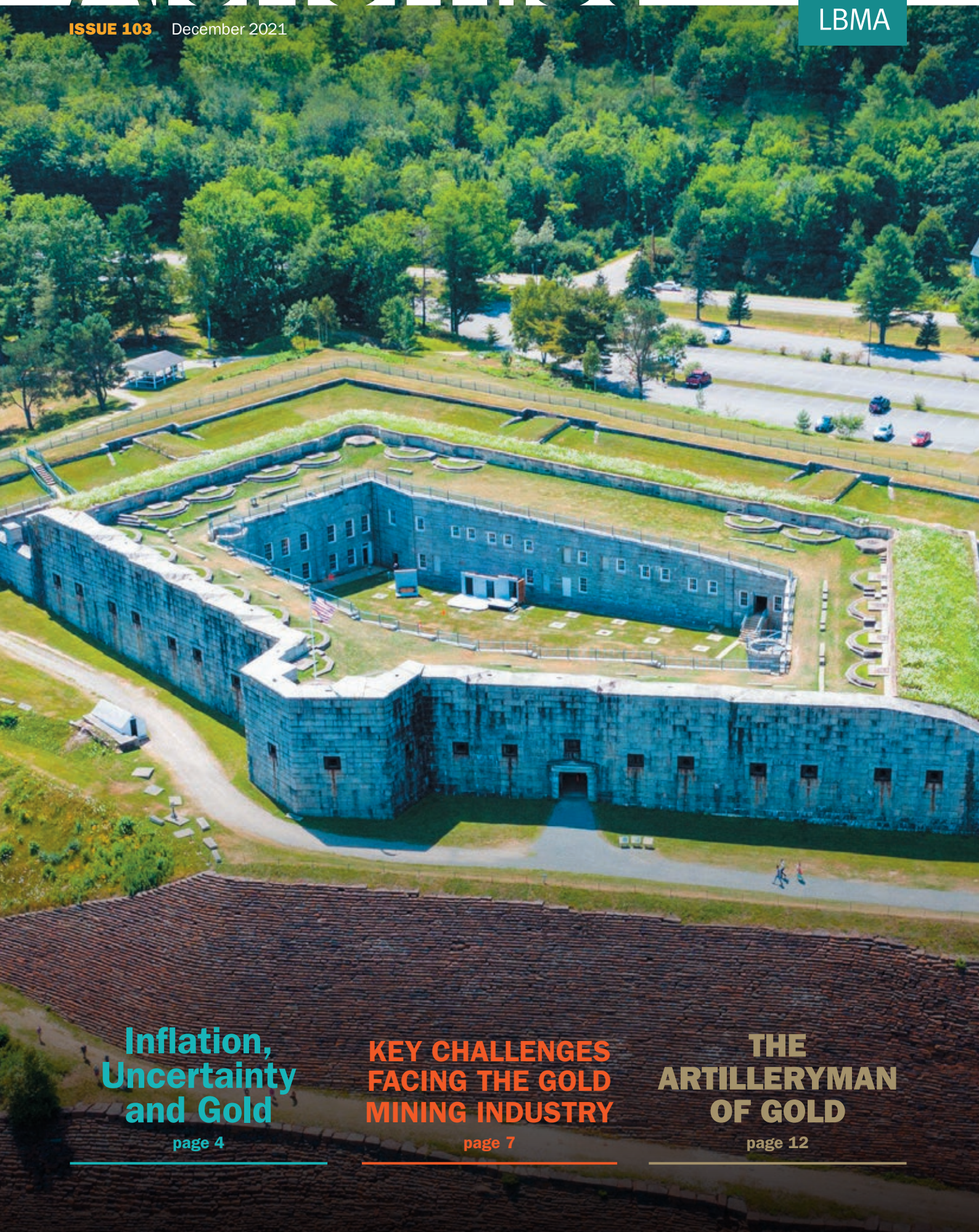
Alchemist

ISSUE 103 December 2021

LBMA



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EDITORIAL

BY EDEL TULLY, HEAD OF COMMUNICATIONS, LBMA

2021 has been another turbulent year. COVID-19 retains centre stage and continues to stress test the resilience of all financial markets. For us in the bullion market, we are at least able to draw on a long history, strong networks and deep expertise to retain our resilience.

The many different elements of gold – from rock to ring – have all been disrupted to varying degrees, but the market has largely been able to continue operating, despite shutdowns and home working for some. London vaults and benchmark auctions have kept operating, there has been sufficient refining capacity and dealers have been trading remotely.

It's now just over a year since I took the reins as LBMA's Head of Communications. In some ways, it feels much longer, but perhaps that is because we have been in the midst of unusual times whilst striving to deliver a packed programme of events, communications and campaigns.

WE HAVE SET OURSELVES SOME CHALLENGING STRATEGIC OBJECTIVES TO STRIVE TO BETTER SERVE OUR MEMBERS AND THE INDUSTRY AT LARGE

I wanted to take this opportunity to highlight what we've been working on since I arrived. I won't say too much about what is probably the cornerstone of what LBMA does – Responsible Sourcing – as you can read all about these developments in our second Responsible Sourcing Report, published just last month. And more recently, we have also published the latest iteration of our Responsible Sourcing Guidance, version 9, which builds on ESG initiatives. I would encourage you to read both reports.

One of my objectives when I arrived at LBMA was to strengthen our channels of communication to keep the market and our Members up to date with the latest news and market developments. With that in mind, we have improved our Weekly Newsletter and bi-weekly webinar programme, and have also introduced more regular market updates, including a quarterly market report and a country/sector spotlight feature in partnership with Metals Focus. On the publications front, the *Alchemist* continues to fly the flag and we will shortly launch our fifth Annual Report.

In March this year, we launched our redesigned website. We improved our site navigation and launched new functionality and features, such as the ability to download prices and data. The relaunch also included a refresh to our Newsroom and Events page, where you can find our latest news, features and events. A new Press page provides a handy reference for journalists, including quick links to publications and resources that outline our key strategic priorities.

Earlier this year, we released a digital exhibition entitled 'The Wonders of Gold' – curated by Stewart Murray, LBMA's GDL Consultant. The online exhibition showcases approximately 150 items from around the world and is a real treasure trove of artefacts.

Our in-person events have unsurprisingly taken a hit this year as we had to cancel first our Conference in Lisbon and then more recently our annual black-tie Dinner at the Natural History Museum. This was very disappointing, not just from a personal perspective but also for the market, who I know really relish those opportunities to meet face to face with colleagues, clients and friends. We did manage to transition much of the content to a virtual format for the Conference as well as the Seminar that was scheduled to take place prior to the Dinner. Both events proved popular and we have had some great feedback.

As we approach a new year, while it can be useful to look back over the last 12 months' achievements, we also must look forward with our new three-year Strategic Plan 2022-2024. Our mission continues to be the advancement of global standards, with our strategic thinking focused around four key pillars: Responsible Sourcing, Physical Market, Financial Market, and Communications and Engagement. We have also set ourselves some challenging strategic objectives to strive to better serve our Members and the industry at large.

WE WOULD ENCOURAGE YOU TO PROVIDE MORE FEEDBACK AS WE CONSULT FURTHER ON OUR STRATEGIC PLAN IN THE NEW YEAR

A key part of measuring how we are at meeting our strategic goals is through key metrics, such as Member Satisfaction rates. This is why we commissioned an independent Membership Survey in the autumn to seek feedback from Members, Refiners and Subscribers on how LBMA is delivering against its strategic mission, as well as to consult on the key pillars of our new Strategic Plan.

The full results of the Survey will be published early in the New Year, but I can share some preliminary results with you. Overall, LBMA is performing well, achieving an overall Members Satisfaction rate of 67%, with 20% saying they are extremely satisfied. There was also good support for the key workstreams identified for the Strategic Plan. We would like to thank you all for taking the time to participate in the Survey and provide your feedback. We would encourage you to provide more feedback as we consult further on our Strategic Plan in the New Year.

Edel Tully

ISSUE HIGHLIGHTS

Front cover – An aerial photo of Fort Knox, located in Stockton Springs, Maine, USA, which is featured in the article by Simon Rostron "The Artilleryman of Gold" on page 12.

The Federal Reserve Bank of New York.

INFLATION, UNCERTAINTY & GOLD

BY BARRY EICHENGREEN, PROFESSOR OF ECONOMICS, UNIVERSITY OF CALIFORNIA, BERKELEY

This article is based on the keynote speech which Barry Eichengreen delivered at the 2021 LBMA/LPPM Virtual Precious Metals Conference on September 20, 2021.

INTRODUCTION

We are currently in a period of heightened uncertainty. Relations between the US and China continue to be strained, as are those between France and the Anglophone countries. There are doubts about the reliability of US alliances more generally, given the Biden administration's unilateral withdrawal from Afghanistan. The world continues to deal with the challenge of Covid, which might die away with the progress of vaccinations or might surge anew, owing to the development of new variants and the slow pace of progress in vaccinating the Third World.

INFLATIONARY PRESSURES

There is concern that we are now entering a period of significant chronic inflation; I am however not so worried about this. This is partly due to some current inflationary pressures that are temporary – think, used cars in the United States – but mainly, because I think stability culture is now deeply ingrained in the ranks of our central bankers.

Despite the fact that inflationary pressures could moderate somewhat going forward, it is clear that the central bankers, and the Federal Reserve (the Fed) in particular, are a bit behind the curve. The inflation forecasts of the Federal Open Market Committee (FMOC) are implausibly low. In their latest report (from the FMOC meeting on 15-16 June, 2021), it expects an increase in consumer price inflation of 3.4% this calendar year, but in order to hit that forecast, prices would actually have to be stable, with no inflation whatsoever in the third and fourth quarters of the year. This obviously is implausible, given what is already in the pipeline. Inflation is not going to fall to zero now, given the considerable fiscal stimulus to which the US is currently subject, and the various supply-side disruptions. This means that the Fed is going to have to start tapering and then raising interest rates earlier and more sharply than communicated previously, in order to damp inflation back down. It is already showing signs that it is about to alter its communication to that effect.

While I have absolutely no doubt that this is what the Fed is about to do, others – Charles Goodhart, for example – are suggesting that heavier debt burdens will empower the debtors' lobby, which pushes for higher inflation. However, the creditors' lobby of mutual fund investors, insurance companies and pension funds is every bit as influential. Others say that central banks will succumb to fiscal dominance, and they will hesitate to raise rates because this will increase their government's debt servicing costs.

I think central banks have invested too much in their inflation targets

I do not agree with this argument. I think central banks have invested too much in their inflation targets. They have invested too much in their anti-inflationary credibility to compromise their targets in this way. So having fallen behind the curve, they are now about to rush in order to catch up, which has two implications. First, it will make for difficult choices for governments that are unable to inflate away their debts. Second, if central banks end up normalising earlier and faster than promised, they may run for the financial markets. In other words, if they can precipitate a sharp market correction, they can provoke another taper tantrum in emerging markets. This possible market turbulence is yet another source of heightened uncertainty.

Oesterreichische Nationalbank (OeNB), the Central Bank of Austria, gold vault.

PROSPECTS FOR GOLD

Given all this, what about the prospects for gold? Since I am not terribly worried about inflation, I see only a weak argument for investing in gold as an inflation hedge. For my money, as it were, the inflation hedge argument was not that strong in the first place. If you look at studies of gold's historical performance as an inflation hedge, you see that gold does reasonably well in the long run, meaning over a century or so, which is much longer than is relevant for an investor's horizon.

Over shorter horizons, gold's correlation with inflation is erratic. Unlike others, I do not see us heading back toward a period of chronic inflation or a period of relatively high inflation like the 1970's, when the inflation hedge character of gold was evident. Even if you disagree, I think you are better advised to hedge inflation risk by investing in say Kipps or similar, whose returns are better correlated with inflation.

IF YOU LOOK AT STUDIES OF GOLD'S HISTORICAL PERFORMANCE AS AN INFLATION HEDGE YOU SEE THAT GOLD DOES REASONABLY WELL IN THE LONG RUN

DOES GOLD PERFORM WELL IN PERIODS OF HEIGHTENED UNCERTAINTY

It certainly did in 2020, which epitomised that environment of uncertainty. Gold has a low correlation with other asset classes, meaning that it is a useful means of diversification. My dissertation adviser, Jim Tobin, won the Nobel Prize in Economics for his work on portfolio diversification. When he was asked at the post prize press conference to describe to lay people the implications of his findings, he said: "Well, my research showed that you shouldn't put all your eggs in one basket." Tobin's advice was that when allocating your risk assets, hold the market portfolio. So, if the market capitalisation of gold is $10 trillion, a generous estimate, that of global equities is $100 trillion, that of global bonds is $125 trillion and that of global real estate is 300 trillion, this implies that gold should be 2% of a well-diversified portfolio, unless you think that you can outguess the markets.

JIM TOBIN WON THE NOBEL PRIZE IN ECONOMICS AND SAID: ***"WELL, MY RESEARCH SHOWED THAT YOU SHOULDN'T PUT ALL YOUR EGGS IN ONE BASKET."*** THIS IMPLIES THAT GOLD SHOULD BE 2% OF A WELL-DIVERSIFIED PORTFOLIO

DO CRYPTOCURRENCIES PROVIDE AN ALTERNATIVE?

There is a pronounced age enthusiasm gradient when people are asked about cryptocurrencies. I think that cryptocurrencies will remain a niche investment product for people with a gambling tendency and for people with a high risk tolerance. Cryptocurrencies are about to be subjected to rigorous regulatory oversight in the United States and elsewhere, which will diminish their appeal to people who like them for use in surreptitious transactions. The most that can be said on their behalf is that cryptocurrencies such as Bitcoin, like gold, display a low correlation with other investments, including with gold itself, so far as I can tell. If the market cap of cryptocurrencies collectively is in the order of $2 trillion, then their weight in your market portfolio, following the calculations outlined above, should be in the order of 1/3 of 1% – not very much, and absolutely not very much compared to gold.

One of the Bank of England's gold vaults.

Professor Barry Eichengreen is an American economist who holds the title of George Pardee and Helen N Pardee, Professor of Economics and Political Science at the University of California, Berkeley, where he has taught since 1987.

He currently serves as a Research Associate at the National Bureau of Economic Research and is a Research Fellow at the Centre for Economic Policy Research. His best-known work is the book *Golden Fetters: The Gold Standard and the Great Depression 1919-1939*.

Barrick's gold mine in Kibali, Democratic Republic of the Congo.

Key Challenges Facing the Gold Mining Industry

BY MARK BRISTOW, PRESIDENT AND CEO, BARRICK GOLD

This article is based on a keynote speech delivered by Mark Bristow at the 2021 LBMA/LPPM Virtual Precious Metals Conference on 21 September, 2021.

Mining is, by its very nature, a challenging business. Mines are large, complex and risk-laden industrial enterprises run by people who have to manage them through commodity price cycles, find replacements for dwindling mineral reserves, convert them into renewable energy sources and, in many cases, find and operate them in challenging jurisdictions with poorly developed infrastructure.

DRIVING ECONOMIC DEVELOPMENT

The key overarching issue that the mining industry currently faces is the need to advocate mining to the societies and general population whose needs it serves in countless and in growing ways. It's worth recalling that mining has been advancing human civilisation since our remote forebears started using copper in the Middle East some 11,000 years ago. Today, copper remains a material of critical strategic importance, a key component not only of the global power distribution infrastructure, but of all the new clean energy technologies. In fact, these technologies are reliant on a wide range of mined resources.

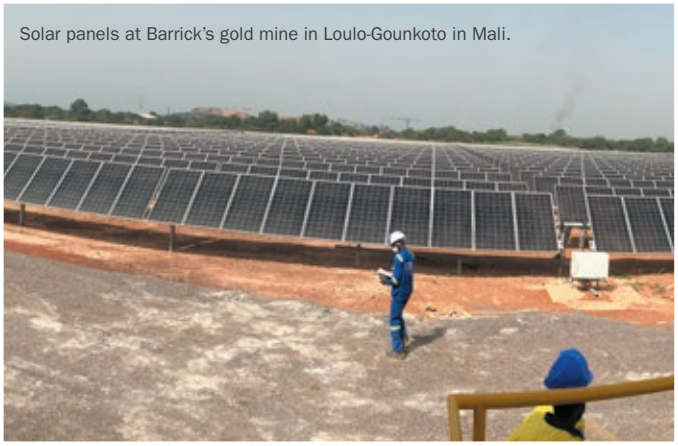
THE KEY OVERARCHING ISSUE THAT THE MINING INDUSTRY CURRENTLY FACES IS THE NEED TO ADVOCATE MINING TO THE SOCIETIES AND GENERAL POPULATION WHOSE NEEDS IT SERVES IN COUNTLESS AND IN GROWING WAYS

Mining has been the primary driver of economic development throughout the world and it still performs that vitally important function in emerging countries. Its products touch the lives of every person, every day and in many ways.

We depend on at least 90 metals and minerals to support and power the global economy. Yet, in spite of its contribution to mankind, which few other industries can match, the mining industry has never been given its due. At best, it is taken for granted. At worst, it is depicted by activists of various persuasions as a ruthless exploiter of countries and people, and a reckless despoiler of the environment.

EMBRACING ESG PRINCIPLES

Sadly, greenhouse emissions by rogue players, and even some industry leaders, have given some credence to this perception. It's therefore encouraging to note that a fightback has started with the introduction of the World Gold Council's (WGC) responsible gold mining principles and the closely aligned mining principles of the International Council on Mining and Metals (ICMM). Representing the views of a broad range of stakeholders, these principles address key Environmental, Social and Governance (ESG) issues, and provide a credible framework within which mining companies can demonstrate that their gold or other metals and minerals have been produced responsibly.



Solar panels at Barrick's gold mine in Loulo-Gounkoto in Mali.

However, as an industry, we could do better, by standing up for ourselves and ensuring that we talk with one voice and promote our own well-thought-through regulations, rather than constantly trying to comply with a plethora of third-party or activist-derived regulations.

ESG as an investment thesis has moved from the margins to the mainstream, and this is definitely a good thing. However, it also presents some challenges, with the number of disclosures, tools and metrics used to score a company's performance ever increasing. As an industry, we need to be working with investors and raters to improve the understanding of what "good" looks like when it comes to ESG because, ultimately, we know our industry best.

We should be striving for equivalency and having a single set of reporting guidelines for the industry. Only then can we start making meaningful comparisons and focusing our attention on those ESG metrics that actually add value.

Getting to what "good" looks like is one of the reasons Barrick has worked with the WGC and ICMM on the responsible gold mining principles and the mining principles respectively – along with driving equivalency between the two. It was also a key reason for us to develop our own ESG sustainability scorecard. The scorecard, which is a first for our industry, sets out the sustainability issues that are most relevant for our business, as well as for our industry. It not only benchmarks us against our peers, but importantly, also drives internal performance.

ESG as an investment thesis has moved from the margins to the mainstream, and this is definitely a good thing.

Creating heightened awareness of mining's industrial and commercial importance is only one challenge, however. The need to reorientate mining companies as modern businesses in step with society's rapidly changing demands and expectations is really the key challenge we face as an industry. The new model is exemplified by the current emphasis on ESG, which requires an equal focus to be placed on the S (Social) and the G (Governance) criteria as on the E (Environment).

The basic principles of ESG have been around for a long time, but I think it's fair to say that, until quite recently, chief executives of mining companies have been content to look upon these as feel-good factors, which could be relegated to their CSR departments and/or used as a tool to try and outcompete their peers in the compliance space.

While this attitude is changing, there's still more we can do to reconsider, in a fundamental way, our priorities.

Mining operations at Barrick's gold mine, Turquoise Ridge, Nevada, USA.

THE NEED TO REORIENTATE MINING COMPANIES AS MODERN BUSINESSES IN STEP WITH SOCIETY'S RAPIDLY CHANGING DEMANDS AND EXPECTATIONS IS REALLY THE KEY CHALLENGE WE FACE AS AN INDUSTRY

ESG is not a passing market whim. It should always have been a key element of the way we run our businesses. What we call our social licence to operate has long been a strategic imperative for Barrick. Essentially, we believe that a mining company should serve not only its shareholders, but also its host countries and communities, as a good corporate citizen and as a welcome neighbour, who shares the value it creates fairly with all its stakeholders. We define stakeholders as any constituency involved in our operations or affected by their presence. Growth in the return to investors should not be at the expense of other stakeholders, including employees, the environment and society at large.

Alex Edmunds, a professor of Finance at London Business School, recently published a book entitled *Grow the Pie, How Great Companies Deliver Both Purpose and Profit*. In it, he notes that many chief executives still see the value that their company creates as a fixed quantity, which he describes as a pie. They believe that anything you give to stakeholders cuts a slice out of that pie. In other words, it is at the expense of profits. Edmunds argues persuasively, drawing on academic evidence and empirical research, that when companies invest in stakeholders and take the obligation to benefit those stakeholders seriously, their long-term financial performance and profits improve. Instead of cutting up the pie, they grow it.

Far from being a necessary evil, mining can and should be a force for good in the world. This is particularly true of those disadvantaged countries where a mining company committed to its stakeholders can transform frontier regions, dependent on subsistence activities just to survive, into sustainable economic hubs, providing modern conveniences and employment opportunities that liberate people both economically and politically. It's another sign of the times that people want products to have an ethical provenance. The industry is vulnerable to investors' and consumers' perception of responsibly resourced minerals and metals.

In the gold industry, we have our share of illegal miners, so it's essential that gold should have impeccable track and trace credentials, to maintain the trust of investors and regulators.

FUTURE TECHNOLOGIES

As the WGC is advocating, we're on the cusp of a new industrial revolution, driven by rapid advances in digital technology. This should be employed to ensure that the integrity of the supply chains for gold and other metals and minerals are fully transparent. The WGC envisages the use of technology to create fungible and interoperable local and regional markets, so that gold could be used for alternative purposes, from collateralisation to new sources of funding. It's also working to move the gold market from an opaque bilateral system to a more transparent model.

It's up to the gold industry to make the case for gold and why it should form part of every balanced portfolio for institutional investors worldwide. As for the mining industry as a whole, the world couldn't exist without us. Instead of being defensive, we should assert our right to be recognised as an age-old foundation of economic development, now successfully adapting itself to the changing temper of the times.

EDMUNDS ARGUES PERSUASIVELY, THAT WHEN **COMPANIES INVEST IN STAKEHOLDERS THEIR LONG-TERM FINANCIAL PERFORMANCE AND PROFITS IMPROVE.** INSTEAD OF CUTTING UP THE PIE, THEY GROW.

Mark Bristow has been Barrick President and Chief Executive Officer since January 1, 2019, following the completion of the merger with Randgold Resources. Barrick Gold Corporation (NYSE: GOLD) (TSX: ABX) is a sector-leading gold and copper producer. In July 2019 Barrick combined its gold mines in Nevada, USA, with those of Newmont Corporation in a joint venture, Nevada Gold Mines (NGM), which is majority-owned and operated by Barrick. NGM is the world's largest gold mining complex.

Barrick owns and operates six Tier One gold mines: Cortez, Carlin and Turquoise Ridge in Nevada, Loulo-Gounkoto in Mali, Kibali in the Democratic Republic of the Congo and Pueblo Viejo in the Dominican Republic. It has mines and projects in 13 countries in North and South America, Africa, Papua New Guinea and Saudi Arabia. Its diversified portfolio is focused on high-margin, long-life assets.

Previously, since its incorporation in 1995, Mark was the Chief Executive Officer of Randgold following his pioneering exploration work in West Africa. He subsequently led Randgold's growth through the discovery and development of high-quality assets into a major international gold mining business. He played a pivotal role in promoting the emergence of a sustainable mining industry in Africa, and has a proven track record of delivering significant shareholder value. During his career, he has held board positions at a number of global gold mining companies. He holds a Doctorate in Geology from Natal University in South Africa.

SPOTLIGHT on New GDL Accreditations ABC REFINERY

In the last edition of the *Alchemist* we introduced a new feature looking at new members to find out more about the company, including its role within the precious metals market and its reasons for wanting to join LBMA.

Here, we introduce a similar feature for new Good Delivery List (GDL) accreditations. It's the same five questions with five different answers.

We welcome ABC Refinery, which was added to LBMA's Silver Good Delivery List (GDL) on 4 November 2021. They have been an LBMA GDL gold refiner since 2015.

WHAT WERE THE REASONS FOR YOU WANTING TO JOIN LBMA AND WHAT DO YOU SEE AS THE KEY BENEFITS OF GDL ACCREDITATION?

LBMA is the world's foremost authority in the gold and silver market. It defines the global framework for precious metals quality and responsible sourcing. Our GDL accreditation for gold and now silver reflects ABC Refinery's commitment to ESG principles. Considerate® Precious Metals is the collective term for the ESG initiatives that are incorporated into all precious metals that ABC Refinery produces. It is the basis of our corporate ethos and encompasses all sustainability, responsible sourcing, compliance, environmental and community initiatives undertaken by ABC Refinery and the broader Pallion Group.

TELL US ABOUT YOUR COMPANY'S ROLE IN THE PRECIOUS METALS MARKET?

ABC Refinery and the broader Pallion Group see their collective role as innovators in the global precious metals market. Unconstrained by legacy, our corporate ethos is to partner with our clients and suppliers for mutual benefit, employing the latest technological innovations and the best people. Of particular importance is our commitment to producing Considerate® Precious Metals, utilising the largest zero-emission refining capacity in the world. Details of our sustainability initiatives are contained in our annual **Considerate® Precious Metals Report**, which is available at: www.pallion.com.

WHAT'S THE BACKGROUND AND HISTORY OF THE COMPANY?

ABC Refinery is the refining division of Pallion Group, Australasia's largest independent precious metals services group of companies, which has been involved in the industry since 1951. ABC Refinery is accredited or accepted as a trading partner by LBMA, SGE, COMEX, SBMA and NATA.

Headquartered in Sydney, Australia, Pallion Group is comprised of two core divisions – Bullion and Jewellery – which supply precious metals products globally under six brands: ABC Bullion, ABC Refinery, Palloys, GoldenAge International, Custodian Vaults and W.J. Sanders. Pallion entities process, manufacture and trade precious metals throughout the entire precious metals value chain, providing the following goods and services: bullion; refining and minting; casting and jewellery; fabricated metals and findings; gold and silver smithing; and vaulting.

HOW HAS THE COVID-19 PANDEMIC CHANGED YOUR BUSINESS AND WHAT LASTING IMPACTS DO YOU THINK IT WILL HAVE ON THE MARKET?

Throughout the COVID-19 pandemic, we took active steps to insulate ABC Refinery and the broader Pallion Group and our employees from the effects of COVID-19, such that all production facilities continued to operate without downtime. Perhaps the largest lasting impact has been the permanent implementation of a multi-site model to provide built-in contingency and ensure continuity of operations. This measure includes the implementation of multi-segregated shifts and the off-pavement collection and dispatch of all physical precious metals without any direct human contact.

WHAT ARE YOUR FUTURE PLANS FOR THE BUSINESS?

We plan to remain steadfast in our commitment to partnering with our suppliers and clients for mutual benefit, employing the latest in precious metals technologies and the world's best people. In so doing, we are committed to furthering our aim to produce responsibly superior precious metals products for the world market.

5 QUESTIONS 5 ANSWERS

Knox Expedition,
Noble Train of Artillery, 1775.

THE ARTILLERYMAN OF GOLD

BY SIMON ROSTRON, PR CONSULTANT, LBMA

The last time London gold fixed below $1,000 per oz was the morning of Friday, 2 October 2009. Since then, despite near misses in late December 2015 and early 2016, the metal has never again been priced (in dollar terms) in fewer than four figures.

It may therefore come as a surprise that one of the largest single gold holdings in the world – some 147.34 million ounces or 4,582.84 tonnes (February 2021) – should command a book value of only $42.22 per oz, equivalent to $6.22 billion as opposed to $265 billion based on the price at the end of October this year. This ultra-conservative valuation is, however, just one of the curiosities embodied by Fort Knox, which as all readers of the *Alchemist*, and notoriously Auric Goldfinger, know is the home of the United States Bullion Depository.

BUILDING A FORTRESS

Fort Knox, and the associated Depository, occupy 109,000 acres of northern Kentucky just south of the Ohio River, which forms the border with Indiana. The area was once home to Thomas Lincoln, Abraham Lincoln's father, and is the burial place of his grandmother, Bathsheba – a Harrison from Virginia.

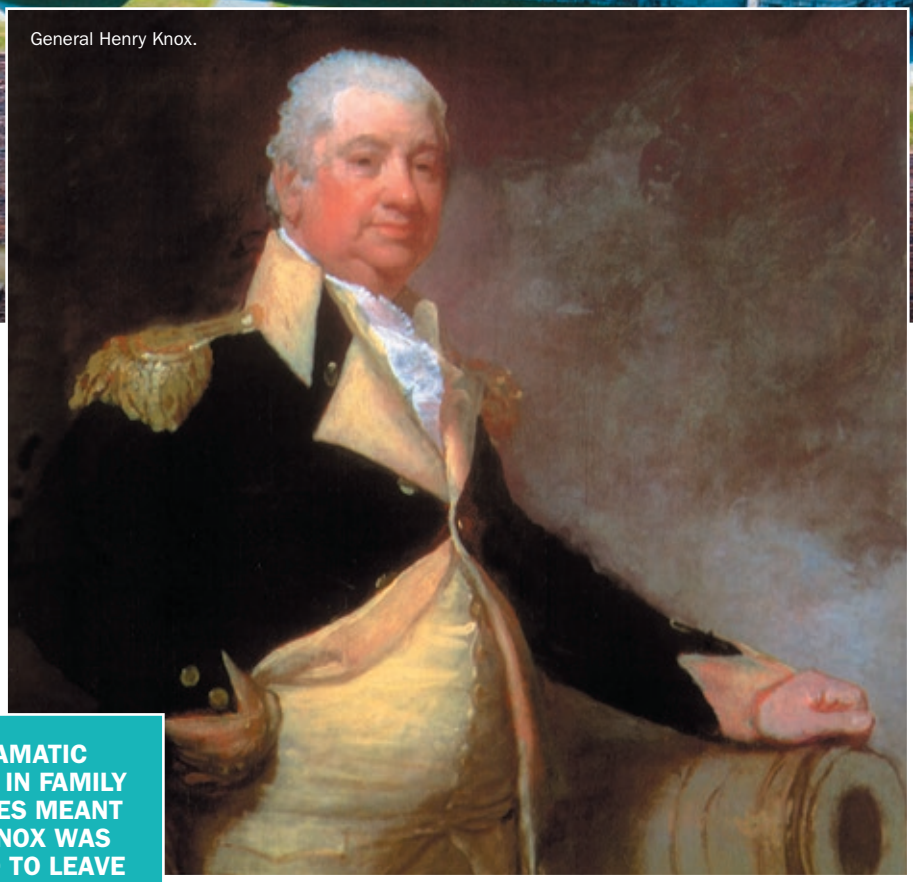
THE VAULT IS SAID BY SOME TO BE THE **MOST HEAVILY GUARDED PLACE** ON THE PLANET

The original fortifications in the Fort Knox area, specifically at Fort Duffield, now a tourist attraction, date back to the American Civil War. However, construction proper at Fort Knox itself had to wait until the last months of the First World War and, even then, the building programme was cut back as the war ended. The fort was turned into a permanent garrison for the US Cavalry (mechanised) in 1932 and served as the home of the US Armor Centre for 60 years until 2011.

The Bullion Depository was constructed from 1936 and the first deposits of gold (and other precious items) took place a year later. The vault is said by some to be the most heavily guarded place on the planet. Among many other defences, rumour has it that the grounds are surrounded by land mines and electric fences, machine guns go off when a laser is triggered and a radar keeps watch over the entire area. The whole is under the guard of one of the oldest US law enforcement agencies – the US Mint Police, established in 1792, by coincidence the same year that Kentucky became the 15th state of the Union.

Fort Knox, previously known as Camp Knox, was formally designated in 1936, some 130 years after the man for whom it was named was killed by a chicken bone at his home in Thomaston on the east coast of Maine. But who was Henry Knox, and how did a Bostonian bookseller become one of George Washington's closest confidantes? Why do full-length paintings of Knox usually portray him with either a handkerchief over his left hand or clenching that fist? Furthermore, who were the Green Mountain Boys?

Fort Knox, Stockton Springs, Maine, USA.



General Henry Knox.

THREE-FINGERED HENRY AND HIS TWO TRAINS

Many historical commentators credit the rise of Henry Knox's military celebrity to his association with "two trains" each with different meanings – neither of which was to do with a railroad.

The first train for which Henry was known was the name given to his artillery company The Train, which he joined soon after his 18th birthday, prompted it is said by watching a British military parade in July 1768 celebrating King George III's birthday. Like many young men of his time, Knox harboured ambitions of military glory and honour, thinking, wrongly as it turned out, that these might accrue from (another) war with the French. In his case, however, these hopes were no mere pipedreams. Henry Knox had in some sense been preparing himself for battle from an early age.

A DRAMATIC DECLINE IN FAMILY FORTUNES MEANT THAT KNOX WAS OBLIGED TO LEAVE FORMAL EDUCATION AT THE AGE OF NINE AND SEEK EMPLOYMENT

A dramatic decline in family fortunes, coupled with the permanent departure of his father, meant that Knox was obliged to leave formal education at the age of nine and seek employment in support of his mother, Mary, and his younger brother, William. For many people, this would have been a major problem, but for Henry, who found work in a bookstore, it was in many ways the making of the man.

The owners of said bookstore, Messrs. Wharton and Bowes, were keen to allow the boy to read as much as he liked and to take books home for further study. Knox took full advantage of this liberality. He had already studied Greek and Latin in his early (and only) school years, but now indulged himself in European history, mathematics, physics, military strategy and French, all of which were to serve him, and indeed George Washington, exceptionally well in the coming War of Independence.

Henry was big for his age and grew into a big man some 6'2" tall and, in later life, weighing in at 20 stone. And it was his size, implies one of his biographers, Mark Puls, that was helpful in leading Knox eventually to abandon Boston and join the 'rebels' (as the English called them).

Another incentive was the somewhat arbitrary taxes levied on the American colonists by the Westminster government.

From working in a bookshop, Knox became the proprietor of his own – The London Bookstore, which opened in 1771 – but en route to this venture, he had also developed an extramural reputation as something of a fighter, a man fearless on the streets of Boston, even as they became increasingly filled with nervous if arrogant British troops sent in to quell the unrest primarily caused by the taxes on goods such as tea. Knox had, for example, a lead role as an attempted pacifier and prime witness in the so-called Boston Massacre of 1770, when 11 people died in a clash between the British and the townsfolk, and a couple of years later, he was to some extent involved in the notorious Boston Tea Party (see article "Boston Tea Party" by Aelred Connelly in *Alchemist* **edition 91**).

These and similar events gradually shifted Knox's sympathies from loyalty to the British crown to loyalty to the colonists, and in the same period, specifically in 1772, he became co-founder of the Boston Grenadiers, the smartest (and tallest) of the city's militia companies. The smartness was perhaps slightly impaired by the fact that when duck hunting with his brother the summer before, Knox had shot two fingers from his left hand – an injury he found embarrassing and was therefore at pains to disguise in the portraits of himself that were to come.

ENTER THE GREEN MOUNTAIN BOYS

From 1772 through 1775, tensions in Boston between the British and the colonists worsened as more British troops were garrisoned in the city, fewer goods got through, British warships used cannons and cannonades to break up mass gatherings, and the Massachusetts colonists set up their own provincial congress to prepare for war. It was clearly time to take sides, and as Knox's business began to fail with the absence of any British books to sell, he found himself drawn more to the cause of independence and began advising his Grenadiers to start leaving the city and to join the Continental Army – a loosely structured militia under the command of George Washington.

IT IS DOUBTFUL THAT MANY OF THE COLONIES WOULD HAVE SUPPORTED SEPARATION FROM GREAT BRITAIN IF THE ARMY HAD BEEN UNABLE TO FREE BOSTON FROM OCCUPATION

Knox himself was late to leave Boston, held there in part by his marriage to Lucy Flucker, all of whose family were loyalists. However, in the end, he and Lucy went one way, and Lucy's parents and siblings went another, eventually settling in England.

It has been said that Boston was an early tipping point in the War of Independence. As Knox's biographer, Puls, says: "*It is doubtful that many of the colonies would have supported separation from Great Britain if the army had been unable to free Boston from occupation*." But the problem was the fact that the Americans had very little artillery and certainly nothing to match the guns aboard the flotilla of British warships in the harbour. Furthermore, the Continental Army's positions were badly vulnerable to attack.

Knox's knowledge of artillery, admittedly drawn largely from book learning, manoeuvres with his Grenadiers, but moreover actively watching how the British forces set themselves, enabled him quickly to organise better defensive positions for the Americans – work which undoubtedly impressed George Washington. Defence was one thing, but attack was impossible, and the British navy could not be dislodged without guns.

It is here that the Green Mountain Boys enter the story. The 'Boys' were a Vermont-based militia, led by Ethan Allen, and the subsequently notorious Benedict Arnold, who in March 1775 captured Fort Ticonderoga, a former French fort that had been taken by the British in 1759 to protect their interests in Canada. Fort Ticonderoga was 300 miles across difficult country from Boston, but it was stuffed with artillery. Following a recommendation by Arnold, Washington sent Knox, then aged 25, to get it.

Henry Knox Trail.


Black Powder Cannons at Fort Ticonderoga, formerly Fort Carillon, is a large 18th century fort built by the Canadians and French.

View of West Point Military Academy on the Hudson River, New York.

KNOX'S SECOND TRAIN

The winter of 1775-76 was hard, but by employing what *Wikipedia* describes as the 'Noble train of artillery', Knox got the guns:

"Knox went to Ticonderoga in November 1775 and moved 60 tons of cannon and other armaments over the course of three winter months by boat, horse, ox-drawn sledges, and manpower along poor-quality roads, across two semi-frozen rivers, and through the forests and swamps of the lightly inhabited Berkshires to the Boston area, covering approximately 300 miles (500 km). Historian Victor Brooks has called Knox's exploit 'one of the most stupendous feats of logistics' of the entire American Revolutionary War. The route which he followed is now known as the Henry Knox Trail, and the states of New York and Massachusetts have erected markers along the way."

The accurate deployment of the Ticonderoga guns (supported by shot and powder donated by other eastern seaboard colonies) dislodged the British from Boston, never to return.

West Point was actually developed by him and is, as well as a centre of military excellence, a mint and depository for some **22%** of today's US gold reserves

The War of Independence continued until 1783 and, during that time, Knox, who had become the Continental Army's artillery head and a major general, was rarely far from Washington's side. As Puls says: "*If George Washington was the indispensable man of the Revolution, then Henry Knox was his indispensable man*." The relationship between the two was further cemented by Washington becoming godfather to one of Knox's 12 children (only three of whom survived into adulthood) and by Knox becoming America's first Secretary of War under Washington's presidency.

AN IRONIC LEGACY

Through the War, Knox had come to recognise, and was frequently frustrated by, what he saw as the absence of professionalism among many American officers by comparison to their ally, the French, and their enemy, the British.

IF GEORGE WASHINGTON WAS THE INDISPENSABLE MAN OF THE REVOLUTION THEN HENRY KNOX WAS HIS INDISPENSABLE MAN

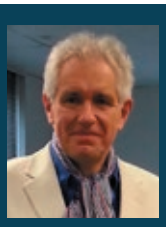
He therefore determined to establish a training school to rival those of the British Royal Military Academy (founded in 1741) and the École Militaire (established in 1750).

Knox's first attempt at an American equivalent was established at Pluckemin, New Jersey, the Continental Army's artillery winter cantonment in 1778-79, but his major opportunity, and one of his lasting legacies, came in August 1782, when he was made commander of the crucial defensive position of West Point on the Hudson River – not that there was an immediate move to turn West Point into the school it is today.

It was not until 1802 that President Jefferson called for and signed legislation establishing a "Corps of Engineers" which "*shall be stationed at West Point and constitute a Military Academy*".

West Point is, of course, less familiar in gold circles than Fort Knox, but the irony here is that while the latter is named for Henry Knox, the former was actually developed by him and is, as well as a centre of military excellence, a mint and depository for some 22% of today's US gold reserves.

A final irony, one perhaps for our times, is that artillery and engineering genius though he was, Knox was less successful as a businessman – a problem compounded by late payments for his military service and a meagre salary arising from his role as Secretary of War. At his death, on 25 October 1806, at his home in Thomaston, Maine, the man whose name is synonymous with the riches of Croesus was running a bankrupt estate.



Simon Rostron has been Managing Director of Rostron Parry Ltd - media relations consultancy since 1991 and PR and media consultant to LBMA since 2014. In his earlier career he was a Stockjobber, London Stock Exchange and remains a legend in his own lunchtime.

CURATOR'S CORNER

BY STEWART MURRAY, LBMA CONSULTANT

The Bimaran Reliquary

Advent, at least in the western part of Christendom, begins in early December and starts the run-up to the world's most celebrated religious festival. But as anyone who has visited a shopping mall in China at this time of year knows, Christmas is also the world's favourite shopping festival for atheists just as much as the faithful. In the preceding months, manufacturers and workshops around the world work at full capacity to fill the seasonal demand for gold jewellery. But historically, the relationship between gold and religion has been very different from the modern mass market.

THE BIMARAN CASKET

THE BIMARAN CASKET BASE

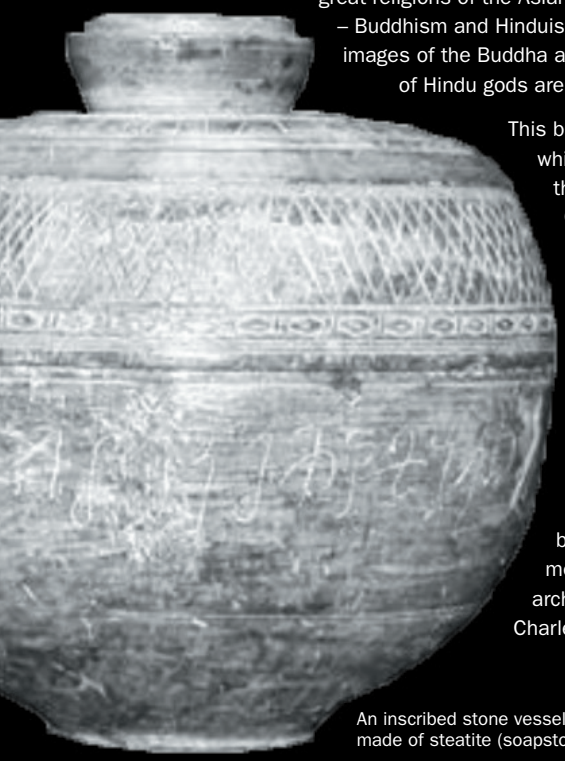
The adherents of most world religions have always been happy to decorate their places of worship with gold and gilding, but their attitudes to the use of gold for manufactured objects are clearly differentiated.

For Christianity, the period from late Middle Ages to the Baroque saw some of the most remarkable artefacts being created for use in important ceremonies and often as an indicator of ecclesiastical rank. These include most notably elaborate reliquaries, embellished with enamel, pearls and precious stones, to hold various items ranging from bones of the beatified to "fragments of the true cross".

Bell-shaped Stupa 2 in Bimaran.

Other ceremonial items such as altar crosses, chalices and ampullae (for holding holy oil) have also given goldsmiths an opportunity to demonstrate their skills. Islam, by contrast, has tended to restrict the use of gold to purely decorative uses and, most importantly, coinage. Above all, it eschews the use of gold and other precious metals for utensils and male (though decidedly not ***for*** female) adornment, while the representation of the human or even animal form in Islamic art is strictly taboo. The same can definitely not be claimed for the two great religions of the Asian continent – Buddhism and Hinduism – where images of the Buddha and the panoply of Hindu gods are ubiquitous.

This brings us to the item which is featured in this issue's Curator's Corner – the Bimaran Reliquary, one of the great treasures of the British Museum, which holds the record for the earliest depiction of the Buddha in human form. It was discovered in around 1835 by one of Britain's most extraordinary archaeologists, Charles Masson.



An inscribed stone vessel made of steatite (soapstone).

He discovered the cylindrical golden casket, set with garnets, inside an inscribed stone vessel made of steatite (soapstone), which is also now in the Museum. The circular base of the casket has a beautiful lotus flower design.

TODAY THE BRITISH MUSEUM'S COLLECTION CATALOGUE LISTS MORE THAN 9,300 ITEMS DISCOVERED BY MASSON

In spite of the images of the Buddha on the casket, this is not a purely Buddhist item. The Buddha (facing the viewer in the centre of the image) is surrounded by two Hindu gods: on his left is Indra (god of war, thunderbolts and rain), and on his right, is the creator god, Brahma. The same threesome is repeated on the opposite side, with two unidentified individuals in between.

Masson unearthed these priceless objects together with some accompanying gold coins (which allowed the casket to be dated to the first century), plus hundreds of gold beads and other items from the bell-shaped Stupa 2 in Bimaran, located close to the modern village of Daruntah, some 100 km east of Kabul. Masson provided a drawing of the Stupa, which is one of several in the area that he explored.

Scarcely less interesting than the casket itself is the life of its discoverer. Born in London in 1800 (real name James Lewis), he enlisted in the East India Company's Bengal Artillery regiment in 1822, but deserted in 1827 and subsequently took the name of Charles Masson. After five years travelling in north-west India and neighbouring regions, he was employed by the Company again (without it being aware of his true identity) as an archaeologist. During the next five years, he collected an estimated 60,000 coins and excavated some 50 sites in Afghanistan. When his true identity was realised in 1835, he was co-opted to work for the British in Kabul in return for a pardon. After some further extraordinary episodes, Masson returned to London in 1841 and worked until his death in 1853 on his drawings and a three-volume account of his adventures and discoveries in Afghanistan. Today, the British Museum's collection catalogue lists more than 9,300 items discovered by Masson.

We would love your feedback on the items featured in the Wonders of Gold exhibition or on any ideas you may have on items to include. Whether it's a gold artefact, a significant historical event or influential person who helped shape the gold market – we want to hear from you.

You can get in touch with Stewart Murray, the Curator of Wonders of Gold, at: **curator@LBMA.org.uk**

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Three screens really are necessary.

A Day in the Life ...of an Analyst

BY RHONA O'CONNELL, HEAD OF MARKET ANALYSIS, EMEA AND ASIA REGIONS, STONEX FINANCIAL LTD

There's reporting, and there's analysis. Reporting delivers facts. Analysis, like good journalism, pulls together the relevant elements of an issue and puts them into context. An analyst will then assess their impact on the markets in question and – usually but not always – build implications for prices, local premia, forward rates, trade patterns, supply-demand shifts or anything that's appropriate!

It isn't possible strictly to define a day in the life of an analyst as market developments and influences can be random, and so every day varies. There are common threads, though, revolving around interpretation and dissemination of information and – well – analysis. And, of course, money lies at the root of it all.

Every analyst's role is different, but one of the most important things is that, like anything else, expertise can only be developed by working from the basic building blocks upwards, no matter how tedious that may seem. Rather like being in a rowing crew, if you can't do it properly slowly, you'll never win a race at speed.

I started out, many years ago, by copying out trade statistics from books in the department of Trade & Industry library, for the OW Roskill commodities studies. By hand! Then as a junior analyst at gold mining giant Consolidated Gold Fields, I did some of the legwork (but not the analysis) for three iterations of the Gold Survey (subsequently produced under the aegis of the GFMS), which involved retrospective fact-finding and building gold supply and demand numbers for the previous year, as well as spending a full year each working on ten-year market structure outlooks for silver and for the platinum group metals as part of the feasibility studies for the Shafter silver prospect in Texas and for what is now the Northam platinum mine in South Africa, respectively.

Travel, talking to industry participants, piecing together the jigsaw puzzle (tough in the platinum sector, as the supply side was all kept very quiet in the 1980s) were all involved. My boss did the price forecasting. Shafter was payable at $20/ounce silver, and my boss argued that the silver price stood no chance of attaining that in the foreseeable future – and she was right. That helped to save the company a fortune.

one of the most important things is that expertise can only be developed by working from the basic building blocks upwards

So that is one kind of analysis – someone who takes a long-term view tied to a specific project, with a lot of money at stake. Money at stake is the most common thread of all. Since ConsGold, I have largely been in the financial sector, and here the time horizons can vary from days out to years. At brokers Rudolf Wolff, I learnt how important it is to talk to the dealers so that we could build a picture for published reports as well as discovering more about the workings of the financial side such as hedging activity and techniques.

I learnt how important it is to talk to the dealers so that we could **BUILD A PICTURE FOR PUBLISHED REPORTS** as well as discovering more about the workings of the financial side

One fun part of working at Wolff (and now at StoneX) was taking clients into the London Metal Exchange (LME) Gallery and unravelling what looks like (but isn't) organised chaos in the LME Ring. And talking to the dealers is also fascinating and very informative – hopefully that works both ways!

PEOPLE ALWAYS WANT A VIEW OF WHETHER A MARKET IS IN SURPLUS OR DEFICIT, BUT FAMILIARITY WITH REGIONAL VARIATIONS AND MARKET CHARACTERISTICS IS ALSO VITAL.

Supply-demand models are key, not just for price forecasts, but for understanding the dynamics of a market. People always want a view of whether a market is in surplus or deficit, but familiarity with regional variations and market characteristics is also vital. The current supply chain disruptions are a case in point – likewise the associated semiconductor issue.

Publishing reports is only part of it, however; public speaking, roadshows, press relations, webinars and podcasts are all features. And, of course, colleague and client relationships. Tip: when asked how long something will take, always build in some fat – you will never, ever get a following wind with no interruptions. So respond to your emails, delve into a wide variety of data sources, always go the extra mile to add local colour and detail, and be ready to take incoming calls at a moment's notice (I've just been talking to Bloomberg, for example).

SOME OF MY BEST AND MOST INTERESTING RESEARCH HAS BEEN BORN OF A REQUEST FROM A CLIENT RAISING AN ISSUE THAT I MIGHT NEVER HAVE THOUGHT OF MYSELF

Interruptions can be a nuisance, but they are part of the rich fabric of the job. It is always a pleasure to be able to help client, colleague or contact with a query – and I must say that some of my best and most interesting research has been born of a request from a client raising an issue that I might never have thought of myself. Market analysis is fun, and very fulfilling.

"A market's history is as interesting as the present day – sometimes more so!" – Gold stater of King Croesus of Lydia, 560-540 B.C.
Obverse: Lion and bull; Reverse: two punches.

Rhona O'Connell has over 30 years' experience as a commodities analyst, and is a recognised authority in the precious metals sector. She has worked as a metals market analyst in many aspects of the industry, including the mining sector, commodities broking at Rudolf Wolff where she was a major contributor to Wolff's Guide to the LME, and in the equity markets and investment banking, where at Shearson Lehman she was the Group Precious Metals analyst responsible for advising a wide range of market participants from trading through equities to corporate finance.

She has held Extel ranking (2nd place) in the gold sector and has been the Association of Mining Analysts Commodities Analyst of the year, is a regular contributor to the media, and has a large number of speaking engagements to her name.

After a number of years running the GFMS team at Thomson Reuters she is now the Head of Market Analysis at INTL FCStone, where she is developing a team of analysts to support the EMEA and Asia sectors in particular.

She holds an honours degree in Law from the University of Cambridge.

LBMA NEWS

BY RUTH CROWELL, CEO, LBMA

LBMA LAUNCHES RGG VERSION 9

LBMA recently published Version 9 of its Responsible Gold Guidance (RGG) following an extensive period of consultation with market participants. The previous iteration of the RGG, Version 8, came into effect from January 2019, and marked a major strategic expansion to include Environmental, Social and Governance (ESG) issues. RGG Version 9 builds on this, as well as reflecting the strategic priorities identified as part of LBMA's IBC Recommendations.

We would like to convey our thanks to the many partners and stakeholders for their robust and constructive feedback. There has been strong engagement from a wide range of stakeholders in the industry who expressed their support. We are confident that the feedback will not only keep the RGG fit for purpose but maintain its place as the gold standard in responsible sourcing.

For further details, including the full version of RGG Version 9, click here.

LBMA RESPONDS TO EBA NSFR REPORT

The European Banking Authority (EBA) recently published a report on the possible impact of the Net Stable Funding Ratio (NSFR) on the functioning of the precious metals' markets.

The report assessed whether the EBA would be justified to reduce the required stable funding factor for assets used for providing clearing and settlement services or for financing transactions of precious metals.

The EBA report states that it sees "*limited impact of the NSFR on the functioning of the precious metals' markets*."

LBMA responded by saying "*The report findings were not unexpected. However, LBMA remains disappointed by the EBA's failure to respond to the permission granted by the UK Prudential Regulatory Authority in a written policy statement (June 2021), allowing banks to apply a zero rate to interdependent assets and liabilities under CRR2 article 428f. As this is a European regulation, LBMA would expect EBA to allow a similar treatment for precious metals clearing and settlement to those banks who wish to apply directly to it.*"

Further details can be found on the **LBMA's website.**

LBMA MEMBERS

We currently have **146** member companies – comprising **12** Market Making Members, **76** Full Members and **58** Affiliate Members.

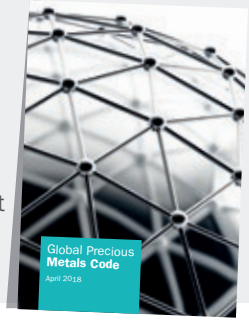
If you are interested in applying for membership of LBMA, including the new Subscriber category, please email: **mail@lbma.org.uk**

FCA Confirms Recognition of the Global Precious Metals Code

The Financial Conduct Authority (FCA) recently recognised the Global Precious Metals Code (the Code) under its code recognition scheme.

The Code, maintained and updated by LBMA, sets out principles to promote the integrity and effective functioning of the global precious metals market.

The FCA also confirmed recognition of the updated FX Global Code maintained and updated by the Global Foreign Exchange Committee, which sets out standards of good practice for the global foreign exchange (FX) market.



RESPONSIBLE SOURCING REPORT 2021 Published

At the beginning of November, we published our second annual Responsible Sourcing Report, which highlights the key work that we have been doing since we published the first report in September 2020.

The aim of the Report is to increase the transparency of the LBMA Responsible Sourcing Programme. It reviews the refiners' and auditors' performance during the previous 12 months and provides details on the Country of Origin (CoO) in which Good Delivery List (GDL) refiners source mine supply and recycled gold around the world. It is vital to understand the CoO data, as it provides more granular detail and insight on gold and silver flows. We also highlight the key aspects of the Responsible Gold Guidance Version 9, which comes into effect for all GDL refiners from January 2022. **Read the full report.**

MEMBER SURVEY

This autumn, we commissioned an independent Membership Survey to seek feedback from Members, Refiners and Subscribers on how LBMA is delivering against its strategic mission, as well as to consult on the key pillars of our new Strategic Plan. We wanted to offer Members, Refiners and other key stakeholders an opportunity to provide meaningful feedback and have a say in the future direction of the Association.

We received 127 complete online survey responses from LBMA Members, Refiners and Subscribers. We also held 20 in-depth interviews with key industry stakeholders from inside and outside the Membership.

The full results of the Survey will be published early in the New Year, but I can share some preliminary results with you. Overall, LBMA is performing well, achieving an overall Members Satisfaction rate of 67%, with 20% saying they are extremely satisfied.

We would like to thank you all for taking the time to take part and provide your feedback.

UK REACH

Following the withdrawal of the UK from the EU, the EU REACH Regulation has been brought into UK law in the form of UK REACH, which retains key principles of the EU REACH Regulation.

LBMA has been working with a consultant, Caroline Braibant, to create guides and support Members with compliance with UK REACH. Three submissions needed to be prepared and submitted to the Health and Safety Executive (HSE) in 2021 as a first step of compliance: grandfathering REACH dossiers submitted under EU REACH, downstream user importer notification (DUIN) and article 26 inquiry.

Although the deadlines have passed, HSE has agreed to grant an extension for the grandfathering submission and it is likely Members will also require an extension to comply with the DUIN obligation.

To implement this, LBMA is asking Members to complete this survey to collate the information for HSE. You can find out more here, or send any questions to **regulatory.affairs@lbma.org.uk**.

GOLD & SILVER HELD IN LONDON VAULTS

Over 9,600 Tonnes of Gold Held in London Vaults

As at end October 2021, the amount of gold held in London vaults was **9,661** tonnes (-0.5% on the previous month), valued at **$549.5 billion**, which equates to approximately **772,889** gold bars.

There were also **36,110** tonnes of silver (-1% on the previous month), valued at **$27.9 billion**, which equates to approximately **1,203,668** silver bars.

These figures provide an important insight into London's ability to underpin the physical OTC market.

101 ACCREDITED REFINERS

We now have **101 refiners** on the Good Delivery Lists, with **69** listed for gold, **82** listed for silver and **50** refiners on both lists.

There are currently eight active Good Delivery List applications (three silver, three gold and one for both metals, which is treated as two applications).

LATEST STAFF NEWS

We're delighted to welcome Graham Jelf as our new Compliance Officer. Graham is responsible for providing advice to the LBMA executive on regulatory risk and compliance, establishing and improving control and reporting frameworks where necessary.

After a short spell in retail banking, he started working in the commodities business in 1986, undertaking front and back-office functions for the Mocatta Group, his career then took Graham to the Bank of Nova Scotia, ICBC Standard Bank and lastly Standard Chartered Bank. He helped establish Compliance Departments in the 1990s before leading specialist Compliance Business Advisory teams from 2006 onwards.

COMMITTEE NEWS

LBMA currently has vacancies on a number of its Committees and welcomes applications from the staff of Full Members and Affiliates.

New Chair and Vice Chair for Public Affairs Committee
Suki Cooper (Standard Chartered Bank) is the new Chair of the Public Affairs Committee (PAC), and Rhona O'Connell (StoneX Financial Ltd) the new Vice-Chair. LBMA would like to congratulate both Suki and Rhona. They replace the outgoing pair, Tom Kendall and Jonathan Butler respectively, to whom LBMA would like to extend their thanks for the time and energy that both have dedicated to the PAC during their tenure. Tom and Jonathan will remain on the Committee so we will retain their knowledge and expertise.

Refiners' Committee (RC): two vacancies
The RC discusses and advises the LBMA Executive on a range of issues facing the refining industry, including providing feedback on the Responsible Sourcing Programme, GDL Rules, new technologies and initiatives.

Finance Committee
The Committee are delighted to welcome two new members, Orestis Brentas (BNP Paribas) and Emiliano Vanni (Italpreziosi).

Membership Committee (MC): one vacancy
The role of the MC is to ensure that the quality of LBMA's membership is maintained and to guide the Executive in the identification and encouragement of all suitably qualified companies involved in the bullion business to join the Association.

Regulatory Affairs Committee (RAC): vacancies
The RAC monitors and disseminates information concerning international regulation affecting the bullion market. If you are interested in joining the RAC or require further details please email: **regulatory.affairs@lbma.org.uk**

Global Precious Metals Code (GPMC) Working Group
Following the announcement that the FCA has recognised the Code, the Regulatory Affairs Committee is gauging interest in a GPMC working group. The group will consider the revision of the code, first published in May 2017, taking into consideration advancements in matters such as Environmental, Social and Governance (ESG), Conflict Minerals Regulation, diversity and inclusivity, and contingency planning. If you'd like to participate, or provide any feedback, please contact **regulatory.affairs@lbma.org.uk**.

If you are interested in applying for any of the above vacancies, please email mail@lbma.org.uk and include details of your relevant market experience and reasons for applying.

You can also find out more about these Committees, including their Terms of Reference on the **LBMA website**.

EVENTS

In September, we held our first in-person event for 18 months together with the London Platinum and Palladium Market (LPPM) – a networking reception in London during our virtual Precious Metals Conference, 19-21 September 2021.

Some 462 delegates digitally attended the Conference, which featured an exceptional line-up of speakers, panellists and guest chairs. Delegates participated in Q&A breakout sessions and speed networking, as well as predicting what precious metals prices would be at the start of the 2022 Conference in Lisbon (see table). Delegates were most bullish about the prospects of platinum, predicting a 41% in-crease in price.

DELEGATES' PRICE FORECASTS AT THE LBMA 2021 VIRTUAL CONFERENCE

	Forecast as at 17 October 2022	Latest price at time of forecast (17 September 2021)
Gold	$1,969	$1,756
Silver	$26.76	$23.01
Platinum	$1,345	$953
Palladium	$2,025	$2,023

Unfortunately, we had to cancel this year's annual dinner, scheduled on 1 December, 2021 due to tightening COVID-19 restrictions in the UK and around the world following the discovery of the new 'Omicron' variant.

However, we were able to go ahead with the seminar as a virtual offering. This proved a great success with over 160 registered attendees who were able to enjoy insightful commentary and opinions from an illustrious panel of experts, moderated by LBMA's Head of Marketing & Communications, Edel Tully. LBMA would like to extend its thanks to our panel of experts: James Steel (HSBC), Paul Fisher (LBMA Chairman), Matthew Turner (Anglo-American) and Philip Newman (Metals Focus).

UPCOMING EVENTS 2022

Save the DATE!

3 MARCH
LBMA Annual Members' Party

28-30 MARCH
Responsible Sourcing and Sustainability Summit

16-18 OCTOBER
LBMA/LPPM Virtual Precious Metals Conference

Webinars

We hope you find our fortnightly webinars helpful and informative. You can catch up on all our webinar programmes, including the most recent ones covering the Responsible Sourcing Report, RGG Version 9, Insights into LBMA Trade Data and ESG & Mining, by visiting our website.

The webinar programme is taking a break until the New Year. If there are any topics you would like to see a greater focus on in 2022, or if you feel as though we've missed out on something important, please send your suggestions through to: **ask@lbma.org.uk**.

SPOTLIGHT on New Members

Helveticor

In this latest edition of Spotlight on New Members, we find out more about Helveticor, including its role within the precious metals market and its reasons for wanting to join LBMA.

5 QUESTIONS 5 ANSWERS

WHAT WERE THE REASONS FOR YOU WANTING TO JOIN LBMA AND WHAT DO YOU SEE AS THE KEY BENEFITS OF MEMBERSHIP?

As an international freight forwarding and logistics company transporting and storing valuables on behalf of customers, we welcomed the opportunity to achieve Full Member status of the LBMA, particularly as we fully support its current roadmap and integrity and sustainability aspirations. Not only that, given that our entire management has been part of this unique family for many years, this is a kind of coming back, and it opens international doors essential to the sustainable growth and existence of our company.

TELL US ABOUT YOUR COMPANY'S ROLE IN THE PRECIOUS METALS MARKET?

Helveticor provides a full range of tailored services spanning national and international valuables transport by air, sea, road and rail; storage in our own high-security buildings in Switzerland and abroad for national as well as goods under customs status (OZL); customs clearance and insurance solutions for transport and storage; logistics handling for international jewellery and watch exhibitions; escorting high-risk transports; and monitoring and intervention for TAPA-compliant transports with our own 24/7/365 control room.

We bring valuables such as precious metals, jewellery, banknotes, credit cards, vaccines and tobaccos from A to B with Swiss security, punctuality and professionalism. Our storage solutions, which include duty-free storage, making storing silver more attractive from an international point of view, embody the same values and security.

WHAT'S THE BACKGROUND AND HISTORY OF THE COMPANY?

We were founded in April 2018, and since September 2018, Helveticor has been 100% Swiss family-owned and one of the largest Swiss transport and logistics companies. Our management has many years of experience in the transport and storage of valuables such as precious metals, banknotes and jewellery.

HOW HAS THE COVID-19 PANDEMIC CHANGED YOUR BUSINESS AND WHAT LASTING IMPACTS DO YOU THINK IT WILL HAVE ON THE MARKET?

The operational impact has been positive, as our ability to immediately provide innovative and tailor-made arrangements when existing supply and logistics chains fail has shown potential customers that we're an alternative to existing providers. A big challenge has been keeping staff healthy, while remaining secure and compliant. We've responded with regular and frequent communication to everyone involved in safety matters.

WHAT ARE YOUR FUTURE PLANS FOR THE BUSINESS?

We aspire to being a top employer, and a thoughtful and steadfast long-term partner. Innovative and creative, we want to lead Helveticor into the future as a sustainable powerhouse. We believe in our service and view the wishes of our customers as our greatest asset. We want to find and provide solutions to bring security and trust to our customers.

If you would like to learn more about membership of LBMA, including benefits please visit our website

Market and LBMA Price Auction Closing Times over the **Christmas** and **New Year** Period

LONDON PRECIOUS METALS CLEARING LIMITED (LPMCL)

The LPMCL clearing system will be closed on Monday 27 and Tuesday 28 December, 2021 and Monday 3 January 2022.

The latest time for LPMCL Members accepting customer clearing instructions on Friday 24 December 2021, and Friday 31 December 2021, will be 2pm London time.

LBMA PRECIOUS METAL AUCTIONS

The London Metal Exchange has announced that on Friday, 24 December, 2021 there will be no AM or PM auctions for LBMA Platinum and LBMA Palladium prices. Ice Benchmark Administration has also confirmed that on Friday, 24 December, 2021 there will be an AM auction for LBMA Gold and Silver prices but no PM auction for either metal.

There will also be no PM LBMA Precious Metal Prices published on Friday 31 December 2021. On this day only the AM LBMA Gold, Platinum and Palladium Prices and the midday LBMA Silver Price will be published.

There will be no LBMA precious metal prices (for either gold, silver, platinum or palladium) published on Monday 27 and Tuesday 28 December, 2021 or Monday 3 January 2022.

IN REMEMBRANCE
Larissa Hedlund

It is with deep sadness that we at StoneX have to announce to our community that Larissa Hedlund's journey in life has been tragically cut short after she lost her battle with a terminal illness.

Larissa started her precious metals career at Commerzbank in 2008 as a sales/trader and rapidly became the Head of the Global Precious Metals Sales team.

More recently, she shared her professional expertise and provided assistance within the precious metals department at StoneX, and was a wonderful addition to the team.

Larissa was known and respected in our community as an inspiring professional who valued the importance of listening to people.

We will remember her not only for her amazing spirit and strength, but also for her willingness to commit to helping others. We send our deepest condolences to her husband Peter.

The StoneX Precious Metals team.

FACING **FACTS**

Gold Price Supports Revenue Margins Even After Rising Mining Costs

BY FEDERICO GAY, SENIOR MINING ANALYST AND SAIDA LITOSH, HEAD OF PRECIOUS METALS DEMAND RESEARCH FOR EUROPE, REFINITIV METALS TEAM

BULLISH SENTIMENT FOR GOLD

While governments are trying to put the pandemic behind them, at least on an economic front, inflation seems to be a growing concern amongst economists, investors and the general public. And gold, as a proven hedge against inflation, has been enjoying renewed investor interest. Since reaching a year's low of $1,682 in early March, the gold price has been steadily increasing, up to $1,849 at the time of writing, 12 November, representing around a 10% rise in nine months. Physical demand for gold has returned almost to pre-pandemic levels during the first nine months of 2021, increasing by around 34% compared to this period last year. The sectors in which demand has increased the most are jewellery and purchases from the official sector. Offsetting this, ETF demand is declining, as some investors are shifting towards other investment assets.

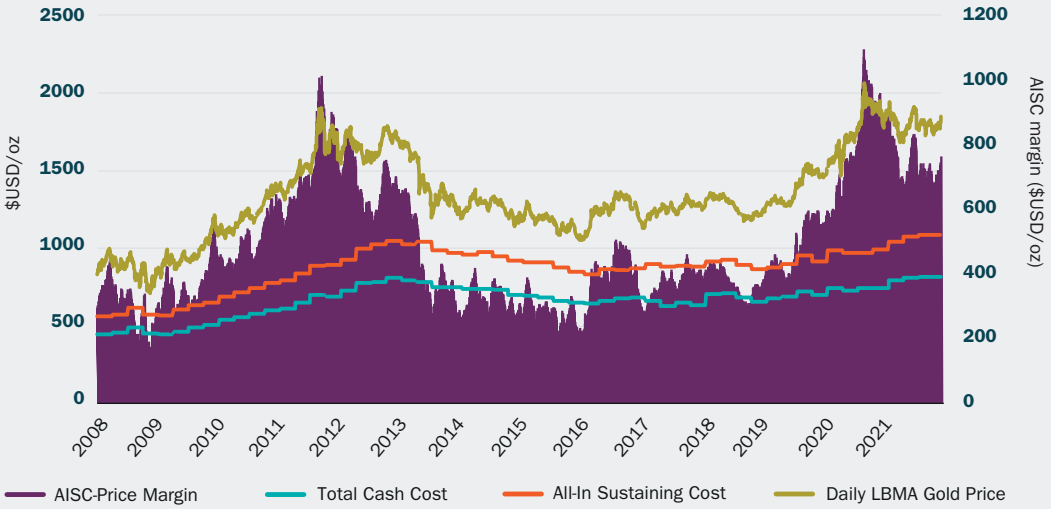
GOLD MINE PRODUCTION

The bullish sentiment around the yellow metal is also boosting interest in gold miners, whose Q3 results are being released. Mine production has resumed to pre-pandemic levels, and we estimate that global output this year will marginally surpass that of 2019, which was an all-time high. But rising operating costs, higher expenses derived from the pandemic and increasing environmental costs, resulting from the objective to reduce the carbon footprint and improve the results on other ESG-related variables, are having a toll in miners' revenue margins. Preliminary results show that during the third quarter of 2021, AISC-Price margins (the difference between spot price and the global All-In Sustaining Cost weighted average) have decreased by a quarter, compared to the same period last year, and are currently on the $700/oz mark.

We estimate that global output this year will marginally surpass that of 2019 which was an all-time high

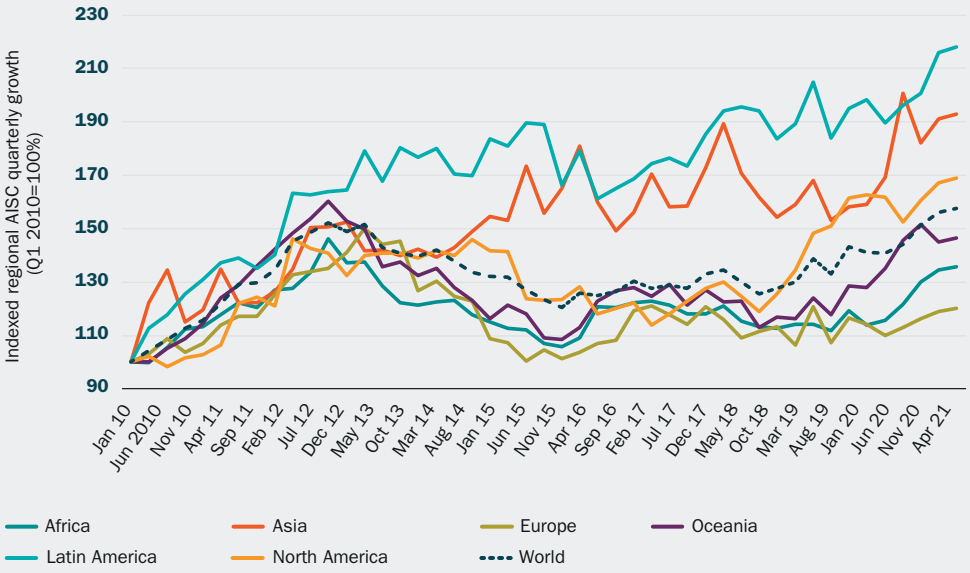
Although we have to consider that the All-In Sustaining Cost (AISC) does not represent the total cost of mining and commercialising gold, as some expenses, such as corporate income tax, are not included, it's a good approximation that helps indicate how profitable gold mining is at the moment.

CHART 1: MINING COSTS ROSE BACK TO 2013 LEVELS



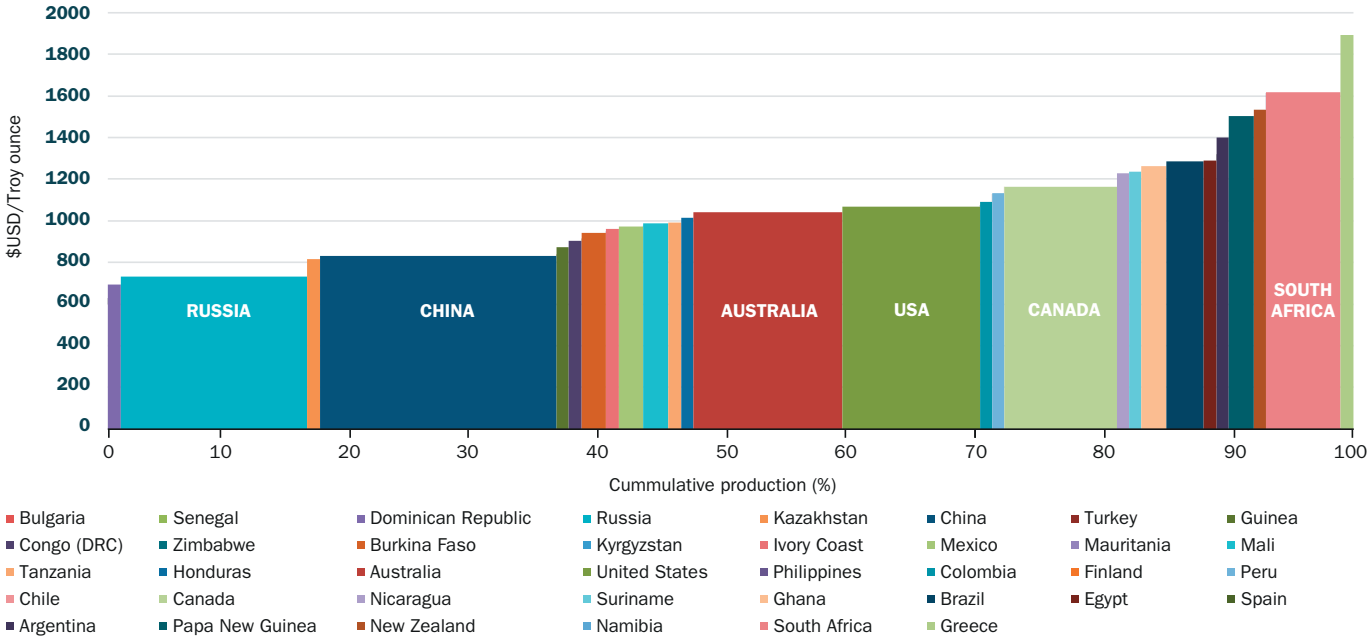
Source: Refinitiv Metals Research

CHART 2: MINING COSTS IN LATIN AMERICA AND ASIA HAVE DOUBLED SINCE 2010



Source: Refinitiv Metals Research

CHART 3: ALL-IN SUSTAINING COSTS BY COUNTRY (Q3 2021)



Source: Preliminary Company Reports, Refinitiv Metals Research

MINING COSTS

During the third quarter of 2021, Total Cash Cost reached $818/oz, increasing by 1% compared to the previous quarter, while AISC rose by nearly 2%, totalling $1,086/oz. At a regional level, Refinitiv Metals Research has found that mining gold in Latin America and Asia costs nearly twice as much as it did back in 2010, while costs in Europe have increased by only 10% in the same period of time.

This is mostly explained by high inflation rates and increasing labour unrest in some Latin American countries, and higher infrastructure spending and higher costs due to geological complexities and lower grades in Asia. On absolute levels, however, Europe, Asia and Latin America remain the most economical regions to mine gold.

Mining costs also widely differ depending on which countries the operations are located in. Infrastructure levels, topography, geological variables (such as deposit type, metallurgy, gold grades and volume) and, of course, economic variables such as currency exchange and taxes are just a few of the parameters that determine the viability of a project. The top two producers, China and Russia, have amongst the lowest costs globally, on an AISC basis, while South Africa's ageing mines put the country on the high end of the cost curve.

SEVERAL GOLD MINERS **CONFIRMED THEIR COMMITMENT TO ACHIEVE** NET-ZERO EMISSIONS BY 2050

IMPACT OF THE PANDEMIC ON MINING COSTS

At a mine level, we estimate that around 6% of the more than 300 operations that Refinitiv Metals Research monitors were sub-economical during the third quarter this year, as their reported AISC was larger than the quarter's average gold price of $1,789.9/oz. According to our findings, since the beginning of 2020, mining costs have risen the most in countries which were severely affected by the pandemic, either by high infection rates or by tight restrictions imposed by governments. Most of these mines are located in South Africa, whose mines usually incur high maintenance costs to operate and are frequently labour-intensive. When the South African government imposed severe movement restrictions in an attempt to reduce the impact of the pandemic, several mines had to be put into care and maintenance, resulting in AISC growing by 18% year-on-year, on average. In other parts of the world, such as Mexico, some mines suffered a similar fate, with their average costs rising by 8%, as a scaling-down of operations was enforced for most industries by government.

MINING GOLD IN LATIN AMERICA AND ASIA COSTS NEARLY TWICE AS MUCH AS IT DID BACK IN 2010 WHILE COSTS IN EUROPE HAVE INCREASED BY ONLY 10%

GREEN COMMITMENTS

Turning to recent events, during the climax of the 2021 United Nations Climate Change Conference, several gold miners confirmed their commitment to achieve net-zero emissions by 2050. As an energy-intensive industry, several challenges lie ahead in order to achieve this goal, such as the investment necessary to improve efficiencies.

Renewables currently represent only 8% of gold mining's energy matrix, meaning that massive investment is needed to turn gold greener and to fulfil the carbon reduction promises. This, of course, will have an impact on costs.

GOLD ETF OUTFLOWS ON TRACK FOR SECOND-HIGHEST YEAR, AS INVESTOR APPETITE WANES

Investment in gold exchange traded funds (ETFs) is on course to mark the first year of net selling since 2015, and the second highest level of sales since their inception. Net outflows of 39 tonnes were reported in the third quarter, which was in sharp contrast to significant inflows registered during the same quarter of last year, when investors added 283 tonnes to their holdings. This also represented the second quarter of net selling so far this year, with total outflows estimated at over 190 tonnes during the first nine months. To put this into context, ETF investors added over 1,000 tonnes of gold between January and September 2020, pushing global holdings to a fresh high in November.

Outflows from ETFs were driven by a general rise in optimism and a gradual return of confidence, following the big economic shock caused by the pandemic last year. This saw investors pursue higher yields, putting pressure on gold prices. In addition, a continued recovery in the global economy, along with mounting inflationary pressures, prompted fears that the US Federal Reserve might start raising interest rates sooner than previously expected, which weighed on investor sentiment towards gold.

A regional analysis reveals that Q3 selling was concentrated in North America, which was, in fact, the only region to register net outflows, of nearly 58 tonnes or down 3%, during the quarter.

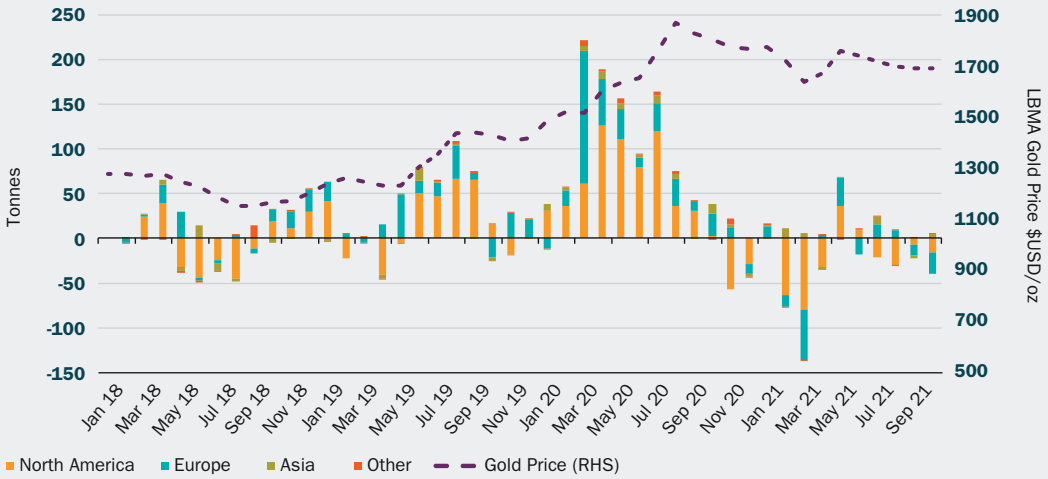
European-listed funds added 12 tonnes or up 1% over the three-month period, while Asian funds experienced the largest increase in percentage terms, with holdings growing by 4%, although only by six tonnes in absolute terms.

Gold ETF selling continued into October, with outflows estimated at 34 tonnes. This represented the third consecutive month of liquidation, with net selling over the ten-month period equivalent to just under 230 tonnes.

INVESTMENT IN GOLD EXCHANGE TRADED FUNDS (ETFs) IS ON COURSE TO MARK THE FIRST YEAR OF NET SELLING SINCE 2015 AND THE SECOND HIGHEST LEVEL OF SALES SINCE THEIR INCEPTION

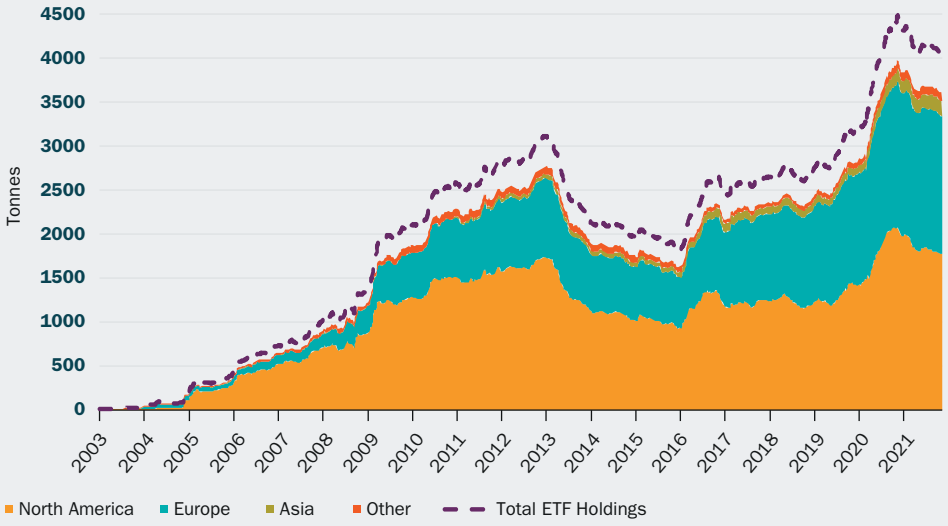
It is worth adding though that despite a shift in investor sentiment, the ongoing economic recovery and the central banks' rhetoric turning slightly hawkish, gold ETFs have remained relatively resilient this year. Global holdings as of early November are estimated at less than 10% below the all-time peak of nearly 4,000 tonnes registered in the fourth quarter of 2020.

CHART 4: MONTHLY CHANGE IN GOLD ETF HOLDINGS



Source: Refinitiv Metals Research

CHART 5: GOLD ETF HOLDINGS BY REGION



Source: Refinitiv Metals Research

Looking ahead, we expect investors to remain cautious for the remainder of the year, while fresh purchases are likely to stay limited. As such, gold ETFs are set to register net outflows of over 200 tonnes in 2021, which would mark the first year of net selling since 2015 and the second-highest level of annual outflows since the inception of gold ETFs in 2003, with the largest net annual selling of 876 tonnes witnessed in 2013.

Federico Gay, Senior Analyst, Refinitiv, GFMS. Federico is a geologist with a BSc from the National University of the South, Argentina. He joined Refinitiv in London in November 2019, focused on precious metals supply modelling. Prior to Refinitiv, he worked over seven years in Chile in a wide range of assignments, including exploration, ore control, geological modelling and resource estimation for a Copper-Gold-Molybdenum mine in the Atacama Desert. He completed a master's program in Economic Geology from the Catholic University of the North, Chile.

Saida Litosh has been covering the metals markets since she joined the GFMS precious metals research team in 2011, focusing on investment and fabrication demand in Europe and playing a key role in covering precious metals research in Russia. In 2016, She joined Thomson Reuters Oil Research team, where her primary focus was analysis of crude, fuel oil and key refined product flows for Europe, Russia and Africa. She re-joined Refinitiv Metals team in late 2017 to head up precious metals demand research for Europe, in addition to leading gold analysis and economic forecasts. Saida holds a Master's degree in Economics from the London School of Economics.

The *Alchemist* is published quarterly by LBMA. If you would like to contribute an article to the Alchemist or if you require further information please contact the Editor, Aelred Connelly,
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