LBMA

Alchemist

The London Bullion Market Association ISSUE 76 January 2015

In this issue

Inflated Threats: The Eurozone Crisis and the Challenges Going Forward
By Wolfgang Münchau
Page 3

Mining in Peru – Country of Opportunities
By Eva Arias Sologuren
Page 6

The Good, The Bad and The Ugly: Challenges Facing PGMs in South Africa
By Stuart Murray
Page 9

Conference 2014 Review
By Aelred Connelly
Page 12

LBMA's 14th Biennial Dinner Review
By Aelred Connelly
Page 14

'A Lifetime in the Bullion Market' – Voices of the London Bullion Market
By Dr Michele Blagg
Page 17

Silver Celebrates Something of a Magic Moment
By Daniel Marburger
Page 20

Regulation Update
By Sakhila Mirza
Page 26

LBMA News
By Ruth Crowell
Page 28

Editorial
By Grant Angwin
Page 33

Facing Facts
By William Tankard and Dante Aranda
Page 34

The photo shows silver grain. 2014 proved to be a momentous year for the London Precious Metals Market. Silver features prominently in this edition with articles by Daniel Marburger on page 20 and William Tankard on page 34. The LBMA Silver Price and other precious metal benchmark prices are also featured in LBMA News on page 28 and the Editorial by Grant Angwin on page 33.

SBERBANK CIB

Your reliable Russian partner in precious metals

Inflated Threats: The Eurozone Crisis and the Challenges Going Forward

By Wolfgang Münchau, Associate Editor, Financial Times

This is a transcription of the keynote Macro-economic speech delivered by Wolfgang Münchau at the 2014 LBMA Conference in Lima, on 10 November 2014.

The LBMA conference for the industry is an excellent opportunity to reflect on some of the major issues affecting the Precious Metals market. The Eurozone crisis matters in your industry, because the way the scenarios develop will impact market prices. It will have a huge ramification as well for the global economy.

This is not the first crisis. When I grew up in Europe in the 1970s, there was a joke about the EU and how dysfunctional it was. A European nightmare in which the British were in charge of the cooking, the French were the engineers, the Swiss the lovers, the Germans the policemen and the Italians responsible for making the trains run on time.

We have come a long way since then and my modern version of this European nightmare is a Europe where Germany saves, even though it has the capacity to invest and to use fiscal measures to make adjustments to the economy. It is a Europe where France and Italy use fiscal capacity they don't have. Europe has a single currency but its governments refuse to do all the things necessary to make that single currency work.

The problems in the monetary union are generally put down to fiscal irresponsibility, but a lot of adjustments happen in the economy when you forge many countries – it is now 18 – into a single currency.

These are not just fiscal, there are also private sector flows. With the labour markets being unco-ordinated, all functions of the economic policies are essentially national, under national political control, especially the structures of markets. Despite the single market rules, which provide some minimum standards for product markets, all the other factors have been left to national control.

During that period, Germany started an improvement in the real exchange rate, which is the key thing that happened. This wasn't that big of an issue in the first five years of the last decade, but with labour market and welfare reforms, the wage demands are moderated against the rest of the Europe. It made Germany more competitive in one respect, which meant large export surpluses and its counterpart large saving surpluses. Last year, Germany's current account surplus was 8%, which is high. It will be similar this year. You can explain some of it through the fact that Germany is an aging society, which will be a demographic shock. Germany should probably run a current account surplus but nothing of that size. It cannot explain an imbalance as big as 8% of GDP.

> *"Europe has a single currency but its governments refuse to do all the things necessary to make that single currency work."*

When you have these massive differences in the current account balances between member states in a monetary union, you don't get a balance of payments crisis, which is what you would normally get if the counterpart were deficits in other countries. You would get a credit crisis. So the excessive wage moderation in Germany was purely selfish, perfectly legitimate and a politically legitimate policy. You want to be competitive and have full employment; you can't really blame anyone for that. This is the same in every other Eurozone country; they acted rationally, it was not irrational behaviour.

We then got a financial crisis, not a balance of payments crisis but credit crisis. We have a private and public sector credit crisis. The latter was probably avoidable in some instances – certainly in Greece – but in the private sector crisis it was not. The German surpluses had to go somewhere. They were invested, usually at negative returns on investment. And private sectors in other Eurozone countries spent too much. That wasn't the result of some behavioural error; it was the result of a system that has imbalances.

Afterwards, Germany agreed to bankroll the system. That wasn't clear in the beginning because Germany was in a favourable position, it is a rule-based system. The no bail-out principle was enshrined in the treaty. Partially giving up on that was a big deal. They came to an agreement of having a bail-out treaty, the European Stability Mechanism (ESM), which was set up by a treaty among the participating members and became the blueprint. We bail you out, but you have to fulfil some criteria. We're sending in the IMF, the ECB and the European Commission to oversee that you're doing all the necessary adjustments. But it became also the kernel for why things have gone wrong subsequently. If you're in a situation like that, the ideal adjustment for Germany is to accept higher inflation. This is now looking at it not from a German perspective but from a global perspective. And that's what the Americans, the IMF and everyone else is saying: the ideal adjustment is for Germany to accept higher inflation, say 3% or 4%, and for the other Eurozone members to have slightly lower inflation so that we're kind of reversing the process of the last decade and trying to achieve some normality. This is not happening. The opposite is happening because Germany is not inflating. Germany is very much in the mid-range in the Eurozone with regard to inflation rates, which are very similar to the core of the Eurozone. Therefore, the other member states are adjusting. The south is adjusting through deflation, and we see negative inflation rates in southern Europe and Germany having inflation rates of around 1%, which is below the ECB's inflation target of 2%.

Even the strongest economy is still inflating at only half the target rate, which is the reason why we are so concerned about inflation.

As such, the Central Bank would normally act to address the imbalance. It could pretty much solve the problem; however, it cannot do so when inflation is at the zero lower band. That's a global scenario. We're all at the zero lower band so this kind of thing couldn't have happened at a worse time, when monetary policy is unusually constrained. And there are additional constraints placed on the European Central Bank – all sorts of laws that others don't have. It is not the central bank of a country but of a monetary union. There are lots of things the ECB is not allowed to do that other central banks find easier to do.

What do we do now? It's been talking about QE for the last 12 months and say it is ready to implement it. In reality, we know it doesn't have it in place. Things first have to get worse for it.

The photo shows Mario Draghi and the German Finance Minister, Wolfgang Schäuble.

This is probably the reason.

I was recently in Berlin talking to Schäuble and he made it clear to me that this is the red line.

Everyone you talk to in Germany tells you that QE is the red line. We've been willing to go along with the bail-out mechanism, but this is a real red line. We'll see what happens when it is breached, which I believe is going to happen. The Germans are holding out on the system. The reason we don't have QE is because of Germany.

Draghi wanted to bring Germany on board with all his policies; he outvoted Germany on interest rate cuts and on his famous official outright monetary transactions (OMT), the programme introduced two years ago that stabilised the financial system and ended the acute phase of the financial crisis, his backstop guarantee. The Germans were opposed to it, so was the Bundesbank, but not the government. On QE, it's going to be difficult. Draghi didn't want to force the issue earlier, at a time when he would have alienated Germany to an extent that there would have been an irrevocable breach of trust.

In January, there will be a court case on the OMT programme. My expectation is that the European Court of Justice will give the green light. That will encourage the ECB, given that the legal arguments are clear, so I expect that in the first quarter of 2015 we're going to see a QE programme. I'm not very enthusiastic about it, although I am in favour. However, the QE programme will probably be 500 billion euros, which is small. The Eurozone is almost the same size as the US in terms of annual economic output, but the US QE programme was three or four times as large as the EU programme will be.

Of course, in Europe, when we decide something controversial, we don't go 100% nor 0%. Draghi will say we have QE and the Germans will claim we don't have it. When the announcement is made, you will spend quite some time interpreting what you've actually heard.

How will it work? 500 billion euros isn't going to make a big shift. There is a valid argument against QE relative to the US and the UK. The European economy is much more bank based, so a lot of the financial instruments whose interest rates you will manipulate through the programme matter less to the Eurozone economy than they would have mattered to the US. The main channel for the Eurozone will be the exchange rates, but don't get too excited about that either. The reason is that people always focus on the dollar-euro rate, which has gone down significantly. But the nominal exchange rate effect, which is the one that matters, hasn't moved as much. This is because the yen has depreciated against the euro, the other European currencies are fairly stable, as is the pound, but the Swiss franc is certainly not – it is not revaluing against the euro. Many of the currencies are fixed. Italy gained a boost when installing the exchange rate mechanism in the 1990s, but there needs to be a 30% devaluation in the currency for Italy to get the same kind of effect through a euro devaluation. As an example, the euro would need to devalue by 60%, but it's not going to happen. It would be like a 60 to 70 cent devaluation in the dollar; this is just too big, the reason being that the US is a large economy.

The Eurozone is in many respects similar to the United States. The exchange rates are not completely irrelevant, but it's not as important as it would be for a small island economy. And since the Eurozone consists of 18 mostly small countries, everybody talks about the exchange rate as though it was the exchange rate of 18 small open economies, when it is the rate of a large closed economy. The latter is very different in its behaviour from that of small countries.

If you wanted to make QE work, you would probably have to do more – not just buy more but also use other channels than the exchange rate. My favourite channel would be an expectation of the future. We could shift inflation expectations by changing the inflation target. One thing you could do, and that would still be in line with the treaties and with our 2% inflation objective, is a price level target. Not an annual inflation rate but a long-term price stability objective, which would mean that even if inflation rises, if that were to happen in the next ten years, we wouldn't stop this programme immediately. People always fear that when inflation arrives, the ECB will be the first central bank to break, which will impact on the programme, knowing that they don't give you a target, they don't give you a guarantee about how long or how much they will buy and for how long. This will impact confidence. The way to boost it would be to introduce some kind of target change. Now that's not going to happen. I understand they discussed it on the governing council and, for the moment, it has been rejected. The question is: what will happen if QE is put in place but doesn't work?

Pablo Iglesias

The photo is a man from Spain, Pablo Iglesias. Why this is dangerous for Europe is that it's already a 'secular stagnation' we're falling into. This recovery we were supposed to have seen isn't happening. This fact is more dangerous than the financial crisis when the central bank stepped in and ended it. What we're now seeing is the financial crisis translated into an economic crisis because of the way we have reacted to it and all the constraints we have imposed on ourselves. This economic crisis is not just a malaise; we're not like Japan with zero growth rates and a country that's still functional. We will have a lot of insurrection and political discontent, especially in the countries that are affected.

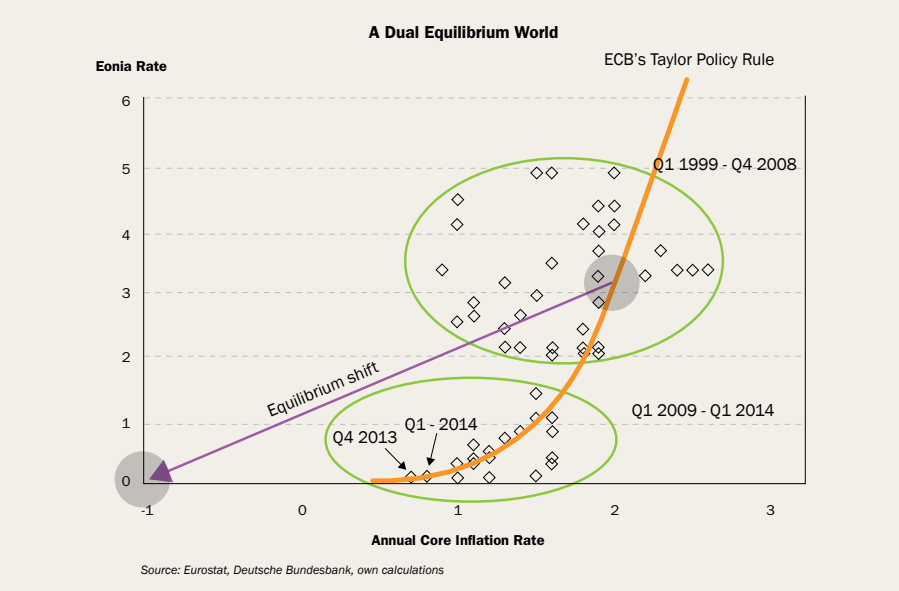
Spain is a good example of a country that had two very strong parties – the centre left party and the centre right party, which has dominated the political spectrum since the democratic revolution of the 1970s. There have been no other serious political players in Spain except for this party until Podemos. Its foundation was not that long ago and it is now leading in all polls.

Mr Rajoy

The above is a photo of Mr Rajoy a talented sociology professor, who is probably of the new breed of leaders to be taken most seriously. We're going to see political issues arising that

we haven't seen before. Will Mr Rajoy be the Spanish prime minister at next year's election? It looked a pretty certain prospect even six months ago but is now much less clear. People are talking about a grand coalition, which is bad news because that's the best recipe to encourage opposition. Rajoy will then be the opposition leader and that will change the politics of that.

Alexis Tsipras may become the next prime minister of Greece. He is leading in the polls and the government is not looking good. I don't take him as seriously as Podemos because I think he will ultimately do what his predecessor did. He has a different rhetoric, his party is clearly different, but he's very much part of the policy consensus. He's not nearly as radical as he appeared to be two years ago, so I would expect him to present a different style; however, I'm not sure whether the substance will be all that different.



Source: Eurostat, Deutsche Bundesbank, own calculations

Casaleggio (left) and Beppo Grillo (right)

The above photo shows two Italians, Casaleggio and Beppo Grillo. Beppo Grillo is the party leader of the Five Star Movement in Italy. Casaleggio is the intellectual and financial power behind the party. They believe that Italy should leave the Eurozone. This was the party with the most votes in the last election, but because in Italy you have parties forming pre-electoral coalitions, it isn't even the main opposition party in the parliament. The main opposition party wants to exit from the euro. That's different from the consensus 10 years ago when both the government and the opposition consistently supported the euro.

Marine Le Pen said that if she becomes president of France, the first act in office will be to instruct the Treasury to leave the euro. I don't think she will become president of France at the next election because these political changes take a long time to come to fruition. There are many things that could happen between now and the next election; for example, Hollande might not run and therefore she might not face him but someone from the conservative party. There may be political developments and intrigue, but it's already telling us that the National Front is leading in the polls, which is completely new. While I don't expect her and Grillo to become the next generation of leaders, Podemos and Tsipras, Iglesias and Tsipras are more likely challengers.

This would change politics, just as oppositions change politics. When the opposition is against the euro, you're going to be more careful. The same is happening in Germany with the anti-euro party. The effect will not be that the party gets into power – it won't – but it constrains the government's ability to say 'no' in public and 'yes' in private, to be pragmatic. We've heard Germany saying no to QE, no to fiscal expansion and so on.

This chart above shows 'secular stagnation'. It plots the annual inflation rate and the interest rates on the left, which asks the question: how high does the interest rate have to be, the Eonia rate being a short-term rate, for inflation to be at a certain level? The upper circle is the old Eurozone world and various years. The dots represent the years before the crisis. Inflation was generally between 1% and 2%, between 1% and 3%, usually it's sort of centring, averaging on 2% in the upper circle, and the interest rate was around 4%, between 2% and 5% but sort of averaging 3% to 4%. That was the pre-crisis world. In economics, you have this equilibrium, meaning things get out of sync but all sorts of market forces bring it back into balance again. This is precisely what happened. We have moved towards a different and lower equilibrium. The reason is the zero bound interest rate.

What does it all mean? I don't want to propose a hugely stagnating Eurozone; there are various scenarios possible: Eurozone stagnates, Japan stagnates, China is slowing down, you can get pessimistic and think gloom and doom forever. Or we have a deflationary scenario but are going to do much about it – unlike the Japanese – and our financial system works very differently from that of Japan in the 1990s. We could have a scenario where deflation, or 'lowflation' as the IMF calls it, is followed by inflation. Or we could have five years of lowflation and then so much cash in the system that it eventually leads to growth, which then might become inflationary.

We could have a decoupling scenario where the Eurozone does what Japan did, but the rest of the world isn't following, it is not affected and finds its own way. That depends on how well the rest of the world can absorb the current account surpluses of Europe, which it is running now, and whether it has the capacity to absorb them and overcome the global shock that comes with it.

These are the three scenarios that stem from it. I believe it would slow down the world for a certain period of time but not forever. It is a classic economic shock to the world; however, the global economy is going to be fine with that. I'm not that optimistic about the Eurozone itself. But that is another story...

Wolfgang Münchau, Associate Editor Financial Times

Wolfgang Münchau, 49, is associate editor and European economic columnist of the Financial Times. Together with his wife, the economist Susanne Mundschenk, he runs eurointelligence.com, an internet service that provides daily comment and analysis of the euro area, targeted at investors, academics and policy makers.

He was one of the founding members of Financial Times Deutschland, the German language business daily, where he served as deputy editor from 1999 until 2001, and as editor-in-chief from 2001 until 2003. FT Deutschland is now a firmly established player in the German media market with a daily circulation of more than 100,000 copies sold.

Previous appointments include correspondent posts for the Financial Times and the Times of London in Washington, Brussels and Frankfurt. He was awarded the Wincott Young Financial Journalist of the Year award in 1989. He holds the degrees of Dipl-Betriebswirt (Reutlingen), Dipl-Mathematiker (Hagen), and MA in International Journalism (City University, London).

He has published three German-language books. His book *Vorbeben*, on the financial crisis, has received the prestigious GetAbstract business book award in 2008, and is now published by McGraw Hill in the US.

Mining in Peru – Country of Opportunities

By Eva Arias Sologuren, President, Sociedad Nacional de Mineria Petroleo & Energia

This is a transcription of the welcome address delivered by Eva Arias Sologuren at the LBMA Conference in Lima, on 10 November 2014.

When I was thinking about what to talk about this morning, I was thinking about talking about this 'super cycle' and the prices. Then, I realised that we already have the experts here today and tomorrow to cover that. So, I decided it was better to talk about mining in my country.

As you know, Peru is a mining country and has a varied geography, biodiversity and natural resources. We have world-class geology as well as a very rich cultural diversity. And one of the results of that is our gastronomy, for example.

Today and for the past 15 years, our economy has remained very stable. We have a GDP that has been growing year by year and inflation is at a very low rate. Investment has also been increasing every year and, more importantly, poverty has been reduced dramatically from 2004. We went from nearly 60% to less than 24% last year. So we would like to keep this going in this way.

Table 1: Inflation Forecasts for Latin American Countries (annual % change).

Inflation is expected to remain in the target range, and remain at around 2%.

Country	2014	2015
Peru	3	2
Colombia	3.3	2.9
Ecuador	3.6	3.2
Mexico	3.9	3.5
Chile	4.2	3.7
Paraguay	5	4.5
Brazil	6.3	5.9
Bolivia	7.1	6.2
Uruguay	8.4	7.5
Argentina	29.3	27.7
Venezuela	68.5	57.5

Inflation forecasts

Peru has always been a mining country. Before the Incas, our people knew how to work gold, silver and copper, and they knew their metallurgy. This continued in all our history up until today as can be seen in our world-class modern operations. This drives our country to be a really big player in several minerals. We have polymetallic producers and, as you can see in the projection, in copper and silver we are second in Latin America, and in the rest of minerals we produce, we are first.

We also have a great amount of the world reserves, 10% in copper and zinc, 17% in silver. So we really have great potential as a mining country. Mining GDP has a direct effect on the national GDP as you see in the graph. The mining industry also contributes to tax revenue. It's a very important source of tax revenue; last year, it was 15% of the total corporate income tax in the country. Fifty-five per cent of our exports come from mining, and 23% of the private investment comes also from mining. It is a very big player in our country.

Net International Reserves

I would like to stress two points. One is employment. Last year, we had 208,000 employees in mining, and for each worker that we have, nine other jobs are created in other sectors. The other point is domestic procurement. Mining buys 14% of the Peruvian manufacturing industry gross value added. So it drives and dynamises the economy a lot.

Table 2: Peru Net International Reserves

The Peruvian economy has high levels of international reserves in comparison to other countries in Latin America. (see also Table 3)

Country	US $ billions
2007	27.7
2008	31.2
2009	33.1
2010	44.1
2011	48.8
2012	64
2013	65.7
2014*	64.7
2015*	65.7
2016*	67.7

But mining is not only about exporting minerals or paying taxes. We are going to have at the end of the year, the UN climate change conference in Peru and the mining industry has been working on climate change mitigation and adaptation projects. These works are in reservoirs and water recirculation, irrigation technology, canals and reforestation, and there is a lot of work in conserving the biodiversity that we have in the country.

Mining Investment

We do this without neglecting our social responsibility, which includes programmes for the promotion of productive development and for the improvement of the education and health of the communities surrounding the operations. Looking at the future, Peru has a lot of potential. Over 30% of the land is available for mining and only 1.2% of our territory is used in exploration and exploitation. So there is a lot that can be done in the country in mining.

Table 3: Peru Net International Reserves: Coverage Indicators

As % of:	2004	2009	2014*
GDP	19.2	27.2	31.1
Short-term external debt	171.8	297.1	760.5
Short-term external debt plus current account deficit	173.2	281.6	350.1

Source: BCRP. *Forecast

Table 4: Mining Investment in Peru

Year	Billions US $
2000	1.5
2005	1.1
2010	4.1
2011	7.2
2012	8.5
2013	9.7
2014*	8.4

Source: MINEM, *SNMPE estimate

Investment Portfolio

We have an investment portfolio of over US$61 billion and that means over 50 projects in different metals. Nearly 64% of those are in copper, 13% are in gold and 12% are in iron. And in the upper part of the slide, you can see how the mining investments have been doing in the past years. They are growing and growing. However, this year has not been a good year. We expect it to be broadly similar to 2012. We have a few projects that are being constructed now and that explains this amount of investment.

We are the third-largest copper producer in the world. Copper is mined mainly in the south and in Ancash, which is in the north of Peru. And production has been growing, as you can see. This year, it is also going to grow and next year as well. We have expansion plans as well as new projects and exploration activities. This represents nearly US$40 billion in investments in copper. Even if this is a precious metals conference, I cannot leave copper out because it's the main metal that we export.

Table 5: Investment Portfolio

More than 50 projects US$61.3 billion

Metal/mineral	%
Potasium	0.2
Tin	0.3
Zinc	0.8
Silver	1.2
Phosphates	3.1
Polymetallic	5.9
Iron ore	11.6
Gold	13.4
Copper	63.6

Source: MINEM (June 2014)

In gold, we are the fifth-largest producer. This metal is mined mainly in the northern part of Peru, in Cajamarca and La Libertad. And in this case, our mine production has not increased since 2005. It's going down. We hope that with new projects, this trend can be turned around in the next few years.

In silver, production is going well and we have this metal as a by-product in many mines. This is a very important product. We are the third-largest producer in the world.

Table 6: Mining Production in Peru

	Production (millions of tonnes)		Production Ranking		% of world reserves
	2000	**2013**	**World**	**Latin America**	
Copper	553,924	1,375,641	3	2	10
Gold	133	151	5	1	4
Silver	2,438	3,674	3	2	17
Zinc	910,303	1,351,273	3	1	10
Lead	270,576	266,472	4	1	8
Tin	37,410	23,668	3	1	2

Source: MINEM, USGS

Mining Production

As we all know, we are now in a very uncertain and volatile world where many economies have not been doing well. They are not growing as they used to do some years ago. And the prices are also going down. We can see that in the case of gold between October 2011 and October this year, price dropped 26%, and in the same period, it fell 46% in the case of silver.

Furthermore, costs are high. They have been getting higher year by year. You can see in the upper part of the slide that in South America, the estimated average mining project cost overrun has been 64% in the last few years and, in the lower part, you can see that the cost of copper has also been going up. But in the blue line in the lower part of the graph, we have Peru, which has very competitive costs, mainly because of our electricity costs. This is very important for being competitive in the world. The cost of gold has also been increasing year by year in different parts of the world.

Our economy can deal with the uncertainty and volatility that we are having in the world these days, because we have very solid macro-economic fundamentals: our international reserves have been growing and are high in comparison to other countries in Latin America. And inflation in our country, which is the lowest in the region, is expected to remain in our Central Bank's target range in the next couple of years. Our exchange rate is also not as volatile as that of other countries, so we are in a better shape.

Looking at the future, we have geological wealth, our costs are competitive even in this context, but we have a lot to do. As mining companies, we need to increase productivity in our operations. After such a long super cycle of good prices, we sometimes forget about what productivity means.

As a country, we need to strengthen our institutions. We need to ensure that our social environment is favourable to the development of productive activities. We need to simplify our administrative procedures. We need to accelerate the construction and improvement of transport and services infrastructure. We need to have a more formal economy, especially in our sector, where eradicating the illegal extraction of minerals is an important challenge.

As I mentioned, Peru is a country of opportunities. We have a mining investment portfolio of over US$61 billion and, if we all work together, we are going to add value to these resources.

Eva Arias Sologuren, President, Sociedad Nacional de Mineria Petroleo & Energia

Eva belongs to the third generation of a mining family. She graduated as an architect at the National University of Engineering, later studied various courses on business management at ESAN (Perú).

Currently, she is President of the National Society of Mining, Petroleum and Energy, being the first woman in 117 years to preside over this institution; President of the American Society of Mining (SIM), Director of the Confederation of Private Business Institutions (CONFIEP) , Member of the Business Advisory Council of the International Freedom Foundation, Executive Chairman of the Board of Compania Minera Poderosa SA, Alternate Director in Company Minera San Ignacio de Morococha SA and President of the Board of Asociación Pataz, which is a non - profit organization.

Throughout her career she has received several awards, the most recent are: "Entrepreneur of the Year 2013", granted by the Chamber of Commerce of La Libertad; the distinction "Habich Torch" from the National University of Engineering (2013); Wayra of the Incas by the Association of Professional Engineers of Peru, Chapter Metallurgy and Engineering (2013). Lately, the National University of Engineering awarded her the honorary tittle "Doctor Honoris Causa" (2014).

The Good, The Bad and The Ugly: Challenges Facing PGMs in South Africa

By Stuart Murray, Chairman, Sylvania Platinum Ltd

This is a transcription of the speech which Stuart Murray delivered at the LBMA Conference in Lima on 11 November, 2014.

Mogalakwena platinum mine in South Africa

I'm going to give you a flavour of the situation that the gold and platinum miners face in South Africa. It might be a little bit depressing. I'd argue that we have a crisis of leadership both in the country, in labour and in the corporates themselves, which is reflected in the title of my presentation – The Good, The Bad and The Ugly – and I've categorised the issues around the title.

It's also a presentation within a presentation. I'll add some references to gold since we are a precious metals conference and, on top of that, inserted in here is a little bit of a PGM presentation towards the end.

South Africa is probably the world's greatest treasure chest of minerals; however, it does appear that wealth in the ground does not equal wealth in the nation. I think the gold industry is an example of an industry that has taken a beating over the last 20 years, with South African output sliding from being the premier producer in the world to sixth position now, having lost its crown around 2005/2006. That said, you know, if these resources were husbanded better, with better law, confidence and investment, maybe South Africa could get its premium rating back in the mineral sector.

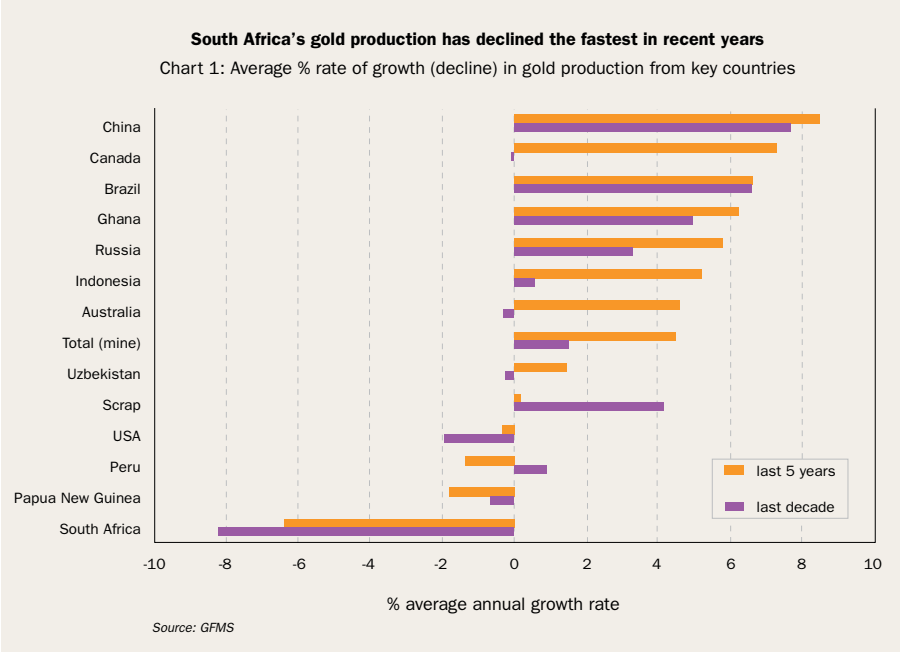
I get a sense with our government over the last five or 10 years meddling with the law that they see the industry as a never-ending font of money, which is no longer the case. And as an industry that is down just now, it continues to be kicked, and I hope not kicked to death by the politicians. South Africa is a good place to mine. It's a world leader in many mining technologies, and it's a world leader in depth, with apologies to Dr Spock, for South African gold miners have gone places where no one else on the planet has ever gone, and depth is not necessarily a working cost issue – it's a CAPEX issue. And you know all credit to the likes of Goldfields for continuing to invest in the new deep level mine at South Deep – it clearly believes that you can have world-class mining operations, albeit at great depth.

I think that South African corporates seem to be eyeing opportunities offshore. This is more so than perhaps eyeing the opportunities onshore in the name of diversification, risk, etc. I think there's a responsibility on the part of South African corporates to re-examine and look for the opportunities within South Africa rather than abroad.

Those of you who've been to South Africa know that it's a great place to mine, or it should be. I mean, there's no such thing as remoteness. The infrastructure is pretty exceptional – you can land in Johannesburg and you can be in the world's greatest platinum belt in an hour and a half by car – that's not remote by any stretch of the imagination.

The three amigos

However, there are problems and here is a photo of my three amigos. We have the boss of the National Union of Mineworkers, the oldest liberation union in mining, and I would argue, now a shop-soiled trade union that's been in a

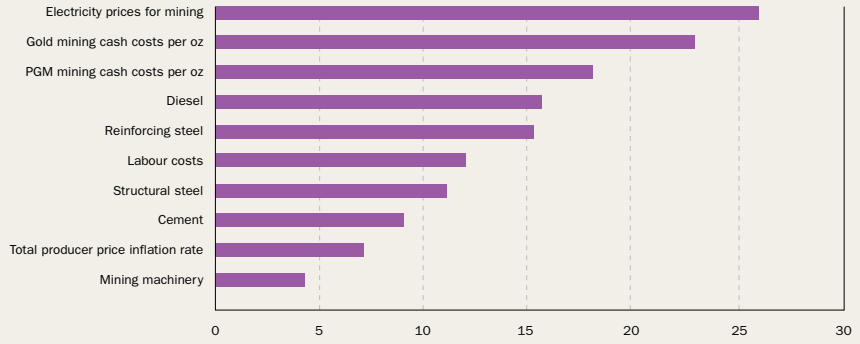


very cosy relationship with the governing party for some 20 odd years, and which I think has basically lost its way and its moral compass. Into that vacuum, we have Joseph Mathunjwa, the President of the Association of Mine Workers and Construction Union. This man is a radical, he's self-interested, and he split away from the NUM several years ago. The trade union movement in South Africa is a licence to print money. You clip between 1% and 2% of every worker's pay cheque every month and so the battle for membership often becomes brutal, violent and intimidatory, and this man is a master at it.

Aided and abetted by our friend, Julius Malema, a rebel rouser, opportunistic ex-ANC politician who's gone on to establish his own party. Those of you who were in Montreal will remember that this is the man who three years ago said that the mining industry must share some of this 'delicious cake' with him. I don't know quite how he meant to share, but I assume it was for his back pocket.

Inflation in input costs has simply been too high (and mostly out of control of the miners)

Chart 2: Cost inflation affecting the mining sector, average annual increase in costs, 2007 to 2012



In three years, he's gone on to be expelled from the ANC, and get tied up in the AMCU and the platinum strikes and whatever earlier this year. But was sworn in as a Member of Parliament in our new parliament in February this year, and he dressed himself in an unusual fashion to make a point. Right now, he is under a disciplinary inquiry and suspended from parliament for failing to comply with amongst other things, the dress code!

I think there are a number of real issues in South Africa, not only the costs, but people are well aware of what's happened with cost pressures in South Africa. I'd argue again, costs – and there are a lot of 'administered' costs but the rampant labour cost runaway that we've seen of the last 20 years has in part something to do with the management being unable to reign in the trade unions. The result has, as everyone knows, seen the decline of the gold industry. I believe if we don't take urgent action in South Africa, the platinum industry will continue to decline in much the same way as the gold industry has.

Productivity is a key problem in South Africa. When I joined the industry, the working week was 11 days in every fortnight and there were very few public holidays. The shift cycle meant that companies having invested all these billions could actually operate their mines for an excess of 300 to 310 days, maybe as much as 320 days a year. Due to negotiation between management and unions, and government regulations being imposed on the industry, we have a very fine sort of European-style low-hour working week and, as a result, the number of productive shifts has now fallen to the order of 230 days a year. That is a significant de-rating of the South African industry for the same amount of capital input, and I believe it has to be reversed in one way or the other.

Costs are up. Electricity, which people are well aware has been a problem in South Africa. You're looking at the fact that Eskom has, I believe, grossly mismanaged the power situation. We are looking at the return of load-shedding power cuts, shortages of power for new businesses to open in South Africa, but above all, you're looking at the fact that the power price has gone from 2 to 8 US cents in under a decade; and this has been particularly hard on power-intensive industries such as gold and platinum mining. The Department of Minerals and Energy as it used to be called, now it's the Department of Mineral Regulation, has tampered with the law, introducing lots of complexity and bureaucracy. The impact of this has been that many foreign miners and foreign investors in the country have seen the difficulties of trying to permit and license and prospect in South Africa, and in many cases have actually gone elsewhere. It is complicated by the Black Economic Empowerment Legislation that you have to consider for a major new mine; you'll probably have to 'free carry' your Black Economic Empowerment Partner for 26% of the entire cost of your project. That just raises the hurdles for investment.

I'll give you examples that have just happened in the Press in the last two weeks. Ivanplats, a Canadian outfit wanting to invest somewhere upwards of $2 billion in the platinum industry, finally out of frustration at not getting its mining licence, announced on 22 October that it's putting its project on hold and sacking 325 people. That's what it came to in order to get the government to actually grant it the mining permit that was months overdue. And low and behold, on 5 November, the said permit was granted!

> *"The amendments to the Mineral and Petroleum Development Resources Act have been stalled three times this year due to inter-party/inter-government wrangling."*

Aquarius Platinum had been trying to sell a mothballed mine to a Chinese group for about 18 months, but after nine extensions to the conditions precedent to the transaction, it gave up and the deal was cancelled, and it (AQP) publicly blamed the government for it.

When we start talking about the operating environment, the issue of corruption crops up. South Africa is probably not different to many other developing countries when it comes to battling the scourge of corruption. However, it doesn't help itself; it writes bad law. The amendments to the Mineral and Petroleum Development Resources Act have been stalled three times this year due to inter-party/inter-government wrangling. This law will result in even more discretion for the Minister and his or her officials. It will give the government the ability to deem certain commodities strategic, and therefore companies will have to sell them at under the market price, again at the discretion of the Minister. This is bad law – it feeds corruption. The bureaucracy I talked about earlier – inevitably I believe, feeds corruption because the temptation to expedite your project, your permits or whatever, it has to be there, the temptation of the brown envelope – and anecdotally, it does occur in South Africa. I think, of course, in looking at all this, people talk about the 'fish rots from the head', and our President was apparently oblivious to the fact that taxpayers had spent some 246 million Rand on security upgrades for his house in the village of Nkandla. It's mind-boggling to believe that somebody could be this insensitive.

As you are well aware, we have some very serious problems with labour. Communities are becoming antagonistic towards mining largely because of unfulfilled promises or unfulfilled expectations that were created by the ruling party and not followed through. I think there's a belief that mining is a never-ending golden goose that can lay the eggs, and carry on laying the eggs, but the reality is big investment goes in before returns come out, and this is something that is hard to explain to a financially illiterate mass of people.

Coupled with that, you've still got issues like the festering sore of the Marikana horror. Our Deputy President describes Marikana as a collective responsibility; as a nation we should dip our heads in shame and accept that we've

Widespread unrest among the mine workers who have become increasingly antagonistic because of unfulfilled promises

all failed. Hang on; this guy represented the Black Empowerment Group that owns 18% of the company at which this horror happened! With the sort of double standards and hypocrisy that goes on, the decks have to be cleared. We have a new Minister of Mines. He's described by a prominent University of Cape Town law professor as a "...clumsy politician to the right of the ANC, a nationalist and outspoken critic of the constitution. This will result in a difficult time for the mines and international investment and confidence in the country." Surely, we can get better leadership in the state and the state can, with its relationship with the trade unions, exercise and put some pressure on to help achieve this.

We are also dealing with the fact that a five-month platinum strike this year, where the workforce were promised pay increases upwards of a 100% – they ended up getting 12%! They lost five months of pay. People died, there were lots of injuries, intimidation occurred; mining is hard, it's dirty, it's dangerous in some cases, but does that mean that a mine worker has to be paid twice what a nurse, a teacher or a police constable earns in South Africa? And it's this kind of thuggery that has somehow to be brought to an end.

Again, the whole perception of who actually creams the money from the platinum industry. There is a reality that shareholders have actually had very little share of the pie in the last five or six years. I would argue, yes, we do have a crisis of leadership and that probably sums up where the mining industry is at the present juncture. I've described how the gold industry is in decline. It shouldn't be, but it is. It's lost as in 'gold is lost' and the 'three PGM bears', Platinum, Palladium and Rhodium – with apologies to the author of the fairy tale. We dig, dig, dig, but it's certainly not for profit. We have a situation; let's take yesterday. Lonmin, the world's third-largest producer of primary PGMs, announces a $326 million loss for this year. It's going to spend $350 million of CAPEX to ramp up production in the face of over-supply and, as a London analyst said yesterday, Lonmin has only generated sufficient cash flow in two out of the last seven years in order to fund its capital needs. So it's clearly not a company that's focused on profit and certainly not looking after its shareholders' interests.

The platinum market, I think we all know is in a mess. It is over-supplied, it doesn't matter whose research you look at in terms of fundamental market research; however, the equity analysts continue to persist with the belief that there are a million and two million ounce deficits out there. However, there was a youngster up here on this stage a year ago called Walter De Wet from Standard Bank, who did a very good, albeit rather dry presentation, and who took the view that the world had three years of platinum above ground for industrial consumption purposes. That might be a bit extreme, so I plagiarised Will Tankard's work here, and if I add up his bars, there's certainly a year, maybe a bit more of platinum above the ground. So where are these deficits that the equity analysts talk about? They're clearly not there. The equity analysts put ETF in as demand – it's not demand, it is stock! And all that's really happened in the platinum industry in five years is the stock has moved from the miners who used to hoard it in bad times and release it in good times, and they've dumped it into the financial space mainly with the ETFs and other investments.

As a result, platinum has been commoditised; the big miners are in a race to get to the bottom of the cost curve, to achieve lower unit costs; however, in the process, they gave up husbanding the revenue line, they gave up looking after the market. The end result has been an industry that well, I've got some figures there, it's lost several billions of Rands in the last two years, has raised $2.8 billion in new equity since 2008 and paid $400 million of dividends. The combined market capitalisation, including the juniors, is down by over 500 billion Rand since June 2008. Tell me that the managements of these companies are husbanding shareholders' wealth – well, that's a myth, a complete myth!

Where does the industry go from here? We hear about selling assets, well, Aquarius failed to sell to the Chinese, Eastplats announced on 8 November that it's going to sell the Crocodile River Mine, a mine that's had more owners and sucked in more investment than you can shake a stick at, and it's now going to sell it to a Chinese consortium for over $200 million.

The market does not need more metal; it needs less metal and it needs to reduce investment and cut costs. Lonmin said yesterday, "... we're going to take two billion Rand out of the costs". Hang on boys, labour accounts for 50% to 60% of your costs, and you're ramping up production – you can't cut labour, so how on earth do you take two billion Rand out of your power, chemicals, consumables and machinery. The maths just don't add up; start facing the truth boys!

Shut shafts or shut mines? One player, Aquarius, shut mines in my time that were too small to actually have any impact on the market. We need the high marginal cost output of this industry cut, and the gap between the two has got to close, I believe, in order to get fundamental supply and demand back.

So where are we at? I think the theme of this bit of the conference was 'when in a hole, keep digging', and I'm afraid that is the dilemma facing the South African producers – when in a hole just keep on digging and neglect your shareholders!

With that thanks very much.

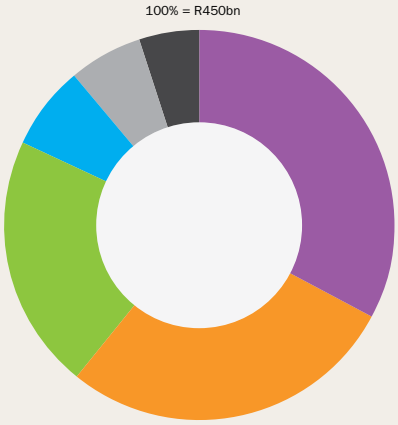
Who gets the dough?

Chart 3: Aggregate value distribution of the SA platinum industry (2009-2013, Rbn)

The platinum industry generated R450bn in aggregate revenues during 2009-13.

Of this, 33% (R150bn) was paid out in salaries, 28% (R125bn) to suppliers, 21% (R95bn) reinvested, and 7% (R29bn) paid to utility providers.

Only 5% (R24bn) was paid out to providers of capital during 2009-2013.



Stuart Murray, Chairman, Sylvania Platinum Limited. Stuart Murray has over 25 years of executive experience in the Southern African platinum sector, commencing his career at Impala Platinum's Refineries in 1984. He held a number of positions at Impala Platinum, Rhodium Reefs Ltd, Barplats Mines, and Middelburg Steel and Alloys, before joining Aquarius Platinum Limited in 2001 as Chief Executive Officer, holding that position until 2012. He is currently Chairman of Sylvania Platinum Limited, the South African pgms from chromite tailings processor and a Non-Executive Director of Talvivaara Mining Company Plc, the new technology Finnish nickel miner. He was educated in Scotland and gained a Bachelor of Science (Engineering) degree in Chemical Engineering from Imperial College, University of London in 1984.

Review of the 2014 LBMA Precious Metals Conference

By Aelred Connelly, Public Relations Officer, LBMA

Investment Panel on Day 1 of the Conference

The LBMA's 15th Annual Precious Metals Conference took place this year in Lima, Peru on 9-11 November. After 15 years of hosting conferences worldwide, this was the first time that the LBMA had held its Precious Metals Conference in South America.

In doing so, the LBMA fulfilled a promise to hold the conference in Lima, having had to abandon plans to hold the conference there in 2009 owing to the financial crisis. South America is an extremely important region for the mining of many metals, particularly gold and silver. Gold was, of course, the main attraction for the Spanish during the time of the Conquistadors and eventually established Lima as the capital of the Spanish empire in South America. In modern times, half of the world's silver is mined in South America, with Peru the world's second-largest producer of silver. Peru is also the world's fifth-largest producer of gold.

For a long haul destination, it was gratifying to see that the Conference attracted a higher number of delegates than anticipated, with more than 400 delegates in attendance from more than 37 countries and 188 different companies. The numbers were much lower than at the Rome conference, but this made for a more intimate event and one in which delegates found it easier to network.

The Vice-President of Peru, Marisol Espinoza, delivered a Welcome address in the Opening Session of the Conference and there was a strong local presence during the rest of the programme featuring Eva Arias, President of SNMPE, and Roque Benavides, CEO of Buenaventura. Other highlights on an excellent programme included the Keynote address from Wolfgang Münchau, Associate Editor of the *Financial Times*. You can read Wolfgang's speech in the Alchemist on page 3. This year, the programme included two Panel discussions, one on Investment chaired by Wolfgang and the other by Jon Spall focusing on Hot Topics facing the Precious Metals Market. These sessions were particularly well received as was the new-look Conference Wrap Up, which for the first time took the form of a double act, ably conducted by John Reade and Ross Norman. The best speaker prize of a 1oz gold bar was awarded to Grant Angwin for his presentation on a refiner's perspective in the Physical Markets Session. This was Grant's first conference as Chairman of the LBMA so it was fitting that he carried off the main prize.

Grant Angwin is awarded the 2014 conference best speaker prize, a 1oz gold bar, from Mehdi Barkhordar, CEO of PAMP SA. The winning prize was kindly donated by PAMP SA.

A noticeable feature of this year's Conference was the higher than usual attendance figures for each of the sessions, which in part reflected the excellent speaker programme put together by the Public Affairs Committee (PAC). In the absence of the usual digi handsets (which were impounded by the Peruvian Customs officials), delegates had to ask speakers questions direct from the Conference floor, which actually helped make the event more dynamic and interactive. Special thanks for organising the programme should be extended to the Public Affairs Committee under the stewardship of Edel Tully, who had been beavering away ever since returning from the last conference in Rome. Already their attention has switched to preparing the programme for next year's conference, which will be held in Vienna.

> *"This year, the programme included two Panel discussions, one on Investment chaired by Wolfgang and the other by Jon Spall focusing on Hot Topics facing the Precious Metals Market."*

This year, the proceedings featured, for the second year in succession, a Responsible Gold Forum, organised in partnership with the Responsible Jewellery Council, which was held directly after the close of the main Conference programme. Given the location of the Conference in Peru, responsible sourcing and artisanal mining are vital issues, so having the opportunity to listen to presentations and debate from representatives from the OECD, artisanal miners, producers, NGOs and others helped inform delegates' understanding of responsible sourcing and engagement.

As is the case every year, media attention focused on the gold price predictions from conference delegates. On the first day of the 2013 LBMA/LPPM Conference in Rome,

Delegates enjoying the Gala dinner on Monday 10 November

delegates were extremely bullish in predicting that the gold price would be US$1,423 by the time of the 2014 Conference. The following day, they predicted a lower price of $1,405, indicating that discussions in the wings of the conference had perhaps caused a revision of delegates' bullish views. Hindsight really is a wonderful thing. It transpired that despite the downward adjustment of their forecasts, delegates were still some $243 off the actual price of $1,162 for the last fix before the start of the 2014 Conference. This year, delegates predicted on the first day of the Conference that the gold price will be up marginally at $1,200 by the time of the 2015 Precious Metals Conference in Vienna (18-20 October). Delegates also gave their predictions for the price of the other three precious metals at the time of the next conference. They were most bullish about silver and platinum prices in 2015, predicting increases of approximately 9% for both metals. Their forecasts follow: silver $17 (latest price prior to the start of the Conference

Dancers on stage at the Gala dinner

was $15.67), platinum $1,325 ($1,209) and palladium $825 ($772). We will be publishing the LBMA's Annual Precious Metals Forecast Survey in January 2015. Experts from the market participate in the Survey and will be asked to forecast the average price of the four metals during 2015. So it will be interesting to see whether their forecasts concur with those of the Conference delegates.

The presentations from all the other speeches delivered at the Conference are available now on the LBMA's website. The LBMA would like to extend its congratulations and thanks to

> *"Delegates also gave their predictions for the price of the other three precious metals at the time of the next conference."*

all the speakers for contributing towards the Conference proceedings as well as the delegates who attended the conference. Thanks also go to the sponsors of this year's Conference: CME Group for the Welcome Reception on the Sunday evening, EBS for the Gala Dinner and Johnson Matthey USA for the Monday lunch. Thanks also go to the 18 booth exhibitors who advertised their products and services, many of whom took advantage of the LBMA's offer to have their booths built locally rather than shipping them direct and running the risk of falling foul of Peruvian customs. A special thank you should also be extended to Don Guido del Castillo for the wonderful display of minerals from Peru. This collection, which has taken him many decades to amass, was a welcome attraction.

Special mention should also be made to the former Chairman of the LBMA, David Gornall, and the former Chief Executive of the LBMA, Stewart Murray. Unfortunately, neither of them were able to attend the Conference this year. It was the first LBMA conference that Stewart had missed and I would like to thank them both for their dedication to the work of the association during their respective tenures. The LBMA still, of course, benefits from Stewart's knowledge in his current capacity as a consultant on Good Delivery related issues. The LBMA's Public Affairs Committee, who are responsible for organising the annual conference, are now turning their attention to organising the 2015 event, which will take place in Vienna, Austria from 18 to 20 October. One of the things that the Committee will be considering is the feedback from delegates attending this year's Conference. It was a great and successful Conference in Lima, but there is always room for improvement and we will be working hard to ensure that next year's conference is even better than ever. We hope to see you there!

And finally...

We were honoured at this year's Conference to receive the Welcome address in the Opening Session from Marisol Espinoza, Vice-President of Peru. She delivered her remarks in Spanish so for the benefit of those delegates who do not understand Spanish, the English translation of her speech follows.

Welcome to the LBMA's Annual Precious Metals Conference. I would like to welcome Grant Angwin, LBMA Chairman, Ruth Crowell, Chief Executive of the LBMA, Eva Arias, President of the National Mining and Petrol Company, and also Guido de Castillo, President of Aruntani SpA.

Today is quite a special and significant occasion so please allow me to welcome you to our country. We are very pleased to host the LBMA's annual gathering for two reasons: one due to the quality of the panellists and exhibitors, but above all for the opportunity to hold discussions in our country and to see what effect the proposals made throughout this gathering will have on the precious metals market. Peru was to host an earlier meeting, but as you all know, the situation and the fluctuation in commodity prices prevented the conference from taking place on that occasion.

We are all here together in Peru and I don't just want to welcome you but also wish you great success at this conference. I am sure you will hear of proposals and a path to follow in the field of investment and, above all, how to move the mining industry forward.

Peru is the fifth-largest producer of gold in the world; it has an enormous mining potential. It is second in copper, first and second in zinc and silver respectively this year, and fourth in lead production. We have high expectations for this, for the next few months, with new investment projects such as that of Las Bambas, which is already making progress in terms of production and the installation stage. We are also convinced that the Peruvian economy will offer you many great opportunities. We have and can guarantee legal safeguarding and we are also making progress in ensuring that procedures are much easier and simpler. We are always keen to look after our relationships with both communities and the environment, something that is also a priority for the Peruvian government.

In this context, we are convinced that this is a critical moment in terms of the price of commodities but we are also very optimistic. We know that Peru, as well as guaranteeing production, will overcome this fluctuation of prices and will achieve a better opportunity to raise investment, production and the market will shine again once more.

This is the first time that such a gathering has taken place in South America. I would like to welcome you and wish you every success.

Welcome to Peru. Thank you.

LBMA's 14th Biennial Dinner Review

By Aelred Connelly, Public Relations Officer, LBMA

The top table guests, left to right, John Bennett, Sir Brian Bender, David Gornall, Ruth Crowell, Grant Angwin, Lord Daniel Finkelstein, Matthew Hunt, Steve Lowe and Doris Rijnbeek

The LBMA's 14th biennial dinner took place in the Guildhall on 1 December 2014. The dinner was attended by more than 240 representatives of Members and Associates, together with guests from other markets and central banks.

The medieval Grade 1 listed landmark provided a magnificent setting for the dinner and a fitting one too given its historical association with the merchant classes who have traditionally met here to refine laws and trading regulations. Guests were able to view the City of London Corporation's 1297 copy of the Magna Carta, which is currently on display in the Guildhall Art Gallery to mark the 800th anniversary next year of its creation. The document is widely regarded as one of the finest surviving 13th century copies and, owing to its delicate condition, it currently only goes on display for special events. The City of London Corporation's 1297 Magna Carta includes Edward I's seal and the original writ directed to the Sheriffs of London, ordering that the Charter be promulgated within the City. The Charter was confirmed in Parliament, which gave the document statutory force.

The City of London played an active role in the events that led to Magna Carta's creation in 1215 and the Mayor was appointed, along with the barons, to see that its provisions were fulfilled. London was also the only city specifically referenced in the Magna Carta, in the clause that stated that *"the City of London shall have all its ancient liberties by land as well as by water"*. The grant requires the mayor to be presented to the sovereign for approval and to take an oath to be faithful. These provisions continue to this day and are enshrined in the annual election and swearing in of the Lord Mayor.

> *"The medieval Grade 1 listed landmark provided a magnificent setting for the dinner and a fitting one too given its historical association with the merchant classes."*

The LBMA was honoured to have both a Sir and a Lord in attendance at this year's biennial

Biennial Dinner Guests at dinner

Lord Daniel Finkelstein delivering the toast to the LBMA

Left to right: Grant Angwin (LBMA Chairman), Ruth Crowell (LBMA Chief Executive) and Steve Lowe (LBMA Vice Chairman).

1297 version of the Magna Carta

dinner, in the shape of Sir Brian Bender, a retired British civil servant, and Lord Daniel Finkelstein, Executive Editor of *The Times*. Also in attendance was John Bennett, Chief Commoner at City of London Corporation. Proceedings began with a cocktail reception in the east crypt where guests were introduced to the Chairman of the LBMA, Grant Angwin, Vice-Chair Steve Lowe and the Chief Executive of the LBMA, Ruth Crowell, by the Master of Ceremonies. Drinks and canapes were served and guests were entertained by the Belinfante String Quartet who played unobtrusively throughout the evening, allowing guests to mingle and chat without disturbance (remember the drums in Rome!).

The dinner was held in the magnificent setting of the Great Hall. Following dinner, Lord Daniel Finkelstein delivered the main address of the evening by offering the toast to the LBMA. At the start of his speech he said that he wanted to make five points, and with only the assistance of a piece of paper with five words written on it, he provided the guests with an amusing insight into human nature and the political process. He also talked about the concept behind his weekly football statistics column, which is published in *The Times* every Saturday. Grant Angwin delivered the toast to the guests, his first as Chairman of the LBMA at a biennial dinner. Grant spoke of the challenges that have faced the LBMA, particularly over the last year. An abridged version of his speech forms the basis of the Editorial which you can read on page 33.

And finally, a special word of thanks to Mrs Doris Rijnbeek, Deputy Head Front Office at the Austrian National Bank, who stepped in

> *"Grant Angwin delivered the toast to the guests, his first as Chairman of the LBMA at a biennial dinner."*

at late notice to give the Response on behalf of the guests. It was fitting that Doris closed proceedings given that Austria plays host to the 2015 LBMA Conference, which will be held in Vienna on 18-20 October 2015.

Biennial Dinner Main Dining Room

Guests enjoying the Cocktail Reception in the East Crypt

'A Lifetime in the Bullion Market' – Voices of the London Bullion Market

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

The jury is out, 12 "good men and true" of the London Bullion Market are (left to right) Chris Elston, Albert Helmig, David King, Philip Clewes-Garner, Tim Green, Colin Griffith, Howard Davies, Martin Stokes, Alan Baker, Stewart Murray, Peter Fava and Terry Smeeton.

Over the past 30 years, the London Bullion Market has undergone a fundamental change. The interlocking network of businesses, many of which were born out of the gold rush of the mid 19th century and remained such a prominent force for much of the 20th century, may appear remote to the great majority of those now employed in the City, let alone worldwide. The aim of the Voices project is to capture, contextualise and explain this transformation. The project started in January and the research and recording of contributors' 'voices' for the archive began in April.

To date, more than 40 voices have been recorded. This number continues to rise. Through these interviews, the careers and views of a group of individuals employed in a variety of different roles connected to the bullion market have been recorded. They prove illuminating, reflecting the enjoyment and pride felt by those who have worked in the market, many of them for the whole of their working lives. Those who agreed to share their personal experiences were selected for their diversity, the time span of their experience and, in some cases, their recollection of how they traded gold when it was still priced at $35 an ounce!

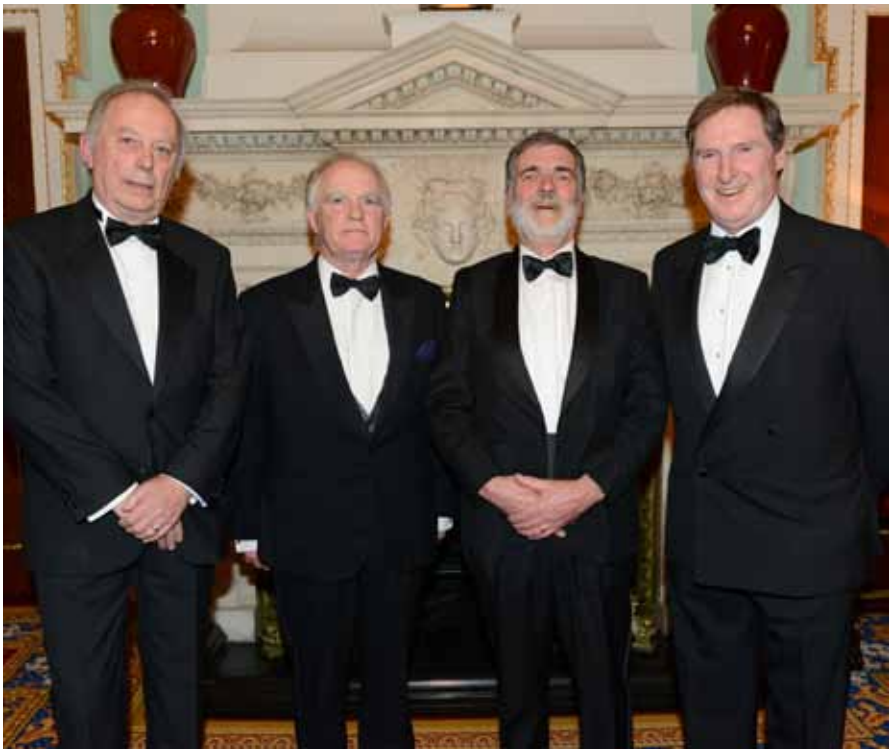
> *"The recording locations ranged from the comfort of the London Bullion Market Association office near the Royal Exchange, to hotel lobbies and dining rooms, and once even to the shores of Lake Annecy."*

The recording locations ranged from the comfort of the London Bullion Market Association office near the Royal Exchange, to hotel lobbies and dining rooms, and once even to the shores of Lake Annecy. Accordingly, the sound quality for these recordings reflect the environment and background noises, which include the quarterly chime from the Royal Exchange bell, the clatter of dishes and traffic.

> *"Recurring themes included how, over time, behaviours had to adapt in order for companies to survive and meet the changing needs and expectation of clients."*

Popular topics covered included the role of the back office; the changing nature of the trading desk; technological advances; client relations; the ability to build genuine trust-based relationships; leadership frameworks; the influence people had on careers; the introduction of graduate recruits to the market; issues of gender; greater transparency without threatening confidentiality; increased regulation; the production of standard documentation; the internationalisation of the markets and how the digital transformation changed the business landscape globally. Recurring themes included how, over time, behaviours had to adapt in order for companies to survive and meet the changing needs and expectation of clients. Others spoke of global mobility, increased competition from emerging markets, endless overseas travel, seamless networks and corporate responsibility; while some observed the growth of business acumen and technical capabilities transcending the boundaries of geography, politics, race and culture.

Many remarked on the pattern of work and the variety of the working day, in particular the need to be prepared for any eventuality. Others spoke of colleagues who inspired them, or recognised particular individuals for their achievements or ability to lead the market and make a difference while delivering results that benefited all. Professional relationships frequently spilled over into lives outside work. There were fond memories of a pint at the end of the working day, the friendly banter, competitiveness and rivalry between firms during games of cricket, and the annual LBMA golf day.



The original memorandum, incorporating the founding of the LBMA was signed on the 24 November 1987. Pictured are four of the signatories (left to right) Les Edgar, John Wolff, Neil Newitt and Robert Guy.

Frequently, specific events that appear in the history of the London bullion market were mentioned and examined; for example, the change in market tempo during the 1960s, particularly after 1967 when the market was woken from its peaceful slumber as international investors rushed to buy gold at $35, the price at which it had been fixed in 1934; the effects of the closure of the London bullion market for two weeks in 1968; the closure of the 'gold window' in 1971 despite the US Fed's claim to defend the price of gold at $35 'to the last ingot'; the end of the embargo on gold ownership for US citizens in the mid 1970s and the anticipated high demand for gold purchases that failed to materialise; the Bunker Hunt silver scandal and its effect on the silver price and the London market; the gold price high of 1980 as it reached a remarkable

> *"The doldrums of the 1990s and the subsequent Central Bank gold sales saw gold in the news. Since 2000, the attention of the market has been on regulation, regulation, regulation!"*

$850; the collapse of Johnson Matthey Bankers and the implications that followed as the Bank of England took control of the bank's affairs until a purchaser was found. Such events produced some of the most hectic trading periods in the history of the market, resulting in much scope for the making of both profits and losses. Career transitions, redundancies and moves to other firms featured highly. The doldrums of the 1990s and the subsequent Central Bank gold sales saw gold in the news. Since 2000, the attention of the market has been on regulation, regulation, regulation!

The aim of the project was not merely a nostalgic trip into memories of times gone by but to preserve the record of the evolution of the London Bullion Market Association, its structure, its place in the City's financial system and its

global presence. Capturing this information is of great value for research and analysis, including why, how and who was instrumental in the formation of the LBMA. Its work continues to grow as the needs of the market evolve. The LBMA has been instrumental in undertaking many activities on behalf of its members and the wider market, including setting good delivery and refining standards, the organisation of conferences and other events, and serving as a point of contact for the regulatory authorities. One of the high points of the project came in October when the present Chairman and emeritus Chairmen of the LBMA, together with present and past CEOs, were invited to attend

> *"The aim of the project was not merely a nostalgic trip into memories of times gone by but to preserve the record of the evolution of the London Bullion Market Association, its structure, its place in the City's financial system and its global presence."*

a roundtable event that examined the role and functions of the Association and how these have changed over time. Each of the Chairs and Chief Executives were asked to talk about significant events they witnessed during their tenure and issues that spanned longer periods of time. A fascinating discussion ensued. By examining its past role and purpose, the seminar illuminated important, even crucial, questions for the Association today: for example, how it operates, how it funds itself, how commercial decisions are taken and who can make those decisions. Above all, the LBMA is concerned with its members. It draws on the expertise of those employed by its members, who have specific knowledge of certain areas of the industry and who are willing to serve as voluntary officers on the various committees of the Association.

The Voices Project has addressed the lack of historical understanding and an imperfect public knowledge of the success story of the London bullion market. The timing of this project sets it apart from previous studies into the history of the City and other markets. As you are no doubt aware, 2014 saw the end of the two long-standing traditions associated with the London bullion market. First, the daily silver fixing ceased, quickly followed by the daily gold fixing. New methods for setting daily benchmarks by electronic platforms were introduced. Change often leads to losses in tracing the history of an organisation; however, many of those interviewed at some point in their career had taken part in the daily fixing ritual and spoke openly on the subject. There has been much change in recent years in the fabric of the City and this dynamism has been captured.

> *"The collection will be archived and, subject to interviewee consent, made available at the London Metropolitan Archive for consultation by researchers and historians."*

Oral history is a uniquely useful tool for collecting personal testimony, gaining insight into and reflecting on the past. The project sought to track the network of energies and influences, professional training and interactions that have shaped the bullion market. A life story approach was taken, offering a more rounded view of the individual and their contribution to the market. The contents of the one-to-one audio interviews, averaging 60 minutes in length, broadly cover the family background, education and career of the individual. The collection will be archived and, subject to interviewee consent, made available at the London Metropolitan Archive for consultation by researchers and historians.

I am indebted to all those who have so far taken the time to record their individual memories and to those who have contributed memorabilia and photographs that will enrich the collection and enhance the understanding of the market.
I would like to thank the management committee for choosing to support the project, as well as Ruth, Stewart and all the staff at the LBMA for their support, patience and for allowing many of the recordings to take place at the London offices. The LBMA would like to continue to expand the collection. Should you wish to contribute, please contact voices.project@lbma.org.uk to arrange a suitable time for your recording, or if you would prefer to make a written contribution, a list of set questions can be provided on request.

Dr Michele Blagg (BA, MA, PhD) is a visiting Research Associate at the Institute of Contemporary British History (ICBH) at King's College University. Michele is a Research Consultant for the LBMA, currently engaged on the oral history project 'Voices of the London Bullion Market'. As part if a collaborative doctoral award granted by the Art's and Humanities Research Council, she was based at the Rothschild Archive. Her doctoral research focused on the Royal Mint Refinery, operated by N M Rothschild & Sons between 1852 and 1968, and how it adapted to the changed London gold market.

Her areas of interest are in financial and business history with special regard for the actors and networks located in the London market.

She teaches on the MA in Contemporary British History and assists with the Witness Seminar Programme. She sits on the Business Archives Council Executive and is involve in the annual 'Meet the Archivists' workshop held in the City that aims to explore ways in which research students can identify and use business records in a variety of different research fields.

Past Chairmen of the LBMA – (in order of tenure left to right) Robert Guy, Dick Gazmararian, Alan Baker, Peter Fava, Martin Stokes, Simon Weeks, Jeremy Charles and David Gornall. The two missing are former chairmen Kevin Crisp and the current chairman Grant Angwin.

Silver Celebrates Something of a Magic Moment

By Daniel Marburger, Director of Silver-to-go

Daniel Marburger, Director of Silver-to-go, which sells silver bars and coins to private investors throughout Europe, discusses a landmark report that shows how silver has heavily outperformed other asset classes since 2000. He looks at the price of the precious metal and its relationship with gold, and discovers why there is a whole new use for silver that looks set to underpin demand for decades to come. Assessing the global and economic conditions that are likely to affect the price over the coming years, Daniel Marburger also gives an insight into the investors who are buying silver today.

Robert Kiyosaki, the American investor and founder of the Rich Dad Company, recently said: "If I have cash and I can't figure a way to put it into real estate or my business, I hold it in gold and silver." Interestingly, Kiyosaki mentions gold and silver. Until fairly recently, many commodity investors would have talked only of gold, but silver is having something of a moment. Slowly but surely, people are recognising the benefits of the precious metal and are taking it seriously.

Let's face it, as far as alternative investments are concerned, gold usually has the upper hand, primarily because of silver's steep tax profile across Europe. Yet, despite fiscal barriers, in recent years, the precious metal has had a shift. Not only has its price risen to levels unseen since records began, but investors have increasingly recognised its benefits in the face of global and economic uncertainty.

CoinInvest.com, the sister company of Silver-to-go, which sells silver bars and coins to private investors throughout Europe, recently asked the Centre of Business Research (Cebr) to look into silver's investment properties. We wanted to find out how it performed as an investment asset against other classes, including gold. The results of the research showed that £10,000 invested in silver would have yielded a £23,000 return between 2000 and 2014, compared to a return of just £6,000 from the same investment in the FTSE 100 Index, a yield of £5,717 from the FTSE Euro 100 index and £4,018 from the S&P 500 Index. In terms of performance, silver came second only to gold, which would have yielded a return of £31,817 during the same period.

Certainly, global economic and political uncertainty over the past five years, particularly since the financial crisis of 2008, has encouraged investors throughout Europe to turn to silver because of its safe-haven properties, which mirror those of gold. So, we found it particularly interesting to see that when investment in the precious metal is directly compared with other asset classes, it performs so strongly. The report says that investor demand for silver tends to be boosted in the face of elevated economic uncertainty and this helped silver make great gains in the immediate aftermath of the financial crisis.

Surprising facts about price movement

Interestingly, data collated for the report also revealed surprising information about the silver price itself. Firstly, the price of silver has traditionally been sensitive to sudden economic shocks but less so than other asset classes. The report reveals that this is because demand is also driven by real industrial production, which tends to be more stable.

Table 1: Return of different asset classes on 26/09/2014 based on initial investments made on 03/01/2000

	Silver price	Gold price	FTSE 100 Index, total return	FTSE Gilts Index, 10-15 years, total return	FTSE Euro 100 Index, total return	S&P 500 Index, total return	Dow Jones CBOT, Treasury Index, Close
£5,000	£11,454	£15,909	£2,946	£7,327	£2,858	£4,018	£4,525
£10,000	£22,908	£31,817	£5,892	£14,654	£5,717	£8,036	£9,049

£10k invested in Silver in 2000 would have yielded £23k of return - Silver and Gold heavily outperformed other asset classes

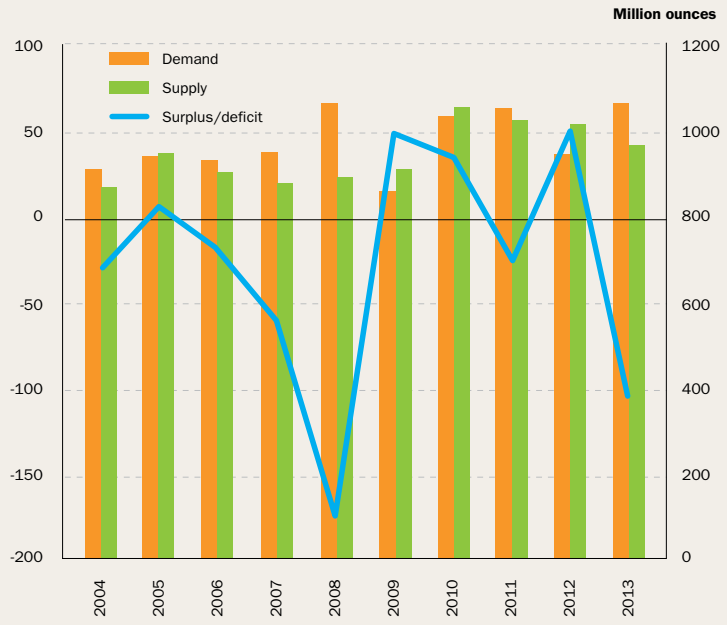
Source: LBMA, Eurostat, Macrobond.

However, looking at its long-term history, silver did see a dramatic spike in 1980. This time, the spike could not be attributed to global economic and political events. Instead, it was a pair of Texan oil barons, the Hunt brothers, whose failed attempts to corner the silver market led to a crash in prices on 'Silver Thursday', as 27 March 1980 became known.

Following on from 'Silver Thursday', the precious metal's price remained relatively stable until the financial crisis and its aftermath. Indeed, the silver price followed an upward trend in the face of global economic uncertainty at this time. It actually reached a peak of $48.70 per troy ounce in April 2011, making it three times as high as it had been at the beginning of the crisis, the day of Lehman Brothers' collapse.

Although the price of silver has been on a downward trend since April 2011 (see chart 2 below), today's price of $16.80 per troy ounce is still close to double the long-term average of $8.80 per troy ounce and nine times higher than the price set in 1970. Another interesting point to note is that 2013 saw the third-highest nominal annual average price on record, despite double-digit falls from the previous year's level.

Chart 3: Demand and supply of silver (RHS) and surplus or deficit (LHS)



Source: 2014 World Silver Survey

The gap has started to narrow

The report reveals that the relationship between the price of silver and gold has always been close. However, following the 2008 financial crisis, silver's price was rising faster than that of gold, which led to a fall in the gold-silver price ratio when the silver price peaked in April 2011. More recently, though, the gap in the performance of the two metals has started to narrow as silver prices have fallen more dramatically than gold prices. Even so, the report discovers that silver still outperforms gold today when setting 2009 as a benchmark. In 2013, investors and consumers rushed to take advantage of falling silver prices, resulting in a steep rise in demand to 1,081 million ounces from 954 million ounces the year before. At this time, supply failed to match demand and production declined from 1,005 million ounces in 2012 to 978 in 2013. Looking ahead, the report predicts supply will cover some ground this year and the gap between the two will narrow slightly to go some way to redress the wide deficit.

Industrial use is a major strength

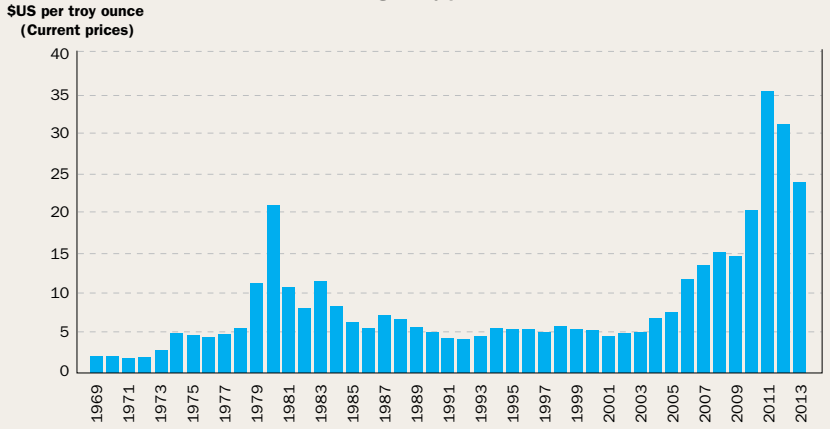
One of the biggest strengths of silver as an investment asset is its use in industry and technology. In 2013, more than half of the world's silver went to industrial applications in technology. Private and institutional investment, on the other hand, is a relatively small part of overall silver demand, with just over a fifth of the world's silver being used for investment purposes. The remaining demand can be attributed to jewellery or silverware demand, which has been fairly consistent over the past decade.

The picture for gold is very different. Indeed, just under half of its demand is attributable to jewellery and less than 10% is used for industrial purposes. Investment demand in this precious metal, therefore, plays a much greater role in the gold market.

> *"One of the biggest strengths of silver as an investment asset is its use in industry and technology. In 2013, more than half of the world's silver went to industrial applications in technology."*

In terms of the overall investment demand for silver, data analysis by Cebr shows that investor demand is clearly the most volatile element. Our charts show that demand peaked in 2008, in the immediate aftermath of the financial crisis, and more recently in 2011, 2012 and 2013, yet there was much less demand in the years immediately preceding the financial crisis.

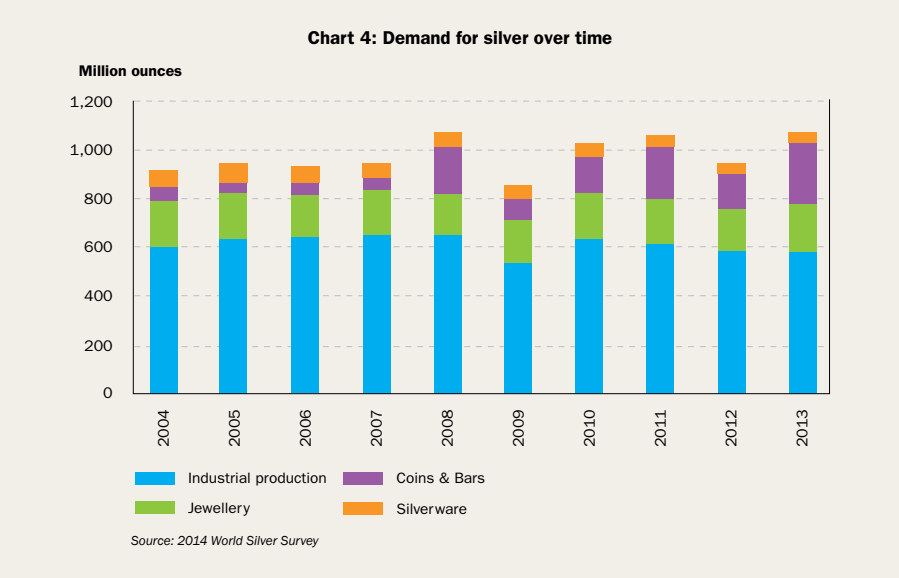
Chart 2: Annual average daily price of silver since 1969



Source: LBMA

Silver and photovoltaic energy generation

Undoubtedly, silver's chemical properties make it a favourite component in a number of industries. For example, silver is the most widely used metal as an electrical and thermal conductor, which makes it a key input in many electrical and electronics products such as batteries. In addition, it is an important component in photographic film, which is used in radiography, the graphic arts and consumer photography. We can see from the report that photographic demand for silver has declined



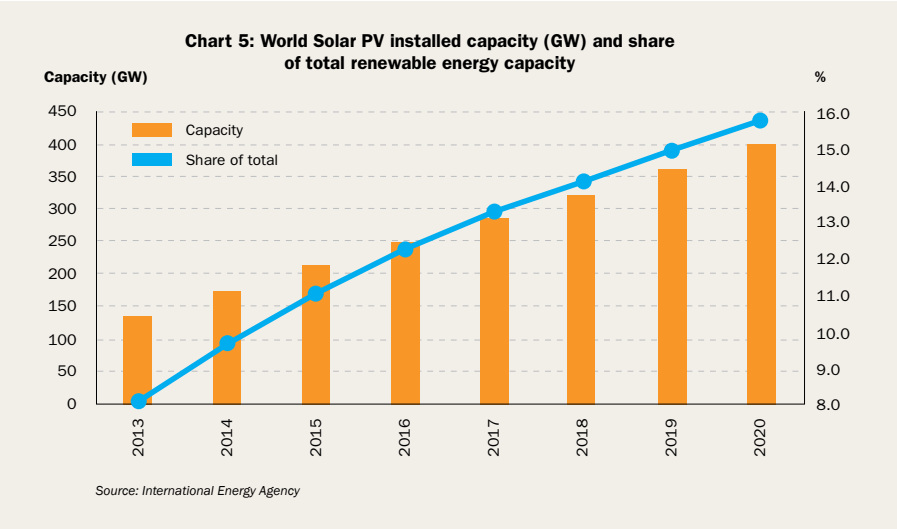
Similarly, India's demand for silver rose by 11% over the same period.

Silver in the last five years

The financial crisis of 2008-2009 and the 2011 Eurozone crisis that followed shortly after have caused significant global economic uncertainty over the last five years. Certainly during this period, many investors turned to silver and gold because of their potential as safe-haven assets to help insulate from the uncertainty and volatility plaguing the stock markets. This increase in investor activity helped silver triple in value between the start of the crisis and April 2011. Since then, however, prices have come down, but silver still outperforms most other similar asset classes when setting the start of the financial crisis as a benchmark.

greatly over time, particularly with the rise of digital photography and smartphones equipped with high-quality cameras. In 2004, for example, photographic demand for silver declined by over 70%.

However, other uses of silver are becoming more prominent and look set to replace the decline in demand for photographic use. For example, silver is an important component in photovoltaic cells, the technology used in the majority of solar panels. Cebr reports that the International Energy Agency expects solar photovoltaic installed capacity to grow continuously and robustly to the end of the decade. Therefore, the use of silver in solar photovoltaic energy generation is expected to provide a growing source of silver demand going forward.



> *"Europe, on the other hand, has seen a decline from 28% to just 17% of global demand, whilst demand in Asia has gone up by nearly 10% to 56% of global demand."*

Interestingly, demand for silver is also shifting geographically. For example, data from the World Bank and International Monetary Fund show that industrial production is set to be driven by emerging markets. Indeed, Africa, Asia and South America are expected to see a more pronounced rise in industrial production compared to the developed economies.

Meanwhile, our report shows that from 2004 to 2013, there has been a shift in demand from Europe to Asia. Within the decade, demand in North America, South America and Oceania has remained stable. Europe, on the other hand, has seen a decline from 28% to just 17% of global demand, whilst demand in Asia has gone up by nearly 10% to 56% of global demand.

On a per capita basis, though, advanced markets continue to dominate the silver scene today. Within Europe itself, Austria tops the list with demand rising 13-fold in the past decade. This is no real surprise to us as the Austrian Government's Mint has produced more coins within the last ten years, including the Austrian Silver Vienna Philharmonic, which was first produced in 2008 and is legal tender in the country. Coins like this have helped to boost demand as a whole.

Impact of Indian fiscal policy

Policy driven changes in India had a significant impact on the silver market in 2013. Indeed, last year, the Indian government introduced restrictions to the gold market, with rises in taxes and constraints on imports aimed at restricting the gold trade. These fiscal measures drove investors and consumers alike to silver and substantially pushed up overall demand. This was despite a decline in Indian industrial demand for silver, which was caused by a slowdown in economic activity.The result was that Indian demand for gold declined by 3%, allowing China to overtake it as the world's biggest gold market between 2012 and 2013.

Silver consumption in the future

Although 2014 began as a promising year for many economies, particularly those hoping to cement their recovery, the year has contained a few shocks with global reach. Firstly, the ISIS crisis, the Ebola outbreak and the Russia-Ukraine conflict have all combined to bring risk and uncertainty to alarming rates. In addition, the Eurozone has been particularly badly affected, with its three biggest economies, Germany, France and Italy, on the brink of recession once more. As a result, the European Central Bank is expected to keep monetary policy loose for a considerable period of time. In our report, Cebr predicts that loose monetary policy will support consumer demand for silver, primarily in the form of jewellery and silverware, because the cost of taking loans will remain low and the benefits of saving negligible.

Similarly, despite the US and UK economies seeing strong growth this year, their labour markets continue to suffer from weaknesses. The Centre for Economics and Business Research expects that the Federal Reserve and the Bank of England will keep rates on hold until at least mid-2015 to prevent putting recovery

in either country at risk. And, according to Cebr, even when tightening does kick in, it is unlikely that rates will return to the high levels seen in the pre-crisis period.

Another interesting point to note is that the report analyses the share of world silver demand to identify the top ten markets. Cebr then looks at the GDP compound annual growth rate of each of the leading markets to see whether economic conditions will be conducive to demand in the years ahead. Certainly, China, India, Thailand, South Korea and the UK are all expected to see a significant rise in compound annual growth rate to 2025, thus continuing to support demand for silver in the years ahead.

Surge in industrial demand for silver

A key factor expected to determine the demand, and price, of silver in the coming decade is the outlook for industrial uses of silver. We have already talked about more than half the world's silver going to industry, with wide-ranging applications from photography to electronics. Although the use of film photography is expected to continue declining in the coming decade as we become more entrenched in the digital age, other uses for silver look more fruitful. As discussed earlier, the solar photovoltaic energy industry in particular is expected to provide a growing source of silver demand.

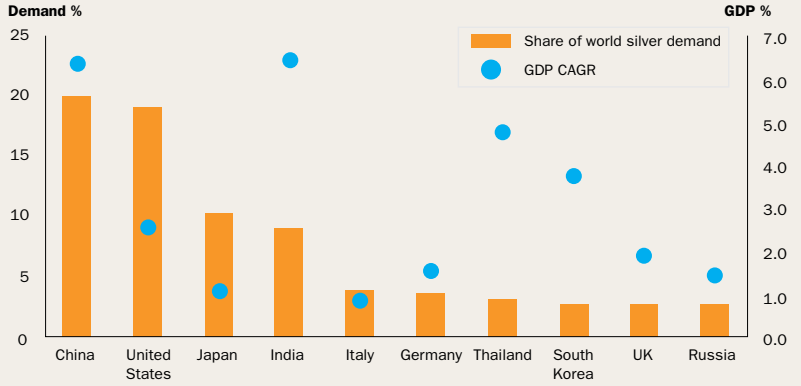
Who's buying silver now?

For the would-be silver investor, it is undoubtedly easier to buy the precious metal today. Online companies like Silver-to-go, which operates from Germany and offers VAT-free coins for delivery across Europe, mean that buying silver is as easy as placing an order for toys, food and clothes. Investors can browse the website, place their preferred items in the shopping basket and their silver order will be delivered within 48 hours.

We have a wide range of customers throughout Europe, with the UK and France being our biggest markets. Despite its recent economic record, the latter is undoubtedly one of the wealthiest countries in Europe, with a high concentration of millionaires who are likely to want to diversify their investments.

But it is not just millionaires who are attracted to the safe-haven benefits of silver. Indeed, our average order for silver is £3,500. Investors can also be ordinary working people who believe a small investment in silver, and/or gold, will help protect their overall wealth. An investor placing an order for £700 of silver recently told me that he believed that silver was "safe", "tangible" (primarily because he could hold it in his hands), "and that its value would be unaffected by anything happening in the world around us". And this brings us back to Kiyosaki once more. In many respects, his comments probably best illustrate the financial Zeitgeist. The events of the last five years have shaken some people's belief in the financial world. The collapse of Lehman Brothers, for example, has had far-reaching consequences and the global economic landscape is taking time to recover. It is in this environment that silver, a safe-haven asset, has come to the fore.

Chart 6: Share of world silver demand (2004-2013) and GDP compound annual growth rate, top ten markets in silver fabrication



Source: 2014 World Silver Survey, Cebr World Economic League Table

Notes about the research

The Cebr research aimed to examine the macroeconomic determinants of demand for silver and present a comprehensive picture of the historic performance of the precious metal in comparison to other asset classes, as well as give a view for the drivers of the silver market going forward.

The research draws upon a wide variety of data. Data on historic price developments of gold and silver are retrieved from the London Bullion Market Association (LBMA), while data on demand and supply drivers of silver and gold are drawn from the Silver Institute's World Silver Survey and the World Gold Council's Gold Demand trends respectively. We further draw on the International Energy Agency's projections on solar photovoltaic capacity, the World Bank and International Monetary Fund's projections for industrial production, and the United Nations' Population Prospects. Finally, the data and analysis used are complemented by Cebr's proprietary macroeconomic forecasts from *The Prospects Service* and the *World Economic League Table*, which were used to inform views expressed in the report regarding the outlook of the silver market.

Daniel Marburger, Director of Silver-to-go
Daniel Marburger is Director of CoinInvest.com, which sells gold bars and coins to investors throughout Europe. During his time with CoinInvest.com, he has also set up sister company, Silver-to-go, which sells VAT-free silver coins and bars to private and institutional investors. Daniel joined the company in 2011. Prior to that, he was a banker within the private wealth management division of Commerzbank AG, formerly Dresdner Bank.

Regulation Update

By Sakhila Mirza, LBMA General Counsel

Fair Effective Markets Review (FEMR)

The broader review

The FEMR focuses on the fairness and effectiveness of the fixed income, currency and commodities (FICC) markets and how this might be improved. The LBMA plans to submit a response to the consultation, which was jointly launched by the Bank of England, HM Treasury and the Financial Conduct Authority on 27 October 2014. The LBMA will focus its response solely on the precious metals markets, which have been highlighted several times in the consultation. The deadline for this response is 31 January 2015. Market participants are encouraged to take part directly and to engage with the LBMA in their responses.

Benchmarks

FEMR also focuses on the regulation of benchmarks. A separate consultation was launched, again jointly by the Bank of England, HM Treasury and the Financial Conduct Authority, back in September, which focused on the regulation of benchmarks. The consultation proposed seven benchmarks to become regulated, including the LBMA Silver Price and the current Gold Fix (soon to become the LBMA Gold Price). The LBMA was involved in a roundtable discussion with HM Treasury to discuss whether these benchmarks should be included and also submitted a written response to the consultation. The LBMA is of the view that the LBMA Silver Price is not a significant benchmark and therefore should not be included in the list of benchmarks to become regulated.

The LBMA Silver Price, The LBMA Platinum and Palladium Price, The LBMA Gold Price

For further detail, please read LBMA News, Regulatory Affairs Committee update. In summary, the second half of 2014 has certainly bought about monumental changes to the London Precious Metals pricing mechanisms. The LBMA continues to talk to regulators to keep them updated on the developments in relation to these benchmarks.

OECD Update

The 8th Meeting of ICGLR-OECD-United Nations Group of Experts Joint Forum on Responsible Mineral Supply Chains took place in Kinshasa, Democratic Republic of Congo. This meeting provided the opportunity to review and discuss implementation of the OECD Due Diligence Guidance, the ICGLR Regional Certification Mechanism and other initiatives to enable responsible mineral supply chains. The LBMA was represented at the forum and took part in a panel discussion, speaking about the implementation of the LBMA Responsible Gold Guidance and how the LBMA would deal with instances of zero tolerance. The Forum was attended by more than 400 organisations, including some of the LBMA GDL refiners, as well as in-region and OECD governments.

EU Conflict Minerals – Draft Regulation

On 6 November 2014, the European Parliament's International Trade Committee (INTA) held a first exchange of views on the Commission's proposal for a conflict minerals Regulation. The draft Regulation establishes a system for supply chain due diligence for importers of tin, tantalum and tungsten, their ores and gold from conflict-affected areas. The debate focused on:

- whether such a system should be mandatory or voluntary (some MEPs favour a mandatory system whilst others believe this will deter suppliers away from conflict-struck areas);
- how it would be linked to existing international rules (such as the Dodd-Frank Act); and
- the definition of conflict areas (a representative of the European Commission emphasised that there should be no list of conflict areas but instead a more dynamic system).

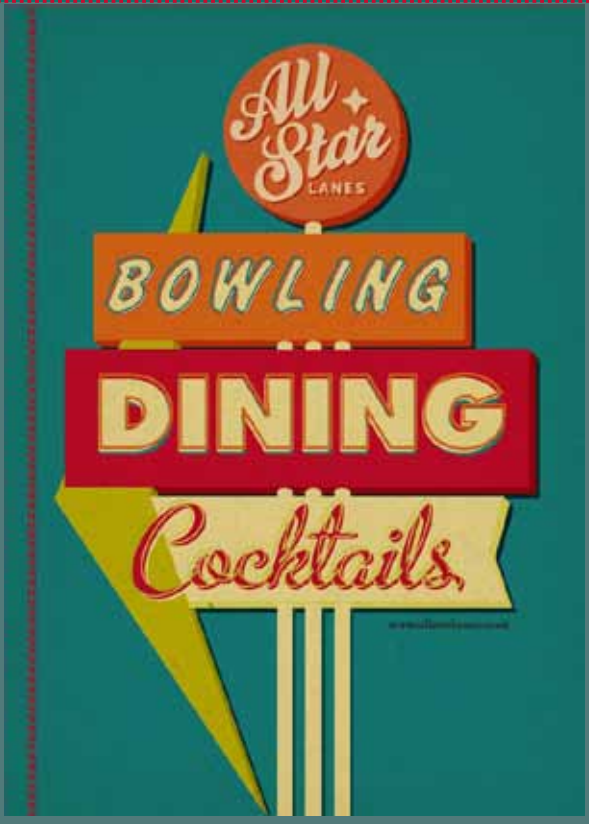
Furthermore, the draft Regulation requires banks and other downstream participants to arrange an independent third-party audit. The EU believes that banks should be audited to prove how they import conflict-free materials into the EU. The LBMA has expressed that such audits are not consistent with the OECD Guidance and are unnecessarily onerous, as well as duplicative due to the Responsible Gold programme.

Responsible Gold Guidance (RGG)

Russian Bullion Forum – Outreach & Implementation

The LBMA attended the Russian Bullion Forum, which was held in Moscow on 4 December 2014. The LBMA also met with refiners and the Gokhran (the State Precious Metals and Gems Repository – an institution under the Russian Ministry of Finance) to discuss the implementation of the Responsible Gold Guidance and aid with implementation.

LBMA ANNUAL PARTY



Thursday 26th February 2015

18:00 until late

All Star Lanes

Victoria House

Bloomsbury Place

London WC1B 4DA

www.allstarlanes.co.uk/venues/holborn/

The theme of the party is *Rock 'n' Roll*
1950s dress encouraged

Members & Associates only

Registration now open

Contact Humaira Afzal at events@lbma.org.uk

DIARY OF EVENTS 2015

FEB

09-12
21st African Mining Indaba 2015
Cape Town, South Africa
www.minuingindaba.com/

10
10th Russian Precious Metals Summit 2015
Moscow, Russia
www.russianmetalssummit.com/

23-24
Colombia Mining Summit
Bogota, Colombia
www.latinmarkets.org/forums/

MAR

08-10
6th LBMA Assaying & Refining Seminar
The Millennium Hotel, Grosvenor Square, London
www.lbma.org.uk

18-20
Mining Investment Asia 2015
Singapore
www.mininginvestmentasia.com/

23-27
Mines and Money
Hong Kong
www.minesandmoney.com/hongkong/

APR

12-13
Dubai Precious Metals Conference 2015
Dubai, UAE
www.dpmc.ae

14-16
European Gold Forum
Zurich, Switzerland
www.denvergold.org/gold-forums

20-21
121 Mining Investment
155 Bishopsgate, London
www.weare121.com/121-events/

MAY

18-22
LPPM Platinum Week 2015
London
www.lppm.com

25-27
Asia Mining Congress 2015
Singapore
www.terrapinn.com/conference/asia-mining-congress/index.stm

26-28
Mines and Money
Beijing, China
www.minesandmoney.com/beijing/

JUN

01-02
Peru Mining Summit
Lima, Peru
www.latinmarkets.org/forums/peru-mining-summit/

13-16
IPMI 39th Conference
San Antonio, Texas
www.ipmi.org

AUG

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

SEP

23-25
Precious Metals Summit
Colorado, USA
www.precioussummit.com/

OCT

12-16
LME Week 2015
www.lme.com

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

LBMA News

By Ruth Crowell, Chief Executive, LBMA

MEMBERSHIP

Citibank was reclassified as a spot Market Maker on 25 September and Morgan Stanley was reclassified as a spot and options Market Maker on 16 October. This brings the total number of LBMA Market Makers to 13. The full list of Market Makers on the LBMA website shows the products (spot, forwards and options) provided by each company.

On 7 October, China Construction Banking Corporation was admitted as an Ordinary Member.

These changes brought the membership to 146 companies, comprising 77 Members (of which 13 are Market Makers) and 69 are Associates.

GOOD DELIVERY LIST

On 21 November 2014, the silver refinery of Umicore Precious Metals (Thailand) Ltd was admitted to the Silver List. This increased the number of countries represented on the Good Delivery List to 28.

There are now currently 73 refiners on the Gold Good Delivery List and 80 refiners on the Silver Good Delivery List.

COMMITTEES

Management Committee
The Committee worked with the Executive, the Regulatory Affairs Committee and the Market Makers group on implementing a number of important changes relating to the precious metals benchmark prices. The Committee approved the set-up of a 100% fully owned subsidiary of the LBMA to own the intellectual property (IP) rights in the new benchmark prices, Precious Metals Prices Limited (PMPL). PMPL was incorporated on 28 November 2014 and is run by the LBMA Executive, independent of the LBMA Management Committee. This has also required the LBMA to formally expand its scope into all four precious metals. More detail on the work done can be found in Regulatory Affairs Committee below.

The Committee is also focusing on the long-term strategy and structure of the Association. This is in view of the fact that the market needs more support given the changing regulatory and infrastructure landscape. While its role as a hybrid trade association and market body has evolved organically over time, there is a need to proactively ensure it is equipped to adequately support the market on a long-term basis. The LBMA's role in providing market infrastructure has recently increased from the Good Delivery accreditation to encompass benchmarks. Going forward, it will have broader scope of work to contend with as regulation increases. These regulations include US Dodd-Frank, MIFID and MIFIR, as well as the potential regulation resulting from the Fair Effective Markets Review (FEMR). FEMR focuses not only on benchmarks, but on the entire structure and conduct of the London precious metals market.

The Committee needs to position the LBMA in a way that allows the Association to deal with the changes that may potentially affect the market. The Committee is therefore considering the structure, governance and organisation of the LBMA to ensure that it continues to meet the requirements of its members in an ever changing financial environment. This involves consultation with other market participants and organisations, as well as the regulators.

The Committee also reviewed the work of the Sub-Committees below. This included assisting the PAC in delivering yet another successful LBMA conference in Lima, Peru (see page 12 for details).

Regulatory Affairs Committee
The main focus of the Committee in recent months has been co-ordinating with the Management Committee and the Market Makers about important changes to the administration of the gold, silver, platinum and palladium precious metals benchmark prices.

Following consultation with the market (which included holding two market surveys, a seminar and various meetings with market participants, solution providers and the regulator), the LBMA announced on 7 November that ICE Benchmark Administration (IBA) had been selected to be the third-party administrator for the LBMA Gold Price. IBA is an independent specialist benchmark administrator and will provide the price platform and calculation methodology, as well as the overall administration and governance for the LBMA Gold Price. The LBMA will hold the intellectual property (IP) rights. The new LBMA Gold Price is scheduled to be introduced in Q1 2015.

Only 10 days before the 1 December launch, the LBMA agreed to take ownership of the historic and future intellectual property of the platinum and palladium prices. This was in response to a request from the London Platinum & Palladium Fixing Company Limited (LPPFCL) and after consultation with the Regulatory Affairs Committee and the Management Committee. This transfer of ownership took effect on 1 December, and the prices are now known as the LBMA Platinum Price and the LBMA Palladium Price. The London Metal Exchange (LME) provides the price platform, calculation methodology, administration and governance for both prices, with the intellectual property (IP) rights under the ownership of the LBMA.

As reported in the last edition of the *Alchemist*, the LBMA Silver Price was successfully implemented on 15 August, marking the end of the 117 years of the London Silver Fix. The platform and the calculation methodology for the LBMA Silver Price are provided by CME Group, whereas Thomson Reuters has ultimate responsibility for the administration and governance. The LBMA holds the IP rights to the LBMA Silver Price. There are now six price participants that have been accredited to contribute to the LBMA Silver Price, three more than contributed to the historic silver fix price.

Once the LBMA Gold Price is introduced in Q1 2015, the LBMA will own the intellectual property rights for all four metals. There have been concerns raised that the market has become fragmented with three different platforms covering the four precious metal prices. However, it is worth noting that whilst there are three different platforms, they do share broadly the same features, namely, they are electronic, auditable, tradable and auction-based solutions. With these auctions come improved transparency, more direct participants and, most importantly, independent administrators. All market participants are encouraged to contact the administrators to find out more regarding becoming a direct participant.

The LBMA also announced in November that the Gold Forward Offered Rate (GOFO) dataset will be discontinued and will no longer be published by the LBMA after 30 January 2015. This was due to contributors to the dataset becoming less active in these markets and, after 30 January, there would be insufficient number of contributors to create a critical mass. Gold IRS market participants looking to wind down existing trades are encouraged to contact TriOptima's triReduce Team (Mattias.palm@trioptima.com).

As the tsunami of regulations continues to push forward, the Committee remains focused on understanding the impact that both European and US regulation will have on the Precious Metals Markets. For further information, please read the Regulation Update on page 26.

Physical Committee
Since the last edition of the *Alchemist*, only one new refiner has been added to the Good Delivery List – in contrast to the record number of accreditations mentioned in *Alchemist* issue 75. The pace of work in this area has accordingly returned to a more normal level. However, there are still a number of active applications underway (including three for silver and two for gold), with several more at an advanced stage of preparation.

The Committee's views on vaulting issues are informed by discussions within the Vault Managers group, which meets each quarter to discuss a wide range of basic vaulting issues. The aim is to ensure consistency in the way that the

various vaults carry out operations such as inspections, weighing, assembly of bars on pallets and the formatting of the associated weight lists. The Committee has accepted in principle two recommendations from the Vault Managers. The first concerns year marks. Since 2008, refiners have been required to show a year mark on the bar, either as a separate 4-digit number or as the first 4 characters of the bar number (of up to 10 digits in total). The Vault Managers expressed a clear preference for the latter option, though it is recognised that, in some cases, this might not be practicable because of the 10-digit limit for bar numbers and they also indicated that, whenever possible, an indication of the year of production should be given in weight lists. This would avoid the danger of apparently duplicate bars appearing on published lists (i.e. when a refiner's bars produced in different years are given the same bar number). The next version of the Good Delivery Rules (to be published in January 2015) will clarify how these recommendations will be implemented, e.g. describing the degree to which they will be mandatory.

The Vault Managers' second recommendation was that all refiners (and other depositors) should submit their weight lists as Excel spreadsheets in addition to a non-alterable format. This requirement was incorporated into the new version of the Good Delivery Rules, which was published on the LBMA website in September. This contains a number of changes which refiners seeking accreditation need to be aware of when preparing their applications.

The other main topic discussed by the Vault Managers has been the Vault Operators Accreditation Scheme whose development continues steadily. It is no easy task to produce generic learning and testing material based on the different systems in use in the 12 vaults affiliated to the LBMA. Work on the first of seven modules is now well advanced and is expected to be complete by February 2015.

The technical work carried out by the Referees group in support of the Good Delivery System also falls within the purview of the Committee. At their most recent meetings, the Referees have focused on the arrangements for the Proficiency Testing Scheme which has recently been initiated and whose results will be published in late February 2015. As in the three previous exercises, the sample chosen is a gold alloy within the Good Delivery range – this time at the upper end. An important change is that labs that use ICP to measure the levels of impurities and calculate the fineness by difference are being asked to report on all the significant impurities detected. This will allow them to compare their analytical results with those of the other ICP labs (whose number has increased steadily in the three years that gold Proficiency Testing has been carried out by the LBMA. The Referees agreed to widen possible participation by permitting LBMA members, official assay offices and silver GD refiners to take part. It is gratifying that, partly as a result, the number of participants has increased sharply – by almost 50% – since last year's survey.

The report on the Proficiency Testing Scheme will be made available to participants in time for it to be discussed at the LBMA's forthcoming Assaying and Refining Conference, which will take place in London from 8-10 March 2015. See page 31 for details.

In response to a request from the Committee, the Referees have made good progress in developing proposed new acceptance criteria for Good Delivery applications and Proactive Monitoring. It is clear that the introduction of slightly tighter criteria is justifiable, in part because of the general increase in assaying accuracy on the part of GD refiners' labs. It is hoped that the new criteria will be agreed in time for publication in the GD Rules in the New Year.

Public Affairs Committee

The main focus for the PAC was finalising the arrangements for the conference in Lima on 9-11 November, as well as the biennial dinner on 1 December. The hard work paid off, with both events proving to be a great success. Reviews of both events can be found on page 12 and page 14 respectively.

The Committee is now concentrating on plans for the 2015 LBMA/LPPM Conference in Vienna, Austria, which will be held at the Hilton Hotel on 18-20 October. A high-quality programme of speakers and topics is currently being developed and any suggestions for papers or topics should be sent to the Executive. The PAC is discussing ways to ensure that the quality of the event is not compromised by overcrowding, given that Vienna will be a popular venue for many market participants.

The Committee agreed that five charities should benefit from the LBMA's 2014 charitable fund, as outlined below:

- Childhope. Offers recreational and educational support for children exploited in Peru.
- Future Focus. Offers assistance in developing the skills of young people living in Hanwell, West London.
- WorldVision. Provides support to children suffering from the disorder in Syria.
- Action for Children. Supports the most neglected and disadvantaged children in the UK.
- Great Ormond Street Hospital. Offers specialist medical support to children.

Finance Committee

The recent focus of the Committee has been to develop the budget for the next three years and review current performance. The Committee reviewed the 2014 budgetary performance, noting the unexpected costs raised by the precious metals pricing work. The LBMA's proactive involvement has required additional legal and consultant costs which were not envisaged in the original budget as well as additional staff costs to deal with the Association's ever growing workload. The Committee has also been reviewing the budget from recent LBMA events including the conference in Peru and the biennial dinner as well as the budget for the Assay & Refining Conference in March. Income has been supported by an ever growing number of membership and GDL applications.

Committee Vacancies

A vacancy has arisen on the PAC following the resignation of Tom Kendall, Credit Suisse. We would like to thank Tom for all his helpful advice and support during his time on the committee. The PAC is primarily responsible for organising events, most notably the LBMA Conference, as well as the marketing material and publications of the Association. Anyone interested in applying for the vacancy should send a brief statement of their market experience and suitability for the role to aelred.connelly@lbma.org.uk.

LBMA Staff

The LBMA is sorry to announce the departure of Collett Roberts, as the LBMA's Events Co-ordinator. Collett will be leaving at the end of January 2015 after more than six years of service. She has made an important contribution to the work of the Association and will be greatly missed. We wish her all the best for the future.

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
Telephone: 020 7796 3067
Fax: 020 7283 0030
Email: aelred.connelly@lbma.org.uk
www.lbma.org.uk

Obituary

David Saunders – A true gentleman of the bullion market

It is with great regret that we announce the recent death of David Saunders, following a short illness. David was a much respected stalwart of the London bullion market for many years, working for Sharps Pixley, Mocatta and Goldsmid and Mase Westpae, among others. Here three of his former friends and work colleagues pay their own personal tribute to him.

John Coley writes:
David was born in Portsmouth on 26 November 1931. He was educated at Southern Grammar School where he enjoyed considerable sporting success. He was undefeated Southern Counties boxing champion, represented Hampshire at cross-country running and played good-quality football and cricket in the Southend area. Being from a military family, he entered Sandhurst but decided it was not for him and joined Rothschild before later moving to Sharps Pixley as a Director.

David was a real family man. He married his sweetheart Jackie and had four lovely children: Lynette, Susan, Sarah and Stuart, and 10 grandchildren. From the mid 1960s onwards, the family home was in Petersfield, Hampshire, opposite my parent's house where I was still living. In one of those seminal moments, it was David who invited me to work at Sharps Pixley as they were looking for a young man to start in the dealing room: how different from today when there are files thick with applicants!

It is something for which I have always been so grateful. Even before working for him, I used to look up to this kindly man of strong character with his smart City overcoat complete with velvet collar, his tightly rolled umbrella and specially rolled bowler hat! We played cricket together both as teammate and opposition in our annual match versus Mocatta, and I can instantly recall his unique bowling action. His golf swing was even more esoteric but effective, especially around his home course in Petersfield where he served as Captain, Treasurer and later as President. He was my neighbour, my boss, my mentor and my friend, and I shall miss him greatly.

Colin Griffith writes:
David joined Mocatta & Goldsmid (M&G) in 1973, the same month as I did, and he used to say *"us new boys must stick together and show them we do know what we are doing"*, which was rather amusing as I only had a few years' dealing experience on the LME, whilst David was already a well- respected figure in the bullion market from his time at Rothschild & Sharps. Sitting opposite David for 10 years was a significant learning curve for me, and I always admired his ability to cut to the chase and see the big picture even in stressful times of high volatility.

My first two business trips were both made with David and they were always meticulously planned to ensure they were both enjoyable and constructive. David always had the vision of servicing the customers on a 24-hour basis, so after the establishment of a New York office, he decided that we should open an office in Hong Kong to take advantage of its growing gold market. This was when Mocatta Hong Kong was established, with David as a Director and Dick Gazmararian as the MD.

Yes, David loved his sport – he was always available for the cricket match against Sharps and for any golf days, particularly the dealing room golf trips, and to use the bowling green that sat next to our Finsbury Park offices whenever possible.

After he left M&G, I kept in touch with him on a regular basis and, in late 1987, I succeeded him in running the precious metals division of Credit Suisse London. As expected, he was most helpful during the hand-over of responsibilities.

Dick Gazmararian writes:
I first met David in late 1975 when he and Keith Smith interviewed me for the job at Mocatta in Hong Kong. For the next eight years, I relied a great deal on David's extensive knowledge of the gold market and his guidance.

David was a great proponent of the London market and he encouraged me to develop the concept of trading "Loco London Gold" in the Asian time zone in parallel with the Hong Kong Gold & Silver Exchange. This led to the development of a very successful arbitrage market and promoted London as the pre-eminent gold trading centre.

In 1988, I was fortunate to have David work with me at Mase Westpac (MW) in London as Deputy Managing Director and he also spent some time in our offices in Hong Kong.

He contributed a great deal to both MW and the continual development of London as a major trading centre. He was respected throughout the market for his integrity, knowledge and leadership, and made a significant contribution to the internationalisation of gold trading in the late 1980s and early 1990s.

Market Moves

Bikash Agarwal to join
Heraeus Singapore

Bikash Agarwal will join Heraeus Singapore as Sales and Marketing Manager for the Trading Division from January 2015. He has been working at Heraeus since March 2013 in the area of Finance/Controlling. Prior to joining Heraeus, he worked for over two years as Senior Rating Analyst at ICRA Limited (Subsidiary of Moody´s) focussing on ferrous metals. He will drive the sales activities in the region and widen the range of precious metal related services offered by Heraeus.

Bernd Bauer joins
Agosi, Pforzheim

On 1 November, 2014 Bernd Bauer joined Allgemeine Gold- und Silberscheideanstalt AG, Pforzheim/Germany, as Divisional Sales Manager Precious Metal Services. Prior to this step, he started his career with Sparkasse Pforzheim Calw, building up almost 10 years of well-based experience in the precious metals market and the entire range of metals trading, hedging, financing and investment solutions as Head of Precious Metals Trading. At Agosi, he will further develop the company's precious metals activities, both in the European market and on a global scale.

Schöne Edelmetaal is 275 years old

The oldest LBMA Good Delivery refiner, Schöne Edelmetaal (Amsterdam, The Netherlands) has reached the entirely respectable age of 275 years. This remarkable event was celebrated with its customers on 3 November. Founded in 1739 Schöne quickly became the preferred assaying and refining partner of the Amsterdam Bank, one of the first central banking institutions.

LBMA

The Sixth LBMA Assaying and Refining Conference

The Millennium Hotel, Grosvenor Square, Mayfair, London
8 - 10 March, 2015

Scope

Assaying, analysis and refining of precious metals, primarily covering gold and silver.

Who should attend?

Assayers and Analysts, Refinery Managers and Engineers, and anyone interested in hearing about the latest technical developments or in networking with members of their peer group located in precious metal refineries around the world.

At the last event, held in March 2013, 162 delegates from 27 countries participated.

Outline Programme

- Sunday 8 March
  Evening: Welcome Reception
- Monday 9 March
  Plenary Sessions covering a wide range of topics*
  Evening: Conference Dinner
- Tuesday 10 March
  Plenary Sessions covering a wide range of topics*

Details of the speakers can be downloaded from the LBMA website:* ***www.LBMA.org.uk*

Registration

Registration will open in January, please refer to the LBMA website for further details.

Fees (all subject to 20% VAT)

Conference Registration

The Conference Fee includes attendance at the plenary sessions, the welcome reception, lunches on 9 and 10 March, and the Conference Dinner:

- LBMA Members, Associates and Good Delivery Refiners: **£450**
- Others: **£550**

Optional Events

The Fee for each of the following optional events is £60 (plus 20% VAT). It includes a light lunch following the event as well as entrance fees, for the visit to the Royal Institution, and transport (in the case of the visit to Inspectorate).

The London Assay Office

The London Assay Office, located near St Paul's cathedral, is responsible for the assay-checking and hall-marking of precious metal products (both locally manufactured and imported). It is located at the rear of the livery hall of the Goldsmiths Company, one of oldest guilds in the City of London, with a history stretching back to 1300. The visit will include a quick tour of the livery hall, one of the finest in the City of London, followed by a tour of the assaying and hall-marking sections.

Inspectorate International

Inspectorate, one of the LBMA's Good Delivery Supervisors, is located at Witham in Essex, a 45-minute journey from London. The visit will focus on Inspectorate's wide-ranging facilities for sampling, assaying and analysing a range of metals and minerals.

Although visits to the other LBMA supervisors, ALS and Alex Stewart International (both of which are located in Liverpool), are not included in the programme as options, both companies would be delighted to receive visits from delegates attending the Conference.

The Royal Institution

The Royal Institution is without doubt the place in London that anyone interested in the history of science in the UK should visit. Founded in March 1799, with the aim of introducing new technologies and teaching science to the general public, it has been at its present location in Albemarle Street in Mayfair ever since. Some of the great names who did their work here include Dewar, Bragg, Davy and especially Faraday. An idea of some of the iconic items that will be seen during the tour can be viewed on the RI's website: **www.rigb.org**.

Workshop on X-ray Fluorescence Spectrometry

Led by Dr Mike Hinds, Assay Chemist, Royal Canadian Mint

Due to its wide analytical range (ppm to %), simple sample preparations and least-cost-per-unit analysis, X-ray Fluorescence Spectrometry (XRF) has been widely used by many industry sectors, such as cement, metals, glass, petrochemicals, pharmaceuticals and mineral processing as a primary tool for analysis of their materials. This workshop will explain how XRF works and what makes it different from other atomic spectrometric techniques. The different types of XRF spectrometers will be discussed, and the advantages, disadvantages and limitations of each type of XRF will be highlighted (wavelength dispersive XRF versus energy dispersive XRF versus hand-held XRF). The workshop will end with a review of some examples of how XRF can be used for precious metal analyses.

A Baptism of Fire

Editorial Comment by Grant Angwin, General Manager of Johnson Matthey and Chairman of the LBMA

I have certainly experienced a baptism of fire since I took over the reins as Chairman of the LBMA in July.

As David Gornall rode off into the sunset, I found myself jumping out of the fire and into the frying pan. So many changes in so short a space of time. It is a true reflection of the dedication of the team at the LBMA that we have coped with all that has been thrown at us and, on the whole, have come out unscathed. Despite the fact that we are an Association, the rules of management still apply: surround yourself with good and strong people. The time zone difference sometimes pays havoc with my sleep patterns such as when Ruth – rarely I must admit – calls me in the middle of the night. I also admit to having done the same to her! The role has afforded me the opportunity for a few more trips back to my home country and my two daughters are delighted by this. I must thank Johnson Matthey for their support in this.

Since July I have been focused on the major changes to the daily spot prices for the London precious metals markets. The fixes, or 'daily price auctions' as we call them now, will continue on in new electronic & IOSCO compliant forms while the three fixing companies are being wound down. CME Group, Thomson Reuters/LME and IBA now provide independent administration to these three auctions, and the LBMA holds the intellectual property for all four prices, on behalf of the market. All four prices operate on similar electronic, auction-based platforms with different administrators chosen through market consensus. All of these price auctions are open to new participants. We've been delighted to see the number of direct participants in the LBMA Silver Price double from three at launch to six today. We look forward to more participants joining soon, especially the forthcoming LBMA Gold Price, scheduled to launch in Q1 2015.

Given the long history of the fixes, with the Silver Fix starting in 1897, 2014 has been a landmark year. The origins of the London bullion market can be traced back much further, to the 1670s, when Moses Mocatta crossed the North Sea from Amsterdam to London and founded a brokerage firm in Camomile Street – the Bank of England being formed a couple of decades following. So this is not the first time we have seen major events in the market. Aside from the demise of the gold standard, the announcement by the Silver Fixing Company that they would be winding down in August has had one of the biggest impacts on the precious metals market. Given current market conditions and regulatory changes, it is more important than ever that the three remaining organisations, the LBMA, LPPM and the LPMCL, continue to work together to provide the infrastructure and, more importantly, the voice for London, as a global centre, in this challenging period for the precious metals market.

I am delighted to say that we will be working with the LPPM again with regards to the 2015 Conference. Many members of the LBMA are also members of the LPPM. It is my strong personal opinion that the two organisations must continue to investigate ways in which we can collaborate more effectively on areas that are of mutual interest to our joint membership. Such collaboration is demonstrated with the LBMA assuming the Intellectual Property rights for the Platinum and Palladium fixes.

The LBMA's involvement in the benchmarks has fundamentally changed the work load of the Association. The LBMA has always provided infrastructure to the London Market via the Good Delivery Lists, however, the addition of the benchmarks has greatly enhanced the remit of the organisation. I'm delighted to say that business has continued at its normal high standard even considering the increased workload. The LBMA held two major events in 2014: the LBMA Bullion Market Forum in Singapore as well as the annual Conference in Peru. Both events had nearly 400 attendees and were well received by both the market and attendees. For those of you who found Peru to be a long way from home, we look forward to hosting you closer to home in Vienna later this year. Our Association is also planning an Assaying and Refining Seminar in March, as well as looking at a continued presence in Asia through various outreach and shared events. With regards to Good Delivery, the LBMA welcomed its 100th accredited refiner to the Good Delivery List. The importance and recognition of this programme continues to go from strength to strength. Membership to the association has remained steady despite some losses through mergers, and we are pleased to see a constant stream of interest in joining the Association from around the world.

The LBMA Executive Office has had some significant changes in leadership this year. Ruth Crowell was promoted to Chief Executive in January 2014 and it has certainly been a baptism by fire for Ruth as well. I would like to use this forum to thank Ruth and her team for all their hard work this year. We have begun the process of strengthening the executive team: Sakhila Mirza joins us as General Counsel, along with Sunny Field as Operations Director. Both Sakhila and Sunny bring a wealth of experience to these roles, along with a vision on how to develop the role of the LBMA. Early next year, the team will be joined by Neil Harby, who will be taking on the role of heading one of the cornerstones of our association – the Good Delivery List. Neil joins us from the Rand Refinery – one of the accredited LBMA referees – where he headed up the assaying and evaluation processes as well as being part of the executive management team.

The strategy for the LBMA, as well as the market as a whole, needs to be developed more than ever as many banks are beginning to exit commodities along with benchmarks due to the shifting regulatory environment. The LBMA will be participating in the consultation for the Bank of England, FCA and HM Treasury's Fair & Effective Market Review, which reviews the Fixed Income, Currency and Commodity markets. This will bring significant changes to the regulatory cover of the London precious metals markets, and recommendations will be announced in June 2015. Changes in the economic, political and regulatory environment have given the Association the opportunity to gain further recognition as the world's competent authority for bullion; however, they raise the need for yet more leadership from the LBMA. While there are still many more regulatory challenges ahead of us, the co-ordination of the market via the Members of the Association and the LBMA Executive will allow us to continue to face those in a more informed and more co-ordinated manner. The structure of our Association will need to change as regulation becomes more embedded in our industry and all stakeholders require more transparency. As these and other changes take effect the governance, organisation and financing of the Association will be very different to what we know today.

2015 will continue in the same vein as 2014 for me and the executive. This can be summed up in one word 'change'. The business and the market that Moses Mocatta embraced some 350 years ago will continue to change at a rate of knots that he would not have been able to comprehend. Together with all the membership, I have no doubt that we can create an organisation that can truly represent our industry – from miner to consumer.

May I wish you all a prosperous and happy New Year in 2015.

Grant Angwin, General Manager of Johnson Matthey and Chairman of the LBMA

facing facts

William Tankard, Research Director, Precious Metals Mining and Dante Aranda, Precious Metals Mining Analyst, Thomson Reuters GFMS.

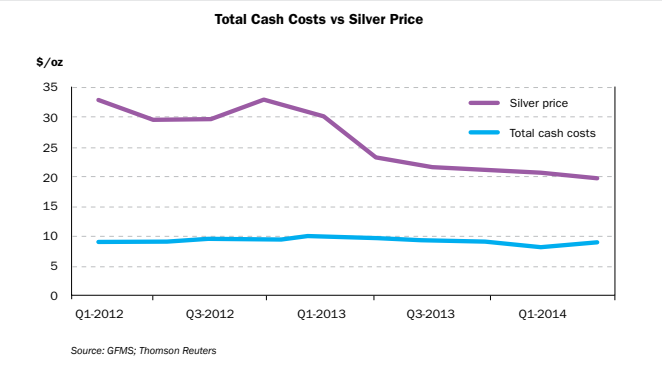
An Interim Review of Silver Production

At the recent Annual Silver Industry Dinner in New York City, hosted by the Silver Institute, the GFMS team delivered a statistical update on the market, including expectations for mine production. On the back of this and in light of the moves lower by the silver price, it seems an appropriate time to take a closer look at some of the trends in the silver mining space.

Despite the decline in silver and most by-product metal prices seen over the year, we expect that global silver mine production will rise by 32 Moz in 2014. A significant portion of the increase we are witnessing this year can be attributed to three major silver-producing mines, in Guatemala, Mexico and Chile, which combined are on track to contribute an increase of around 32 Moz year-on-year. Other major producers' expected output is detailed in the table below.

Guatemalan production has been on the rise in the past year and is expected to grow by 144% in 2014. Commercial production was achieved at Escobal during the first quarter of 2014 with silver grades, mill throughput and recoveries in line with the mine plan. In the 9-month year-to-date period, Escobal produced 15 Moz of silver – a comparable order of magnitude to Canada's output for the year. Escobal has overtaken Marlin as Guatemala's largest silver producer and is on track to produce between 18-21 Moz by year-end.

In Mexico, official statistics point to a 12 Moz increase year-on-year to just under 200 Moz. Over the first nine months, Peñasquito has produced an additional 5 Moz compared to last year, explained by a 29% increase in processed silver grades. In 2013, silver yields were lower owing to more refractory ore.



Elsewhere in the country, the ramp-ups at Del Toro, Saucito and San Jose have added a combined 4 Moz in the year-to-date.

Chilean output, meanwhile, is expected to record a gain in the region of 5 Moz to a total of 44 Moz, aided by new supply from the primary copper mine, Ministro Hales. Over 2014, the 15% devaluation of the Chilean peso has aided miners in the country to contain cost inflation of energy and labour wages. Total silver production is estimated to reach 44 Moz, extending gains for a second consecutive year.

However, gains in the aforementioned countries were partially offset by losses in Canada (-5 Moz) and Kazakhstan (-4 Moz), explained by mine shutdowns and lower grades. In addition, we forecast Australia will register a 4 Moz drop year-on-year, predominantly led by a fall in production at the world's largest primary silver mine, Cannington. The drop in mine output is due to an 18% fall in silver processed grades year-on-year, which substantially outweighed a 4% increase in throughput.

The sharp decline in the silver price, which fell by 25% year-on-year in the first half of the year, has had a marked effect on the financial performance of primary silver producers – a group that will account for some 30% of global mine supply in 2014. In response to this squeeze, as has been the case in the gold industry, costs are being reined in wherever possible. Primary producers' Total Cash Costs in the first half of the year averaged US$8.51/oz, a 13% decrease year-on-year from US$9.77/oz. This implies a 56% simple cash margin, the leanest for a decade. At first impression, this might appear to be an attractive margin, though it should be made clear that Total Cash Costs exclude capital expenditure, corporate overheads and exploration costs. Last year, these items comprised some 30% of incurred cash expenses.

To demonstrate, in the first half of 2013, the aggregate financial performance of four leading primary silver producers (Fresnillo, Coeur Mining, Pan American Silver and Hecla) recorded a narrow loss, of $32 million. Over the year that followed, these producers' exploration expenditure was cut by 42% year-on-year and, over the same period, capital expenditure was reined in by 27%. As a consequence of these cost reduction initiatives and broader optimisation efforts at the operating level, the group of producers brought aggregate net income back to positive $61 million in the first half of 2014. With spot prices having recently traded down to $16/oz, it is clear that further rounds of rationalisation will be needed in the silver industry.

Top 15 Silver Producing Countries

Ranking 2013	2014F	Country	Output (Moz) 2013	2014F
1	1	Mexico	187	199
2	2	Peru	118	121
3	3	China	118	119
4	4	Australia	59	55
5	5	Russia	45	45
7	6	Chile	39	44
6	7	Bolivia	41	42
8	8	Poland	38	37
9	9	United States	34	36
10	10	Argentina	25	27
15	11	Guatemala	10	25
12	12	Kazakhstan	20	16
11	13	Canada	21	16
14	14	Sweden	11	12
13	15	India	12	10

Source: GFMS, Thomson Reuters, The Silver Institute

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.

Dante Aranda began his career in the commodity market in 2010 when he joined Thomson Reuters in Toronto as a commodities specialist, working with a broad range of natural resources companies. Now based in London as a precious metals mining analyst, he is heavily involved in the team's modelling of mine production and industry costs using Matlab and VBA and is also a leading contributor to the GFMS team's technical analysis. Prior to Thomson Reuters, he worked at Banco de Credito del Peru as a Junior Trader on the FX structured products desk. He holds a BSc. (Honours) in Financial Economics & Applied Statistics from the University of Toronto, where he specialised in Econometrics.

The conference by the industry for the industry

LBMA Precious Metals Conference 2015

18-20 October 2015
Hilton Vienna Hotel
Vienna, Austria

There's a place for all market players at the LBMA Conference – Save the Date

PAMP®

Produits Artistiques Metaux Precieux

Produits Artistiques Métaux Précieux, better known as PAMP, one of the world's largest, independently-held precious metals refineries, provides a comprehensive range of vertically integrated services - from pick up uf doré from the mine, through to assaying, refining, hedging services and worldwide delivery of bars.

TRUST IS PRECIOUS

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

An active proponent of quality excellence throughout the industry, PAMP is further honored as one of only three 'Good Delivery Referees' of the LBMA.

A wide range of coin blanks in gold, silver, platinum and palladium are supplied to the world's most prestigious mints. PAMP is also internationally renowned for a variety of sophisticated precious metals products, such as legal tender coins or medals in color, hologram, bi-metallic, or stone-set varations, or with partial or total gold plating.

PAMP SA
6874 Castel San Pietro | Switzerland

T +41 91 695 04 50 | F +41 91 695 04 51
info@pamp.com | www.pamp.com

An MKS PAMP GROUP Company