Crucible

ISSUE 24 | December 2022

By Singapore Bullion Market Association
MCI (P) 059/01/2022

SBMA OUTREACH EXTENDS TO VIETNAM, INDONESIA

By SBMA

SBV's Dao Xuan Tuan delivering his keynote speech at the Hanoi Market Forum.

The Hanoi Forum was first proposed back in 2016, but due to unforeseen circumstances, it was postponed twice and was further delayed due to the COVID-19 pandemic.

With the changes in the market conditions and easing of travel restrictions, SBMA jointly co-organised the Hanoi Market Forum with the Vietnam Gold Traders Association (VGTA) on 14-15 November 2022. The forum, supported by the World Gold Council, attracted over 80 delegates from Vietnam, Singapore, Hong Kong, Malaysia, Thailand and Australia with almost half comprising SBMA members and business associates.

Vietnam, with its growing economy, is an important gold market in ASEAN. In organising the Hanoi Market Forum, SBMA saw an opportunity for our members to meet and network with the country's key industry players and to take part in shaping next phase of development for Vietnam's gold jewellery industry. This also provided the State Bank of Vietnam with a platform for open dialogue to receive feedback from SBMA members and an opportunity for the expert panellists to provide suggestions to the State Bank of Vietnam (SBV) during their presentations and panel discussions.

The objectives of the Hanoi Market Forum are multifold:

1. To request the SBV to consider granting gold raw material import quotas.
2. To request the SBV to consider re-authorizing the local commercial banks to provide gold loans/credits to gold jewellery manufacturers.
3. To request the SBV to consider easing on the monopoly of tael bars in terms of production and distribution in order to allow investors to acquire investment gold bars in line with international gold price.
4. To request the SBV to consider setting up a National Gold Exchange under the management and supervision of SBV.

Besides Dao Xuan Tuan, director-general of SBV's Foreign Exchange department, who provided the forum's keynote speech, speakers and panellists of the Hanoi Market Forum included:

- Nguyen Thanh Long, chairman, VGTA
- Andrew Naylor, regional CEO, World Gold Council APAC
- Albert Cheng, CEO, SBMA
- Dinh Nho Bang, general secretary, VGTA
- Huynh Trung Khanh, deputy chairman, VGTA
- Nguyen Thi Huong, deputy CEO, DOJI Jewelry Group
- Le Tri Thong, CEO, PNJ
- Le Thuy Hang, CEO, SJC
- Prida Tiasuwan, chairman, Pranda
- Ng Yih Ping, CEO, Tomei
- Jonathan Prayoga, CEO, SKK Jewelry

In his closing remarks, SBV's Tuan, said the panellists' inputs and insights would be taken into consideration and urged the VGTA to play an active role in coordinating the suggestions and feedback received during the forum. He added that all related stakeholders and relevant government authorities need to work together and should not rely solely on SBV as all these changes and requests need to come from all the stakeholders involved in both domestic and international trade.

The SBMA will work closely with VGTA and all other stakeholders and will update our members of any future developments.

"The experience in the development of the ASEAN Gold Markets" panellists (L to R): Albert Cheng (SBMA), Prida Tiasuwan (Pranda Group), Chirag Sheth (Metals Focus), Jonathan Prayoga (SKK Group), Le Tri Thong (Phu Nhuan Jewelry).

> " SBMA's delegation had a very successful and fruitful bullion market forum with our Vietnam counterparts in Hanoi this time; and will certainly continue engaging with our working partners in the ASEAN region."
>
> – **KL YAP**
> *General Manager, Metalor Technologies Singapore*
>
> " The State Bank is thinking strategically about how to grow the jewellery fabrication sector in Vietnam and how to grow an export-processing hub for Vietnam. That's impressive. Additionally, it was good to see so many ambitious and fast-growing enterprises in Vietnam with gold jewellery operations at their core."
>
> – **NICHOLAS FRAPPELL**
> *Global Head of Institutional Markets, ABC Refinery*

DIALOGUE WITH RELATED MINISTRIES ON SETTING UP OF BULLION BANK IN INDONESIA

A high-level SBMA delegation comprising members of the Management Committee, headed by CEO Albert Cheng, took part in a three-day visit to Indonesia with the Coordinating Ministry of Economic Affairs (CMEA), Ministry of Finance, Bank Indonesia, Financial Services Authority (OJK), and key stakeholders from Indonesia's bullion industry from 28-30 November 2022.

The visit was coordinated with the assistance from the CMEA. At the kick-off meeting, discussions were held on the proposed banking policy, upcoming changes to support the Indonesian gold market and plans/timeline on the establishment of bullion banks. Ferry Irawan, assistant deputy for monetary and external sector, highlighted that the government is proposing to include bullion business activities as part of the Omnibus Law – a structural reform to attract foreign investment, strengthen Indonesia's economy, increase the ease of doing business and create new jobs. He further elaborated on the country's bullion bank implementation roadmap, in which the non-bank financial institution and state-owned enterprise PT Pegadaian has been earmarked for the pilot.

SBMA members also presented their companies and business activities and showcased how they can participate and engage with relevant Indonesian counterparties in setting up the proposed bullion banks and/or help to improve the overall bullion ecosystem.

A group photo in Indonesia after the kick-off meeting on Day 1.

On the second day, members of the SBMA delegation were also invited to meet with Dr Adi Budiarso, FCPA Financial Sector Policy Center, Fiscal Policy Agency, MoF Indonesia. During the discussions, Dr Adi said Indonesia would develop a bullion market that will be beneficial to both domestic and global market. The bullion bank implementation needs to start with a pilot project (with a non-bank financial institution), then in the future, Indonesia can have a full bullion bank. He added that OJK needs to prepare a bullion bank supervision mechanism and all relevant parties should prepare a gold trading mechanism, and he looked forward to participation/ inputs from SBMA members.

Individual presentations and discussions on possible collaborations, research, and partnerships were also held with the following companies:

- Bank Rakyat Indonesia (BRI)
- Bank Rakyat Indonesia Danareksa Sekuritas (BRIDS)
- PT Pegadaian Indonesia
- PT Aneka Tambang

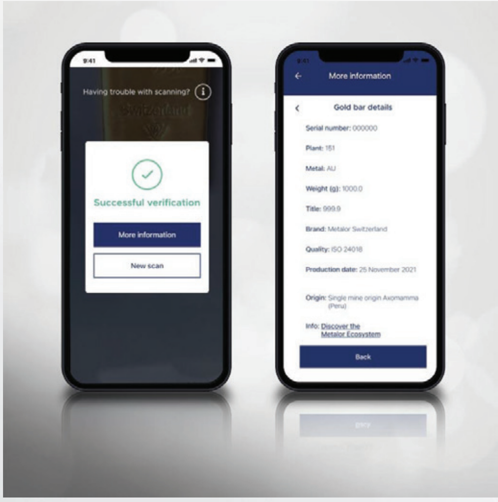
In rounding up the visits, the SBMA delegation had the honour of meeting Iskandar Simorangkir, deputy minister of macroeconomic and finance coordination, CMEA, over a casual dinner hosted by the World Gold Council, where he conveyed the seriousness of the establishment of the Indonesia bullion bank. SBMA is looking forward to be a part of the country's journey in building its bullion ecosystem.

At the dinner table with Iskandar Simorangkir, deputy minister of macroeconomic and finance coordination, CMEA.

We have invited the key stakeholders in Indonesia to visit Singapore early next year and SBMA will help to organise and coordinate their visits with interested parties.

METALOR CHECK IOS APPLICATION

METALOR®



METALOR CHECK IOS APPLICATION

Metalor Check is an application for iOS devices only which allows bar owners to not only readily **authenticate a Metalor gold kilobar**, but also **get detailed information** on it – including production date and location, purity and specifications.

Furthermore, for bars made by segregated refining, information on the origin of the gold are also displayed – this includes bars from single mines or from specific areas, as well as bars issued from recycling. This application is hence fully integrated in the Metalor Ecosystem.

DOWNLOAD & INSTALL

This application is entirely free.

Furthermore, Metalor respects your privacy! No picture of the bar is neither taken nor sent to us, and no personal information is shared with us when you download or use this application.

To download it, go to Apple Store from your device (https://apps.apple.com/us/app/metalor-check/id1596743511) or use the QR-code provided.

Metalor Check
by Metalor Technologies SA

DOWNLOAD NOW AND VERIFY THE MOST SECURED GOLD BARS ON THE MARKET!

TEST & ADOPT

Test is for yourself!

If you do not have a Metalor kilobar under your hands, you can use the bar test picture on the left.

For questions or issues regarding the use of Metalor Check application, please contact:
nbd@metalor.com

HOT TOPICS UNDER THE MICROSCOPE AT LBMA/LPPM GLOBAL PRECIOUS METALS CONFERENCE

By SHELLY FORD, ***Digital Content Manager & Editor of the Alchemist, LBMA***

The BBC's Andrew Verity moderates Session 2: Macroeconomic and Geopolitical Outlook.

Inflation, stagflation, polarisation, deglobalisation, the US dollar, recession, silver and ASM were among the hot topics discussed at the LBMA/LPPM Global Precious Metals Conference in October.

More than 700 delegates from around the world assembled to hear expert panellists and keynote speakers. After welcome speeches from Dr Paul Fisher (chairman, LBMA), Ruth Crowell (chief executive, LBMA), and John Cullen (chairman, LPPM and director, Johnson Matthey Plc), Hélder Rosalina (head of board, Banco de Portugal) spoke about the role of central banks and gold as an inflation hedge. Hélder said: "Gold offers attractive returns in good times, protects the portfolio from losses in turbulent times, and offers protection against inflation in the long term".

The Blind Spot's Izabella Kaminska discussed how unbalanced coverage in the mainstream media has led to a groupthink problem, which, in turn, has resulted in a deep trust issue. Later, Dr Peter Zöllner (head of banking department, Bank for International Settlements - BIS) discussed the macroeconomy, central banks and gold, the dichotomy between the United States and Europe, and how stagflation risks loom large.

The Macroeconomic and Geopolitical Outlook session brought delegates the latest insights into the headwinds impacting the global economy. Moderator Andrew Verity (economics correspondent, BBC) asked the expert panel whether, given we have the highest inflation in 40 years and rising interest rates, gold has become more or less attractive?

> **"THE SECOND DAY OF THE CONFERENCE SAW THE GOLD INDUSTRY COME TOGETHER, CONVENED BY LBMA AND WORLD GOLD COUNCIL, TO SIGN A DECLARATION OF RESPONSIBILITY AND SUSTAINABILITY PRINCIPLES.**

The Future of PGMs session explored the demand for platinum group metals in areas including next-generation semiconductor technology, and precious metal catalysts for the conversion of sustainable feedstocks. The following investment session examined the current outlook and trading challenges, moderated by John Reade (chief market strategist, World Gold Council).

DECLARATION OF RESPONSIBILITY AND SUSTAINABILITY PRINCIPLES

The second day of the conference saw the gold industry come together, convened by LBMA and 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. Ruth Crowell (chief executive, LBMA) said: "We operate in a very complex and global

Signatories came together in person and virtually to sign the Declaration of Responsibility and Sustainability Principles.

industry. But we have been able to come together to define a shared pathway of progress when it comes to sustainability, human rights, the UN Sustainable Delivery Goals and climate change. This is a special moment".

The session on ASM demand included an update on LBMA's strategic objectives relating to LBMA's ESG goals. Sakhila Mirza (general counsel and executive board director, LBMA) called for more volunteers to join the ASM Task Force. On boosting ASM inclusion into mainstream supply lines, Diana Culillas (secretary general, Swiss Better Gold Association) said: "There needs to be a premium on ASM gold, and producers should be offered incentives to offset those costs".

> **"TERRY HANLON (PRESIDENT, DILLON GAGE) SPOKE ABOUT THE FLOW AND DEMAND OF GLOBAL PHYSICAL AND INVESTMENT PRODUCTS, AND HOW RECENT EVENTS HAVE "KEPT EVERYBODY NIMBLE".**

In the global flows and physical demand session, Mark Woolley (SVP Europe, Brink's Global Services) explained global logistics challenges concerning sea and air freight in the context of recent geopolitical factors, and how this impacted supply, demand, and flows. Terry Hanlon (president, Dillon Gage) spoke about the flow and demand of global physical and investment products, and how recent events have "kept everybody nimble".

The wrap-up session with James Steel (chief precious metals analyst, HSBC Securities USA) and Suki Cooper (executive director, precious metals research, Standard Chartered) offered a summary of the conference sessions and discussed their key takeaways. Graham Jelf (compliance officer, LBMA) then held a Regulatory Workshop to discuss compliance, the Global Precious Metals Code, and REACH.

Ruth Crowell handed out prizes sponsored by MKS PAMP for the scavenger hunt winners, and most active participant on the conference app. Mark Woolley was voted best speaker, and received a 1 oz Gold Maple Leaf bullion coin from the Royal Canadian Mint.

FIND OUT MORE

If you'd like to find out more, you can watch a webinar, held on 27 October, dedicated to key takeaways and highlights from the conference, hosted by Rhona O'Connell (head of market analysis, EMEA and Asia, StoneX Financial), James Steel and Suki Cooper, available at www.lbma.org.uk/webinars.

Registration is now open for the next LBMA/LPPM Global Precious Metals Conference, which will take place in Barcelona, Spain, 15–17 October 2023. Find out more and book your ticket at www.lbma.org.uk/events.

SHELLY FORD is the digital content manager and editor of the Alchemist, LBMA. She supports the head of communications to create and develop content across digital channels that engages the LBMA's key stakeholders and supports the organisation's vision and objectives. Shelly brings a wealth of content creation, strategy, and campaign experience from previous roles in the professional and financial service industries, as well as Lloyd's of London insurance market and publishing houses.

RECENT PORTFOLIO APPLICATION OF GOLD ETFS

By **GEOFF HOWIE**, ***Market Strategist, Singapore Exchange Limited***

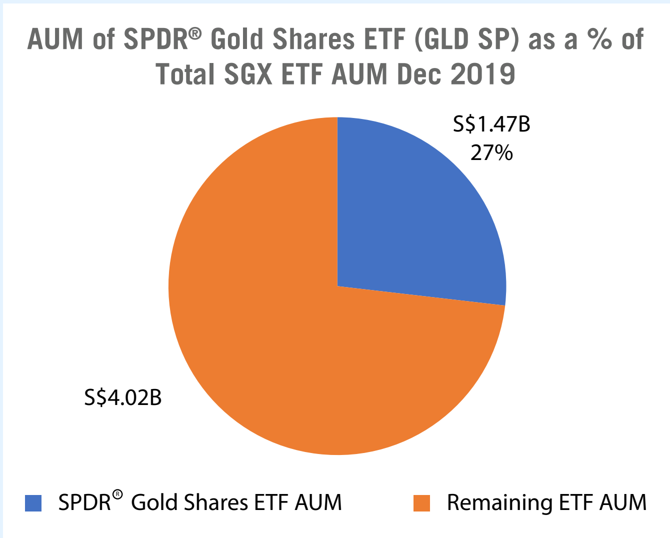
In early November, the SPDR Gold Shares ETF was trading at US$153 per unit (O87) and S$218 per unit (GSD).

While the US dollar counter has held its ground with marginal gains of about US$10 per unit since the end of 2019, there have been multiple instances over the past 34 months of flow rotations and price swings all highly attuned to global investor sentiment. This means monthly trading turnover of the ETF has varied significantly, from as high as S$338 million in March 2020 to as low as S$27 million in June 2022.

As the SPDR Gold Strategy Team maintained in October, from a portfolio perspective, the primary utility for gold is its role as an effective and robust risk-management tool, a durable mechanism to preserve wealth, and an efficient source of portfolio diversification. Over the past three years, there were clear examples of when the SPDR Gold Shares ETF was clearly being utilised strategically than as a reactionary part of portfolios.

> “THE FIRST OCCASION SPANNED THE SIX MONTHS OF MARCH 2020 THROUGH TO AUGUST 2020, WHILE THE SPDR GOLD SHARES ETF RALLIED 25%.

The first occasion spanned the six months of March 2020 through to August 2020, while the SPDR Gold Shares ETF rallied 25%. Investors did not follow the price of precious metal comet with inflows, rather the ETF saw fund outflows of S$300 million. As of the end of 2019, the SPDR Gold ETF comprised 26.8% of the total AUM across the SGX-listed ETF market, which was marginally reduced to 26.1% as of the end of August 2020. From the perspective of collective flows and AUM, SPDR Gold Shares ETF unitholders appeared to have generally rebalanced, rather than closed or added to their positions at the height of the COVID-led economic uncertainty. These six months saw the price of gold rally well-beyond its annualised long-term price returns and significantly outpace other asset classes. This possibly prompted portfolio managers to re-align the comparative weightage of gold to pre-COVID levels, prompting fund outflows of S$300 million.



Source: SGX

The second occasion that demonstrated strategic allocation was later that year, with the November 2020 rally in global markets that saw the Straits Times Index surge 16%, with S$1.4 billion of net fund inflows into Singapore stocks. The unit price of the SPDR Gold Shares ETF declined 5% over the month. In November 2020, global stocks struck record performances attributed to vaccine developments that met optimistic WHO timelines. While pundits called risk-on, the SGX-listed SPDR Gold Shares ETF also attracted S$54 million of fund inflows, which still represents the highest monthly inflows for the ETF since 2019. This indicates that the risk-on was not without blinders, as the fresh foot forward by global investors that month did include fund inflows to the SPDR Gold Shares ETF.

The next highest monthly inflow to the SPDR Gold Shares ETF over the past 34 months was in September 2020, with S$33 million of fund inflows, which followed the above mentioned six months of outflows. In September 2020, the unit price of the ETF declined 4% and global stocks also declined for the first month in six months. The preceding month of August 2020 also produced the second highest monthly trading turnover for the SPDR Gold Shares ETF since 2019. However, August 2020 saw the ETF ultimately book more outflows than inflows.

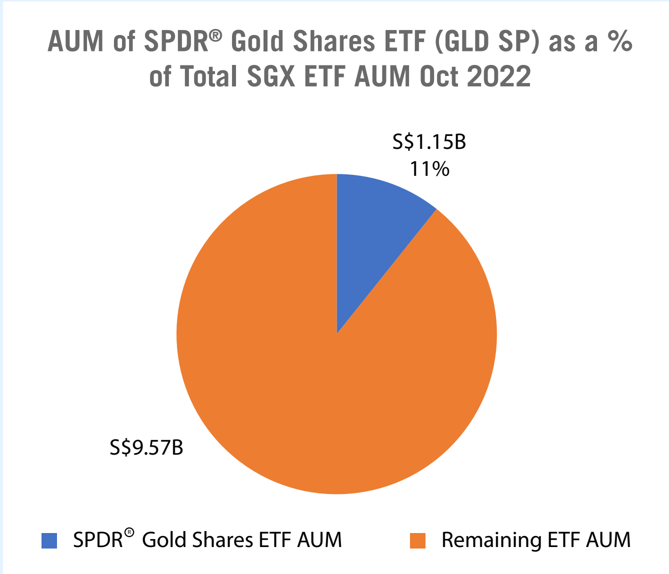
The third highest monthly fund inflows over the period, at less than a quarter of the fund inflows seen in November 2020, was in April 2022, at S$13 million. During that month, the price of gold declined 2%, however at the same time, in what was seen as a signature risk-off month for the United States, the FTSE Developed Index declined 8%, following a 3% gain in the preceding month. March 2022 also produced the third highest monthly trading turnover for the SPDR Gold Shares ETF since 2019, however ultimately the ETF also booked more outflows than inflows that month.

Overall, the SPDR Gold Shares ETF has seen more fund outflows than fund inflows over the 34 months since 2019, with total fund outflows of S$500 million. This has seen the AUM of the ETF decline 22% from S$1.45 billion to S$1.15 billion. During this time, the SPDR Gold Shares ETF generated a 12% gain, while the FTSE Developed Index generated a comparative 20% total return, both in SGD terms.

This indicates that the SPDR Gold Shares ETF had been somewhat utilised as a store of value in portfolios prior to 2020, with investors booking gradual fund outflows over the ensuing 34 months, possibly rotating into other assets such as equities or fixed income. For instance, while the AUM of the SPDR Gold Shares ETF has declined 22% amid a slew of ETFs listed in recent years, it now comprises 11% of the total AUM across the SGX-listed ETF markets. For the 11 of the 34 months that saw fund inflows, there were both gains and declines in corresponding equity markets, however the fund inflows generally corresponded with some level of significance, or size to the gains or declines.

Like most asset classes, the SPDR Gold Shares ETF takes cues from the impact of global growth deceleration, persistent inflation, and geopolitical headwinds. The gains of the US dollar and US Treasury yields over the first 10 months of 2022, have made it more expensive for investors to purchase US dollar denominated gold, while higher US Treasury yields mean greater opportunity costs to investors holding gold. These are two key factors that have weighed the price of gold over the first 10 months of 2022, when some might have thought the ETF would provide gains due to being touted as an inflation hedge in preceding years.

The SPDR Gold Shares ETF was trading at US$170 per unit at the end of 2021, and was 11% lower, near US$152 per unit at the end of October. The key variable was US dollar appreciation, with the US Dollar Index gaining 17% over the 10 months. Thus, in JPY, CNY, and EUR terms, the ETF gained 16%, 3% and 3% respectively for the first 10 months of the year. In INR terms, the ETF maintained its value over the 10 months with flat returns, and in SGD terms the ETF declined 6%. With China and Japan not pursuing tightening monetary policy, the ETF provided a diversified asset and diversified currency investment for onshore portfolios.



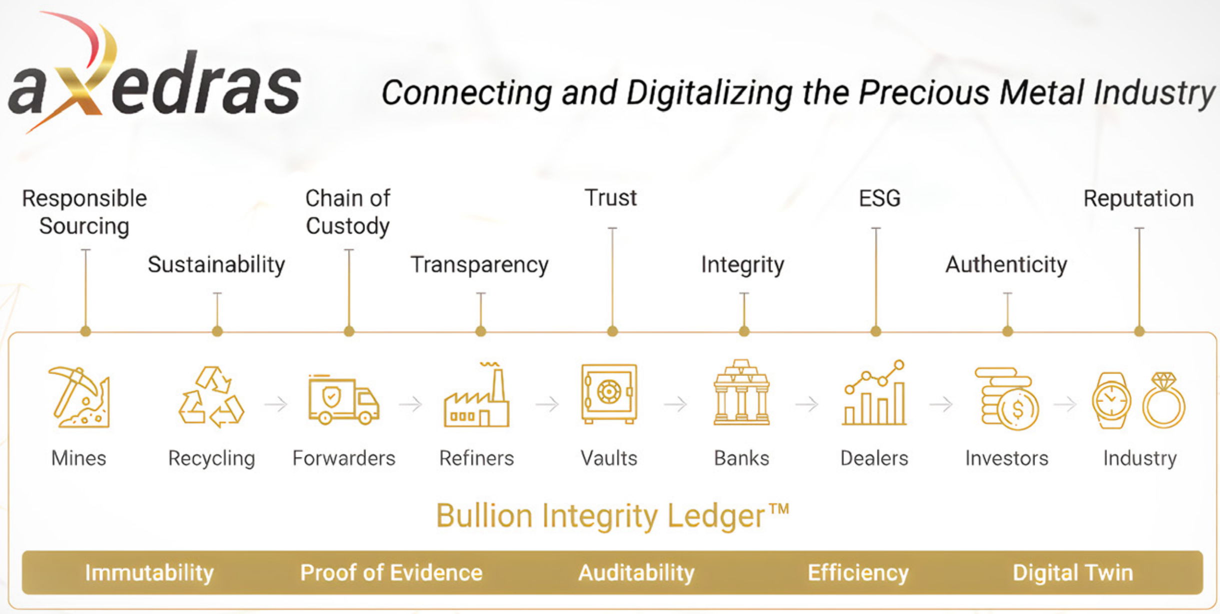
Source: SGX

Still, the outlook for growth, inflation and geopolitics remains fluid. The Federal Reserve subscribes to the theory that inflationary expectations fuel inflation and has thus maintained an increasingly hawkish tone this interest rate hike cycle. This has added to the gains in the US dollar and US Treasuries, which has conversely weighed gold in US dollar terms. And while there have been both elements of cost-push and demand-pull factors behind the current bout of inflation, current expectations are, that if contained rightly, the inflation is less systemic and more structural in nature. This means inflation is expected to gradually decelerate, and over time weigh growth, which will in turn would reduce overall inflation and result in a less hawkish Federal Reserve.

> **“ IN OCTOBER, THE IMF MAINTAINED GLOBAL INFLATION WOULD RISE FROM 4.7% IN 2021 TO 8.8% IN 2022, BEFORE DECELERATING TO 6.5% IN 2023 AND DOWN TO 4.1% IN 2024.**

In October, the IMF maintained global inflation would rise from 4.7% in 2021 to 8.8% in 2022, before decelerating to 6.5% in 2023 and down to 4.1% in 2024. The IMF also maintained a wage-price spiral in which both inflation and nominal wage growth keeps rising over time is not expected, however that risk is expected to see the FOMC maintain the tough hawk talk, for much of the time before the terminal Fed Funds Rate is lowered. Thus, timing continues to matter, in addition to time in the market, as observed with the S$1.47 billion of AUM in the SPDR Gold Shares ETF ahead of 2020.

GEOFF HOWIE is the Singapore Exchange's market strategist, with more than 20 years of experience in financial markets and economics. He has a strong background in global macroeconomics and a reputation for expeditiously identifying key market drivers and their impact across major asset classes.



THE DIGITAL TRANSFORMATION OF PRECIOUS METAL SUPPLY CHAINS

By PHILIPP STOCKINGER, *Business Development Engineer, aXedras Group AG*

Swiss fintech company aXedras, with its Bullion Integrity Ledger™, is playing a vital role in the Gold Bar Integrity (GBI) program, which was jointly launched by the LBMA and the World Gold Council earlier in 2022 to foster the integrity of gold along its supply chain, in particular in the areas of provenance and chain of custody. Following a thorough assessment phase, aXedras was selected to be part of its official pilot in Q2 and Q3 2022.

> "AXEDRAS DEVELOPS A TRUSTED, BLOCKCHAIN-BASED PLATFORM TO DIGITALIZE B2B PROCESSES ALONG THE VALUE CHAIN OF PRECIOUS METALS: FOCUSING ON PRODUCT AND DATA INTEGRITY.

For the pilot, aXedras onboarded more than 30 organisations that are distributed globally: 8 mines, 9 refiners, 4 carriers and 10 banks or dealers. The overarching goal was to demonstrate a successfully digitalised, end-to-end use case for the industry on a global scale. The pilot's participants, spanning the value chain of gold, from mine via refinery to investors, demonstrated an efficient digital flow of gold, enabling for a more transparent future of the industry.

A HOLISTIC APPROACH TO TRANSFORMING THE VALUE CHAIN OF PRECIOUS METALS

As an independent software provider, aXedras has pursued its industry-aligned approach from the very beginning. Its blockchain-based solution is based on mutual data standards and harmonised taxonomy to streamline business processes and communication among business partners along the precious metals value chain. The current solution is specifically designed for gold, silver, platinum and palladium. In a nutshell, the product flows are digitalised as follows:

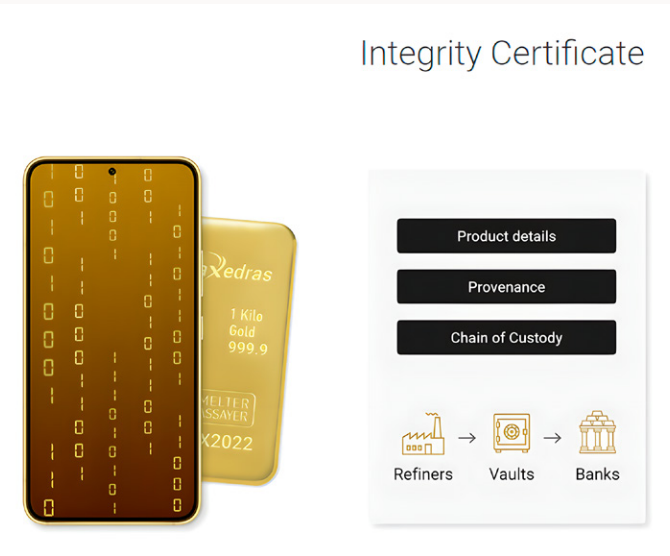
- Suppliers such as mining organisations (ASM, MSM or LSM) or recycling companies can issue a **digital provenance documentation** (which can be conceptualised as a birth certificate) for their mined or recycled products.
- **Digital shipment processes** empower the suppliers to share their provenance data (e.g., certificate of origin) with both the carrier in charge and the receiving refinery. The carrier can upload its shipment documents (e.g., AWB) to the digital shipment process.
- Refiners give **each refined product its unique Integrity Certificate**, including its provenance data, whereby smart contracts ensure that provenance data is not used twice.
- Investors benefit from the **digitalised compliance** records provided at the product level by suppliers and refiners.
- **Auditors can access, and assayers can contribute** to the digital twin representing products or processes to increase the integrity of the products and their respective data.
- An additional layer to improve the integrity of the products is provided through **aXedras' collaboration with security feature providers**, for upstream or downstream products. Any security feature can be integrated, in other words, a one-stop solution for the industry.

BENEFITS OF DLT/BLOCKCHAIN TECHNOLOGY FOR THE AXEDRAS ECOSYSTEM

The Bullion Integrity Ledger™ is based on the Corda-Enterprise version of R3's Distributed Ledger Technology (DLT). Among others, the following DLT/blockchain components are used to strengthen the integrity of precious metals:

- The Bullion Integrity Ledger™ represents a **private and permissioned B2B network**. Only reputable organizations may join the network and their identities are known to each other across the network.
- Each transaction (i.e., each update of data along supply chains) is **digitally signed on the DLT**. This **cryptographic** component ensures the transparency along the supply chain.
- The DLT-based **confidentiality architecture** has been on aXedras' agenda from the very beginning. The Bullion Integrity Ledger™ is designed following a strict need-to-know principle. Each company remains in control and selectively shares data with their business partners. Sensitive business and transactional data are protected from competitors.
- Business partners agree bilaterally or multilaterally on the data and synchronise them across their blockchain nodes. A so-called notary service ensures the uniqueness of transactions and time-stamps them respectively. There is **no need for an energy-intensive consensus mechanism** (e.g., proof of work) to achieve consistency and conformity on exchanged data.

Finally, **each physical product** is **represented as a digital twin** on the DLT-based platform. It carries all relevant data along the products' lifecycle. Cryptography ensures that the data cannot be altered. For instance, whenever a shipment leads to an update of the physical location of a product, the chain of custody is being updated in real time.



HOW INDUSTRY PLAYERS CAN BENEFIT

aXedras focuses on the expansion of its ecosystem by onboarding new members to the Bullion Integrity Ledger™. As a next step, aXedras will extend its global footprint to the Asia Pacific region, with Singapore as its hub.

After having already attended the last two editions of the Asia Pacific Precious Metal Conference as panellist, aXedras looks forward to being in Singapore again in February 2023 to continue discussions with local key stakeholders. Since aXedras' software solutions are designed for any organisation along the precious metals supply chain, their benefits are both manifold and tailor-made. The following list, which is not exhaustive, provides an overview of individual benefits for each stakeholder:

- **Suppliers** such as **mines**, can digitalise and streamline their logistics and business processes with refiners. The integration of the assaying process – possibly conducted by an external party – means faster payment terms and lowers costs.
- **Logistics companies** get access to digital bar lists and concise sets of data and documents for the shipments. The traditional exchange of data and documents via email becomes obsolete, as the exchange takes place via a streamlined and digital platform.
- **Refiners** are often described as "gatekeepers of precious metals for the market", which is duly taken into account:
    - Refiners can receive digital and structured data about their physically sourced materials by their suppliers and carriers, making it easily auditable.
    - Refiners can track the physical material throughout their production processes, which streamlines collateralisation processes.
    - Refiners can map the digital provenance information to their products, which is increasingly demanded by downstream customers and supports their aligned sustainability mandates long term.
- **Vaults** benefit from digital bar lists upon of the receipt of new products. In case a duplicate is identified on the Bullion Integrity Ledger™, for example, if there are two products registered with matching product characteristics (such as metal type, brand, weight, fineness and serial number), the solution alerts the involved vaults about the potential duplicates or even counterfeited product.
- **Banks, dealers, investors and (jewellery) manufacturers** equally benefit from transparency. Increasing regulatory and consumer demands for ESG and responsible sourcing require a digital and transparent solution to ensure the integrity of physical products and to provide needed compliance data.
- Members can digitally share their data with mandated **auditors and authorities**, allowing them to check and sign off compliance data more efficiently.

CONNECTING AND DIGITALISING THE PRECIOUS METAL INDUSTRY

aXedras has developed a novel and unique software solution for and with the precious metal industry. Throughout the GBI pilot, aXedras successfully validated its data standards, taxonomy and holistic process flows with more than 30 stakeholders of the global precious metal industry.

Visit our website www.axedras.com for more information or reach out to us if you'd like to catch up in person or virtually.

As a business development engineer, **PHILIPP STOCKINGER** supports aXedras to establish an entirely new and innovative decentralized ecosystem on the Corda Blockchain for the global precious metal industry. He brings around eight years of experience in the global corporate banking industry. In his former role as relationship manager, he helped to ramp up the SME business in Switzerland for a global German bank.

WORLD GOLD COUNCIL SINGAPORE – 2022 IN REVIEW

By ANDREW NAYLOR, ***Regional CEO, APAC (ex China) and Public Policy, World Gold Council***

2022 was a major year for many reasons, not least the lifting of most pandemic restrictions and the resumption of international travel.

For the World Gold Council, it was also a year in which we launched a number of new initiatives in Singapore:

- Retail Gold Investment Principles (RGIPs)
- ASEAN Market Engagement
- Professional Development Curriculum
- Institutional Investor Outreach
- Gold247™ – The World Gold Council's Vision for the Gold Market

RETAIL GOLD INVESTMENT PRINCIPLES (RGIPS)

Following the global launch of the RGIPs, and their ongoing roll-out in India, Germany, the USA, and others, we are now working with the Singapore Bullion Market Association (SBMA) on a local code of conduct for the retail gold industry, based on the international RGIPs. After a process of industry engagement, a retail market committee has been formed under the auspices of the SBMA. This Committee met for the first time in September, and is developing a local code of conduct.

The World Gold Council remains fully supportive, and we are confident that the RGIPs, and accompanying investor guidance, will help grow our industry. Research suggests that trust is a major barrier to buying gold and the RGIPs are designed to help give consumers confidence in the gold that they buy, and who they buy it from.

ASEAN MARKET ENGAGEMENT

As travel has resumed, we have been able to increase our engagement with regional gold markets. In Thailand, we launched consumer research looking at perceptions of gold, motivations for buying, product preferences, and the role of gold in Thai households and society. Part of our global consumer insights programme, the research helps us and the gold industry better understand consumer behaviour, assisting the development of gold products and services that meet 21st century consumer needs.

In Indonesia, we have been working with the authorities and stakeholders on the development of the country's bullion market. Connectivity between Singapore and Indonesia is vital, and SBMA members will be participating in a business and trade delegation at the end of November.

Finally, in Vietnam we partnered with the Vietnam Gold Traders Association and SBMA on the Hanoi Gold Forum, which took place on November 15. This was the first time in many years that industry participants, policymakers, and representatives of the State Bank of Vietnam have met to discuss the development of Vietnam's gold market, and we look forward to continued engagement next year.

A major focus of all the discussions has been the role that gold plays in household finances. A new report by the World Gold Council developed in conjunction with The Economist, explores the role that gold plays in financial inclusion. Financial inclusion – access to formal financial services – is a key enabler of the UN Sustainable Development Goals, and is a major objective of policymakers across the region. The report examines the role that gold currently plays (as a form of savings, source of credit, and as a method of payment) and advocates for greater retail banking participation in the gold market. The report was launched this year and is underpinning some of our engagement in the region, including at this year's ASEAN Economic Ministers' Meeting.

PROFESSIONAL DEVELOPMENT CURRICULUM

This year, we commenced the development of a CPD programme for gold. Designed for a broad range of employees in the gold industry, the curriculum covers the role of supply chain participants, the investment case for gold, gold and ESG, gold trading, and the various standards and principles that underpin the market. In partnership with the SBMA, the programme will be launched for the first time in January at Enterprise Singapore. Following this, we will be rolling out the curriculum globally, and conducting the programme annually in Singapore.

INSTITUTIONAL INVESTOR OUTREACH

The World Gold Council has continued its outreach to institutional investors here in Singapore and internationally including in Australia and Japan. On average, investment accounts for almost 40% of annual demand for gold and to help institutional investors navigate gold as an asset class. We have a number of tools on goldhub.com including a portfolio optimiser, gold return attribution model, and valuation framework. We have also released new research looking at the strategic case for gold in Singapore, Australia, and Japan, and analysis on gold's role in Australia's superfund landscape.

Topping this off is our annual institutional investor-focused conference in Singapore. Complementing this has been our corporate communications and marketing efforts in the region, and hopefully you will have seen articles, op-eds, and marketing making the continued case for gold.

GOLD 247™ – THE WORLD GOLD COUNCIL'S VISION FOR THE GOLD MARKET

Underpinning our work internationally is the Gold247™ initiative – the World Gold Council's vision for transforming the global gold market to meet the challenges of today's consumers and investors. The way gold is currently traded and the way the supply chain is managed needs to evolve to ensure the gold market continues to meet the expectations of end-users, the financial services community, and regulators.

In order for gold to continue to remain relevant, it must meet three challenges, and digitalisation is key to achieving these aims:

- First, the gold industry should operate with the highest integrity and proven provenance. Today's consumers and investors demand to know where their gold comes from, who produced it, and whether it has been responsibly and sustainably sourced. Gold needs to have unimpeachable credentials, as maintaining the trust and confidence of consumers, investors and regulators is key to broadening participation and the unlocking of latent demand.
- Second, physical gold has to be fully accessible, so that everyone can benefit from its wealth enhancing, risk mitigating and stabilising role as a financial asset. This includes gold being traded 24 hours a day and being fully accessible through contemporary channels such as digital investment accounts or simply one's smart phone.
- Third, we want to ensure gold is fully fungible, which means we should be working to harmonise regional silos, reduce market fragmentation and ensure that local and regional gold markets are fully interoperable.

These are just some of our key initiatives and activities, many of which include valuable partnership with the SBMA. All of our research can be found on www.goldhub.com and I urge you to take a look.

ANDREW NAYLOR joined the World Gold Council in 2016 and since 2020 has led the World Gold Council's regional office in Singapore. Originally part of the central banks and public policy team, Andrew was responsible for the World Gold Council's Islamic finance initiative, culminating in the launch of the AAOIFI Shari'ah Standard on Gold. Andrew started his career at international consultancy firm Cicero Group advising financial institutions on foreign investment and trade policy in Asia, and the global regulatory reform agenda.

THE NEXT GENERATION OF TOKENISED COMMODITIES

By PAUL KELLEY, ***Sales & Partnerships, Trovio***

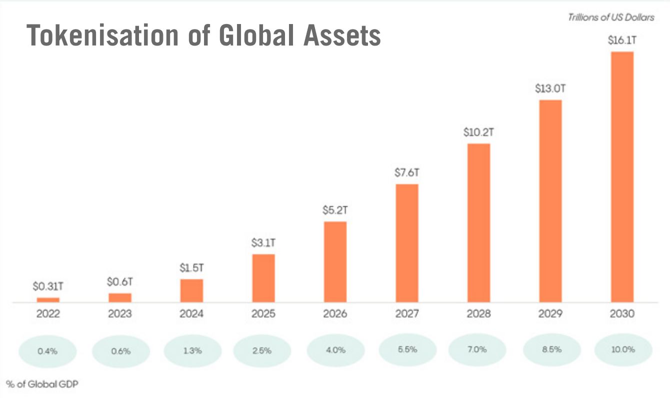
The term commodity is defined as a basic good used in commerce that is interchangeable with other goods of the same type. This means the underlying asset is fungible. The market treats instances of the commodity as equivalent or nearly so with no regard for who produced them or how. Over the last few centuries, we have commoditised many assets, creating supply chains that are fluid and standardised to meet the continued demands of the global consumer.

However, we have neglected the environmental and social impacts of mining, transporting, and refining commodities. The lowest-cost producer has been economically incentivised to continue to push the boundaries of producing fungible assets. But demand profiles are changing as industry bodies, corporate boards, government regulators, and global consumers demand verifiable proof of responsible sourcing, evidence of quantifiable efforts towards reducing carbon footprints, and other positive environmental, social, and governance (ESG) impacts.

DATA-RICH ASSETS ARE LEADING TO THE DE-COMMODITISATION OF COMMODITIES

To meet changing demand profiles, the next evolution of commodities, including precious metals, involves immutably attaching provenance and carbon footprint data to digital representations of physical commodities. Technological advances allow detailed information about a specific commodity's life cycle to be tracked and immutably attached at scale to what was previously a fungible commodity. By creating digital data packs of provenance information attached to a commodity's digital certificate, the industry is moving towards the next generation of data-rich tokenised commodities.

The adoption process for these digital assets will rapidly increase as consumer preferences evolve, and a growing number of producers and market participants offer technology solutions. This increased adoption is part of the larger tokenisation trend which the World Economic Forum estimates will grow to represent 10% of total global GDP by 2030.(1) However, creating data-rich commodities raises the question: are the next generation of commodities still fungible?



Source: BCG & ADDX

NEW COMMODITY MARKET STANDARDS WILL DEVELOP

To make commodities fungible again in a data-rich world, underlying global price benchmarks will need to evolve to include verifiable decarbonisation and other ESG metrics. While this will not happen overnight, we can expect that gold bars with available provenance data and verifiable carbon footprint offsetting will trade at a premium to commodities without such histories.

As data rich and decarbonised gold is produced in ever larger quantities, carbon neutral gold will become the benchmarked gold standard and will trade at a premium to gold that is not data rich and decarbonised. Importantly, market participants with the technological infrastructure to offer this new generation of data rich decarbonised precious metals will find themselves at a distinct advantage.

CURRENT USE CASES FOR TOKENISED COMMODITIES

- **End-to-end provenance tracking**

  Trovio and Blockhead Technologies have partnered to develop industry-leading provenance tracking and digital registry solutions. Our combined technologies create provenance data packs that are continuously updated as commodity assets move along the supply chain. These data packs are attached to digital assets representing specific units of the commodity. The digital asset is an immutable tokenised record of the commodity which is then held in our clients' licensed digital registry.

  For the gold market, provenance data packs can contain details about the mines doré was extracted from, the method of transport to the refiner, refinery location and carbon footprint, and subsequent vaulting locations of gold bars.

  Trovio and Blockhead's digital registry solution is also transactable. New transactions add information to the data packs attached to the digital assets representing gold bars in the digital registry. Transactions between customers and counterparties can be executed directly on the digital registry. Precious metals are bought and sold with the digital asset changing ownership, while at the same time, any information about further transportation, new vaulting locations, etc., are attached as a new data pack to the digital asset. The technology also allows fractional quantities to be traded and for commodities from different origins to be combined or blended. In this next generation, commodities will carry their history with them.

  Going forward, rather than gaining a competitive advantage through new physical processes, commodity companies will look to differentiate and add value through better provenance data including verifiable carbon footprints. In these markets, scalability and system interoperability will be key, along with security and ownership of data. The solutions developed by Trovio and Blockhead are scalable and offer end-to-end tracking and transacting, while ensuring companies continue to own their data. Such data is held privately in a company's licensed digital registry, and, when appropriate, can be shared with select consumers, trusted parties, industry registries, or if desired, disclosed publicly via verified industry accepted sources.

- **Carbon footprinting and immutable carbon neutral assets**

  Provenance tracking and digital registry technology also enable a new generation of verifiable carbon-neutral commodities. Once provenance data is attached to a digital asset, it is possible to calculate verifiable carbon footprints for the specific commodity. When such information is tracked, participants along the supply chain can make verifiable and traceable reductions in their carbon footprint. Uniquely, such reductions in carbon intensity can be recorded in near real-time. Improvements can be rewarded, and setbacks can be flagged and addressed as they occur. Tracking real time verifiable carbon footprints is a significant departure from past practices where carbon calculations would only happen during annual audits, if ever, and such audits would take place on an aggregated level failing to incentivise immediate carbon reductions on a commodity transaction level. With improved provenance tracking, companies that lower their carbon footprint can immediately reap the benefits of delivering lower carbon and decarbonised commodities to the market.

> **"PROVENANCE TRACKING AND DIGITAL REGISTRY TECHNOLOGY ALSO ENABLE A NEW GENERATION OF VERIFIABLE CARBON-NEUTRAL COMMODITIES.**

Trovio's digital registry solution provides market participants with a decarbonisation service to create carbon neutral commodities. The service sources carbon credits to offset the hard-to-reduce portion of a commodities' carbon footprint, retires these credits verifiably on leading carbon registries, and immutably bonds the retired credits with the digital commodity to create a new digital asset, representing the carbon neutral commodity. By recording both the carbon footprint and the retired carbon credits in an immutable digital registry, users create an auditable and verifiable proof of a specific commodities' decarbonisation. Trovio, in partnership with Singapore-based Walton Capital and Rotary Engineering, has used this technology to build a propriety solution called Carbon Management Solutions (CMS) that works towards decarbonising the Singapore bunker fuel market. As these types of technologies become more prevalent across the commodities and precious metals markets, gold consumers will have a range of options for purchasing provenance-traced, carbon-neutral gold, and increasing numbers of market participants will begin demanding such carbon-neutral commodities.

THE FUTURE OF COMMODITY MARKETS

- **New benchmarks**

  Carbon-neutral gold is an example of how accepted standards for pricing and benchmarking will be disrupted as market move towards data-rich tokenised commodities. As demand increases and decarbonisation solutions become widely available, global benchmarks will evolve towards decarbonised product specifications. Carbon-neutral gold is already available from select refiners, and as increasing numbers of consumers and investors work towards net-zero goals, benchmarks will be pushed towards a gold reference price that includes the price of gold plus the price for offsetting the specific carbon footprint of the gold. Across commodities, similar carbon offset benchmarks will grow to become the market standard. They will meet evolving consumer demands, and they will reward both low-carbon emitting producers and technology-enabled market participants.

- **New marketplaces**

  Market disruption will not stop at benchmarks. Tokenisation and associated technological developments will lead to entirely new commodity marketplaces. While the exact structure and functionality of these marketplaces are still in the making with competing players developing and deploying different solutions, nonetheless, new commodity marketplaces will evolve. This next generation of marketplaces will be built on digital asset technologies. The key value-add for these marketplaces will be their ability to differentiate tokenised data-rich commodities that can be transferred and instantly settled between parties based on their specific, individual data attributes without the need for intermediaries or counterparty trust. In these marketplaces, the activities of market participants will be governed by smart contracts that facilitate counterparty transactions with minimal third-party involvement or costs. Such marketplaces will enable fungible trading of data-rich commodities and will allow previously dormant assets to begin earning yield by providing liquidity.

- **New Generation**

  As commodity markets evolve and change, tokenisation technology will be an important force reshaping the industry. Whether creating data-rich digital asset provenance records with verifiable decarbonisation or enabling the development of new benchmarks and entirely new marketplaces, the next generation for the commodity industry will involve tokenisation technologies, and the market participants who engage with these new technologies first will find themselves with a competitive advantage.

PAUL KELLEY manages Sales & Partnerships at Trovio, a digital asset company that uses proprietary technology to provide a suite of products to enable partners to interface and create value in the digital economy. Before Trovio, Paul spent 12 years working in commodities sales & trading with JP Morgan and BNP Paribas in London. In his prior roles, Paul developed financial derivative products to help international corporate clients meet their commodity risk management objectives.

Note

1 BCG & ADDX, *Relevance of On-Chain Asset Tokenisation in 'Crypto Winter'*, 2022.

A SAFE HAVEN FOR GENERATIONAL WEALTH

HIGH-SECURITY VAULTING

The following vaults spaces are available for lease:

- UL Class II vaults for the safekeeping of gold and small high-value items
- Over 30,000 sqft of vaulting space suitable for art and valuables
- 10,000 sqft of high floor loading space suitable for vaulting silver and bulky valuable goods

PREMIER OFFICE SPACES

13 offices on the 5th floor are available for rent, well suited for:

- Wealth management
- Family offices
- Private banking
- Auction houses
- Fine art
- Trustee services
- Digitalisation services

EVENT SPACES

The 4th and 5th floors feature extensive lobbies and meeting rooms, a recording studio, as well as spaces suitable for auctions and custom events for up to 100 people.

For leasing enquiries, please email
contact@thereserve.sg

The Reserve

The Reserve Pte Ltd
6 Changi South Street 3
Singapore 486128

www.thereserve.sg

ROBUST GOLD YIELDS IN THE CARDS

By BART MELEK, *Global Head of Commodity Strategy, TD Securities*

After over a decade scraping the bottom, 12-month gold lease rates have moved distinctively higher to trend above 50 bps, as US monetary policy started to tighten aggressively.

With the Fed continuing to take rates higher in the face of sky-high inflation, real interest rates will continue to rise at an accelerated rate across much of the short end of the Treasury curve. With that, speculative long activity will wane amid higher carry and rising opportunity costs. This implies that gold yields should reach multi-decade highs into 2023.

The widespread view that gold does not offer a yield is a misconception. While income generation from gold is generally not available to most private investors, central banks can actively manage their holdings to deliver returns. This can happen in two major ways: (a) bullion reserves can be lent out to earn the gold deposit rate, or (b) the metal can be swapped for dollars at the gold offered forward rate (GOFO) or the swap rate.

While central banks are also likely to capitalise on the higher gold yield environment by making gold available to the market, they are unlikely to reduce holdings. Gold reserves offer the benefit of being highly liquid holdings, which possess both pro and counter cyclical properties, are a well-recognised store of value for many millennia and are considered strategic assets which are no one's liability. Physical holdings are also impervious to sanctions.

GOLD INTEREST RATE MECHANICS

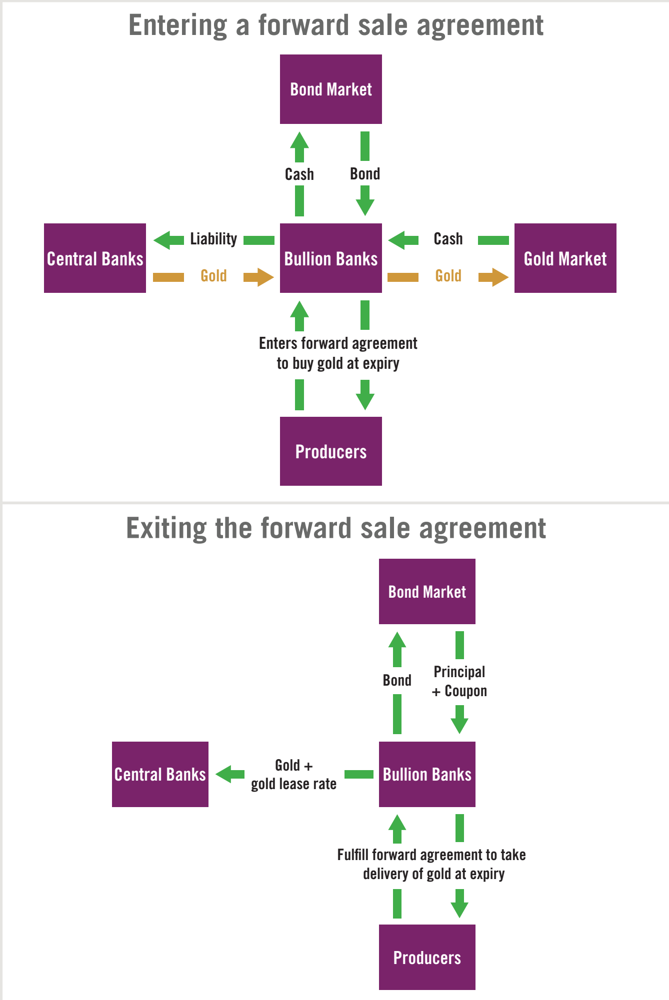
Central banks can generate material yield from gold holdings via uncollateralised loans to a bullion bank. Given that the yellow metal is a monetary asset for central banks, it can be lent out on a term deposit like any other currency in their reserve portfolio. Most commonly, a central bank will place gold on deposit with a bullion bank, in return for a deposit rate. Maturities can vary, but 1-month, 3-month and 12-month tenures are the most common. At maturity, the gold is returned with the interest paid either in gold or fiat.

Deposit rates are derived and set independently by bullion banks. Due to gold's inherently lower risk (eg. no one's liability), the yellow metal tends to deliver lower returns than corporate or even government bonds.

Yield from their gold holdings can also be generated via a gold swap, or more specifically, a repurchase agreement that simulates a swap. In this instance, a central bank sells its gold to a bullion bank with the promise to buy back the gold at a later date. The central bank pays interest equivalent to the GOFO rate (forward swap rate).

In this context, the GOFO rate is akin to a US dollar loan using gold as collateral. Formally, it is defined as the rate at which market-making members of the London Bullion Market Association (LBMA) will lend gold on swap against US dollars. The central bank is then able to reinvest the funds at LIBOR (more recently SOFR) and earn the premium between the dollar rate and GOFO, which amounts to the gold lease rate.

The gold lease rate is typically an over-the-counter instrument, it can be best comprehended through the interaction of the demand and supply of borrowed gold, which will be the focus for the purpose of discussion.



Source: World Gold Council

DECADES-HIGH GOLD YIELDS – A POTENTIAL BOON FOR CENTRAL BANKS

While volatile, we project that the market environment is conducive to delivering consistently higher positive lease rates, which should be quite accretive for central banks willing to deposit metal with a bullion bank in good standing.

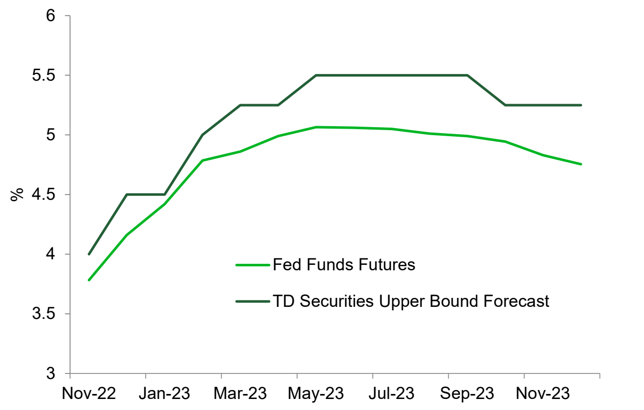
The World Gold Council model has shown that real rates, central bank gold holdings of CBGA signatories, producer hedging demand, the real price of gold, the VIX and gold spec positioning explained the 3-month lease rate with a 62% accuracy, with the 12-month rate having an even better 74% success rate. TD Securities analysis has shown similar trends.

Contemporaneous Regressions: Lease Rate Drivers

	1	2	3	4	5	6
gold returns	-3.537				2.448	2.235
gold vol	-4.779				-0.368	-0.806
mkt excess return		0.00883			0.0773***	0.0804***
smb factor		0.0119			0.0362	0.0302
hml factor		-0.0138			0.0561	0.0596
3m Tsy yield		0.585***			0.451***	0.675***
10y3m Tsy spread		0.337**			-0.0773	0.256
credit spread (Baa-Aaa)		-1.571**			-2.471***	-1.695***
trade-weighted dollar		11.51**			10.23**	9.741*
Chicago Fed FCI			2.121***		-1.993***	-1.991**
Money Supply			20.25		3.292	20.48
VIX				0.0167	0.0839***	0.0888***
Bond Illiquidity				0.562***	0.611***	0.677***
MOVE				0.0348	1.399**	0.35
Comex Gold stocks g						-1.19
Constant	0.503	-1.587	1.265***	-1.964***	-5.550***	-6.723***
Adjusted R2	0.028	0.292	0.079	0.139	0.491	0.521

Source: Risk Premia in Gold Lease Rates, Anh Le and Haoiang Xu; TD Securities

Market Still Has Room For More Hawkish Pricing



Source: Bloomberg, TD Securities

Generally speaking, positive price sentiment, a decline in the opportunity cost of holding gold and an aggressive increase in central bank holdings have prompted a fall in producer hedging demand and made the gold carry trade and speculative short-selling less attractive. Factors that are price positive have typically reduced borrowing demand, which depresses gold lease rates.

We judge that extremely low central bank interest rates (Fed Funds, other CB policy rates) in the aftermath of the financial crisis, and more recently the COVID pandemic, are a key reason why lease rates were very low between 2010 and 2020. But as real rates across the short end of the Treasury yield curve turn sharply positive and volatility trends higher due to quantitative tightening, sharply higher policy rates and moderating inflation, the conditions which drove lease rates lower will increasingly reverse.

After an outsized 400 tonnes worth of central bank gold purchases in Q3 2022, the official sector purchases are likely to slow relative to the previous pace of accumulation, which should be an additional marginal factor driving gold lease rates above the recent range between 50-75 bps into 2023.

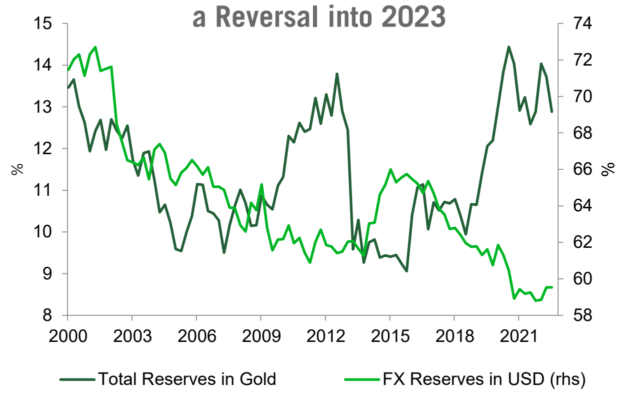
BEING READY CAN BE PROFITABLE

Between 1989 and 1999, the gold deposit rate offered a robust source of return for central banks, with the 12-month gold lease rate averaging a hefty 140–200 bps. Since then, however, the rate has fallen sharply, averaging just 54 bps between 2000 and 2009, and we calculate a 15 bps rate between 2010 and 2020.

During the 1980s and 1990s, central banks were aggressive sellers of bullion. As this happened, demand for borrowed gold was increasing at the same time, with many Western European central banks also extending their use of lending, swaps and other derivative instruments. An increase in lending typically resulted in additional gold being sold amid the central bank uncertainty, adding supplies to the market.

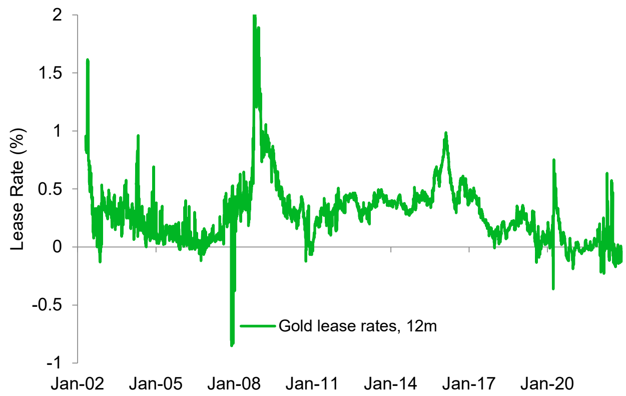
The resulting prolonged bear market also prompted miners to take out hedges with bullion banks, helping to create an environment where gold lease rates were elevated and volatile.

Dollar Debasement Fears Kept CB Holdings Elevated, But Global Slowdown May See a Reversal into 2023



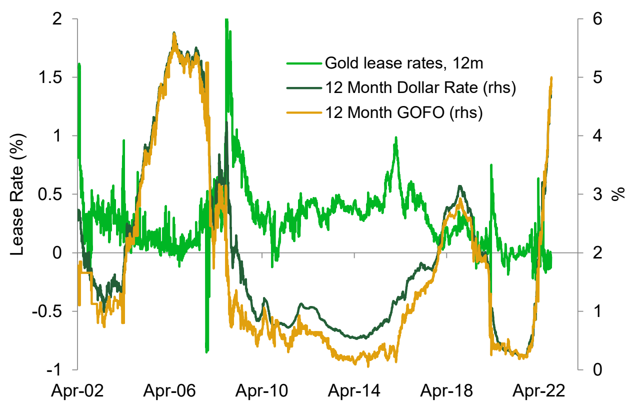
Source: Bloomberg, IMF, TDS Commodity Strategy

History Shows Gold Lease Rates Can Be Volatile



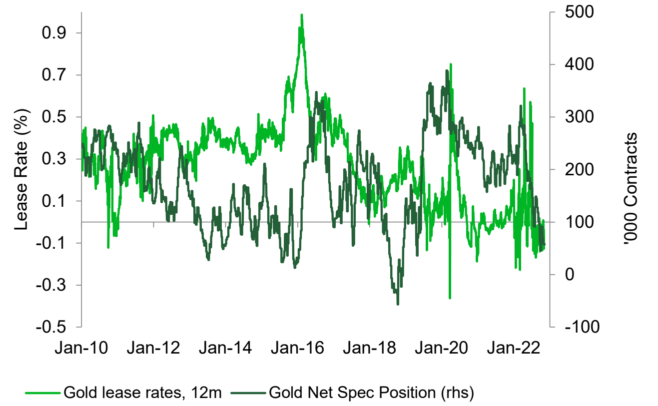
Source: TDS Securities, TP Metals, Bloomberg
** Transitions from LIBOR to SOFR in 2022*

Different Dynamics Can Drive Lease Rate Changes



Source: TDS Securities, TP Metals, Bloomberg
** Transitions from LIBOR to SOFR in 2022*

Lease Rates Tend to Rise When Precious Metal Sentiment Sours



Source: TDS Securities, TP Metals, Bloomberg
** Transitions from LIBOR to SOFR in 2022*

But even during this period (2000–21), when the monetary policy and macroeconomic environment were negative for gold interest rates, various one-off liquidity crises events such as the great recession and the COVID pandemic shocks and aftershocks generated brief periods when lease rates rose sharply higher, as these shocks precipitated a large need for US dollar liquidity. Banks and corporations sought to use borrowed gold to raise US dollars, which contributed to spikes in gold lease rates. These were opportunities to use gold reserves to generate generous returns, even when the overall environment was not friendly for these types of trades.

The past suggests that there is even more of a case to be made for lease rate spikes in the current environment. As rates rise and central bank balance sheets are drained, liquidity problems are likely to arise periodically, which could spike lease rates. As such, central bank reserve portfolio managers would be prudent to have all their legal document ducks in the row, so they can capitalise on yield spikes should they occur.

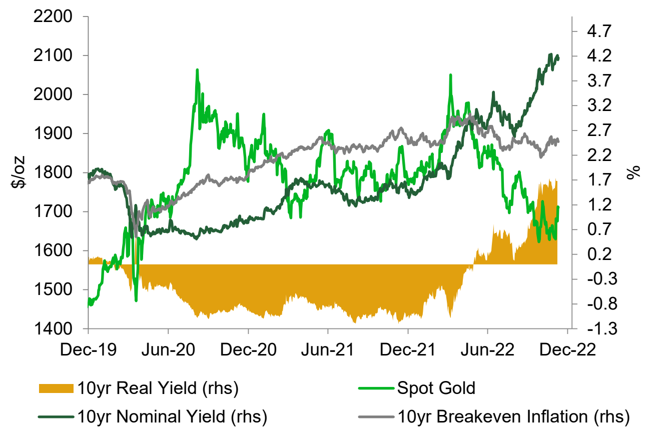
GOLD YIELDS LOOKING UP

With inflation still raging, the Fed may have no choice but to stick to a hawkish policy stance for a while yet. TD Securities believes that the Fed Funds yield will hit 5.5% and there will be no dovish pivot until late 2023. Conversely, TD Securities judges there will be a general lack of investor interest in gold well into 2023 (as per example: Q3 2022 investment demand, excluding OTC, was down 47% y/y), as the Fed pushed the Fed Funds rate toward 5.50%.

The unwinding of record-setting post-COVID central bank balance sheets, sharply higher equity market volatility and the exit of speculative investors, have already forced non-commercial players (CTAs and other specs) out of all of their long positions, driving prices sharply lower. This helped to lift lease rates up to current fairly high levels, from extreme lows before the tightening.

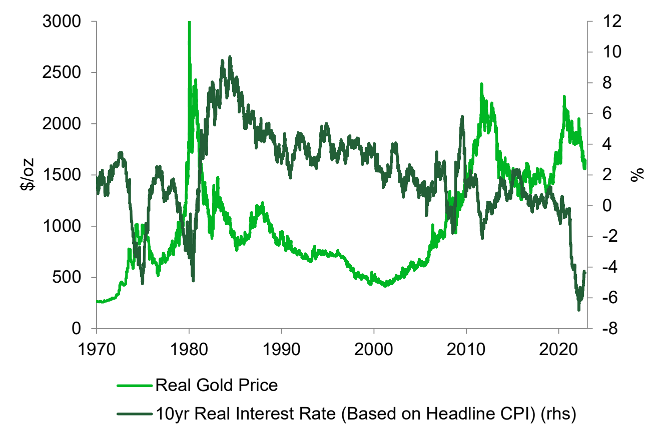
Aggressive monetary policy tightening has already increased nominal interest rates sharply and reduced inflation expectations, which forced real rates (a key driver of gold) up sharply along the front end, in turn weighing on gold prices. Less investor interest prompted the GOFO rates to lag Treasury yields, pushing lease rates higher. As this trend will continue, particularly on the short end, gold yields also look to be well supported into 2023. This should be exacerbated if physical holders and producers decide to perform some hedging.

Outsized Inflation, Higher Interest Set to Drive Dollar funding and Elevate Lease Rates



Source: Bloomberg, TDS Commodity Strategy

Restrictive Monetary Policy Set to Moderate Inflation, Lift Real Rates— a Positive for Gold Deposit Yields



Source: Bloomberg, TDS Commodity Strategy

Still, large long positions are being held by family offices and proprietary trading shops. Capitulation from these positions suggests there can be more upward pressure on gold lease rates owing to the potential for further downside price risk and higher carry.

BART MELEK has over 20 years' experience analysing precious metals, base metals, energy, financial markets, as well as key economies. He has worked closely with commodity, equity and FX trading desks around the world, and has several forecasting distinctions and top global rankings. Bart contributes to the TD Securities strategic view on commodity, various other markets and macroeconomics. Bart is also a sought-after media commentator. Previous to joining TD, he had senior roles in equities, commodities and risk. He holds a master's degree in economics from York University in Toronto, with an International Finance/Banking Specialization.

World Platinum Investment Council
世界铂金投资协会

2023 Chinese Panda
Precious Metal Commemorative Coins
2023版熊猫贵金属纪念币

ALL PICTURES SHOWN ARE FOR ILLUSTRATION PURPOSE ONLY.
PLEASE REFER TO THE ACTUAL PRODUCT.

中国人民银行 发行
Issued by the People's Bank of China

WHERE BEACH MEETS BULLION

By STRATEGIC WEALTH PRESERVATION

Seven Mile Beach, Grand Cayman

The Cayman Islands are a self-governing British Overseas Territory in the Western Caribbean made up of the three islands of Grand Cayman, Cayman Brac and Little Cayman.

Just an hour's flight from Miami, it sits between Jamaica and Mexico's Yucatan Peninsula. With several daily commercial international flights serviced by British Airways, American Airlines, Delta, Air Canada, Jet Blue and the island's national carrier, Cayman Airways, it is a popular destination for visitors from around the world for both pleasure and business.

Coupled with first-class infrastructure, a stable economic and political environment, and tax neutral benefits with no wealth reporting requirements, Grand Cayman is an attractive option for investors as a location to buy and store their precious metals. This is why Strategic Wealth Preservation (SWP) has made it our home.

Long respected as one of the top financial centers of the world, SWP was inspired to offer a superior service to the ever-growing precious metals market that could benefit from the same favourable conditions as Cayman's other traditional financial markets. The Cayman Islands are one of only a handful of countries that has no direct taxation of any kind. There is no import, export or any other tax on the purchase, sale, or storage of precious metals.

SWP is classified as an Active Non-Financial Foreign Entity. As such, SWP has no wealth reporting requirements to any local or foreign tax authority or government. This is particularly important to people trying to retain their privacy, which can be challenging these days.

We opened our doors in 2014 and have fast become one of the top offshore storage locations in the world. We are a fully integrated precious metals dealer and secure storage facility offering our clients segregated storage of their gold and silver. This means there is no consolidation of your product. If you purchase or send us a particular gold coin or bar, that is exactly what gets put in your box, and that is exactly what you can take out again. In fact, you can visit your holdings at any time with just a 24-hour notice, to ensure privacy and personal service.

“ LONG RESPECTED AS ONE OF THE TOP FINANCIAL CENTERS OF THE WORLD, SWP WAS INSPIRED TO OFFER A SUPERIOR SERVICE TO THE EVER-GROWING PRECIOUS METALS MARKET THAT COULD BENEFIT FROM THE SAME FAVOURABLE CONDITIONS AS CAYMAN'S OTHER TRADITIONAL FINANCIAL MARKETS.

SWP's secure storage facility, Grand Cayman

Shipping in and out of the Cayman Islands is also an easy proposition. We provide global logistics services to move cargo of any value to and from many locations worldwide. Whether your valuables are currently located in your home, at a bank or another secure storage facility, our dedicated logistics team can help you move your precious metals or other valuable assets with minimal fuss.

"SHIPPING IN AND OUT OF THE CAYMAN ISLANDS IS ALSO AN EASY PROPOSITION. WE PROVIDE GLOBAL LOGISTICS SERVICES TO MOVE CARGO OF ANY VALUE TO AND FROM MANY LOCATIONS WORLDWIDE.

We don't believe you have to be the biggest to be the best. What we do believe is that we must offer the best service, the most secure storage, and the most flexibility for each and every one of our clients. We are inspired by our industry colleagues around the world, and are also rooted in our fundamental beliefs of resilience, integrity, responsible sourcing, sustainability and our ESG goals.

When we opened SWP, we did so as investors ourselves. We knew we could improve on the storage and acquisition experience, but we also didn't want to become complacent. With numerous challenges and uncertainties facing the world today, we want to ensure that our clients feel like they have a long-term partner to navigate their precious metals investment and wealth preservation goals.

We have found ourselves motivated by the best practice initiatives of industry organisations like the SBMA and LBMA to not only develop our ethical and sustainability strategies but also be a thoughtful educator and influencer in the precious metals arena. Our popular video series "Inside the Vault" has been a valuable source of information for millions of viewers, some with no previous precious metals investment experience. We want to dispel the myth and mystery of wealth preservation and make it accessible to anyone wanting to create a robust investment portfolio for the long run.

With global challenges come creativity. The next generation of economic players and investors are standing by, catapulting innovation bombs on a new world stage fraught with instability and turmoil. We have made it our business to engage and pay attention to this innovation, making intentional choices about how to best service our clients, not only now, but also into the future.

Although no one could have predicted the particular combination of catastrophes that have befallen the world of late, it would be a reasonable assumption that these cyclical outcomes were probably just around the corner. Whether turbulent or steady, we are driven by the responsibility to educate our clients on how to protect their wealth and economic choices. One of the main components for this is flexibility.

Segregated storage bins, Cayman Islands vault

With this in mind, we offer 10 other storage options around the world located in Canada, the United States, Switzerland, Liechtenstein, Singapore and New Zealand under our "One Account, One World" program. Tax optimisation, travel restrictions, and global instability and conflict, remain relevant concerns for many of our clients, and therefore we offer the option to buy, store, and sell to any one of our 11 locations allowing for greater geo-diversification of their holdings.

Silver Marlin coins, the national bullion coin of the Cayman Islands

"CLIENTS CAN BORROW UP TO 75% OF THEIR HOLDINGS WITH A MINIMUM LOAN AMOUNT OF US$100,000. INTERESTINGLY, MANY USE THIS OPPORTUNITY TO PURCHASE MORE PRECIOUS METALS.

In keeping with our flexibility model, our clients can liquidate all or any part of their holdings within 24 hours. And if you don't want to be paid in cash, SWP clients can now choose to be paid in or pay for their gold and silver orders with Bitcoin, Ethereum and USDC. Cold storage is also available for crypto wallets and keys at our vault locations.

Another important offering is from our sister company SWP Capital, which offers our clients short-term lending options against their precious metals holdings. Clients can borrow up to 75% of their holdings with a minimum loan amount of US$100,000. Interestingly, many use this opportunity to purchase more precious metals. Another option with SWP Capital is investing in Precious Metals Backed Securitised Notes (PMBSN), earning a fixed annual return significantly higher than bank deposit rates. The point is to offer our clients as much liquidity and flexibility as possible, even with your cash.

That kind of freedom coupled with the wealth insurance that precious metals provide, is a winning combination for long-term security, but it isn't everything. We know knowledge is power, along with data, expert opinion, and analysis, and we believe that should be shared and utilised to our clients' benefit. For that reason, we have created several outlets of communication including our quarterly newsletter, social media outlets, our popular You Tube channel, and real-time communication directly with clients.

In the pipeline is also our new Golden Turtle Supper Club, a private members group to discuss thoughts and opinions relating to investments, the geopolitical climate, market activity and general socioeconomic matters. This safe space is the perfect outlet for knowledge sharing with likeminded individuals who wish to stay more actively involved in the investment markets as it relates to precious metals and other alternative assets.

It's who we are as people, and it is who we are as a company. We are intentional and progressive, but we are also rooted in stability. Our recent membership into the SBMA is a great honour for us. Not just because of the prestige associated with such a relevant and longstanding institution, but because of our aligned objectives for excellence in our industry. Our global community has shown great resilience and innovation of late, and we look forward to playing our small part in its advancement and integrity for many years to come.

We'd love to speak with you, whether you be a private investor, wealth advisor or a fellow member of the precious metals industry.

SWP®

Strategic Wealth Preservation

Contact Information

Website: www.swpcayman.com

Email: info@swpcayman.com

Phone: 1 (888) 445-1977

SBMA News

The SBMA team would like to wish our members and friends a wonderful festive season and a very Happy New Year. We would also like to thank our contributors and sponsors for your continued support over the year and are looking forward to our continued partnership in 2023.

Here is an update of SBMA's activities in the past quarter:

18 NOVEMBER 2022: SBMA held its 2022 Annual General Meeting (AGM), which was followed by a cocktail reception to thank members for their continued support.

MTS GOLD JOINS ASIA PACIFIC EXCHANGE

SBMA member MTS Gold Group's Thailand-based subsidiary, MTS Capital Co., Ltd has become Asia Pacific Exchange's (APEX) first Foreign General Member.

MTS Capital was Thailand's first broker to receive the Best Derivative House Award and the Outstanding Derivative House Award three years in a row from the Stock Exchange of Thailand. With this membership, MTS Capital is now the first Thai Broker to offer global derivative access to both CME and APEX. The partnership with APEX brings a new level of investing in the Thailand derivative markets and marks another milestone in MTS Gold Group's Global trading connectivity.

MTS Capital is an active participant in the global OTC and Derivative markets in precious, base and ferrous metals. It works directly with many global exchanges, Tier 1 Investment Banks and Bullion banks.

MTS Gold is also a leading player in Thailand's gold industry, with a comprehensive gold trading platform and active as a liquidity provider and market maker in the precious (gold, silver) base and, ferrous metals exchange-traded markets.

MTS Gold Group businesses encompass five main lines: precious metals, jewellery, refining, financial and global trading solutions, making it a "one-stop" precious metals investment house in the ASEAN region.

BR METALS TOPS E50 AWARDS

SBMA congratulates member company BR Metals – an industry-leading specialist in the recycling of Platinum Group Metals (PGM) and one of Asia's largest processors of end-of-life catalytic converters – for clinching the top spot at the Enterprise 50 2022 Awards. Co-organised by The Business Times and KPMG, E50 recognises the 50 most enterprising local privately held companies that have contributed to Singapore's economic development, both at home and abroad.

MEMBERSHIP

ACE Capital Growth Sdn Bhd, Best Profit Capital Limited, CPC Resources Limited and Public Gold Marketing Sdn Bhd were recently onboarded as Foreign Associate Corporate members, and Strategic Wealth Preservation was onboarded as an Affiliate Associate Corporate member.

SBMA's total corporate membership currently consists of 60 companies, including 3 Category 1 members, 36 Local Associate Corporate members, 18 Foreign Associate Corporate members, and 3 Affiliate members.

ANNOUNCEMENT

We thank Jos van Wegen for his invaluable contribution toward SBMA over the years, and we wish him all the best on his much-deserved retirement with his loved ones.

- from the SBMA team

UPCOMING EVENTS

4–6 June 2023. Singapore
Asia Pacific Precious Metals Conference 2023
The annual APPMC, organised by the SBMA and supported by Enterprise Singapore, will next take place on 4-6 June 2023 in Singapore. Remember to mark your dates and we hope to see you then.

More information, updates and details of past conferences are available at: http://www.asiapacificpmc.com.

15–17 October 2023. Barcelona, Spain
LBMA/LPPM Global Precious Metals Conference 2023
Register now for the 23rd LBMA/LPPM Global Precious Metals Conference, with three days of high-profile speakers, fascinating panel sessions, and unrivalled networking opportunities, held in the cosmopolitan capital of Spain's Catalonia region.

Please visit https://www.lbma.org.uk/events/lbma-lppm-global-precious-metals-conference-2023 for registration and event details.

About Crucible

Crucible is published quarterly by SBMA. If you would like to contribute an article, news or information to Crucible, place an advertisement in Crucible, or if you require further information, please contact:

Singapore Bullion Market Association,
9 Raffles Place, Level 58, Republic Plaza, Singapore 048619,
Singapore.
Tel: +65 6823 1301 / +65 6823 1302
Email: mail@sbma.org.sg
Web: www.sbma.org.sg

Printing Office

SC (Sang Choy) International Pte Ltd
25 Harrison Road, #09-00 Chin Lim Industrial Building,
Singapore 369646, Singapore
Tel: +65 6289 0829
Licence number: L012/12/2021