was intrigued to learn from Simon that during the price rise of gold at the end of 1979 and the start of 1980s, when it peaked at $850 an ounce, there were only five bars of gold in the Johnson Matthey Bank vault. Simon explained that was because:
"Nobody wanted it, nobody was delivering metal, nobody was drawing metal; although, I remember one occasion when one of the banks in Switzerland called [JMB] for fifteen tons of silver that [JMB] didn't have. A quick call to the refinery and some of the Indian silver coin, which had been backing up for years and years, was processed. Eventually, over the next three or four years, there was more than 1,000 tons of silver a year coming out of the Johnson Matthey refinery."

Silver took on a more prominent role during the 1980s, the era of Bunker Hunt when the Hunt brothers tried to corner the silver market and the price rose to $50 dollars an ounce. As the price came down, having gone from no silver in the vaults, Simon remembered how it came from over the Atlantic by the ton: "Shiploads, plane loads. By the end of 1980, it was just pouring out of our ears. After being checked over by vault staff, it went into a hole in the ground!"

Simon was also responsible for maintaining an adequate supply of small gold bars, overseeing the weekly production levels dictated by demand from the Far East and Dubai. He recalled the limiting factor in the production of the bars at the time, as they were still made by hand. Describing the process, he observed that:
"At a time before automation, there would be a bank of women sitting at a high bench with various grades of grain in front of them. They would pour the grain, then weigh it, putting a bit more in just until the charge was the right weight for the kilo bar or ten tola bar, even to the extent that it would be one bead of grain just to get the weight right."

Sometime during the 1980s, bar production eventually transferred to an automated process.

While there have been many interesting periods that stand out in Simon's career, one unfortunate incident that stood alone was the Brinks Mat bullion robbery that took place on 26 November 1983, as the vast majority of the bullion that was

JM trading floor circa 1983, reproduced with kind permission of Bob Takai.

stolen was there because he was shipping it! He recalled the events leading up to the theft: *"The bullion was all picked up from [JMB] on the Friday afternoon. The refinery used to deliver on Friday, so it was all packed up ready for Brinks to pick up and then it would be flown out on the Saturday Hong Kong flight, then distributed from there up to Tokyo or out to Singapore, or it would stay in Hong Kong. The Dubai flight would also leave from London and just go straight to Dubai. I knew that the flight left from Gatwick Airport. On that Saturday morning, the phone rang about 11 o'clock in the morning and it was a friend who said: 'Have you heard the radio?' I said: 'No, why what has happened?' There had been a gold robbery at Heathrow and I said. 'No, it can't be ours because it flies out of Gatwick.' What I didn't actually know was that they [Brinks] stored it at Heathrow and trundled it down to Gatwick, rather than hold it at their City branch."*

> *"Perhaps the most life-altering experience for Simon was learning of the failure of Johnson Matthey Bankers on 1 October 1984."*

Brink's insurers dealt swiftly with the loss and the fallout from the theft was kept to a minimum. Simon remembered that "the loss was covered at the Monday morning 'Fix The refinery had to work overtime, because the customers still wanted their gold, but come that Friday everybody's position was back exactly where it was." It is of no surprise that shipping procedures have since been reviewed.

Simon's role at the Bank meant that he was one of the first members of staff to find out about the impending collapse, having received a phone call on the Saturday morning ahead of the official announcement and been told: "You have to come in to work now!" As he headed into the office, he wondered what was so important, only to be greeted by his head of department who informed him that the bank was in serious trouble because it couldn't meet its commitments. It was technically bankrupt. Throughout the 1980s, mainly on the back of gold profits generated during the earlier price rise when gold and silver hit $850 and $50 respectively, the bank had grown particularly rapidly by lending very large sums to a small number of little-known Asian businessmen.

During the previous week, rumours had begun to circulate that one of the 'Fixing' companies was in trouble. The Bank of England, in order to maintain stability in the gold market, felt it necessary to step in and look for a new owner for JMB. Over the weekend, emergency meetings took place at the Bank and representatives of all possible parties concerned were summoned for a series of conferences. Many of the top representatives of the Bank and other firms had been away in Washington at the IMF, including the Governor, Robin Leigh-Pemberton, and it was his deputy, Kit McMahon, who took the lead in negotiations on behalf of the Bank of England. Over the course of the weekend, more than 200 people were involved. The seriousness of the situation was laid out by both Evelyn de Rothschild and Michael Hawkes (of Kleinworts). They spelled out to McMahon the danger to the London gold market and possibly even the London inter-bank market if JMB was allowed to go. David Kynaston (2002) in *The City of London, A Club No More* recounted how at one point Hawkes mischievously decided to leave the room he had been assigned and have a quiet snoop around:
"In one room there were the Johnson Matthey bankers' books and I spent a glorious two hours going through them. There wasn't a single name I'd ever heard of and the amounts, £60 million to one name, £30 million to another, were absolutely staggering. We spent ages hanging around, lobbying every Bank of England man we could find and urging that Johnson Matthey must be rescued, otherwise the gold market would go forthwith to Switzerland and the malaise in the gold market might spread to other members of the market, perhaps even to Midland Bank... 'til 10:30 at night all this seemed to no avail, and I came to the conclusion that the Bank of England had decided to let Johnson Matthey go ..."[1]

It was hoped that following an expression of interest and talks with the Bank of Nova Scotia, a bid would be placed. Negotiations broke down, having failed to secure indemnification against potential lawsuits and it was realised at the Bank of England that there was no alternative but to take responsibility and launch its own rescue of JMB.

On the Monday morning, the rest of their colleagues, who were instructed to close all the blinds and not answer any telephones, joined Simon, his boss and a chap who ran the Settlements department, who had also worked over the weekend. At 09:30, a low-key announcement came from the Bank of England that JMB had collapsed and had been purchased by the Bank for £1, enabling JMB to trade normally and meet all its commitments.[2]

> *"At 9.30 a low key announcement came from the Bank of England that JMB had collapsed."*

Simon recalled that it had been a real shock at the time. In the months that followed there was a tremendous amount of upheaval. While the Bullion department was later exonerated from any blame in the failure of JMB, at the time, some politicians decided that it was the main cause. Both Dennis Skinner and David Owen expressed concerns in the Commons over the rescue package, suggesting that the effects of failure had been exaggerated and hinted at an establishment cover-up.[3] Later in his memoirs, the Chancellor at the time, Nigel Lawson,[4] explained his position in the JMB affair:
"The more I discovered about it the less surprising its collapse became – but by the same token the more inexplicable the Bank's failure, as the supervisory authority to step in at a much earlier stage. But my interest was not in raking over the JMB issue as such: it lay in strengthening the system of banking supervision in the UK, so that a debacle of this kind was far less likely to occur in future.[5]

1 David Kynaston, *The City of London, A Club No More* (London: Pimlico, 2002), pp. 655-6.
2 Ibid.
3 Kynaston, The City of London, A Club No More, p.657.
4 Nigel Lawson was only advised of the JMB collapse and rescue package put in place by the Bank of England a short time ahead of the official announcement. This did not bode well with the Chancellor and caused some ill feeling. Although, the Bank had every authority to deal with the matter and was not required to inform the Chancellor sooner, one of the participants of the project explained: "The error was not in whether the Bank acted correctly, but in the belief by the Chancellor that he should have been informed from the outset."
5 Nigel Lawson, *The View from No. 11, Memoirs of a Tory Radical* (Britain: Corgi Books, 1993), pp.404-5

Cartoon by Nicholas Garland published in the Daily Telegraph, 18 December, 1985, reproduced by permission of the Daily Telegraph and the British Cartoon Archive, University of Kent, www.cartoons.ac.uk

In December 1984, Lawson announced to Parliament the setting up of a Committee to look into the UK system of bank supervision and make recommendations. An internal review was carried out and Robin Leigh-Pemberton chaired the committee. The findings of the report were published in June 1985, from which neither the Bank of England nor the JMB auditors, Arthur Young, emerged well. By tradition, the Bank of England had supervision of the banking system and, until 1979, "Banking supervision had been conducted on an entirely informal and non-statutory basis, with the Bank relying on what was officially termed 'moral suasion' and more commonly 'the Governor's eyebrow' to secure its objectives."[6] Legislation introduced in 1979 came on the heels of the secondary banking crisis of the early 1970s and a European Community directive that required all member states to have bank supervisory legislation in place. The JMB failure demonstrated that the 1979 Act was inadequate and the Leigh-Pemberton committee made some important recommendations. The subsequent 1987 Act that came into effect went well beyond the recommendations put forward and the key feature that came out of the JMB affair was the setting up of a Board of Banking Supervision.[7] David Lascelles of the Financial Times captured the enormity of these changes in his article that appeared two days after Lawson's statement in the Commons:
"For sheer drama, it is a tale of banking incompetence on a scale that defies belief: a small bank manages to lose £248m, more than half its loan book of £400m, and forces the Bank of England to mount one of the most elaborate rescue operations ever seen in the UK, because it happens to be a vital cog in the delicate machinery of the international gold market...

But for the history books, the big story will be the turning point that JMB represents in the evolution of banking supervision in the UK: the changes it has set in motion well may mark the end of the gentlemanly codes by which the Bank of England and the City have abided for decades, founded on trust and frankness.

Instead, the teeming ranks of the 600 banks now crammed into London will be kept in line with more form-filling, closer scrutiny by accountants, more frequent meetings with a beefed-up team of Bank supervisors and a string of new regulations that will be devised in the coming months.

'A sad day, but necessary' was how a senior banker viewed the scene yesterday..."[8]

While the Bank had effectively disregarded all manner of danger signals, the auditors had performed little better. The Bank announced its intention to sue the accountancy firm and was later awarded substantial damages.

During the period that JMB was under its direct supervision, the Bank of England sent in sets of auditors and inspectors to look at the business and locate the exact cause of the collapse. They were to set the business on a good footing prior to the Bank selling it on to Westpac Banking Corporation in 1986, which had a subsidiary company that traded bullion in Australia, Mase Westpac Limited. Simon described the sale as "just a name change over the top of me" as he and his colleagues moved over to the new Mase Westpac London office, which from the deal now owned a seat on the 'Fixing Company' and a full banking licence. According to Simon:
"Mase had a completely different outlook as it began to make changes, concentrating solely on bullion. Foreign Exchange became a subsidiary to the Bullion department, Doc Credits went completely, the Banking Hall was closed, the Coin Department was closed. The bank shrunk from around 300 people to 120, maybe even less than that."

One of the improvements initiated by the Bank of England during its time as caretaker was to implement some technical changes, in particular the installation of a computer system. It had been a long drawn-out process in which a software program had to be written, developed, installed and tested, but once in place, it meant that Simon had instant information at his fingertips.

> *"For sheer drama, it is a tale of banking incompetence on a scale that defies belief: a small bank manages to lose £248m, more than half its loan book of £400m."*

He remembered how:
"Instead of having to sit down and work something out on a scrap of paper, with a pencil and a calculator, you just hit some buttons and something would appear. You would be able to see how many bars you had in stock of a particular quality. You would be able to see if you had allocated it and once allocated, it would disappear from view so you couldn't reallocate it. You could hit another couple of buttons and it would produce a bar list for you, so you didn't have to be there on a typewriter bashing away at it."

> *"Instead of having to sit down and work something out on a scrap of paper, with a pencil and a calculator, you just hit some buttons and something would appear."*

The system that made life so much easier has only just, in 2014, been superseded by a new system.

In 1993, Westpac announced that it was selling the operation to Republic National Bank of New York. Again, Simon described the sale as "just a name change over the top of me". This time he and his colleagues moved from the office in King William Street to Republic's London offices in Monument Street. Republic already had a small Bullion department, just two people. In acquiring the venture, it gained a full banking licence and a seat on the 'Fixing Company. Simon was relieved that everything just carried on as it had before. He was almost left alone to get on with it, mainly because Republic had never traded bullion on that scale before. Perhaps it was because Republic had confidence in the bullion team, as in the past, it had always had a close interaction with Johnson Matthey Bankers and Westpac, being a large customer of both.

Under the new banner, life changed. It became more streamlined, more efficient and life carried on until in 1999 when it was announced that HSBC would buy Republic. Simon reflected that on learning the news, he "knew his luck had run out because HSBC had a fully functioning Bullion department in London". And so it came to pass that when HSBC took over the business in January 2000, it would only be a few months before Simon and his colleagues received their redundancy notices. He took the summer off to job hunt and enjoy the Olympics before workingfor a short period at Standard Bank, ahead of joining Brinks, where he remained

6 Ibid., p. 407.
7 Ibid., p. 408.
8 Kynaston, *The City of London, A Club No More*, p.666.

The LBMA Management Committee at the LBMA's Silver Anniversary Dinner in December, 2012. Simon is located on the back row, fifth from the right.

until his retirement in April 2015. Following the reflections of his extremely interesting career, Simon commented that not much more could be discussed of his time at Brinks without the need to "shoot me afterwards". There was only one question still to ask, if he had his time again, would he do anything different?, to which Simon replied: "I really don't know, it is a difficult question to answer, but somehow I fell into this business. I seem to have gained a reputation where people know me and trust me. What more could you ask for?"

Dr Michele Blagg (BA, MA, PhD) is an independent Research consultant and Visiting Research Associate at the Institute of Contemporary British History (ICBH), King's College London. In 2015 she was awarded a certificate in Global Risk Analysis & Crisis Management from Vesalius College, Brussels.

Her main areas of interest are financial and business history with special regard for the development of the London bullion market and those who work in the industry. Her doctoral research focused on the business operations of the Royal Mint Refinery, a bullion refinery operated by N M Rothschild & Sons between 1852 and 1968, which provided a detailed picture of the growth and external threats faced by the London bullion market. She further extended her knowledge of the London market while engaged as a Research Consultant for the LBMA on the oral history project *Voices of the London Bullion Market.* The aim of the project was to preserve for the record the development of the LBMA, its structure, its place in the City's financial system and its global presence.

She teaches on the MA in Contemporary British History at ICBH and assists with the Witness Seminar Programme. She is a Trustee and member of the Executive Committee of the Business Archives Council 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. She can be contacted at **michele.blagg@kcl.ac.uk**.

The 2015 LBMA Bullion Market Forum

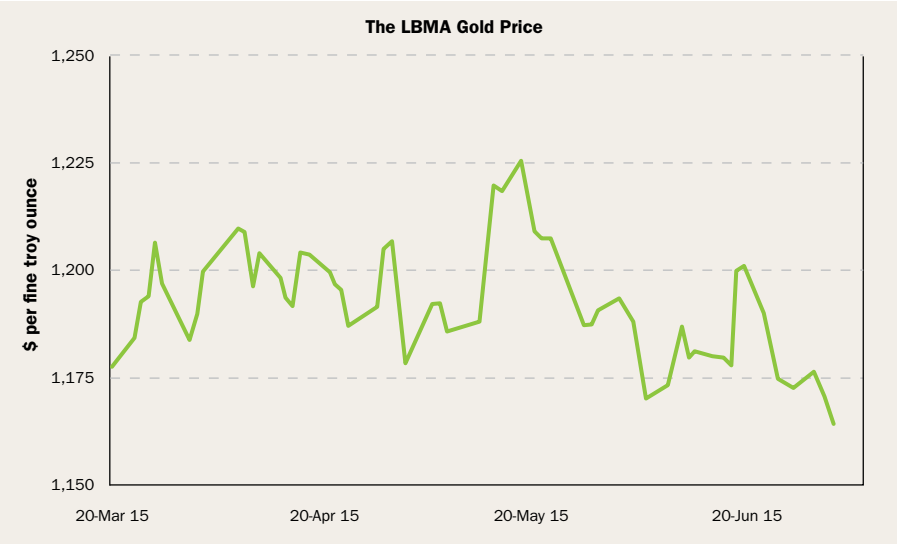
The LBMA held a Bullion Market Forum at the Mandarin Oriental Hotel in Shanghai on 24-25 June, 2015. The purpose of the Forum was to highlight developments in the local bullion market. The LBMA have held similar forums in the past in Moscow, New Delhi and Singapore, to focus primarily on local bullion market issues. As such the forums are typically smaller in scale than the LBMA's annual conference, which has a more international based focus. The Forum proved a great success with more than 330 delegates in attendance.

Proceedings opened on the Wednesday evening with a Cocktail Reception and Dinner sponsored by the Shanghai Gold Exchange. After an evening of networking, the formal forum programme began the following day with a total of 28 speakers and moderators participating in five sessions spread over the course of the day. The keynote speech was delivered by the distinguished Chinese economist, Dr Yao Yudong, Director General of the Research Institute, People's Bank of China.

Two of the most popular speeches are reproduced here in the Alchemist. On page 6 is the Welcome Speech by Ms Shen Gang, Vice President of the Shanghai Gold Exchange, covering the growth in the gold market in China. There is also the speech, "View from an International Bank" by Jeremy East of Standard Chartered Bank, which you will find on page 9. The presentations delivered at the Forum are available on the LBMA's website. The Forum was very well received, and we will look forward to the next event, the annual conference in Vienna, 18-20 October, 2015.

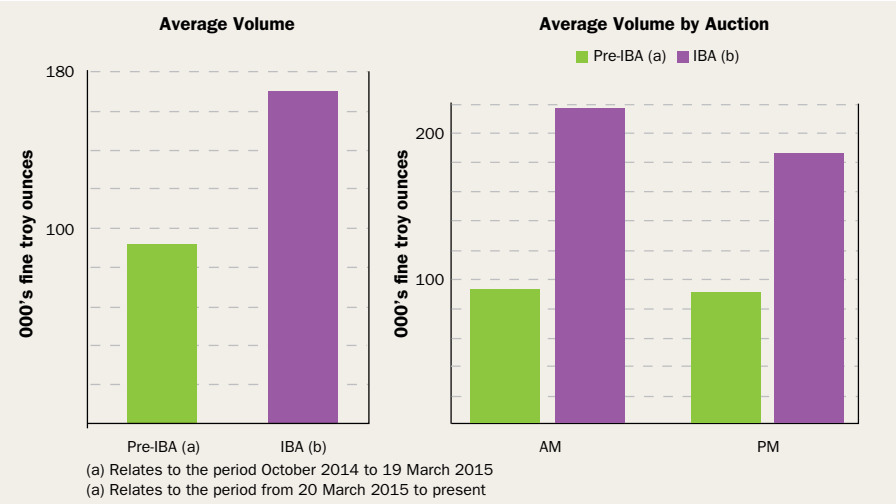
ICE Benchmark Administration and the LBMA Gold Price

By Finbarr Hutcheson, President, ICE Benchmark Administration



On 20 March 2015, ICE Benchmark Administration Ltd (IBA) became the administrator for the LBMA Gold Price, which replaced the London Gold Fix as the principal global benchmark for daily gold prices. That day was the culmination of a tremendous amount of work by the London Bullion Market Association (LBMA), IBA and the day one participating firms – Bank of Nova Scotia-Mocatta, Barclays, Goldman Sachs, HSBC, Societe Generale, UBS and JP Morgan Chase (which joined one week later). That morning, the transition from the London Gold Fixing Company Limited phone call methodology to the electronic WebICE platform was seamless. I was delighted to witness the first-ever gold auction, which published the LBMA Gold Price at $1,171.75.

Operating and supervising the auction is now part of our daily routine at IBA, but our role as administrator extends beyond the daily production of the benchmark price. We are continuously working to raise the credibility of the benchmark through increased participation and volumes in the auction, high-quality benchmark administration, improved governance and oversight, and in many other ways as well. We have expanded the number of direct participants in the auction from four (under the London Gold Fixing Company) to ten and with more on the way. Bank of China recently became the first Chinese direct participant, and both China Construction Bank and the Industrial and Commercial Bank of China have announced their intent to join the auction. Compared to the volumes of the last five months of the London Gold Fix, volumes in the auction have almost doubled. Volumes prior to the launch of the LBMA Gold Price were on a net basis, ie after netting off house and client orders, whereas volumes since the launch of the LBMA Gold Price can be submitted either on a net or gross basis.



Additional ways we are working to raise the benchmark's credibility include consulting with the market on key aspects of the process – such as the Seller's Premium and the publication of non-USD prices – and establishing the LBMA Gold Price Oversight Committee, which meets regularly to review key issues related to the benchmark. We are also maintaining our dialogue with the regulators to provide input on the new rules they are considering. Finally, we recently published our commercial model to support these ongoing efforts. In this article, I will provide my perspective on each of these topics.

> *"Bank of China recently became the first Chinese direct participant, and both China Construction Bank and the Industrial and Commercial Bank of China have announced their intent to join the auction."*

Consulting on Key Changes

Just three weeks after the LBMA Gold Price began, we launched a consultation on three aspects of the auction process: the Seller's Premium; the non-USD prices (EUR and GBP); and the fallback procedures if there are not enough direct participants to run an auction.

The Seller's Premium is a historical market convention of adding $0.15 to the benchmark

for settlement purposes. There is little formal documentation on the origins of the Seller's Premium, but we believe it was put in place a long time ago to incentivise miners to bring their metal through London.

The upshot is that trades between direct participants from the auction are not settled using the benchmark price itself, but a different, higher value. Consequently, transactions between direct participants and clients settle at a spread around this higher value and not around the benchmark price. For example, if the benchmark were $1,200.00, direct participant transactions would settle at $1,200.15 and direct participants would settle transactions with selling clients lower than $1,200.15 (e.g. $1,200.05) and transactions with buying clients higher than $1,200.15 (e.g. $1,200.25). Due to the requirement for client spreads, it makes sense that customer business might not settle at the same price as trades between direct participants. However, as a result of the Seller's Premium convention, trades based on the auction for the LBMA Gold Price do not settle using the LBMA Gold Price as the mid. Since the benchmark is intended to represent the price of trading activity in the auction, transparency is not served if the mid-price for settlement is actually different to that established by the auction.

The Oversight Committee has considered the feedback from the consultation and has come to the conclusion that removal of the Seller's Premium would promote a more transparent LBMA Gold Price and provide a further benefit of the removal of a tracking error. This new standard will come into effect on 1 January 2016, allowing the market adequate time to prepare for the change. If there is sufficient interest, IBA will run implementation forums in conjunction with the LBMA and ISDA. Please contact IBA if you would like to attend.

The non-USD prices are indicative settlement prices for trades in the auction and are also part of the regulated LBMA Gold Price benchmark (used for reference in contracts outside of the auction). The consultation respondents' use of the non-USD prices was mixed: the prices were important to some and not at all to others. Based on the feedback, IBA will continue to publish the non-USD prices. The settlement price for any non-USD trade in the gold auction is agreed bilaterally between each client and their direct participant. The non-USD prices that IBA publishes are indicative-only prices for settlement in the auction. They form part of the regulated benchmark, the LBMA Gold Price, for use in contracts outside of the auction.

The feedback on the fallback procedures highlighted the need for daily benchmark prices in order to protect contractual certainty even if there are not enough direct participants to run an auction on a given day. Therefore, as the administrator of the benchmark, IBA will publish benchmark prices even on days where there is an insufficient number of direct participants to run an auction.

Oversight Committee

The LBMA Gold Price Oversight Committee is a key part of IBA's governance and administration of the benchmark. The Committee is the mechanism by which the market provides ongoing guidance to IBA to ensure the credibility and longevity of the benchmark. The committee achieves this goal by making decisions on the evolution of the process based on changes in the market and regulatory environments. The inaugural meeting of the Oversight Committee was held on 27 February 2015, three weeks ahead of the go-live, and the Committee has now met four times.

"The feedback on the fallback procedures highlighted the need for daily benchmark prices in order to protect contractual certainty even if there are not enough direct participants to run an auction on a given day."

The Oversight Committee represents a diverse cross-section of the market, populated by respected industry veterans. It includes: Grant Angwin (Johnson Matthey Refining); Shekhar Bhandari (Kotak Mahindra Bank); Tony Evanson (Brink's Global Services); Rob Hayes (AngloGold Ashanti); Sakhila Mirza (LBMA); Aram Shishmanian (World Gold Council); Simon Weeks (Bank of Nova Scotia-Mocatta); and Tim Wood (Denver Gold Group). Additional Committee members include Michel Prada and André Villeneuve, two independent non-executive directors of IBA. Michel Prada served as Chairman of the Executive and Technical Committees of IOSCO and was a founding member of the Financial Stability Forum (now the Financial Stability Board). He is currently Chairman of the International Financial Reporting Standards Foundation Trustees. Previously, he was Chairman of the Autorité des Marchés Financiers (AMF) and its predecessor body for 12 years. André Villeneuve served as Chairman of the City of London's International Regulatory Strategy Group from 2006 to 2012 and he was Non-Executive Chairman of the London International Financial Futures and Options Exchange (LIFFE), now part of Intercontinental Exchange, from 2003 to 2009. He was an Executive Director of Reuters from 1989 to 2000.

I am honoured that these two esteemed professionals, along with the gold market representatives, have committed to work with IBA for the good of the benchmark. Emma Vick, IBA's Benchmark Administration Manager, and I round the committee membership to 12. Together, we are working to deliver the best results for the benchmark.

The Oversight Committee is responsible for reviewing all aspects of the determination of the LBMA Gold Price, including the auction methodology, process and parameters; the eligibility criteria for new direct participants; and overseeing any changes. The Committee reviews potential conflicts of interest and oversees the administration of the benchmark. Standing agenda items reflect supporting benchmark integrity and include reviewing surveillance reports.

The Oversight Committee oversees the LBMA Gold Price Code of Conduct. All direct participants must agree to the Code, which requires direct participants to have sufficient internal systems and controls to mitigate potential conflicts of interest; staff training and experience; whistleblowing policies; adequate record-keeping; and proper compliance and audit policies. The Committee will review the Code regularly and can update it at any appropriate time.

Regulation

It would be impossible to write anything about benchmarks in 2015 without referring to the regulatory environment. While the market benefits from and favours clear regulatory structures, there is always the challenge of interpretation in times of change. It is easy to forget that when markets have been functioning for a time, they benefit from common interpretation of rules and they adopt accepted practices. With new rules, we need to build up a history of normal practice, and four months of running of the gold auction has provided consistency and reassurance to the market.

The LBMA Gold Price is now a 'specified' benchmark, which means that it is regulated by the FCA. It also means that the administrator must be a regulated benchmark administrator and must comply with the FCA's rules for benchmark administrators as set out in MAR 8.3.

One of the key concerns for regulators is the mitigation of potential conflicts of interest. This is reflected in both the Code of Conduct and the design of the technology platform for the auction – WebICE.

A key potential conflict that direct participants must mitigate is that of house trading when in possession of information about their client order flow. House trading is a welcome and valuable part of the auction, provided that possible conflicts are appropriately mitigated.

WebICE can be configured to provide full segregation of client and house orders so that house traders have no knowledge of the client order flow during the auction or when trade confirmations are sent afterwards. The feedback we have received from some firms is that their business in the auction has increased as a result of this segregation – they are now freer to trade than before, because the traders do not see the client orders.

The ultimate step in mitigating this potential conflict of interest is for clients to have their own WebICE screens in order to manage their own orders in the auction. Clients would still face their direct participant (who would continue to provide the intermediation service for credit, etc.), but they would have the same level of access to information and control of their orders that direct participants currently do. This 'level playing field' provides a full audit trail from the point of entry of the order and also provides useful granularity for IOSCO compliance. The technology for this is already in place, and we will continue to work with direct participants to enable this for their clients.

Increasing Participation

As mentioned before, we have increased the number of direct participants from four to ten, and more are expected to join. Growing and diversified participation in the gold auction, both geographically and across the industry, has been key to strengthening the credibility of the LBMA Gold Price.

Since the launch of the gold auction, I have presented in New York to wholesale and retail jewellery companies at the Initiatives in Art and Culture Conference, and in Shanghai to the professional market at the LBMA Bullion Market Forum. In Shanghai, I had several meetings with Chinese banks eager to follow in the footsteps of Bank of China. Bank of China, a founding Ordinary Member of the LBMA, became a direct participant of the auction in June.

> *"We have increased the number of direct participants from four to ten, and more are expected to join."*

We continue to work with new applicants to become direct participants and have a streamlined on-boarding process. If you are interested in learning more about becoming a direct participant, please contact the team, who will be happy to guide you through each step of the process (details are at the end).

Commercials for Sustainability

Systemically important benchmarks need to be operated on a commercially sustainable basis to ensure the required level of investment and attention from independent administrators.

For gold, we designed the commercials to promote direct participation and broad usage of the benchmark in order to further raise global confidence in the LBMA Gold Price and the London gold market. We decided to postpone implementation of fees until the fourth quarter of 2015, to concentrate on a successful launch.

How the LBMA Gold Price is Set

The LBMA Gold Price benchmark is published twice a day using the price from the final round of each gold auction. The gold auctions start at 10:30am and 3:00pm (London time), and are run on the WebICE electronic trading platform.

The auctions provide a market-based platform for buyers and sellers to trade physical spot gold (Loco London delivery). The price discovery is in USD and the final auction price is published as the LBMA Gold Price benchmark in USD, EUR and GBP.

The auctions run in rounds of 45 seconds. At the start of each round, IBA publishes the price for that round and then participants enter their buying and selling volume. At the end of the round, if the difference between buying and selling volume is within the imbalance threshold (20,000 oz) then the auction is finished and the price is set. If the difference in volume is larger than the imbalance, IBA announces a new price and begins a new auction round. Direct participants' orders carry across from round to round and participants can cancel or adjust their orders at any time during or between the rounds. The minimum order size is 1 oz to allow client orders to be exactly represented. Participants can place as many orders as their business requires. Any imbalance is shared equally between the direct participants.

When the auction is finished (i.e. in balance at the end of a round), WebICE automatically nets direct participants' orders to produce the minimum number of trades and notifies the counterparties. The LBMA Gold Price is then published in USD, EUR and GBP, and resulting trades settle two days later.

Based on market feedback, IBA is not charging trade-matching fees to direct participants or their clients; additionally, usage and data access fees are waived for direct participants – to encourage firms to become direct participants. The fee structure is based on benchmark usage and timeliness of access to data, and our commercial model is transparent and non-discriminatory.

Thank You Notes and Conclusion

It has been my pleasure to get to know many of the ladies and gentlemen of the world bullion market, and I look forward to meeting more participants in the future as we continue to grow participation in the auction. I would also like to thank the Oversight Committee members who have demonstrated their commitment to the London gold market by providing their valuable perspective, time and expertise.

I encourage you to visit the IBA web content devoted to the LBMA Gold Price. You will find a comprehensive overview of the technology, governance, oversight and fees associated with the IBA Gold Auction. If you have thoughts on how to further evolve the auction or would like to become a direct participant, please send your feedback to me or the IBA team at iba@theice.com.

Finbarr Hutcheson is President, ICE Benchmark Administration, a wholly-owned subsidiary of Intercontinental Exchange (NYSE: ICE). Previously, he served as the Chief Executive of NYSE Liffe, the international derivatives business of NYSE Euronext, and was responsible for the Group's European Fixed Income, Currencies and Commodities (FICC) businesses; he joined NYSE Euronext in 2011. Prior to this, he spent 15 years working for Goldman Sachs in a variety of roles in derivatives. Most recently, he was Global Head of Futures Services Business Development within the Securities Division.

Regulation Update

By Sakhila Mirza, LBMA General Counsel

Responsible Gold Guidance (RGG)

Refiner audit reports

It has been three years since the LBMA launched its Responsible Gold Guidance (RGG). Both the refiners and auditors have worked hard during this time to understand the requirements and to ensure the LBMA RGG has been implemented successfully. The LBMA RGG 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. As per the RGG, all refiners have three months from the end of their financial year to submit the independent audit report to the LBMA. For most refiners, this deadline for the 2014 production was March 2015. The LBMA has received a number of reports and is continuing to receive more. To date, all the reports reviewed have been approved.

OECD and EU update

The LBMA Executive attended the 9th ICGLR-OECD-UN GoE Forum on Responsible Mineral Supply Chains in Paris in May 2015 and met with the China Chamber of Commerce of Metals Minerals & Chemicals Importers & Exporters (CCCMC). The CCCMC is developing its own responsible sourcing guidance, which will be a two-tier process – a high-level policy supported by detailed guidance.

Fair & Effective Markets Review

Since the last issue of the *Alchemist* was published, the Bank of England, FCA and HMT have issued on 10 June their final report of the Fair & Effective Markets Review (FEMR). Overall, the message was that the FEMR Executive has not taken a legislative approach in relation to precious metals. In doing so, it has acknowledged that the bullion industry is already undertaking a number of initiatives which they expect the industry to drive forward. Indeed, the FEMR Executive acknowledged such initiatives by cross-referencing in its final report the LBMA Strategic Review undertaken by EY. A new Market Standards Board will be set up by FEMR very soon, which will work with the industry to help with clarifying the interpretation of existing rules and how those rules should apply in practice.

FEMR provides 21 recommendations, which can be grouped into six categories:

- Raise standards, professionalism and accountability of individuals
- Improve quality, clarity and market-wide understanding of FICC trading practices
- Strengthen regulation of FICC markets in the UK
- Launch international action to raise standards in global FICC markets
- Promote fairer FICC market structures while also enhancing effectiveness
- Introduce forward-looking conduct risk identification and mitigation.

There will be an opportunity for the LBMA to meet with the new Markets Standards Board and be kept updated on the developments regarding the EY Strategic Review as well as the implementation of the blueprint/road map.

Other regulatory news…

Basel III: The LBMA together with the WGC has also been working on a letter to submit to the European Banking Authority on the Net Stable Funding Ratio, under which the Required Stable Funding (RSF) factor for gold is now required to be 85% – an increase from the initial proposal of 50%. After consultation with the banking members of the LBMA, the letter will highlight the economic impact of the NSFR on the gold market, namely the increase in operating costs for banks. This in turn would have a negative impact on trading pricing and potential market liquidity. Costs will be transferred to clients, making it very expensive to do business, and market liquidity will fall as a result of firms seeking to reduce their gold holding. It is important that gold is treated differently from other commodities.

DIARY OF EVENTS 2015/16

AUG

03-05
Diggers & Dealers Forum 2015
Kalgoorlie, Australia
www.diggersndealers.com.au/

21-23
12th India International Gold Convention
Grand Hyatt, Goa, India
www.goldconvention.in

23-26
2015 Conference of Metallurgists
Toronto, Ontario
Web.cim.org/com2015/

28-30
3rd China Gold Mining Forum
Zhaoyuan, Shandong Province, China
www.cngold.org.cn/

SEP

16-18
14th China International Silver Conference 2015
Shanghai, China
www.silverinstitute.org

16
CME Group Precious Metals Dinner
New York, USA
www.cmegroup.com/

16-18
Precious Metals Summit
Park Hyatt Beaver Creek, Colorado, USA
www.precioussummit.com/

17
IPMI's 3rd Annual Platinum Dinner
New York Palace Hotel, New York, USA
www.ipmi.org/

20-23
Denver Gold Forum 2015
Hyatt Regency, Denver, Colorado, USA
www.denvergoldforum.org/

29-1/10
World Gold Conference 2015
Misty Hills, Gauteng, South Africa
www.saimm.co.za/

OCT

12-16
LME Week 2015
www.lme.com/

18-20
LBMA/LPPM Precious Metals Conference 2015
Hilton Vienna Hotel, Vienna, Austria
www.lbma.org.uk

26-27
The Precious Metals Investment Symposium
Four Seasons Hotel, Sydney, Australia
http://syposium.net.au/pm/

28-29
The Silver Institute: 2015 Silver Industrial Conference
Washington DC, USA
www.silverinstitute.org/

NOV

03-04
2015 Precious Metals Summit
Park Hayatt, Zurich, Switzerland
www.precioussummit.com

DEC

09-10
10th China Gold & Precious Metals Summit 2015
Shanghai, China
www.chinagoldsummit.com/

JAN

24-27
Inside ETFs
Diplomat & Spa, Los Angeles, USA
www.etf.com/

JUN

11-14
IPMI 40th Precious Metals Conference
JW Marriot, Pheonix, Arizona

LBMA News

By Ruth Crowell, Chief Executive, LBMA

MEMBERSHIP

On 30 March, Koch Supply and Trading LP was admitted as an Affiliate Member, as was Bank of America N.A. on 28 April.

The following companies were admitted as Ordinary Members: Asahi Holdings Inc on 17 April, Sharps Pixley Ltd on 10 June and Bank of Communications Co. Ltd on 6 July.

Viamat changed its name to Loomis International (UK) Ltd with effect from 6 July.

These changes brought the membership to 150 companies, comprising 82 Members (of which 14 are Market Makers) and 68 Associates.

GOOD DELIVERY LIST

On 9 June, the gold refinery of Daye Nonferrous Metals Co., Ltd was admitted to the Gold Good Delivery List.

There are currently 73 refiners on the Gold Good Delivery List and 83 on the Silver Good Delivery List.

COMMITTEES

Management Committee
In the past 12 months, the Management Committee has enhanced its scope from reviewing the work of the Subcommittees to proactively developing the strategy and vision for the LBMA. Most recently it has been working with Ernst & Young and the LPMCL on the Strategic Bullion Market Review. This change of focus has been driven by the changes in the regulatory landscape. In the next 12 months, the LBMA will expand its remit to provide new services and technology to the international market that it serves. These services will start with market-led trade reporting, which is in line with the Fair & Effective Market Review. To support these new services, the Committee will need to update the LBMA's legal structure and governance. The Committee will be recruiting Non-Executive Directors to give further firepower as well as enhanced governance to the LBMA.

The Committee has also been involved in reviewing the work of the Subcommittees outlined below.

Regulatory Affairs Committee
The Committee continues to focus on the developments with European regulations, including MFID and MFIR as well as the outcome of the FEMR report, which was published in June. Please see the Regulation Update on page 23 for further details.

Three new participants have recently been approved to participate in the LBMA Gold Price auction process, which is administered by ICE Benchmark Administration (IBA). These are Bank of China, Morgan Stanley and Standard Chartered, taking the total number of participants in the auction process to ten: Barclays Bank, Bank of China, Goldman Sachs International, HSBC Bank USA NA, JP Morgan, Morgan Stanley, Société Générale, Standard Chartered, The Bank of Nova Scotia-ScotiaMocatta and UBS.

The modernisation of the benchmarks has seen a six-month fee-free period (from the date of their respective launches) for all benchmarks to ensure minimal disruption to the market. However, going forward, the administrators of each benchmark will levy licence fees for real-time access to the data in order to offset the associated IT, legal and compliance costs. Anyone who would like to access the benchmark prices in real time will need to purchase a licence from the respective administrator and, accordingly, the LBMA is required to publish the prices on its website with a delay, rather than in real time (see table below).

Physical Committee
In addition to the recent additions to the Good Delivery Lists outlined above, there are currently two active applications – one for gold, which has passed stage one, and one for silver, which is currently at an advanced status of stage two. The LBMA announced recently that, with effect from 26 June, the Tokyo Commodity Exchange (TOCOM) has been granted a licence to use the LBMA's Good Delivery List as part of its own accreditation procedures. TOCOM joins NYSE Liffe US, which was granted a licence in September 2011, and NYMEX/CME, which was granted a licence in February 2013.

Total refined gold production represented by the accredited refiners on the LBMA's Good Delivery List was 6,601 tonnes in 2013, more than double mine production of 3,061 tonnes. For silver, refined production by listed refiners was 24,570 tonnes, marginally below the 25,494 tonnes of mine production in the same year.

A joint meeting between the LBMA and the Shanghai Gold Exchange (SGE) was held during the recent LBMA Forum in Shanghai. Matters of mutual interest were discussed culminating in the issuing of a 999.9 gold kilobar specification. This does not mean, however, that kilobars are now deliverable into London. Due to the volume of bars processed daily by the London vaults, this would not be economically practical. For those readers unfamiliar with the background to this issue, the LBMA accredits refiners to its Gold Good Delivery List on the basis that they satisfy the GD Rules only in relation to large 400 troy oz bars (approx. 12.5kg). The LBMA does not set any formal standard as such for kilobars; however, many of the refiners on the LBMA's list do produce kilobars in addition to standard 400oz bars. The LBMA has issued kilobar specifications to assist the refiners and traders active in 999.9 kilobar markets.

Historically, the SGE had required that all kilobars imported into China must contain, within the impurities, maximum proportions of certain elements such as silver (<0.050ppt) and copper (<20ppt). This meant that refiners had to tailor their refining processes and techniques to satisfy these requirements. Refiners that did not meet these standards would routinely have their kilobars rejected by China. In some cases, this would amount to thousands of bars, which were then the liability of the refiner that had produced them. Even if the refiners were able to offload the bars into other markets, the risk was that they could end up at some point being exported to China and then again be rejected. The new agreed standard means that refiners need only produce a 999.9 kilobar and does away with the requirements for silver and copper, such that the impurities in the bar can now consist of any element and in any proportions that a refiner produces. This news has been welcomed by LBMA refiners, because they do not have to make one type of kilobar for the Chinese market and another standard for other markets.

Preparations for the next round of the Proficiency Testing Scheme have commenced and will take place in early 2016. Further details will be communicated later this year to all GD refiners that are participating in the scheme.

The latest round of Pro Active Monitoring (Round 28) is almost complete, with no reported issues. The next round is expected to start shortly.

The Visual Guide II will be launched in early August. The Visual Guide will ensure consistency when questions

Price	Administrator	Date that charges for access to real-time data became/will become effective	Time at which prices are published on the LBMA's website.
LBMA Gold Price	ICE Benchmark Administration	1 October 2015	30-minute delay
LBMA Silver Price	CME/Thomson Reuters	12 January 2015	Currently 15-minute delay, but at 8pm with effect from 31 August
LBMA Platinum & Palladium Prices	LME	13 July 2015	Delayed until midnight

For further information including data licence arrangements and pricing structures, please refer to the LBMA Prices Summary page at: **www.lbma.org.uk/lbma-prices-summary**

of quality arise and will maintain the efficient movement of physical gold through the London vaults.

At the last Referees Group meeting, the stock levels of silver testing samples was discussed and it was agreed that the process of manufacturing new samples would commence shortly.

It was noted that Stewart Murray will be less involved in the day-to-day work of the Good Delivery List. Instead, he will provide expertise on special projects such as the Visual Guide. The LBMA would like to thank him for his significant contribution to the work of the Committee. However, in view of his substantial and critical contribution to the work of the Referees Group, Stewart will continue his consultancy role in support of the Group.

Membership Committee
The Committee continues to review a growing number of Membership applications, which demonstrates the growing relevancy and diversity of the Association. Any refiners, producers or central banks that may be interested in applying are invited to contact Sunny Field at sunny.field@lbma.org.uk. Further refiner, producer and central bank membership would be a welcome development and would further extend the breadth and strength of the LBMA.

Public Affairs Committee
The Committee helped prepare the programme for the Bullion Market Forum in Shanghai on 24-25 June, which proved a great success. A review of the Forum is on page 19.

The other main focus for the Committee in recent months has been preparing the programme for this year's LBMA/LPPM Conference on 18-20 October in Vienna. Speaker highlights for this year include Keynote Speakers Lord Gus O'Donnell, Strategic Advisor to Toronto-Dominion Bank, and John Authers, Senior Investment columnist at *The Financial Times* as well as a dedicated Central Bank Session with speakers from the Bank of England, Deutsche Bundesbank and the Oesterreichische Nationalbank. Registration for this event is now open and we would encourage those interested in attending to register for the event as soon as possible as places this year will be limited in order to avoid overcrowding.

Finance Committee
In view of the ongoing strategic review, the Committee has been focused on re-evaluating its short-term and long-term funding to ensure continued stability for the Association. The Committee has recently prepared the Management Accounts, including the three-year budget review.

Annual General Meeting
The LBMA's 27th Annual General Meeting took place at Glaziers Hall on Friday 3 July. This year, the five Market Making representatives on the Management Committee were required to stand down, although they were eligible to stand again for election for a further two-year period. The following Market Making representatives were re-elected to the Committee: Robert Davis, Toronto-Dominion Bank; Peter Drabwell, HSBC Bank plc; Jeremy East, Standard Chartered Bank; and Steven Lowe, Bank of Nova Scotia-ScotiaMocatta. The following Market Making representative was elected to the Committee, Sid Tipples, JP Morgan Chase Bank N.A.

In addition, this year, owing to recent resignations from the Committee, there were also three Ordinary Member vacancies to be elected. The following representatives were elected to the Committee: Mehdi Barkhordar, PAMP S.A.; Allan Michael Finn, Malca-Amit Commodities Ltd; and Chris Thompson, Sumitomo Corp. Global Commodities Ltd.

Grant Angwin of Asahi Refining USA Inc was re-elected Chairman of the LBMA. Grant has been a Member of the Management Committee since 2011. Steven Lowe of Bank of Nova Scotia-ScotiaMocatta was re-elected LBMA Vice-Chairman. A full copy of all Subcommittee Reports and Grant's report from the AGM can be found on the LBMA's website.

Obituary - Michele Genel

By Umberto Magro, General Manager, PAMP SA

3 November 1958 – 29 June 2015

In memory of Michele Genel who sadly passed away on 29 June, 2015. Born on 3 November 1958, Michele boasted an educational background in chemistry and held a sworn assayer's diploma from the Swiss Federal Bureau for the Control of Precious Metals.

After several years of working experience in the laboratories of Argor and Inpharzam (Zambon Group), he joined PAMP SA in 1985, where he continued his professional activities as sworn assayer until September 2012, when he decided to move on to a new challenge at ECOMETAL SA.

During the time spent at PAMP SA, Michele was in charge of the Testing and Assay Laboratory. He participated in the growth and development of the company and supported the acquisition of certifications and international accreditations linked to the refining and processing of precious metals such as LBMA, LPPM, COMEX and TOCOM. The company obtained the ISO 17025 accreditation and became an LBMA Referee in 2004, as well as an LPPM Referee in 2007.

Among his several activities, he was involved in the implementation of the assay laboratory of MMTC-PAMP India and played an active role within the LBMA and LPPM Referee panels. He also contributed to the success of the LBMA Assaying and Refining Seminars.

The LBMA Good Delivery Referees, as well as those of the LPPM, will always remember Michele as a calm and likeable person whose dedication and leadership were so appreciated. He will be dearly missed.

Market Moves

Michael Kempinski joined Degussa Precious Metals Asia Pte Ltd as Managing Director in April 2015. He brings with him 20 years of experience in the precious metals industry, the last 4 years of which have been in Singapore. Most recently, he held the position of Director with Deutsche Bank Singapore.

Headquartered in Frankfurt, Degussa seeks to penetrate the Asian precious metals market via Singapore by providing a broad range of Degussa-branded bullion bars and coins, coupled with storage solutions to private and institutional investors. As such, the first Asian Degussa subsidiary will open in Singapore in late summer, 2015.

facing facts

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

For the past few quarters, the GFMS team at Thomson Reuters has been calling that gold mine production would plateau over the 2014/2015 period. With production data now in for Q1, we review how the gold mining industry is faring on both the production and cost fronts.

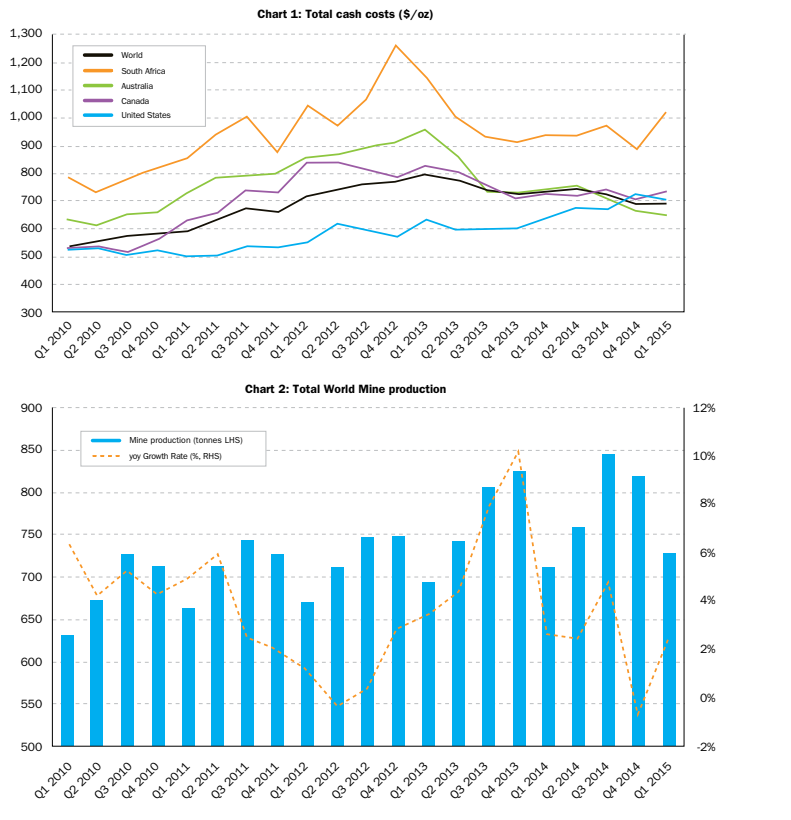
Two years behind the price peak, 2014 year saw the gold mining industry's output hit fresh record highs, of more than 3,100 tonnes. With exploration rates having slowed appreciably and project spending aggressively cut by producers seeking to manage costs, over the past year, we have held the view that the room for further output growth was extremely limited. With hard data compiled for the first quarter of 2015, we expect that mine supply will rise this year, but by less than 1%.

Global gold output has shown a rise of just over 2% in Q1, up by close to 20 tonnes, and we estimate this trend of growth has continued, albeit at a lower pace, with provisional expectation for Q2 output to rise by between 1% and 2% year-on-year.

Based on the trajectory from Q1, with production up by one-sixth year-on-year based on data from the China Gold Association, Chinese output has continued to be influential in the global trend and could push towards the 500t mark for 2015 as a whole. In the case of Russia, from a period of adversity has come opportunity. The sharp rouble devaluation that developed in the second half of 2014 has paved the way for increasingly healthy margins in the gold industry. Although few Russian operators have reported costs yet in 2015, dollar-denominated costs are expected to come in appreciably lower when half-year financials are declared. Although Russia's economic malaise has not yet translated into higher mine output, which was steady in the first quarter, a recent research trip in Moscow to coincide with the launch of the Russian language GFMS Surveys affirmed cautious optimism for mined and refined supply growth over the coming year, in spite of provisional indications of slight weakness in data for the second quarter. Likewise, a number of Eurozone countries have enjoyed improved dollar-denominated margins in recent quarters, with European producers' average total cash costs in Q1 (albeit for a small population) more than 10% lower than a year earlier.

Elsewhere, modest production growth has also been recorded in the Democratic Republic of the Congo, where the formal mining industry is becoming more dominant, most notably thanks to the onset of Kibali. Indonesia also saw an uptick thanks to higher volumes from the country's copper-gold concentrate producers. Peruvian output also edged higher in Q1, on the back of strong operating performances from two of the country's large mines, Yanacocha and Lagunas Norte.

Partially offsetting the growth outlined above, lower output was seen from Africa in the first quarter, with drops from both Ghana and South Africa, the continent's two largest producers, in the case of South Africa by more than 10% year-on-year. With the future of one of Ghana's major mines, Obuasi, in the balance (with production currently on hold as studies on a deep-level project are completed), losses will be carried over the remainder of the year. In South Africa, production losses will continue in Q2 and will likely accelerate over the remainder of the year, presupposing the impasse between unions and corporates is sustained, with strikes expected to hit the industry in the coming weeks. Somewhat surprisingly, in spite of a broad trend of rand depreciation against the dollar over the course of the past year, South Africa has faced adverse cost moves, with Total Cash Costs having risen back above $1,000/oz during Q1 for the first time in two years.



Elsewhere, costs have remained under control, with the global average below $700/oz during Q4 2014 and Q1 2015. This has reflected two major trends in play, with a continued focus by producers to operate assets as leanly as possible, coupled with the US dollar having remained firm against a large suite of producer currencies.

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.

The Alchemist is published quarterly by the LBMA. If you would like to contribute an article to the Alchemist or if you require further information please contact Aelred Connelly, London Bullion Market Association, 1-2 Royal Exchange Buildings, Royal Exchange, London EC3V 3LF
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