Alchemist

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EDITORIAL
The Wisdom of Sore Heads

BY ADRIAN ASH, DIRECTOR OF RESEARCH, BULLIONVAULT

Let's face it, the LBMA Conference in Lisbon didn't face a high hurdle to top the previous two years' events.

Welcome, engaging and valuable as those virtual Conferences proved, the return of a proper event – with real people! in the same room! with drinks and then dinner! – was always going to feel special.

But Lisbon 2022 far surpassed that target I believe, delivering a deluge of data, news, views and expert discussion which raised the bar for future events. On behalf of the Public Affairs Committee (which brainstorms and builds the programme of speakers) as well as the LBMA Executive team (whose dedication makes the Conference happen), I hope that every attendee found it equally informative, enjoyable and productive.

If you weren't able to join, then it's hard to pick a stand-out insight to share. In terms of numbers, perhaps the most welcome statistic was the near-record crowd of 771 attendees, who were finally able to gather, meet and do business in person for the first time since 2019's event in Shenzhen.

That warm glow was surely beaten however – at least for logistics providers, if not for their customers – by the 25 cents per ounce being paid by dealers in India this year to have silver delivered in two days by air, rather than paying 5 cents and waiting a month for sea freight. Mark Wooley (Brink's Global Services) – who won best speaker – explained that the subcontinent's surging consumer and industrial demand has spurred record imports, matched by massive outflows of silver from London vaults.

Silver also beat gold in terms of excitement and interest, both in the Conference hall and at the bar. Indeed, the Lisbon delegates' average gold price forecast for when we next meet (Barcelona, 15-17 October 2023 – book early) projected only a 10% rise in dollar terms – the least bullish consensus since we met in Singapore in 2016.

Silver, in contrast, will trade 52% higher according to the average delegate's forecast from Tuesday afternoon's closing session, way up at $28.30 per ounce.

The wisdom of sore heads, perhaps, after Monday night's gala dinner? Given the bearish outlook I got from chatting with analysts and other market experts, the crowd in Lisbon must have included some heroic bulls to offset those more downbeat forecasts and push the Conference's average silver prediction so much higher.

Not that analysts called it right on silver for 2022. The average predictions for the metal's year-average price back in January's LBMA Forecast competition were out by $2 per ounce compared to the outcome to date. But with that average falling to just $21.60 so far this year, down 14% from 2021's nine-year high, the expert consensus was too bullish 12 months ago, not too bearish.

Might the grey metal's newly energised fans see it reach higher ground in 2023? The latest LBMA webinar, available to watch whenever you're free, replays and expands on the excellent Silver Roundtable discussion I joined in Lisbon, looking at supply and demand, those huge outflows from London storage and the impact of hot-money traders burnt this year by the steepest rise in dollar interest rates since the start of the 1980s.

A NEAR-RECORD CROWD OF 771 ATTENDEES WERE FINALLY ABLE TO GATHER, MEET, AND DO BUSINESS IN PERSON FOR THE FIRST TIME SINCE 2019

For more from this year's Conference, this edition of the *Alchemist* also relays the big-picture analysis and outlook from the Macro and Geopolitical panel, and Peter Boyd of the Yale Center for Business and the Environment explains why he flew across the Atlantic to tell the LBMA Members gathered in Lisbon about the true urgency of climate change.

Silver also gets a starring role in this issue of the *Alchemist* via Simon Rostron's history of the Comstock Lode, the largest deposit of high-grade silver in North America.

Stewart Murray also steps into the archives, examining the original Great Train Robbery of 1855, while Federico Gay of Refinitiv reveals how gold makes football's World Cup the most valuable trophy in sport.

ISSUE HIGHLIGHTS

Will 2023 see the gold in that trophy grow more valuable still? Gold prices in all major currencies rose to new record annual averages this year, including a fresh high of $1,801 per ounce in dollar terms – exactly the average of the 28 entries in January's LBMA Annual Precious Metals Forecast Survey.

Skill, luck or the wisdom of (expert) crowds? Don't miss the Forecast in January for detailed analysis and price predictions from across our industry for gold, silver, platinum and palladium.

SUSTAINABILITY: A Narrowing Window of Huge Opportunity

BY PETER BOYD, LECTURER, YALE SCHOOL OF THE ENVIRONMENT
& FOUNDER AND CEO, TIME4GOOD

This article is based on the keynote speech which Peter Boyd delivered at the LBMA/LPPM Global Precious Metals Conference on 18 October, 2022.

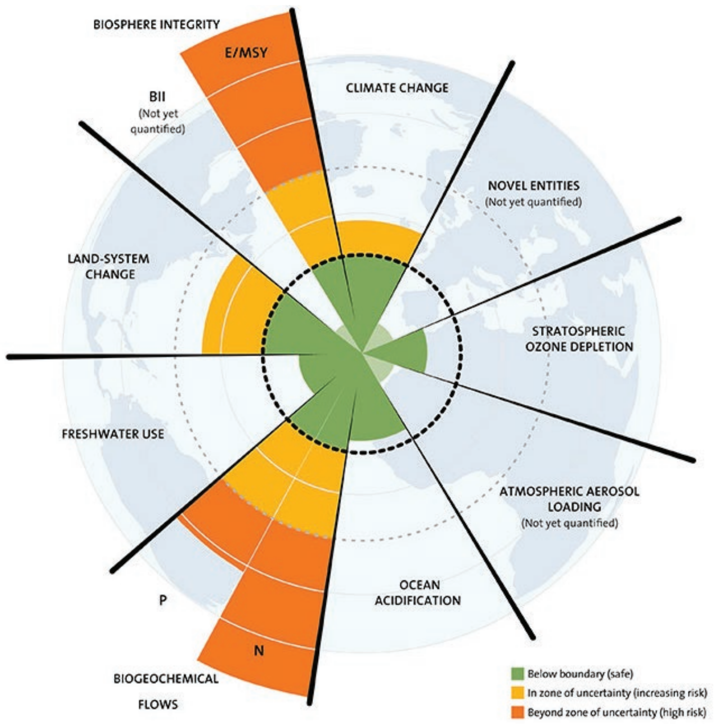
I am a "stubborn optimist", a phrase that I've borrowed from Christiana Figueres, who ushered through the Paris Agreement as the then Secretary of the UNFCCC – an inspirational force of nature with a clear view of the hill we have to climb, but knows the difficulty of the ascent, and who's still optimistic about doing it.

I'd like to give everyone a firmer grasp of the simplicity of the problem, and the range of solutions, so that they can be inspired to act and lead. In essence, I want the leaders of this industry to become more concerned but also more optimistic.

Rockström et al have documented the idea of the 'great acceleration'. We, as humans, are impacting the world through socio-economic trends such as increases in population, real GDP, urban population, water use, paper production, transportation; and the Earth is responding to these with increased levels of carbon dioxide, nitrous oxide, methane, stratospheric ozone, surface temperature, ocean acidification and coastal nitrogen (to name a few).

I'D LIKE TO GIVE EVERYONE A FIRMER GRASP OF THE SIMPLICITY OF THE PROBLEM, AND THE RANGE OF SOLUTIONS, SO THAT THEY CAN BE INSPIRED TO ACT AND LEAD.

If we go back to just 10,000 years ago, the Earth's temperature started to stabilise – during a period called the Holocene – which allowed humans to invent farming, in more than one place, and to settle down.



Source: Steffen et al. Johan Rockström et al.
Stockholm Resilience Centre.

SHIFT TO HUMAN-DOMINATED EPOCH

In more recent years, we've become a very big force on the world. Rockström and the Stockholm Institute have gathered information from hundreds of scientists and developed this concept called the planetary boundaries [a set of nine planetary boundaries within which humanity can continue to develop and thrive for generations to come]. As you can see from the graphic above, we're nudging at the edges of really a safe space of humanity, such that the scientists actually gathered recently and stated that we are now entering a new human age called the Anthropocene, where humans are the dominant force on nature. They dated the start of this age as the first nuclear test.

Another crucial concept is that of Anthropogenic Mass. The mass on Earth created by humans has, for the first time, exceeded the weight of all global-living biomass. The full animal kingdom has been estimated to weigh four gigatonnes, and humans have now created eight gigatonnes of plastic.

YOUR GOING CONCERN

Let's just say, for the sake of argument, that the average length of each business in the audience is 46 years. The planet is 4.6 billion years old. So, say, in your 46-year business, you took on a new employee four hours ago – an entrant called The Human.

One minute ago, the new employee had an interesting idea called the Industrial Revolution, and in that last minute, they destroyed 50% of the world's forests, and in the last 20 seconds, they destroyed 68% of the world's biodiversity.

This is what they've done to your going concern. What would you do with this new employee if this was your business? As a headline in the *Onion* puts it: "Pressure Mounting For Humans To Step Down As Head Of Failing Global Ecosystem".

SOLUTION SPACE

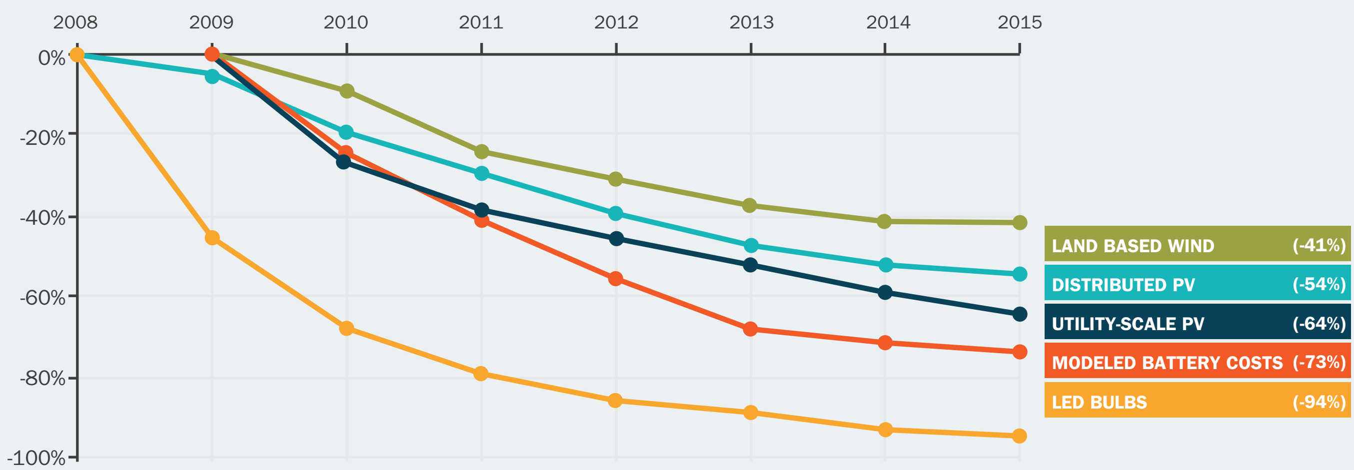
So, if that's the big picture, where's the solution space? A very powerful concept embedded in COP20 in Lima, going into the Paris Agreement and beyond, is this concept of Net Zero. But this concept doesn't have to be just scientifically robust. Who goes to a campsite and wants to leave the campsite worse than they found it?

I believe that's the ethos behind Net Zero. It's simply to leave this campsite as beautiful as you found it – in balance. It is enshrined in Article 4 of the Paris Agreement: achieving the balance between human-caused gases, emissions, anthropogenic emissions, and the ability of the natural world to absorb those emissions.

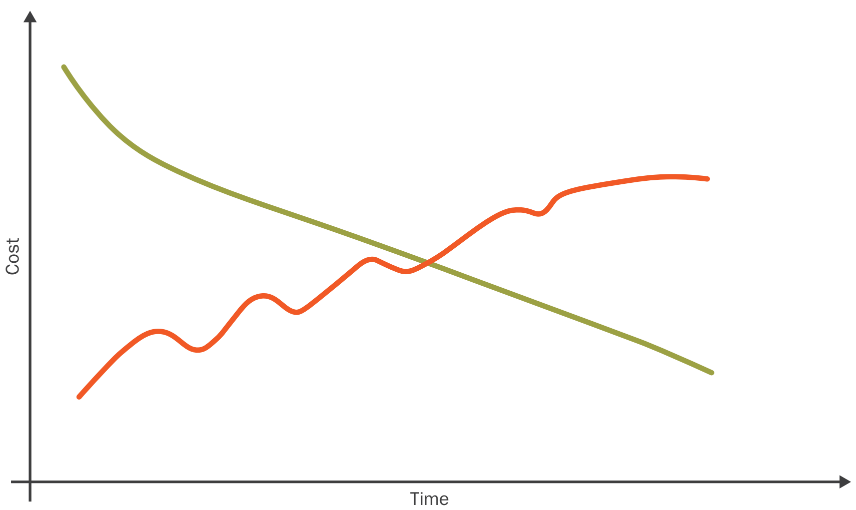
But the speed and trajectory matters – so agrees an IPCC press release from April 2022, which said: "The evidence is clear: the time for action is now. We can halve emissions by 2030."

THERE ARE SOLUTIONS THAT WILL MAKE MONEY AND MANY THAT ARE EXPENSIVE, BUT THEY ULTIMATELY BALANCE OUT WITH AN IMMENSE OPPORTUNITY COST OF NOT DOING THESE THINGS. **THE WORLD CAN AFFORD TO DO IT – IT'S JUST THAT THE RISKS AND REWARDS AREN'T ALWAYS IN THE RIGHT PLACE.**

COST REDUCTIONS SINCE 2008



Source: US Department of Energy



WHO NEEDS TO CHANGE? ALL SECTORS ARE NECESSARY, AND NONE ALONE IS SUFFICIENT.

Meanwhile, fossil fuels are getting harder, more expensive and dirtier to get out of the ground over time. Looking at this simple chart (on the left), you can see a squiggly upward curve and a smooth downward curve. At the left side of the crossover, dirty (red) is cheaper than clean (green). It gets interesting at the crossover, and then on the right-hand side of the crossover, clean is cheaper than dirty, and then the transition accelerates at scale.

We moved out of the Stone Age not because we ran out of stones, but because something else was better. We need to move into the cleaner economy, because it's cheaper and because it's better. Not because we've just decided.

I was excited to hear about the signing of the Responsibility and Sustainability Principles Declaration announced at this Conference, which commits to, among other things, working to reduce the gold industry's greenhouse gas emissions in line with the goals of the Paris Agreement. This implies Net Zero by mid-century; and halving emissions by 2030.

The key idea here is from the New Climate Economy Report from 2014, which said that "the cost of doing what we need to do is not all cost". There are solutions that will make money and many that are expensive, but they ultimately balance out with an immense opportunity cost of not doing these things. The world can afford to do it – it's just that the risks and rewards aren't always in the right place.

If you think about the clean energy curve, it's smooth and largely – supply chain notwithstanding – predictable. The idea of clean energy is a technology, not a fuel. We're writing down the cost curve.

Take electric vehicles. The share of electric vehicles per manufacturer has increased hugely since 2009. By mid-century, the idea is that economics will favour switching across to electric vehicles without subsidy.

Who needs to change? All sectors are necessary, and none alone is sufficient.

CONNECTED LEADERSHIP: PURPOSE TO PRIORITIES

My work is at the intersection of Connected Leadership and the 'Great Work'. I'm excited about the idea of Connected Leadership – how we bring our sense of purpose to clear priorities, visualise our future potential, and plan appropriately to ensure progress towards our goals. I teach this in Yale, and coach leaders across sectors outside the university. The 'Great Work', the transition we have to undertake, is described in a book of the same name by Thomas Berry which details how to create this sustainable world in which we're a benign force on ourselves and the planet itself – and how to get the best out of everyone while doing it.

I WAS EXCITED TO HEAR ABOUT THE SIGNING OF THE RESPONSIBILITY AND SUSTAINABILITY PRINCIPLES DECLARATION ANNOUNCED AT THIS CONFERENCE, WHICH COMMITS TO WORKING TO REDUCE THE GOLD INDUSTRY'S GREENHOUSE GAS EMISSIONS IN LINE WITH THE GOALS OF THE PARIS AGREEMENT.

As part of this, I serve on the Expert Peer Review Group of the UN's Race to Zero campaign. I see accelerating the just transition to sustainability of non-state actors as crucial to this next decade. We need to navigate with both ambition and clarity, because being ambitious and clear inspires the right action. Only ambition carries the risk of greenwashing, while only clarity risks not going far or fast enough.

A related area that I hope this industry also helps with is preserving our forests. Some 6% of the earth's land surface is tropical rainforest, representing over 50% of our embedded carbon. 5% of the world's population are indigenous people – who I was pleased to hear mentioned in the Responsibility and Sustainability Principles Declaration – but they're looking after 80% of those forests. What we need to save and who we need to rely on to save it is critical. We need to change the economics on the ground so that trees are worth more alive than dead, and sovereign-issued carbon credits aligned to the Paris Agreement are a key step in making this a reality

IDENTIFYING OPPORTUNITIES

Back to this industry, how can we look across the precious metals value chain and identify the key opportunities to become sustainable? And who do we need to engage?

As an outsider looking in, I can see the need to understand and disclose, and start working and doing, while becoming part of the new, clean economy. Different parts of the industry coming together is crucial here.

Looking through my Race to Zero lens with its 'five p' criteria, I would encourage 'pledge' (which you clearly have), 'publish' (which you've done today), and then follow through with 'plan' and 'proceed' to get things done, and be cautious and consistent with 'persuade' (who you work with and what they and you advocate for). The UN Race To Zero has launched clear criteria and a guide to help on these 5 P's **https://racetozero.unfccc.int/system/criteria/**.

SOME 6% OF THE EARTH'S LAND SURFACE IS TROPICAL RAINFOREST, REPRESENTING OVER 50% OF OUR EMBEDDED CARBON

I'd also recommend you anchor your sustainability goals to your purpose; connect your sustainability ambition with the ultimate mission of what you're trying to achieve for your shareholders and your long-term vision. This will provide the strength and commitment when courage is required.

Peter Boyd is a Lecturer at the Yale School of the Environment and Resident Fellow at the Yale Center for Business and the Environment. Outside Yale, he is Founder & CEO of Time4Good, helping Leaders and their teams in a variety of sectors, build purpose-driven paths to maximum positive impact. He is on the Expert Peer Review Group of the UN's Race To Zero campaign and the Distinguished Advisory Group of the Integrity Council for Voluntary Carbon Markets. He also serves as an advisor to the Coalition for Rainforest Nations and REDD+ - a digital platform to bring UN-registered, nationally-issued REDD+ forest carbon credits to a wider world of purchasers.

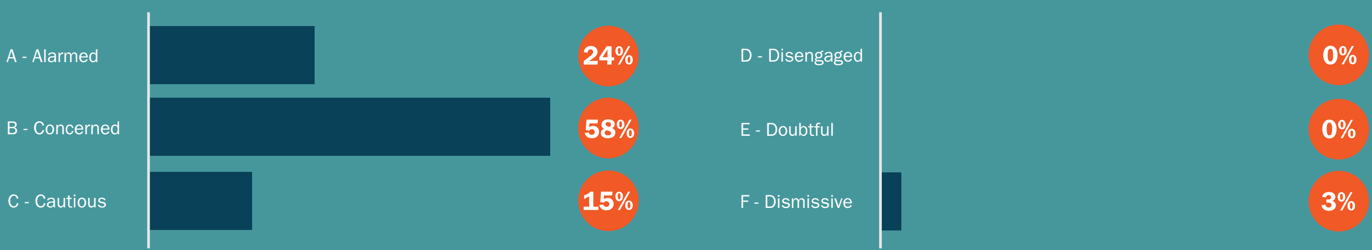
His private-sector experience started with McKinsey & Co then spanned over ten jobs in twelve years at the Virgin Group, including CEO of Virgin Mobile South Africa. In non-profit and government, he was Launch Director and COO of Sir Richard Branson's Carbon War Room; served as Chair of The Energy Efficiency Deployment Office for the UK Department of Energy & Climate Change; and led The B Team's 'Net-Zero by 2050' initiative focused on business encouragement for an ambitious Paris Agreement at COP21.

Peter is originally from Edinburgh, Scotland; graduated from the University of Oxford with a degree in Philosophy, Politics and Economics; and now lives in Westport, Connecticut.

LIVE POLL - THE RESULTS

Our live polls during the Conference showed that on the spectrum concern about sustainability, the audience was tilting towards 'concerned'. Not too many were 'alarmed' and only a few were 'dismissive'.

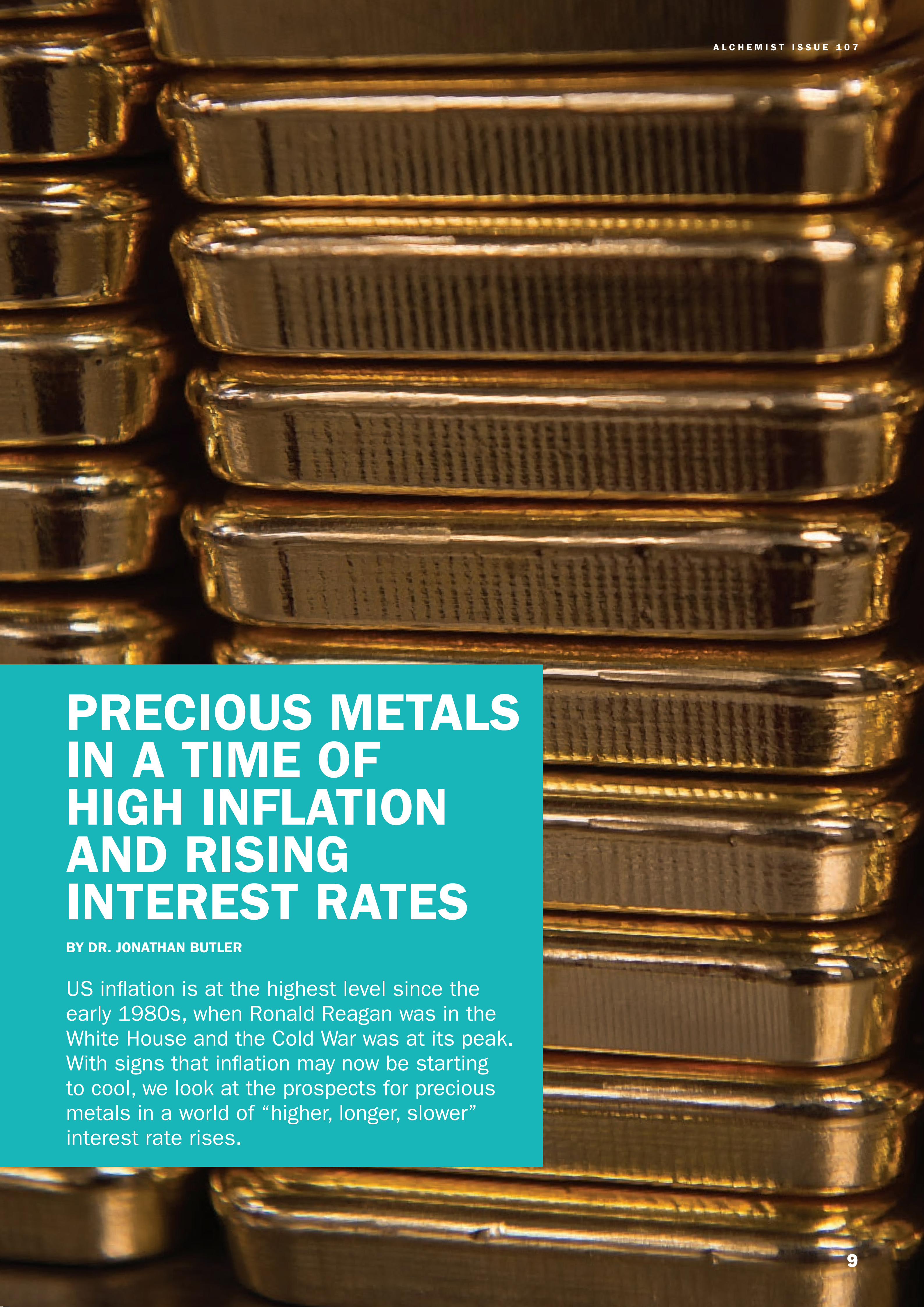
IF YOU WERE TO PLACE YOURSELF ON 'SPECTRUM OF CONCERN' ABOUT THE ENVIRONMENT, HOW WOULD YOU SELF DECLARE?



And now onto optimism: can we, as a world, become sustainable? Poll responses sit around the middle of the scale. And regarding how optimistic the audience was an industry as to whether we can solve this problem, the poll shows slightly greater optimism.

HOW OPTIMISTIC ARE YOU THAT WE CAN SOLVE THIS... AS A WORLD?

HOW OPTIMISTIC ARE YOU THAT WE CAN SOLVE THIS... AS AN INDUSTRY?



PRECIOUS METALS IN A TIME OF HIGH INFLATION AND RISING INTEREST RATES

BY DR. JONATHAN BUTLER

US inflation is at the highest level since the early 1980s, when Ronald Reagan was in the White House and the Cold War was at its peak. With signs that inflation may now be starting to cool, we look at the prospects for precious metals in a world of "higher, longer, slower" interest rate rises.

US inflation on the Consumer Price Index (CPI) measure hit 9.1% in June 2022, the highest since late 1981. Food and energy prices remain high owing to disruptions stemming from the Russian war in Ukraine. Supply chain bottlenecks and a broad post-pandemic recovery in demand have continued to exert upwards pressure on inflation in 2022, and though there have been four successive months of declining inflation to the end of October, CPI remains at a still -40-year high of 7.7%. In an effort to bring inflation under control, US interest rates have risen at the fastest pace since 1981 – with the Federal Reserve lifting rates by fully 3% between June and November, and signalling that it will continue to raise rates into 2023.

IN AN EFFORT TO BRING INFLATION UNDER CONTROL, US INTEREST RATES HAVE RISEN AT THE FASTEST PACE SINCE 1981

Though gold and precious metals tend to shine as havens in a high inflation environment, this has been more difficult in 2022 as bullion and its sister metals have faced the twin headwinds of rising US government bond yields and a stronger US dollar. Yields on 10-year US Treasuries have surged and, adjusting for longer- term inflation expectations, have moved into positive territory this year for the first time since the initial COVID wave in March 2020. Higher yields of course make non-yielding precious metals look less attractive, and this has contributed to a trimming of physical gold longs in the ETF market and a reduction in speculative length on COMEX.

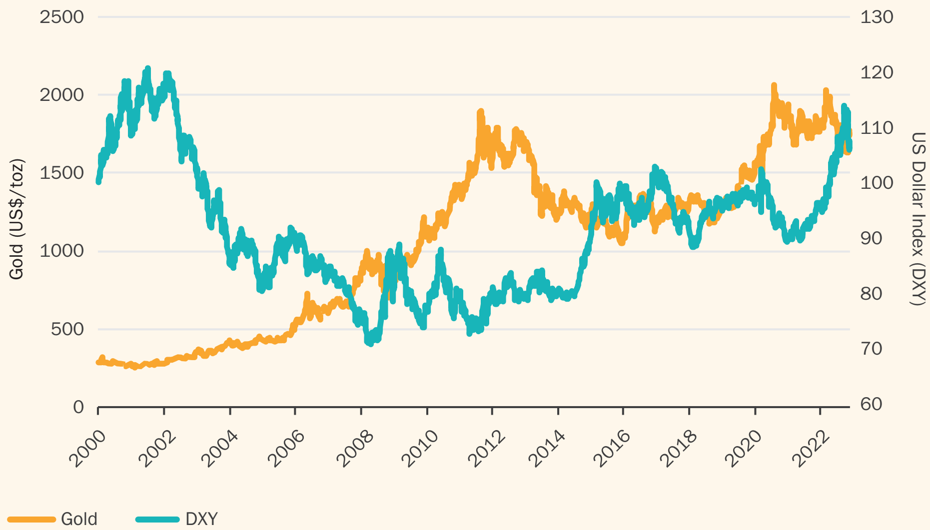
The US dollar for its part has surged to 20-year highs against a basket of major currencies on the back of investment inflows in response to the aggressive interest rate hikes in the US, which has left the US with by far the highest benchmark interest rate of major developed markets. The strong dollar has left USD-denominated gold under the weather, while gold in euros and sterling has fared somewhat better. The dollar has also arguably reverted to its traditional safe haven role as geopolitical risks, from Ukraine to Taiwan, remain elevated and the combination of rising rates and the impact of high inflation across many economies brings the risk of recession.

With an increasingly gloomy and uncertain outlook, the IMF has downgraded its GDP forecasts and now expects the world economy to grow by 2.7% in 2023, down from the 3.8% it forecast at the beginning of 2022. Eurozone GDP growth is expected to also slow down next year, while China's growth is expected to accelerate, though the country's zero tolerance COVID policies and periodic lockdowns could threaten this rise.

THE US DOLLAR HAS SURGED TO 20-YEAR HIGHS AGAINST A BASKET OF **MAJOR CURRENCIES** ON THE BACK OF INVESTMENT INFLOWS IN RESPONSE TO THE **AGGRESSIVE INTEREST RATE HIKES IN THE US**

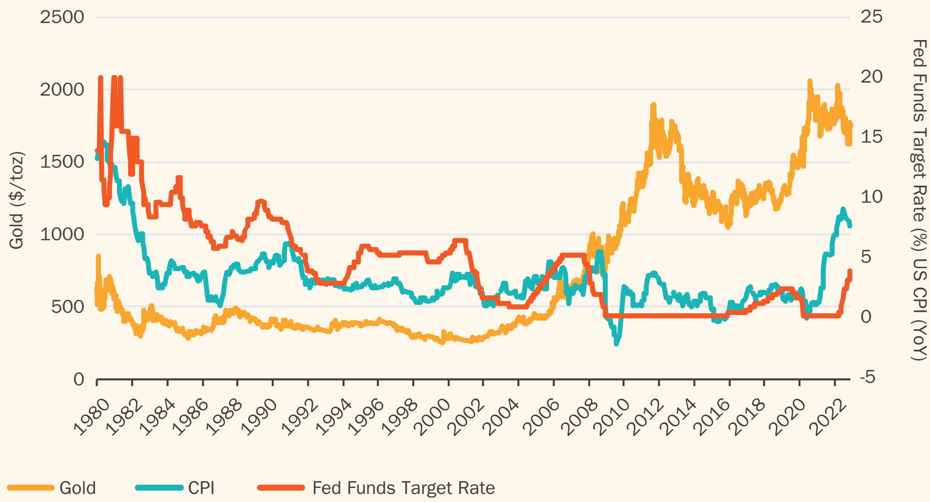
This slowdown in growth is not especially positive for the demand side of the precious metals markets, implying reduced offtake in the manufacturing of jewellery and industrial products. Turnover of bullion on the Shanghai Gold Exchange, much of it destined for the jewellery market, has been impacted by the periodic lockdowns in China this year and lower consumer spending as the cost-of-living squeeze is felt around the world. While demand for high-grade gold and silver has been decent in the electronics sector despite wider supply chain challenges, consumer pull in the consumer electronics space is ultimately at risk from rising inflation and squeezed household budgets. In the automotive sector, where gold and silver are used in speciality electronics and PGMs are used in emissions control, the supply of vehicles continues to be impacted by ongoing supply chain disruption and demand for new cars is constrained by rising auto financing costs and lower consumer confidence. This is also resulting in a buoyant used-car market and fewer end-of-life vehicles available for recycling in the near term.

CHART 1: GOLD AND THE GREENBACK – LONG TERM INVERSE RELATIONSHIP



Source: Mitsubishi from Bloomberg Professional Service

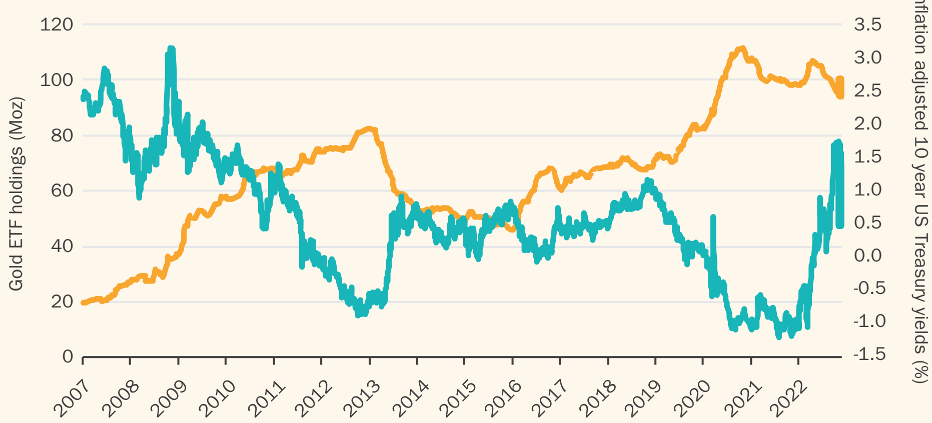
CHART 2: RISING INFLATION, RISING RATES, GOLD COMING OFF ITS HIGHS



Source: Mitsubishi from Bloomberg Professional Service

Given that inflation remains consistently higher than interest rates in many markets, a period of major interest rate tightening is likely to continue over the next year or more. Wary of triggering a recession, central banks and governments may vary in their appetite for squeezing inflation out of the system and we are likely to see a greater degree of speculation over rate decisions manifest in higher market volatility. As inflation- adjusted yields remain low to negative, gold and its sister metals may continue to benefit from a degree of risk hedging, perhaps augmented by worryingly high levels of inflation in certain markets.

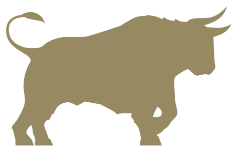
CHART 3: YIELDS ON 10-YEAR US TREASURIES HAVE SURGED



Source: Mitsubishi from Bloomberg Professional Service

Europe in particular is at risk of a long and difficult winter as sanctions on Russian energy supplies and possibly supply interruptions weaken industrial output, add to higher costs and redouble inflationary woes, contributing to negative economic sentiment. Though this may weigh on the more industrial-facing white metals, it will likely create some further investor interest in bullion. With little room for the ECB to raise rates without creating further economic pain, the Euro may continue to slide, giving a lift to EUR-denominated precious metal prices.

IF THE FED CONTINUES TO RAISE RATES, WHICH IT IS LIKELY TO DO GIVEN PERSISTENTLY HIGH INFLATION AND FEW SIGNS OF A SLOWING LABOUR MARKET, **THE DOLLAR IS LIKELY TO CONTINUE ITS BULL RUN AND TEMPER THE GAINS IN USD-PRICED PRECIOUS METALS**

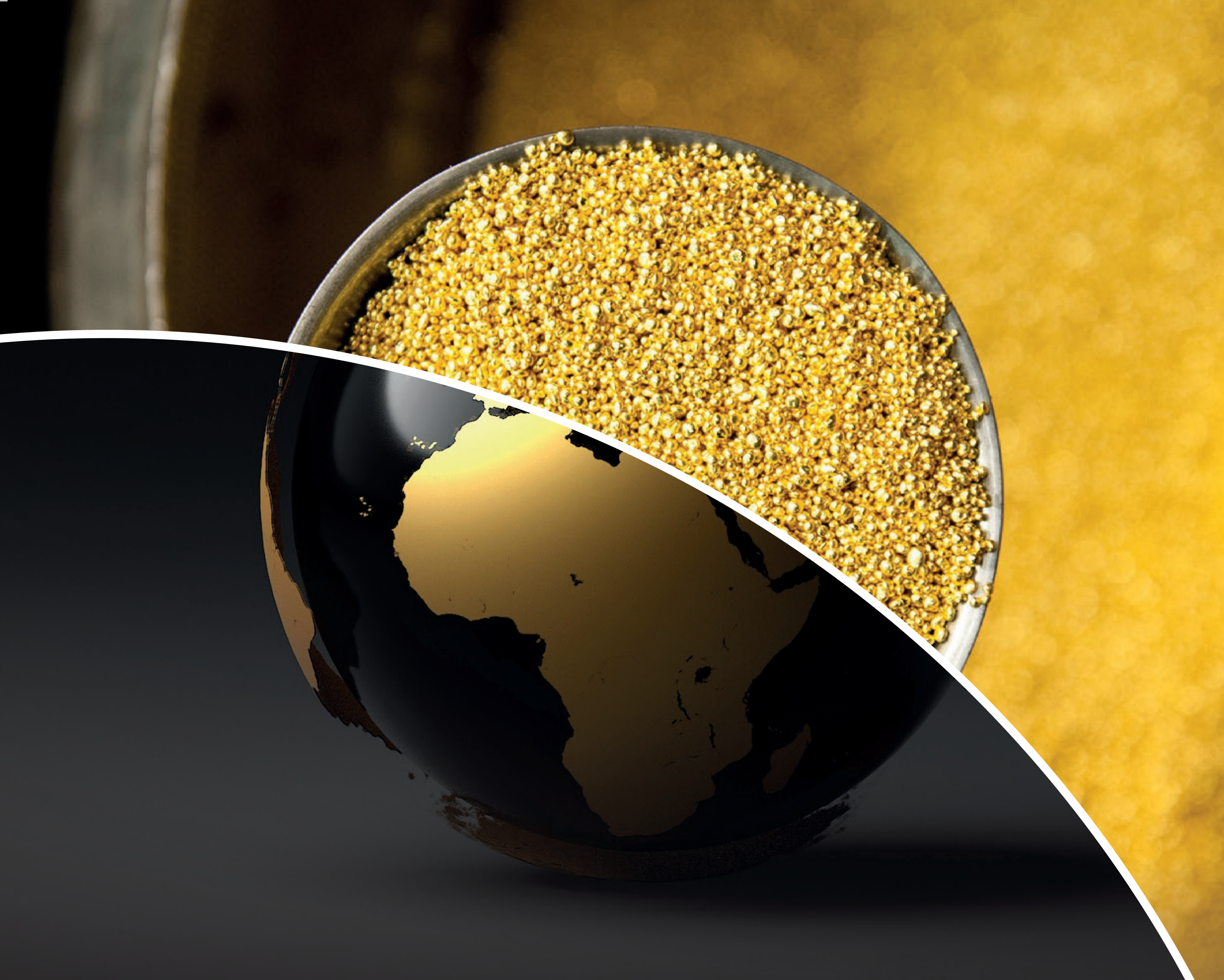


If the Fed continues to raise rates, which it is likely to do given persistently high inflation and few signs of a slowing labour market, the dollar is likely to continue its bull run and temper the gains in USD-priced precious metals. However, ongoing aggressive rate hikes are likely to eventually slow the economy and result in a landscape of high inflation and weaker growth – one in which precious metals can provide portfolio diversification and help manage downside risks.

As we take stock of the past year and look towards 2023, we contemplate a combination of high inflation and rising rates last seen a generation ago.

While this may be challenging from an industrial demand point of view, for those brave enough to navigate the inevitable volatility, it contains opportunities for hedging and risk mitigation not seen for many years.

Dr. Jonathan Butler is Head of Business Development at Mitsubishi Corporation, based in London, and is a member of the LBMA Public Affairs Committee as well as the IPMI Executive Committee.



Unlike most silver ore deposits those of the Comstock Lode occurred in discrete masses often hundreds of feet thick. Sometimes, the ore was so soft it could be removed by shovel. Although this allowed the ore to be easily excavated, the weakness of the surrounding rock resulted in frequent and deadly cave-ins. The cave-in problem was solved by the method of square set timbering invented by Philip Deidesheimer, a German mining engineer from San Francisco, who had been requested to survey the problem by the Silver Kings. *Source: Wikipedia*

COMSTOCK & the End of the European Silver Standard

Discovered in 1859, the Comstock Lode, centred on Virginia City, Nevada, was and remains the largest deposit of high-grade silver ore found in North America.

The numbers are eye-watering. According to website *Western Mining History*, some 7,000,000 kg of silver (and 225,000 kg of gold) were produced from the Comstock mines between 1862 and 1953, with 80% of that production occurring in the first 20 years – towards a total value of $17 billion at today's prices (and, by some calculations, over $1 trillion in equivalent purchasing power).

As we'll see, the Comstock Lode lifted the four 'Silver Kings' to become the wealthiest men of their time, but it also cost many others their life savings and sometimes their lives. More broadly, the Lode required the development of new and important mining techniques that are still in use many decades later, caused a change of monetary policy in much of continental Europe and, furthermore, given the depth of the diggings, prompted a Nevada law – still in force – which made it illegal to talk to a hoist operator while he was working!

No sooner had COMSTOCK been made a partner in the mine than he placed himself at the front in everything about it. He constituted himself superintendent, did all the talking and none of the working, and was always ready to tell strangers about the mine.

THE BLUE STUFF

It was a party of Mormons on their way to the California gold fields in 1850 who set the Comstock silver rush in motion. Blocked by the onset of winter from crossing the Sierra Nevada – the mountain range which separates present day Utah and Nevada from California – they camped by the Carson River and tried their hand at a bit of prospecting, at which they were successful. The river running through what is now called Gold Canyon yielded between half an ounce and one ounce of gold per day – enough to live on but hardly the riches reputedly available on the western side of the mountains.

The Mormons moved on and were replaced in the succeeding decade by a new series of hopefuls, including two Irishmen, Peter O'Reilly and Pat McLaughlin, who worked the rivers of what was then known as the Washoe Region and who are generally credited with the great discovery.

Legends of the Comstock Lode by Beebe and Clegg takes up the story. "Actually they [Pete and Pat] were prospecting for gold, and the heavy blue clays in which they discovered its traces were but a source of annoyance in the recovery of the precious metal. But one day in the autumn of '59, a specimen of the "blue stuff" found its way back to a sophisticated assayer in Grass Valley in the Californian Mother Lode and within a few hours, the Western world was hysterical with the intelligence that the despised "blue stuff" was silver in unfamiliar geological form but of almost incredible richness [yielding some $3,000 per tonne at a time when silver was trading at $1.60 per oz].

"The rush eastwards across the High Sierra was on, and with a scale of concentration and hurrah which dwarfed to insignificance every aspect of the earlier California gold rush."

OLD PANCAKE

Beebe and Clegg may not have overstated the scale of the initial rush given the nearby presence in California of many wannabe miners who had failed to share in the riches achieved by the early 49ers. But one of their stories, in this case about Henry Thomas Paige Comstock, after whom the Lode is named, is probably wrong.

Comstock, often better known to his contemporaries as 'Old Pancake' because he couldn't be bothered to bake bread, was, like many famous Americans, Canadian.

Beebe and Clegg describe him as a "sanctimonious gaffer", which may have been true, but they also say he cut himself in to Pete's and Pat's claim when the silver news came through, which is improbable. It is more likely it was gold that attracted his attention.

Dan de Quille, who wrote *The History of the Comstock Silver Lode & Mines*, offers a more plausible version of the tale. "The grand discovery [by Pete and Pat] had been made several hours before Comstock knew of it. Toward evening on the day the "find" was made, Comstock, who had been out hunting his mustang, came to where the two men were at work. They were taking out gold by the pound … Comstock saw the gold and realised that a great strike had been made. He instantly determined to have a share. He at once declared that he had a claim upon the ground. He said he had located it some time before … [and] so blustered about his rights and so swaggered about … that rather than have any trouble, the two quiet miners agreed to take him in and give him a share of the mine.

"No sooner had Comstock been made a partner in the mine than he placed himself at the front in everything about it. He constituted himself superintendent, did all the talking and none of the working, and was always ready to tell strangers about the mine. When visitors came it was always my mine and my everything. Thus people came to talk of Comstock's mine and Comstock's vein…"

THE NAMING OF VIRGINIA

It took a few years before the true scale of the Comstock Lode was recognised and, because of this, few if any of the first footers succeeded either in making, or at least holding on to, anything like the fabulous financial rewards that were eventually generated. Comstock himself sold out for $11,000 and, not long after, died of suicide. A little later, Pat and Pete sold out for $40,000, with the former ending up as a $40 a month cook on a sheep ranch, while the latter died in a mad house.

ONE FEATURE OF MINING ON THE COMSTOCK WAS THAT THE SILVER ORE GRADE WAS SO HIGH THAT EVEN APPARENTLY PLAYED-OUT MINES COULD BE WORTH REWORKING

Of course, $11,000 or $20,000 each were not paltry sums in the 1860s, but life as a prospector on the Comstock was hard and alcohol took its toll.

The story of James Finney who died in June 1861 serves for many, although in this case, his name is still known. A proud Virginian, Finney was commonly known as "Old Virginny" and was described, among other things as "a hard drinker when he could get the liquor, and an indifferent worker at anything".

According to Beebe and Clegg (there are other accounts), Finney is remembered for naming 'Virginia City' when, staggering back to his foxhole after "one epic Saturday night", he dropped his bottle of 'Old Reprehensible' and in fury emptied the remaining drops onto the ground while shouting, "I christen this God damned camp Virginia."

The name stuck ('City' was added by Wells Fargo a few years later to make the stagecoach stop sound grander).

Not long after, Finney sold his claim for a horse, a couple of blankets and another bottle of whiskey. It was this that did for him. After a further binge, he fell from his saddle and fatally cracked his head. The fate of the horse is unrecorded.

THE SILVER KINGS AND THE BIG BONANZA

One feature of mining on the Comstock was that the silver ore grade was so high that even apparently played-out mines could be worth reworking – that is, if anyone could take the trouble. A man who did was James Mackay, one of a quartet of Irishmen. Mackay's enthusiasm – more than ten years after the initial Comstock 'strike' – for a couple of despised and worthless properties adjacent to each other in the Comstock profile led to the most important discovery of all, which quickly came to be known as "the Big Bonanza".

Mackay and his three partners, James Flood, James Fair and William S. O'Brien, had cut their mining teeth in the California gold rush. Fair and O'Brien were 49ers, with the others appearing a year or two later. All did fairly well, and with the money they earned, Flood and O'Brien set up retail businesses in San Francisco, and when these failed in the depression of 1855, they jointly opened a successful saloon.

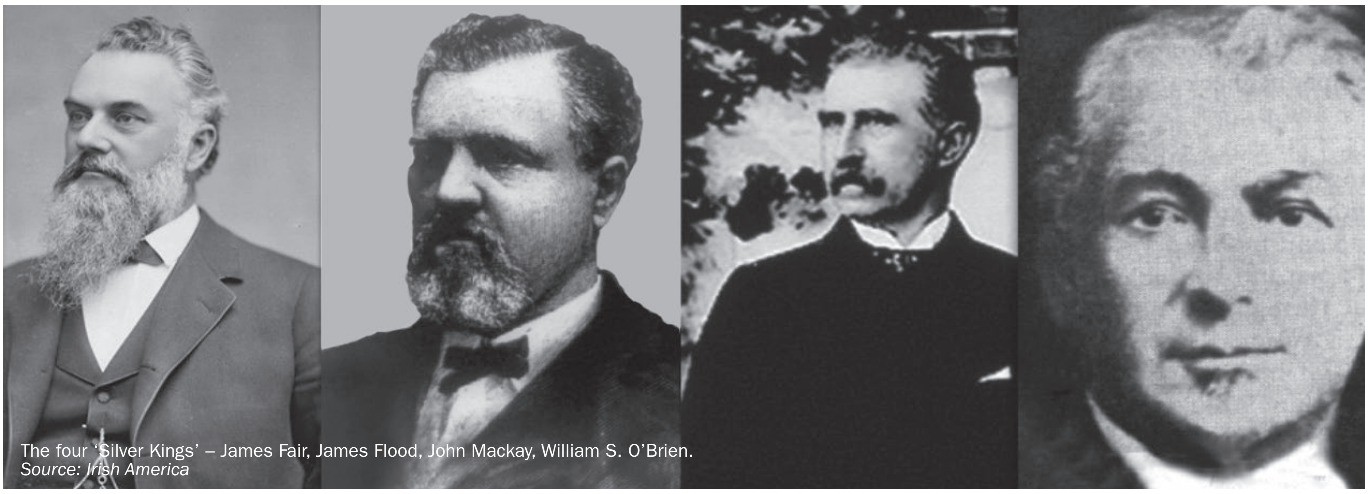
Subsequently, capitalising on Flood's uncanny ability as a stock trader, they set up a stockbrokerage, focusing on mining businesses – notably, those that launched on the back of the Comstock.

Meanwhile, Mackay and Fair moved to Nevada, where Mackay who, despite any formal education, proved to be an exceptional mining engineer, while Fair became superintendent of the most successful Comstock mine – the Ophir.

Both pairs were making good money and, in 1869, formed a partnership which, in 1872, led to the $100,000 purchase of the Consolidated Virginia mine, which was described by the agent of the Bank of California, which owned it, as "a worthless piece of property".

For several months, this estimation appeared correct. Despite spending $200,000 cutting a new, deeper tunnel into Consolidated Virginia, nothing valuable was discovered.

Eventually, however, Mackay's and Fair's work revealed a thin and delicate vein of silver ore, which required several attempts to follow but finally widened out to 10 feet.



The four 'Silver Kings' – James Fair, James Flood, John Mackay, William S. O'Brien.
Source: Irish America

At this point, the stockbroking duo back in San Francisco were instructed to buy all the Consolidated Virginia stock they could lay their hands on.

It was a good investment – at 1,500 feet down, the vein proved to be 50/60 feet wide and of the purest silver and gold anyone had encountered.

It was the breadth of this seam that required new square-set timbering structures to enable extraction without cave-ins, as well as the testing of other new mining techniques, such as the use of dynamite and pneumatic drills.

It was the scale of the 1873 find that led Consolidated Virginia shares to pay dividends of $1 million a month for the next three years (ten times the mine's original purchase price), and this in turn established Mackay, Fair, Flood and O'Brien – the four 'Silver Kings' – as the wealthiest men of their time.

By 1875, Consolidated Virginia and a second property, the California Mine, latterly purchased by the Silver Kings, were valued at more than $1 billion.

Mining share fever hit the San Francisco Stock Exchange and it is said that the city's Chinese gambling dens had to close for lack of interest! Millions of dollars were made but millions more were lost in speculative – and even fictitious – ventures.

IT WAS A GOOD INVESTMENT – AT 1,500 FEET DOWN, THE VEIN PROVED TO BE 50/60 FEET WIDE AND OF THE **PUREST SILVER & GOLD** ANYONE HAD ENCOUNTERED.

THE END OF THE SILVER STANDARD

Perhaps the most unexpected impact of the huge amount of silver produced by "the Big Bonanza" was its destabilising impact (in parallel with the Californian and Australian gold strikes) on continental European monetary policy. As a 2019 IMF Working Paper (by Johannes Wiegand) notes:

"In 1871-73, newly unified Germany [under Bismark] adopted the gold standard, replacing the silver-based currencies that had been prevalent in most German states until then.

The reform sparked a series of steps in other countries that ultimately ended global bimetallism, i.e., a near-universal fixed exchange rate system in which (mostly) France stabilised the exchange value between gold and silver currencies.

As a result, silver currencies depreciated sharply, and severe deflation ensued in the gold block.

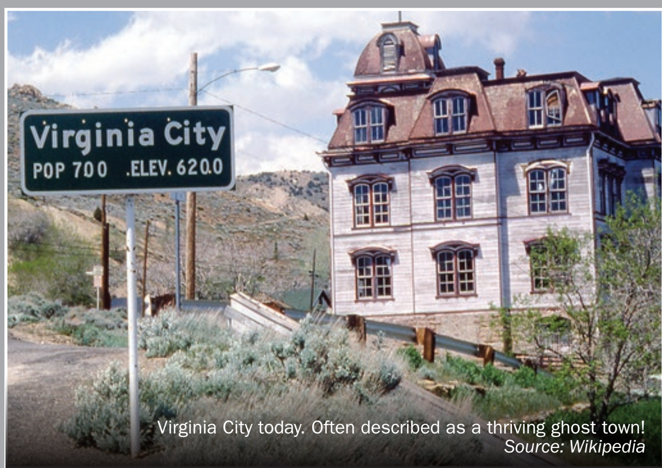
"France also suspended free silver coinage in September 1873, followed soon by the other members of the Latin Monetary Union (Belgium, Italy, and Switzerland).

This ended global bimetallism: thereafter, no one stabilized the gold-silver price ratio any longer… With bimetallism broken, several other European countries moved swiftly to gold, replacing their silver (Scandinavia, the Netherlands) and bimetallic (the other members of the Latin Monetary Union) currencies."

VIRGINIA CITY TODAY

Not many gold or silver rush towns maintained their size as the flow of precious metal gave out. That said, most are still viable communities. Potosi (the site of the silver mountain discovered by the Spanish in the 1670s) is in fact growing and today has a population of some 250,000. Nome, Alaska, the focus of an 1890s gold rush (*Alchemist 98*) numbers some 3,600 inhabitants (although the count was closer to 12,500 in 1900). Mining operations, however, still continue near both these communities.

By contrast, the last metal dug from Consolidated Virginia appeared in 1955 and, more than 60 years on, the 2020 Virginia City, Nevada census recorded 787 inhabitants, compared to an estimated 25,000 in the mid-1870s. Despite this, the place describes itself as one of the world's "most active ghost towns", with more than 70,000 visitors a year all keen to experience something of the area's fabulously wealthy but anarchic past. And there's no better place to find it than in the 'Bucket of Blood Saloon'.



Virginia City today. Often described as a thriving ghost town!
Source: Wikipedia

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.


THE ROAD BEST TRAVELED
DG METALS

Global Precious Metals Conference:

MACROECONOMIC & GEOPOLITICAL OUTLOOK PANEL SESSION

This article features extracts from the Macroeconomic and Geopolitical Outlook session at the LBMA/LPPM Global Precious Metals Conference on 18 October 2022.

The panel comprised Dr Peter Zöllner (Head of the Banking Department, Bank of International Settlements), Izabella Kaminska (Founder, The Blind Spot), Saad Rahim (Chief Economist, Trafigura) and Adrian Ash (Director of Research, BullionVault). Andrew Verity (Economics Correspondent, BBC) moderated the session, which explored current and future macroeconomic and geopolitical concerns and risks.

Andrew Verity (AV): Does the energy crisis raise geopolitical risks such as resource nationalism and subsequent disruption of key raw materials?

Adrian Ash (AA): Well, certainly for gold – and precious metals more broadly. We've already seen this with Russia and the Western response to the invasion of Ukraine. In terms of geopolitics, there's a real risk of new blocs forming, particularly between Russia and China. My sense is that Beijing is not particularly happy with Russia; this really rocks the boat.

Saad Rahim (SR): I think your point about new commodity blocs is absolutely right. It's one I've made a few times as well, because we've gone from a world where Europe and Russia were so entwined that it was hard to envision a separation. But now that train has left the station, at least as far as energy is concerned. And we have Russia, Iran, India and China ostensibly forming a new commodities bloc on the other side of the world. Sanctions are a very blunt instrument and are hard to enforce globally. Without secondary sanctions, then all you're doing is redirecting rather than reducing.

SANCTIONS ARE A VERY BLUNT INSTRUMENT AND ARE HARD TO ENFORCE GLOBALLY. WITHOUT SECONDARY SANCTIONS, THEN ALL YOU'RE DOING IS REDIRECTING RATHER THAN REDUCING.

AV: What were the high inflation indicators that we were missing, or what data should we have paid more attention to?

Izabella Kaminska (IK): The obvious consequences of lockdown policy and the fact that supply side would be constrained. Early indicators were obviously the semiconductor issues that were coming out in terms of bottlenecks. There was the difficulty in rehiring staff coming back from furlough. I think another sign was the huge engagement by people on furlough in, say, stock market trading. We had that whole phenomenon of the 'stimmy' check in the US and people riding on the highs of temporary stock market gains.

I think that was also an interesting indicator, because what goes up has to come down – and the people who did well from this windfall are now very difficult to woo back to the workforce.

In around Q3 of 2021, natural gas prices were already going up, so we had a very clear indicator then that there was something unique going on in the energy markets. I think the big blind spot at that point was the idea that Putin wouldn't take advantage of our clearly distressed supply and demand situation in Europe, because it was self-evident at that point – for reasons unconnected to Putin – that net zero had driven us to a position where we were facing a deficit.

THERE WAS NO SLACK, ALL IT WOULD TAKE WAS A SHARP BLOW TO DISRUPT. THAT BLOW WAS THE INVASION OF UKRAINE.

IF WE'RE ASKING WHY ISN'T THE GOLD PRICE HIGHER, GIVEN CURRENT GEOPOLITICAL FACTORS, I THINK WE SHOULD BE TURNING THE QUESTION ON ITS HEAD AND ASKING WHY HASN'T GOLD DUMPED ON RISING INTEREST RATES?

SR: We were missing the fact that there had been massive underinvestment across supply chains and, in particular, in commodities.

Coming into this year, at Trafigura, we were looking at the oil markets and could see that it was an incredibly fragile system. There was no slack, all it would take was a sharp blow to disrupt. That blow was the invasion of Ukraine.

AV: What was missed by central banks, because they weren't anticipating the situation to be so long lasting? They were all saying it would be transitory.

Dr Peter Zöllner (PZ): In the first few quarters after the pandemic hit in early 2020, there was quite a big consensus between central bank economists, private economists and banking economists that a likely outcome would be a sharp drop in GDP and also a fall in the inflation rate from already low inflation rates. There was a discussion about deflationary effects.

The changing point probably was about one year after the pandemic began. Nobody really knew what the next winter would bring. It's always easy to judge from three years later, and I think there was a point when some inflationary figures came out showing particular impact in the goods industry. But at that time, there were signs that the pandemic had lowered participation rates in the labour markets. Many people in the industry said that inflation would peak in early 2022.

With regards to central banks, the US Fed was expected to raise rates four times, 25 basis points, during this year.

The change came at the end of December 2021, when the Fed indicated a shift to end its asset-buying programme and that it favoured raising rates at a faster pace than expected in 2022.

AV: What has been the interaction between inflation and the gold market?

SR: Gold in particular has been an interest rate story. It struggled to perform in what should be laboratory conditions, given how much inflation and geopolitical uncertainty there is, and if it has not performed, it's because of what's happening on rates. So when I look at next year, instead of this nice curve where everyone's rate projections start to come off by the end of the year, maybe it's time to think about going higher again? And that is a world I don't think people are really thinking about.

AA: We have geopolitical stress like we haven't seen for – frankly, in my lifetime, I don't think. But what is it that's pushing against gold? Well, it's the rising interest rates.

People assume inflation is good for gold. The case for gold as an inflation hedge is intuitive. Throughout all human history, gold has been the ultimate prize. There's a natural sense everybody has that gold is a great inflation hedge – and research suggests that it is, over the very long term. But shorter term, within my lifetime? No, it's not a very good inflation hedge, because there's no actual relationship between inflation rates and the gold price. There simply isn't one.

If we're asking why isn't the gold price higher, given current geopolitical factors, I think we should be turning the question on its head and asking why hasn't gold dumped on rising interest rates?

THERE ARE CERTAIN BOTTLENECKS THIS TIME AROUND THAT INVALIDATE THAT OLD ADAGE ABOUT HIGH PRICES, BECAUSE WE'RE FACING HEADWINDS THAT ARE RELATED TO ESG AND OTHER REAL FINANCING ISSUES.

AV: The consensus is we've got bad inflation now. Is it possible that we're maybe underestimating the risk of deflation? What's the next blind spot?

IK: They say there's no better cure for high prices than high prices. Usually, there's a lot of logic to that, but I think the idea that we're facing a deflationary period has a fairly strong consensus.

Adrian Ash, Director of Research, BullionVault.

Adrian leads communications and industry insight at BullionVault, the precious-metals fintech where private investors now own $4bn of physical gold, silver, platinum and palladium. A regular speaker on LBMA webinars and a member of the Public Affairs Committee, he is frequently quoted by news, investment-trade and personal-finance outlets across the world.

Izabella Kaminska, Founder, The Blind Spot.

Izabella Kaminska is the founder and editor of The Blind Spot, a new media venture that aims to shine a light on stories being missed by the wider journalistic pack. The site focuses on finance, market and media news in both short and long-form. It hopes to deliver a healthy mix of analysis and opinion-led commentary, supported by aggregation, news reporting and deep-dives.

Izabella is a *Financial Times* alumni, where she spent 13 years in reporting roles, most recently as the editor of FT Alphaville, the Financial Times' award-winning markets and finance blog. Izabella was also an FT columnist and opinion writer focused on tech, finance and markets.

Dr Peter Zöllner, Head of Banking Department, BIS.

Peter Zöllner is a member of the Bank's Executive Committee. Previously, Mr Zöllner was a member of the Governing Board and Executive Director for Financial Market Operations at the Central Bank of the Republic of Austria (OeNB). Mr Zöllner started his career at the OeNB in the Banking Department in 1980 and was a member of the Governing Board and Executive Director from 1998. Between 1991 and 1996, Mr Zöllner was Economic Policy Adviser to the Austrian Federal Chancellor.

Saad Rahim, Chief Economist, Trafigura. Co-Portfolio Manager, Galena Multistrategy Fund.

Saad Rahim is the Chief Economist for Trafigura, one of the world's largest traders of oil, metals and other commodities. He is responsible for the company's views on markets and macroeconomics, including the outlook for Crude Oil, Oil Products and Metals markets, commodity prices, equity and credit markets, and political risk. He is also the Co-Portfolio Manager for the Galena Multistrategy Fund, a commodities-focused macro hedge fund managed under Trafigura's investment arm.

Prior to joining Trafigura, he was the Chief Economist at BG Group (now Shell), a major integrated oil and gas company, and prior to that Deputy Chief Economist at Chevron Corporation.

I think that is the markets' expectation, rather than being a blind spot, but there are certain bottlenecks this time around that invalidate that old adage about high prices, because we're facing headwinds that are related to ESG and other real financing issues – among them, the increasing politicisation of the dollar.

Dollar neutrality was the way free markets would penetrate command economy structures. Now, we're doing the exact opposite. We are basically applying capital control mentality and we are politicising the dollar, and that is going to create an opportunity for a new mutual entity financing tool – whether it's Bitcoin or gold. There is no true neutral asset. Money needs to be neutral to be able to conduct price discovery between these different political blocs. I think that's the blind spot that we are facing: how markets will adjust to the lack of a neutral financing intermediation point.

You can watch the full session on the **LBMA website**.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IN REMEMBRANCE

Celebrating the Gold Price Centenary at the Cocktail Reception on 12th September 2019, Rothschild, London.

Biennial Dinner, Goldsmiths Hall, 02 April 1992. Pictured left to right are Paul Lennie, John Fairley, Alan Baker, Keith Smith, Robert Guy, Colin Griffith, Martin Stokes and Robert Stein.

ALAN BAKER

BY JACK ALLEN AND LES EDGAR

It is with deep sadness that we announce the passing of Alan Baker. A dear friend of LBMA and the market, Alan will no doubt be missed by many.

Alan was born in 1943 in Sidcup, Kent, to parents Charles and Jean Baker. Alan's father became a publican after a career in the Navy, and his mother was a secretary at the stock exchange. Alan moved around a lot as a child due to his father's Naval career, including to Somerset and Bermondsey, London.

After completing his schooling, Alan joined Rothschild in 1964. He joined the dealing room two years later, working on the foreign exchange desk. Some eight years later, Alan moved to Sharps Pixley in 1972 as a dealer and progressed to Chief Dealer during his 21 years there. He later spent five years at Deutsche Bank, from 1993 to 1998. He was Chairman of LBMA from 1993 to 1997 and appeared on the front page of the very first *Alchemist* in June 1995.

Alan hired Jack Allen during his time at Sharps Pixley.

Jack wanted to learn more about the business and there was no better person than Alan to learn from. Alan took Jack under his wing and taught him about the intricacies of precious metals trading.

The duo later worked together again at Deutsche Bank, during which time Alan was, again, kind and encouraging.

Alan was a pioneer, especially in the world of options with his early use of PCs, and he was deeply committed to his work. Everything was taken very seriously, as witnessed by a certain famous expression when things went wrong! There was a lighter side to him too, and he enjoyed humour when the occasion arose. He was also very loyal to his team.

Alan was hugely knowledgeable and passionate about the market, as evidenced in his interview on the gold price centenary back in 2019, which you can **watch on the LBMA website**. During this interview, he reveals that he was once "a bit of a rebel" as the only dealer who did not wear a bowler hat.

An immensely proud family man, Alan married Sue in 1968. They had four children: Samantha, Carl, Natasha and Philip – and eight grandchildren.

ALAN WAS A PIONEER AND HE WAS DEEPLY COMMITTED TO HIS WORK

Alan was very able at practical matters, a keen gardener and DIY enthusiast, who could turn his hand to any project, be it carpentry, plumbing, decorating or building.

As a young man, Alan also enjoyed singing in bands and playing music. This was a passion he continued throughout his life as he was a keen bass player, regularly playing in a band to entertain care homes and other venues. He was very active in his local community, as a governor and sometime Chair of a local school.

Alan was a stalwart of the precious metals market and will be missed by all who knew him.

Rest in Peace, Alan.

Photographed with the gold fixing members, circa 1990. Pictured left to right are Dick Gazmararian, Keith Smith, Alastair Chrismas, Alan Baker and Patrick Smith.

Donations may be made to:
HOSPICE IN THE WEALD
through T W Boorman Funeral Services
https://alan-frederick-baker.muchloved.com

SPOTLIGHT ON NEW MEMBERS
SOLIT MANAGEMENT GMBH

In the first instalment of our Spotlight on New Members feature this issue, we find out more about new Affiliate Member SOLIT Management GMBH, 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?

We are keen to be recognised as one of Germany's leading precious metal dealers. LBMA membership represents an important milestone towards achieving this goal.

Trust is definitely the key benefit. Those familiar with LBMA will put more trust in us with the membership logo on our website. LBMA membership will strengthen our reputation when we expand globally, especially with new clients and business associates.

Then there are the exclusive LBMA events. The networking and the knowledge passed on at these events are worth their weight in gold. Trading 'Loco London' also means a lot.

We have long relied on LBMA gold prices to assure our clients of a fair, transparent price. By becoming LBMA members, we want to underline this assurance.

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

Our extensive portfolio strengthens our position as a leading precious metals dealer in Germany. We offer different client groups a broad spectrum of precious metals investments through our various brands. Our omnichannel service comprises a precious metals savings plan and opportunities to purchase physical gold, silver, platinum and palladium ingots and coins. We cater for everyone from small investors purchasing gold anonymously for up to €2,000, to investors putting six-figure sums or more into precious metals. We sell our products through banks, through GoldSilberShop.de, in more than 120 over-the-counter transactions throughout Germany and our two shops.

WHAT'S THE BACKGROUND AND HISTORY OF THE COMPANY?

Our company began as a typical start-up. In 2001, Tim Schieferstein founded VSP Financial Services with two schoolfriends, Thomas Hellener and Robert Vitye. Back then, the office was in Tim's granny's backyard, with just two laptops and a phone. Initially working as fund-brokers, we started concentrating on precious metals in the wake of the 2008 financial crisis. Numerous subsidiaries and brands followed. The greatest milestones include the launch of our B2C brand GoldSilberShop.de in July 2012 and the SOLIT value funds in 2017. We now employ more than 140 staff.

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

The pandemic prompted a sense of insecurity that significantly increased the demand for precious metals, something clearly reflected in our financial statements. However, the greater demand, along with the lockdown in spring 2020, meant that some clients had to wait longer than usual for their precious metals. The long-term effects remain to be seen. Whatever happens, the general population is far more aware of the advantages of precious metals investment, and this knowledge will endure.

WHAT ARE YOUR FUTURE PLANS FOR THE BUSINESS?

We want to continue our growth trajectory towards becoming Germany's leading precious metals dealer. Our international focus and exploitation of more markets will help us, with LBMA membership playing an important role.

LBMA NEWS

BY RUTH CROWELL, CEO, LBMA

Committee NEWS

LBMA has multiple vacancies on the Finance Committee

The Finance Committee is responsible for monitoring LBMA's finances, preparing the annual budget in the autumn and examining the draft accounts around March each year. To find out more about the Finance Committee vacancies, please contact **ed.blight@lbma.org.uk**.

You can find out more about our committees, including their Terms of Reference, on the LBMA website.

Committee Transparency

LBMA is now publishing updates from Committee meetings on its website Newsroom. This is one of the many ways in which LBMA is committed to transparency. These updates mean you can find out more about the work of LBMA's committees and gain an insight into the latest updates and initiatives.

Guests Explore Exhibits at Annual Dinner

LBMA's Annual Dinner took place on 7 December at the Natural History Museum, London, at which some 275

delegates enjoyed hearing from guest speakers Peter Frankopan (bestselling author and Professor of Global History at Oxford University) and Sarah John (Chief Cashier and Executive Director of Banking, Bank of England).

The remarkable setting also allowed guests to explore dozens of exhibits representing 4.5 billion years of natural history.

The dinner followed an informative and engaging seminar at Glaziers Hall, London. Around 100 attendees gathered to hear speakers including Ashok Gautam (MD & CEO, IIBX), James Steel (Chief Precious Metals Analyst, HSBC), Suki Cooper (Executive Director, Standard Chartered Bank), Wilma Swarts (Director of PGMs, Metals Focus), Ruth Crowell (CEO, LBMA) and Isabelle Strauss-Kahn (Non-Executive Director, LBMA).

Value Dates for the Festive Period

LBMA Precious Metal Prices

There will be no LBMA precious metal prices (for either gold, silver, platinum or palladium) published on Monday 26 and Tuesday 27 December, 2022 or Monday, 2 January 2023.

London Precious Metals Clearing Limited (LPMCL)

The LPMCL clearing system will be closed on Monday 26 and Tuesday 27 December, 2022 and Monday, 2 January 2023.

The latest time for LPMCL Members accepting customer clearing instructions on Friday 23 December 2022, and Friday 30th December 2022, for same day settlement will be 2:00pm GMT.

97 ACCREDITED REFINERS

We now have **97 refiners** on the Good Delivery Lists, with **64** listed for gold, **78** listed for silver and **45** refiners on both lists.

CURRENT APPLICATIONS

There are currently nine active Good Delivery applications
- five for silver, and four for gold.

MARKET MOVES

PHILORO GROUP APPOINTS ALBERT C. JOHNSTON III AS DIRECTOR OF SALES AND MARKETING

The trading company philoro Group in November appointed Albert C. Johnston, III as Director of Sales and Marketing in its office based in Manhattan, New York.

Albert was previously a physical precious metals investment broker at Monex, where he worked for some 27 years before his new appointment. philoro USA, Inc markets gold, silver, platinum and palladium bullion bars/coins to private investors and high net worth individuals.

Hiring in the New Year?

LBMA has developed a resource to share job vacancies within the precious metals industry on the LBMA website in a move to support the market and our Members.

We will share the company name, job title, submission end date and no more than 150 words about the role on a new job vacancies section within the Newsroom on our website. The listing will then link to the relevant vacancy page on the Member's website or give details of whom to contact within the relevant company.

Please contact **katherine.ernst@lbma.org.uk** if you have a current vacancy you would like to promote.

LBMA MEMBERS

We currently have **147** member companies – comprising **12** Market Making Members, **75** Full Members and **60** Affiliate Members.

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

Webinars

We hope you find our webinar programme helpful and informative.

You can catch up on all our webinars, including our most recent – 'Silver, Ever the Capricious Metal' and 'LBMA/LPPM Conference Wrap-Up: Key Topics and Themes' – on our Webinars & Videos page.

If there are any topics you would like to see a greater focus on in 2023, or if you feel as though we've missed out on something important, please send your suggestions through to **ask@lbma.org.uk**.

Upcoming webinars in January and beyond include a detailed analysis of the LBMA 2023 Precious Metals Forecast Survey, due to be published in January. What do the analysts' forecasts reveal, and what are the key drivers behind them?

In addition, LBMA and ACI FMA will host a webinar outlining how market participants can meet the training requirements of the new Global Precious Metals Code, launching in December.

Stay tuned for more information on these and other webinars yet to be announced.

TRAINING: In-Person Benefits

LBMA offers a range of CPD accredited training courses to develop your insight and understanding of the precious metals market.

After two years of virtual courses, we're pleased that we've been able to bring some of our courses back into the classroom. Recent attendees have commented that they enjoyed the lively discussion and engagement from attending in-person training, run by Emma Jenkins, commodities derivatives expert who specialises in risk management advisory, training and expert witness services in metal markets.

UPCOMING EVENTS 2022

Save the DATE!

2 MARCH 2023

LBMA Annual Party

Don't miss LBMA's next Annual Party, confirmed for Thursday, 2 March 2023. Look out for further details.

12-15 MARCH 2023

LBMA Assaying & Refining Conference 2023

Next year's Assaying and Refining Conference will take place from Sunday 12 to Wednesday 15 March, at the Natural History Museum, London. Tickets are now available.

15-17 OCTOBER 2023

LBMA/LPPM Global Precious Metals Conference 2023

Book your place now for the next LBMA/LPPM Global Precious Metals Conference in Barcelona. Join us in the cosmopolitan capital of Spain's Catalonia region for three days of high-profile speakers, fascinating panel sessions and unrivalled networking opportunities.

Training Testimonials:

"Emma delivered the content brilliantly. Clear, concise, easy to understand. Excellent use of time. Plenty of attention to answering questions. I thought the content was just the right blend on topics and weighting toward each."

"Expertly delivered – pitched at an appropriate level and very engaging."

Our next two courses will be taking place in person, in London:

- An Introduction to Loco London on February 20, 2023
- An Introduction to Responsible Sourcing on February 23, 2023.

We will also continue to offer virtual courses for those unable to travel to London.

To find out more or register for a course visit the events page on the **LBMA website**.

LBMA/LPPM GLOBAL PRECIOUS METALS CONFERENCE: WRAP-UP

More than 730 delegates joined us from across the globe in Lisbon, making it the second-most attended Conference.

We hosted 39 speakers from across the precious metals value chain and welcomed delegates from across the world. Of these delegates, 80% rated the Conference as ‘excellent’, and the remainder rated it as ‘good’.

The Conference saw the launch of two important initiatives. Delegates bore witness to the gold industry coming together, convened by LBMA and the World Gold Council, to sign a Declaration of Responsibility and Sustainability Principles. The Declaration formally expresses a shared commitment to operating in a responsible and sustainable way based on a clear set of shared goals. LBMA also announced a series of concrete steps to encourage the inclusion of gold produced by Artisanal and Small-scale Mining (ASM) into mainstream supply lines.

PRICE FORECASTS

In addition to enjoying panel sessions, keynotes, networking opportunities, and witnessing the launch of two industry-leading initiatives, delegates also predicted what precious metals prices would be at the start of the 2023 Conference in Barcelona (see table). Delegates were most bullish about the prospects of silver, predicting a 52.19% increase in price.

	Forecast as at 16 October 2023	Latest price at time of forecast (17 October 2022)
Gold	$1,830.5	$1,664.75
Silver	$28.3	$18.595
Platinum	$1,238.7	$920.00
Palladium	$2,058.8	$2,031.00

INTERVIEWS AND FOOTAGE NOW AVAILABLE

Video footage from the Conference is now available to view on the LBMA website, including welcome remarks and the sessions themselves.

You can also find some ‘behind the scenes’ interviews with speakers including Belinda Ellington, Diana Culillas, Peter Boyd, Terry Hanlon and Praveen Baijnath. And don’t miss Ross Norman (CEO, Metals Daily) interviewing John Reade, David Jollie and Sunil Kashyap, videos of which are also available on the **LBMA website**.

Not only does the events section on the LBMA website include video and presentation slides from the most recent Conference, but it also includes supporting materials relating to Conferences dating back to 2005.

Sad it’s over? **Registration is now open** for next year’s Conference in Barcelona, 15-17 October 2023.

See you there!


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The Actual Box and Lead Shot from the First Great Train Robbery. Image Credit: © National Railway Museum, York, The Board of Trustees of the Science Museum released under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 Licence

CURATOR'S CORNER

BY STEWART MURRAY, LBMA CONSULTANT

THE FIRST GREAT TRAIN ROBBERY

Most people in the UK will have heard the phrase "The Great Train Robbery" and those of a certain age will remember the dramatic story of how, in the early hours of 8 August 1963, a 16-strong gang managed to stop the Glasgow-to-London Royal Mail train and steal from it £2.6 million in banknotes (equivalent to £59 million today).

But this was not the first successful heist from a train in the UK. More than a century earlier, on the evening of 15 May 1855, a much smaller gang succeeded in removing some 91kg of gold bars and coins from the London-to-Folkestone mail train. The gold was one of the regular shipments destined for Paris and, in part, for Crimea to pay the wages of British troops fighting with their French and Turkish allies against the Russians. The value of the haul was around £12,000 at the time (or just over £4 million at current prices).

Apart from the obvious similarities between these two audacious robberies (the removal of valuables from a mail train and the meticulous planning that preceded the crimes), they had little in common.

THE PERPETRATORS HAD SAFELY RETURNED TO LONDON WITH THEIR SPOILS LONG BEFORE THE CRIME WAS DISCOVERED WHEN THE BULLION BOXES WERE OPENED IN PARIS

The 1963 robbery involved hijacking the train and a certain amount of physical violence, whilst the execution of the earlier theft was much more subtle: there was no violence and the perpetrators had safely returned to London with their spoils long before the crime was discovered when the bullion boxes were opened in Paris.

In 1975, Michael Crichton's heavily fictionalised account of the 1855 robbery was published and this was followed by the film based on the book, which he directed in 1978. Neither of these attempted to give a true account of the planning, execution and aftermath of the actual crime. For this, we had to wait until 2011 when David Hanrahan's book *The First Great Train Robbery* was published.

FACT OR FICTION?

In his book and film, Crichton's two main perpetrators had similar names to the actual criminals. He depicted the real 'brains' behind the conspiracy as 'Edward Pierce', a career criminal who has managed to pass himself off as a successful businessman and who moves around easily in the ranks of high society. The real originator of the plot was a William Pierce, a career criminal who was employed in the ticket printing office of the South Eastern Railway Company. It was through this 'day job' that he learnt about the gold shipments and conceived the plan to "feloniously abstract" (as the Company's announcement of a reward had it) the bullion from the train as it travelled from London Bridge to Folkestone.

Pierce's chosen co-conspirator was Edward Agar, a highly skilled forger and safe-cracker, whose expertise with keys and locks would be essential to the success of the venture. This was because the wooden bullion boxes were inserted into state-of-the-art portable iron safes, which were then loaded into the guard's van in London. The boxes were removed from the safes in Folkestone before being transferred to the Boulogne steamer. Central to the plan (both actual and fictionalised) was the need to obtain copies of the keys to these safes.

From here on, the actual and fictional crimes diverge significantly. In reality, Pierce succeeded in corrupting two employees of the Railway Company, William Tester, a clerk who 'borrowed' one of the safe keys, allowing Agar to make a wax impression of it, and James Burgess, who was the chief guard on the mail train. Once the duplicate keys had been made, Burgess's role would be to allow Agar to hide in a corner of the guard's van from which he would emerge during the journey, armed with the keys and tools, to open the safes and empty the bullion boxes.

By May 1855, all was ready, and once Pierce had established that a suitably large consignment would be shipped on the 7:30 pm train on the 15th, the plan was put into action. Everything worked perfectly. Agar replaced the gold with bags of lead shot of approximately equal weight and resealed the boxes before replacing them in the safes. The boxes were removed from the safes by company officials in Folkestone and transferred to the harbour office to await the arrival of the Boulogne steamer. Agar and Pierce (the latter travelling as a passenger) stayed on the train until its final destination of Dover, from where they caught the 2 am train to London, carrying the gold under their cloaks in specially made carpet bags.

PIERCE'S CHOSEN CO-CONSPIRATOR WAS EDWARD AGAR, A HIGHLY SKILLED FORGER AND SAFE-CRACKER, WHOSE EXPERTISE WITH KEYS AND LOCKS WOULD BE ESSENTIAL TO THE SUCCESS OF THE VENTURE.

After the crime was discovered, neither the police nor the Railway Company had any success in identifying what had happened or who was responsible.

The French and English authorities blamed each other for allowing the theft and the Railway Company persuaded itself that the gold must have been stolen in Folkestone rather than from the train. A year later, the members of the gang were increasingly confident that their involvement would never be established by the police.

Above: Agar under examination at the Old Bailey, during the trial of Pierce, Burgess and Tester
Source: Wikipedia.

However, they had not managed to launder most of the gold, in spite of the heroic efforts of Pierce and Agar in setting up what was in effect a small foundry to convert the large bars into small bars which could more easily be disposed of or exchanged for notes or sovereigns. Most of the stolen gold was still in its original form.

DISASTROUS CONSEQUENCES

However, Agar's past had caught up with him. In the autumn of 1855, he was arrested for forgery and on conviction in October, he was found guilty and sentenced to transportation to Australia for life. But he was not suspected of any connection with the train robbery and might well have taken this secret to the grave.

The reason he did not was Pierce's mistreatment of Agar's paramour, Fanny Kay, the mother of Agar's illegitimate son Edward. Following his imprisonment and awaiting transportation, Agar had trusted Pierce to look after Fanny and his son financially.

This, Pierce signally failed to do, leading to two consequences that would be disastrous for the gang. First of all, Fanny went to the authorities and told them that she knew who had committed the train robbery.

Secondly, on hearing about Pierce's mistreatment of Fanny, Agar decided to tell all.

Pierce, Burgess and Tester were all arrested and at their trial at the Central Criminal Court in January 1857, Agar was the star witness. Without his evidence, the other three might well have escaped conviction.

But with it, Burgess and Tester were sentenced to transportation for 14 years. Their crime was Larceny as Servants, for which the law allowed such a heavy punishment. But Pierce, in spite of being the instigator of the crime, was judged to be guilty of simple Larceny (as he had left the employment of the Railway Company before the crime had been committed). As a result, the judge was, to his obvious regret, only able to impose on him a maximum sentence of two years with hard labour. He clearly considered Pierce the basest of the villains, not so much for organising the crime as for his treatment of Fanny and her child.

By contrast, the judge obviously had a sneaking admiration for Agar, describing his many talents, which had they been applied to honest, rather than criminal endeavours, would have undoubtedly led to a successful career. Many people, possibly including the judge, felt that Agar should receive some remission of his sentence or even a conditional pardon as a reward for his evidence. But this was not to be. In September 1857, he was transported to Australia.

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

SPOTLIGHT ON NEW MEMBERS

CANADIAN IMPERIAL BANK OF COMMERCE

Find out more about new Full Member, the Canadian Imperial Bank of Commerce (CIBC), in the second Spotlight this issue.

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?

CIBC has been active in the metals market for many years, with a primary focus on our mining franchise. Recently, we have expanded our metals offering by becoming more active in physical markets and inventory finance. CIBC is excited to actively work with other members in the bullion community to further LBMA's goals in promoting a robust and fair market with a focus on responsible sourcing.

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

CIBC provides a full suite of precious metals products, including derivatives, and physical and inventory financing solutions to commercial, corporate, institutional and high-net-worth individuals.

Being involved in the complete value chain of the precious metals life cycle and with extensive expertise in the market, we offer our clients unique solutions, thereby enabling them to focus on their core business.

WHAT'S THE BACKGROUND AND HISTORY OF THE COMPANY?

CIBC is a relationship-oriented bank for a modern world, committed to creating enduring value for our clients, team and communities as we activate our resources to build a more secure, equitable and sustainable future. Our ability to create value for all CIBC stakeholders is driven by a business culture based on common values: trust, teamwork and accountability. What sets us apart is how we connect as one team aligned to our common purpose – making ambitions real.

In 2017, CIBC acquired Private Bancorp, a commercial bank headquartered in Chicago. Now branded CIBC Bank USA, its comprehensive services for mid-market institutions include asset backed lending, equipment finance, treasury management, commercial real estate, private wealth management and now metals financing. This provides a leading, full service offering for clients involved in the metals industry.

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

The COVID-19 pandemic along with international conflicts have created significant disruptions to the global metals supply chain. CIBC works closely with its clients to navigate these challenges through its growing global network, ensuring they have the support needed as their priorities evolve.

WHAT ARE YOUR FUTURE PLANS FOR THE BUSINESS?

We will continue to deliver strong growth across our business through the execution of a client-focused strategy. Across CIBC, our highly connected and purpose-driven team will continue to move our bank forward as we create positive change and help make ambitions a reality.


Size and scale
Trusted by the gold and silver mining industry for more than 120 years, The Perth Mint is Australia's most reliable refinery. Offering unmatched size and scale, and committed to responsible sourcing and production, we continue to redefine the refining process.
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FACING FACTS

GOLD BULLION COIN DEMAND IN 2022 SET TO REACH 35-YEAR HIGH

BY SHREA PAUL, SENIOR RESEARCH ANALYST, PRECIOUS METALS RESEARCH, REFINITIV METALS TEAM

Lower gold prices and high economic uncertainty prompted investors to flock to gold coins as a hedge in the third quarter of 2022. Our survey of six major mints showed that international bullion gold coin sales rose substantially in the period and were up by a significant 21% year-on-year to 48 tonnes.

In the nine months to September, coins sales rose to 155 tonnes, which was up 10% from the corresponding period of the previous year. If coin demand growth remains resilient in Q4, this year will overtake 2021 as the best year for coin sales since our records began in 1987. Sales in value terms increased by 17% to nearly $2.7 billion in Q3. This was despite a 3% year-on-year fall in the average dollar gold price.

REGIONAL ANALYSIS

On a geographical basis, all regions barring Africa registered an increase in the third quarter. North America, with a market share of 50%, remained the largest market for coins, followed by Europe. Additionally, appetite for the yellow metal in Japan picked up after declining for four consecutive quarters.

Sales in North America hit 24 tonnes, registering a 19% increase from the same period last year. The share of the North American market, however, slipped to 50% from 51% in the corresponding period of 2021. This was partly due to an increase in Europe's market share. Aggressively hawkish monetary measures by the US Federal Reserve managed to put a pause on sky-high inflation, but not enough to halt the market volatility stemming from investors' fears. While equities and other risky assets were sold off, retail investors flocked to buy gold coins as an 'inflation hedge'.

In the second-largest market, Europe, coin sales rose by 29% to 21 tonnes. The share of Europe, meanwhile, rose to 44%, from 42% in the corresponding period of last year.

Concerns about higher inflation as central banks hike rates to bring it under control underpinned retail investment.

Also, the dwindling health of the global economy amidst geopolitical concerns stemming from the protracted Russia-Ukraine war has nudged investors towards coins.

Meanwhile, sales in Africa continued to fall in Q3, and were down 67% in the reporting quarter to 0.6 tonnes. Sales rose, however, by 87% in the 'Other' region.

Elsewhere, sales in Japan increased by 75% to 0.7 tonnes in Q3, representing just 1% of the global coin market. Coin sales in our 'Other Asia' region also registered an increase and were up by 37% in Q3.

If coin demand growth remains resilient in Q4 this year will overtake 2021 **as the best year for coin sales since our records began in 1987**

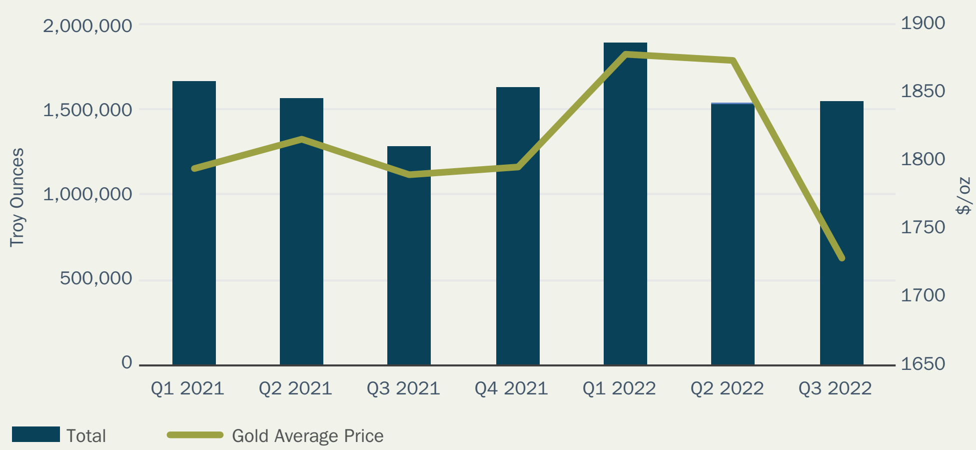
Demand improved across Southeast Asian countries as a decline in prices for gold made it an attractive purchase. The largest consumer, China, also saw an improvement in demand for coins due to the release of pent-up demand following the easing of COVID-related restrictions, while the prices were also attractive to investors. Indian investors also took advantage of the lower prices. Customers booked gold coins in advance for the upcoming festival season.

Shrea Paul, Senior Research Analyst, Precious Metals Research, Refinitiv Metals Team. Based in Mumbai, Shrea is responsible for precious metals research for Europe, Indian Sub-continent as well as Americas. She has a Master's degree in Journalism and did her bachelor's in Engineering.

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.

QUARTERLY GOLD COIN SALES



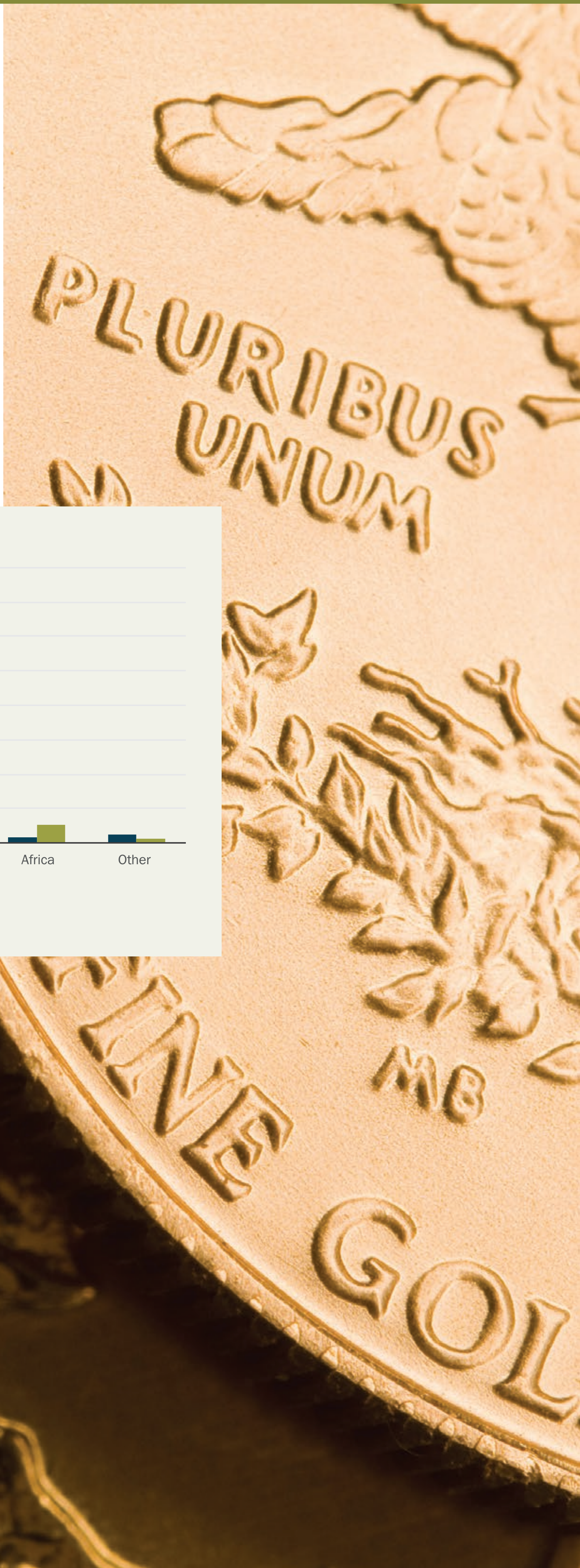
Source: Respective Mints, Refinitiv Eikon, LBMA

OUTLOOK

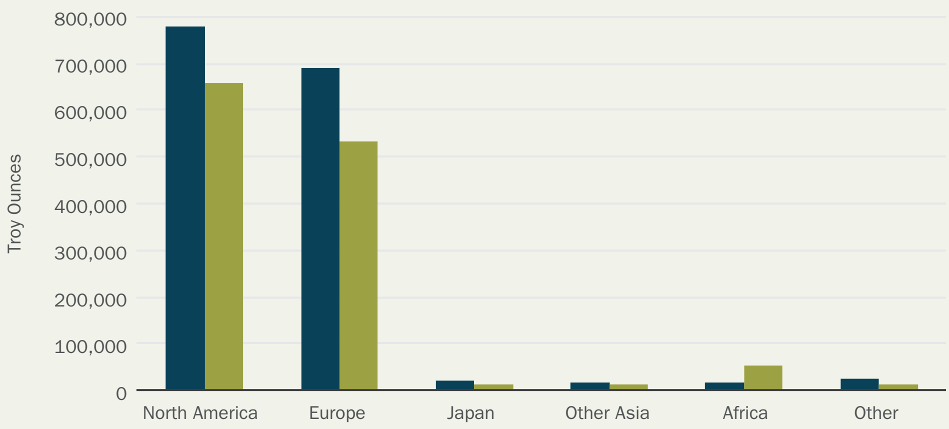
With the latest data hinting that US Inflation may have peaked, there were hopes that the US Federal Reserve might slow the pace of its aggressive monetary policy tightening. At the last meeting in November, the central bank raised rates by 75 basis points, making it the fourth consecutive hike of this magnitude. However, inflation remains far above the Fed's target and feedback has signified that more increases are needed until there is a substantial impact on inflation.

ONE THING IS CERTAIN HIGH INTEREST RATES ARE HERE TO STAY AND GOLD TYPICALLY DOES NOT PERFORM WELL IN A HIGH-INTEREST RATE ENVIRONMENT

One thing is certain, high interest rates are here to stay and gold typically does not perform well in a high-interest rate environment. Positive returns in the yield curve will continue to put pressure on gold for the remainder of the year. However, that said, there is continued economic uncertainty globally, sky-high inflation and year-on-year falls in gold prices such that the aforementioned factors may continue to support coin demand in the last quarter.



GOLD COIN SALES BY REGION



■ Q3 2022 ■ Q3 2021

Source: Respective Mints, Refinitiv Eikon

GOLD AND THE WORLD CUP

BY FEDERICO GAY, SENIOR ANALYST, REFINITIV METALS TEAM

APPROXIMATE MELT VALUES OF SELECTED FOOTBALL TROPHIES

FIFA WORLD CUP	UEFA EUROPA LEAGUE	UEFA CHAMPIONS LEAGUE
• 18 Carat Gold • 6.17kg • $250,000	• Sterling Silver • 15kg • $12,210	• Sterling Silver • 7.5kg • $2,500

Source: Refinitiv

The 2022 FIFA World Cup kicked off in November in Qatar. In this Facing Facts, Refinitiv Metals Research analyses the 18-carat gold trophy's value in material terms, based on data available through Eikon.

THE FIFA WORLD CUP TROPHY IS MADE OF 6.175 KG OF 18-CARAT GOLD, WHICH MEANS IT CONTAINS 4.93 KG OF PURE GOLD.

According to FIFA, over 3.5 billion people watched the last World Cup, held in Russia in 2018. The final match between France and Croatia attracted over a billion viewers, making the trophy one of the most prestigious prizes in the sporting world.

This year's competition began on 20 November, when host nation Qatar played Ecuador, and excitement is set to continue growing throughout the tournament. This World Cup is the first winter tournament and is being hosted for the first time in a Middle Eastern country.

The final match on 18 December will see the winning team lift the cup that is considered priceless by many. The FIFA World Cup trophy is made of 6.175 kg of 18-carat gold, which means it contains 4.93 kg of pure gold.

At recent prices, the gold content of the trophy has a value of around $260,000, appreciating over 1,350% since its creation, when its value is estimated to have been around $18,500.

Since the last tournament, its value has also increased by around $80,000, as gold prices have risen considerably over the period, due to the trade war between China and the United States in 2019 and uncertainty in 2020 caused by the pandemic. Although the gloomy economic environment this year has weighed on gold, price levels remain high compared with the period between 2012 and 2018.

OTHER TROPHIES

While the Champions League is the most prestigious competition in European club football, its trophy in fact is worth less than the second-tier Europa League trophy. In fact, last year's Champions League winners Real Madrid brought home the sterling silver trophy with a melt value $4,600 lower than the Europa League trophy.

The current iteration of "Ol' Big Ears" or "La Orejona" (the nickname for the Champions League trophy) has been in use since 2006. At that time, the melt value was worth even less, at $2,785.

GOLD PRICE: 1974 TO 2022

While the CHAMPIONS LEAGUE is the most prestigious competition in European club football, its trophy in fact is worth less than the second-tier Europa League trophy.

The gold and semi-precious malachite cup has an estimated value of over $20 million, but to mark the launch of the 'Qatar World Cup 2022' Eikon App, the Refinitiv Metals Research team has estimated its melted value back to the first time this particular cup was awarded in 1974.

In contrast, the Europa League trophy is the heaviest of the UEFA trophies, weighing in at an impressive 15kg of sterling silver. However, silver price fluctuations have meant that in the last decade, the melt value of this cup has varied considerably. See the comparison above.

SILVER PRICE HAD A WILD RIDE DURING THE LAST TWO DECADES

If there is one word to describe silver's price behaviour during the last two decades, surely 'volatile' must be shortlisted. For example, prices dropped by nearly 30% in only three months after touching an all-time high of around $48/oz in April 2011. This high gave the UEFA Europa League trophy a melt value of a whopping $21,000. Silver has had sharp price swings in both directions and, at the start of the pandemic, for example, prices increased 242% in just five months.

The gold and silver ratio shows recent sizeable fluctuations. After the silver price drop during mid-March 2020, the ratio peaked at 128 (meaning 128 ounces of silver equals one ounce of gold in price terms), surpassing the previous all-time-high of 99 at the beginning of the Second World War and the peak during the First Gulf War in 1991, when the value reached 91.

APPROXIMATE MELT VALUES OF OTHER VALUABLE TROPHIES IN SPORT

BORG-WARNER TROPHY
(Indy 500 - Car Racing)
- Sterling Silver
- 49.8kg
- $40,537

WOODLAWN VASE
(Preakness Stakes - Horse Riding)
- Sterling Silver
- 13.1kg
- $10,663

VINCE LOMBARDI TROPHY
(Super Bowl Champions - American Football)
- Sterling Silver
- 3kg
- $2,442

Source: Refinitiv

IF THERE IS ONE WORD TO DESCRIBE SILVER'S PRICE BEHAVIOUR DURING THE LAST TWO DECADES, SURELY 'VOLATILE' MUST BE SHORTLISTED.

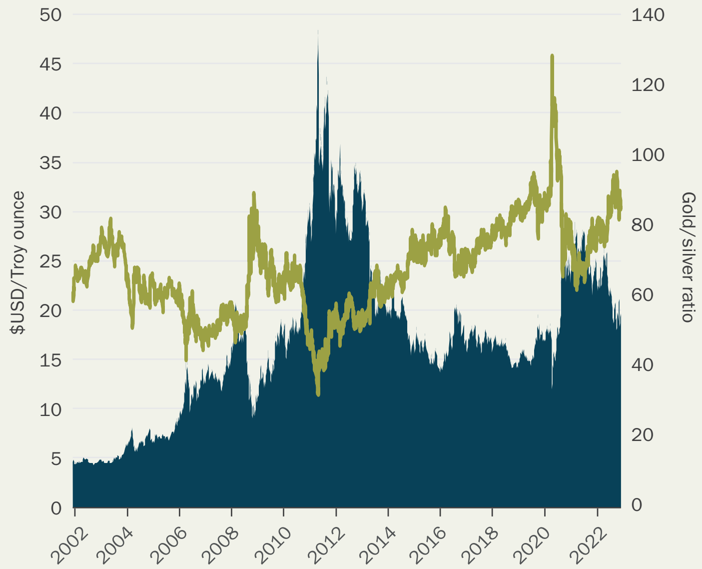
AMERICAN SPORTS TROPHIES

At 1.62m high and made from sterling silver, the Borg-Warner Trophy is the top prize for Indianapolis 500 car racing. It is made from 69 kg pure silver sterling, with a melt value of over $40,537. It is also one of the largest (and heaviest) across all sporting competitions.

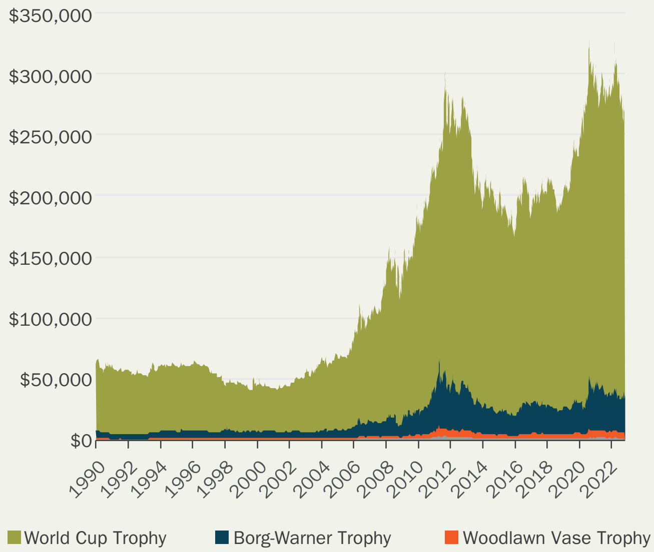
The Woodlawn Vase, which is awarded to the winning owner of the Preakness stakes at Pimlico Racecourse, is made of solid sterling silver, weighs over 11 kg and has a melt value of over $10,633.

However, more internationally recognisable is the Vince Lombardi Trophy, which is awarded to the NFL Super Bowl winners. Produced by Tiffany & Co., it uses 3.2 kg of solid sterling silver, equating to around $2,442 in value. This trophy is given outright to the Super Bowl's winning team and reproduced every year.

SILVER PRICE VS GOLD/SILVER RATIO



HIGHEST MELT-VALUE SPORT TROPHIES



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