

Volume 3 Issue 2 February 2023

Price Rs 60

# Bullion World

*World of Bullion Research*

[www.bullionworld.in](http://www.bullionworld.in)



Budget 2023: Highlights of announcements for the Precious Metals Industry

08

Price Risk Management Via MCX Bullion Derivatives Contract

Mr Shivanshu Mehta

14

Silver Nanowires for flexible and printed electronics

Mr Jayesh R. Sonawane & Dr Amol A. Kulkarni

20

## MARK YOUR DATES

India Silver Conference  
28-30 April 2023  
Le Meridien Resort, Jaipur

Asia Pacific Precious Metals Conference  
4-6 June 2023  
Park Royal Beach Road, Singapore

India Gold Conference  
18-20 Aug 2023  
JW Marriott, Kolkata



SAM PRECIOUS METALS



*we know what  
Precious really means*

[www.sampreciousmetals.com](http://www.sampreciousmetals.com)

INDIA  
SILVER  
CONFERENCE

Ag 47

28-30 April 2023

Le Meridien Resort, Jaipur

MARK  
YOUR  
DATES

[www.silverconference.in](http://www.silverconference.in)

ASIA PACIFIC  
PRECIOUS METALS  
CONFERENCE

4-6 June 2023

Park Royal Beach Road, Singapore

MARK  
YOUR  
DATES

[www.asiapacificpmc.com](http://www.asiapacificpmc.com)



18-20 August 2023

JW Marriott, Kolkata

MARK  
YOUR  
DATES

[www.goldconference.in](http://www.goldconference.in)

For details, contact [abhinaya@eventellglobal.com](mailto:abhinaya@eventellglobal.com)

+91 9343734140

[www.eventellglobal.com](http://www.eventellglobal.com)

# USE TECHNOLOGY. OR, GET USED BY HUMANS.

Sequel runs on technology that is transparent, efficient, empowering.

With our Sequel247 app, you can:

- Book multiple pickup requests
- Track your shipment
- Make online payments
- View the overall summary of your shipments

And be a part of the complete logistics process!



 **Sequel**  
Global precious logistics

# EDITORIAL

Dear Readers,

The Union Budget 2023 was welcomed by a broad section of the society, as it aimed at continuation of the growth momentum while containing deficit. However, the Indian bullion and jewellery industry was disappointed. Let's try and understand the current scenario.



From November 2022, local gold price in India is discounted to the price of duty paid bullion bars. It could be a combined effect of higher gold price and parallel trade. As a result, gold dore imports have reduced to nil and most refineries are shut. Besides, gold bullion bar imports have also come down, with most overseas suppliers holding high inventories in bonded warehouses. Thirdly, despite being one of the years with highest number of auspicious days for marriage, demand for gold jewellery across India has not picked up. Given these, the industry was expecting measures that would reduce illegal gold, and stimulate growth in jewellery production and exports. The budget did not have any provisions on these.

Viewed from the government side, the economic survey pointed to a potential flaring up of current account deficit. Given the possibility of such an event, government of India might have considered it prudent to defer any decision on import duty reduction on gold.

Coming to silver, the government has increased the customs duty on silver bullion and aligned it with gold at 15%. Like-wise duty on silver dore has been increased to 14.35%. Would it result in drop in demand for silver jewellery and silverware? We need to wait and watch the situation. For now, the demand for silver is lukewarm and the market is at a discount.

Removal of capital gains tax on conversion of physical gold to EGR is a good move. Together with the expected GST refund measure, these reforms could help in establishing gold spot exchange.

This issue of Bullion World features Expert views on the Union Budget 2023. Multi Commodity Exchange of India has covered the price risk management using exchange derivative contracts. National Chemical Laboratory has contributed on Silver Nano Wires. Credit rating Agency ICRA has come out with an outlook on Organised retailers, while CARE Ratings on Cut and Polished Diamond industry. Finally, we have an exclusive interview from Indigo precious Metals

Is there a way to collect 18% tax, facilitate growth in value-added jewellery exports and also eliminate smuggling? Let us know your thoughts.

Best wishes,  
G Srivatsava  
Editor

## ADVISORY BOARD

Rajesh Khosla  
Prithviraj Kothari  
Bhargava Vaidya  
Surendra Mehta

DIRECTOR & CEO  
G Srivatsava

DIRECTOR & COO  
Vinayak Meharwade

VICE PRESIDENTS  
Abhinaya S  
Swapna B E

CONTENT EDITOR  
N Srinivasa Moorthy

GRAPHIC DESIGNERS  
Radhika K & Sathiyam

WEB DESIGNERS  
Manivannan & Imayavaramban G

DATA SUPPORT  
Gajendra

TEAM  
Prathik Tambre  
Srikantharaman LS  
Chandrasekaran S  
Ravi B  
Shivakumar  
Jaisheelan  
Ramya  
Shubham Kumar  
Krishnendu Roy

PUBLISHING OFFICE  
Bullion World  
#146, 1-2 Floor, Gopal Towers  
Ramaiah Street, HAL Airport Road, Kodihalli  
Bangalore - 560008

Tel: +91-80-41535476, +91 9343734140  
Email: editor@bullionworld.in  
Web: www.bullionworld.in

**Bullion World**  
neither endorses the advertised product, service  
or company nor any of the claims made by the  
advertisement or the advertiser. Readers are  
encouraged to do necessary due diligence before  
initiating any action. Should you like to share your  
feedback on any of advertisers, please write to  
editor@bullionworld.in

08

Budget 2023: Highlights of announcements for the  
Precious Metals Industry

14

Price Risk Management Via  
MCX Bullion Derivatives Contract  
[Mr Shivanshu Mehta](#)

20

Silver Nanowires for flexible and printed electronics  
[Mr Jayesh R. Sonawane & Dr Amol A. Kulkarni](#)

25

Organised jewellery retailers to outpace industry growth over  
the medium term; outlook remains Stable  
[Mr Vipin Jindal & Mr Raunak Modi](#)

28

CPD Exports Cautious after Strong FY22 Show,  
Margin dip Imminent:  
[Mr Ujjwal Patel](#)

31

High-quality, cost-effective and innovative investment  
solutions: USP of Indigo Precious Metals  
[Mr David J Mitchell](#)

39

Data, Statistics & IBJA Rates

# EXCHANGE TRADED BULLION CONTRACTS - FAIR AND TRANSPARENT MEANS OF INVESTMENT



## SMALLER DENOMINATION GOLD & SILVER FUTURES CONTRACTS

**Developing gold and silver as an asset class.** Investment in smaller denomination contracts backed with delivery is witnessing an increasing interest from retail participants.

Smaller denomination contracts are designed to cater to the organized retail investor demand. They also capture the imagination of a fast emerging new-age clientele with an evolving view on gold and silver as an investment class.

### SALIENT FEATURES

- Smaller denomination contract
- Providing a systematic investment plan (SIP) type of flexibility
- Coins and bars can be held and accumulated in the electronic format and physical delivery also available
- It comes with an individual assaying certificate with quality assurance
- Convenience of transaction and liquidity of exchange platform are key advantages
- Better Cash flow management and margin protection
- Inventory hedging amid volatile prices

# Budget 2023: Highlights of announcements for the Precious Metals Industry



## 1) Alignment of Customs Duty on Silver and Silver Dore:

Commodity	BCD(%)		AIDC(%)		SWS(%)		Total(5)
	From	To	From	To	From	To	
Gold Bars	12.50	10	2.50	5.00	Nil	Nil	15.00
Gold Dore	11.85	10	2.50	4.35	Nil	Nil	14.35
Platinum	12.50	10	1.50	5.40	1.40	Nil	15.40
Silver Bars	7.50	10	2.50	5.00	0.75	Nil	15.00
Silver Dore	6.10	10	2.50	4.35	0.61	Nil	14.35

## 2) EGRs exempted from Capital Gain Tax

In order to promote the concept of Electronic Gold, it is proposed to exclude the conversion of the physical form of gold into EGR, and vice versa by a SEBI-registered Vault Manager from the purview of 'transfer' for the purposes of Capital gains. It is also proposed that the cost of acquisition of the EGR for the purpose of computing capital gains shall be deemed to be the cost of gold in the hands of the person in whose name Electronic Gold Receipt is issued, and the holding period for the purpose of capital gains would include the period for which the assessee held gold prior to its conversion into EGR. Similarly, provision for conversion from gold to EGR is also proposed."

## 3) Gold Jewellery: Hike in import duty

The import duty on articles made of precious metals falling under CTH 7113 and 7114 is increased from 22% to 25%. It is, however, being exempted from SWS. The import duty on intimation jewellery classified under heading 7117 is being increased from 22% or INR 400/ Kg to 25% or INR 600/ Kg, whichever is higher. It is, however, being exempted from SWS.

## 4) Lab-Grown Diamonds:

The BCD on seeds for use in the manufacture of rough lab-grown diamond is being reduced to nil subject to IGCR condition for a period of two years. A Grant of INR 242 crore has been given to IIT- Madras to promote R&D on LGD



## Experts view on the Union Budget- 2023

### **Mr Prithviraj Kothari, President, India Bullion & Jewellers Association**

I feel that the union budget is excellent for growth, employment creation and welfare of the people. It would make India stronger, coming specifically to bullion and jewellery sector, in my understanding I feel, employment creation and exports are the only focus areas of the government of India. The industry should take the message seriously and work with the government closely on these two agenda.

Higher customs duty on gold and silver would put further strain on the viability of trading business and to some extent on jewellery manufacturing, as more capital needs to be deployed. Demand for jewellery during the current season has not picked up despite record number of marriage days. The industry needs to find a solution.



### **Mr Saiyam Mehra, Chairman, GJC**

We thank Honourable FM Shri Nirmala Sitharaman ji for presenting a well-balanced Union Budget 2023-24, focused on the spirit of Amrit Kaal. Key announcements such as Income tax- rebate extended on income up to Rs 7 lakhs in new tax regime, increase in outlay of PM Awaas Yojana is a big relief for the middle-income group. However, the Gems & Jewellery Industry's critical concerns are not addressed in the Union Budget 2023-24. While the Research and Development grant will be provided to one of the IITs for the development of Lab Grown Diamond seeds and machines, the other sectors of the industry have been ignored. The reduction in Gold Custom Duty in this Budget was our big expectation, which has severely hampered the industry and encouraged smuggling and grey market. GJC has been actively representing the reduction in customs duty of Gold over past many years. However, the Silver Dore Bars Custom Duty has been brought at par with Gold and platinum in this budget. This move will adversely affect the masses. GJC will continue to represent this important issue of the Industry. We are having a meeting with Honourable FM on 4th February at Mumbai, in which we shall once again stress upon the important concerns such as reduction in custom duty, EMI on Jewellery, Relief in Capital Gain tax and Gold Monetisation Scheme etc.



**Mr Surendra Mehta, Secretary, IBJA**

“Silver dore are usually part of Gold dore. Since the duty on silver dore technically was earlier 14.35% but the duty on silver bars was only 10.75%, it was technically not possible to recover differential duty of 3.6% through sale of silver bar.” Hence, it was our demand to bring duty on silver bars parallel to gold bars. We are happy that same has been accepted in budget 2023 by Hon. Finance Minister.

Since the rupee has been constantly weakening and CAD at its peak which is being major concern for govt, due to expected recession, the demand for reduction in duty on gold was not considered by Hon. Finance Minister. This has been really disappointing for industry as more duty encourages illegal import which helps unorganised and non-transparent players. The hike in import duty of jewellery from 22% to 25% will not impact much as import of jewellery is miniscule in comparison to import of bullion. In the country it will help domestic manufactures.



**Mr Satish Bansal, President, Association of Gold Refiners & Mint**

We thank the finance minister for considering our suggestion for aligning import duty on silver bullion with that of silver content contained in gold Dore. About 5% to 40% silver is present in gold dore imports. Earlier, silver content in gold dore was being subject to import duty of 14.35% by the customs, while silver bullion had a lower duty of 10.75%. Thus, the refiners were suffering a loss. The budget has corrected the anomaly.



**Mr Jayantilal Challani, President, The Jewellers and Diamond Traders Association, Chennai**

The Union Budget proposed for 2023-24 was a mixed bag for Gems and Jewellery Industry. The conversion of physical gold to Electronic Gold Receipt and vice versa will not attract any capital gains is a positive move and the government recommendations to promote indigenous manufacturing in the upcoming Lab Grown Diamond sector is much welcomed. On the other side, sticking to 10% as Basic Customs Duty would be definitely encourage the grey market .The thriving grey market has diluted efforts to reduce cash transactions and penalizes organised and compliant players. Reduction in customs duty on gold was most anticipated but it was not addressed. This might severely hamper the industry and encourage again the grey market.



**Mr James Jose, President, Hallmarking Federation of India**

The 2023 Union budget has exempted capital gain tax for converting physical gold to EGR, which is a welcome step in encouraging the recirculation of idle gold holdings at the commodity exchanges, thereby reducing imports. However, without a corresponding announcement of a hassle-free deposit of 500 gms of gold for households, the expected inflows of old gold into EGR may not happen.



Many of the long pending demands of the gold refining industry, which are revenue neutral, such as the permission to import gold Dore from Dore aggregators abroad, remain unanswered. The 1% import duty disparity on bullion under the India UAE-CEPA and the continuously prevailing price discounts of 6 -10% on bullion coming from the grey market have practically spelt the death knell of the domestic gold refining industry. It is disappointing that the industry demand to reduce import duties considerably so as to disincentive unofficial supplies has not found favour with the govt.

**Mr Haresh Acharya, Director, Parker Precious Metals**

The government has introduced a stable budget. It has made all the duties of precious metals equal. Also, they have increased the duty for silver by 5%. This is a long-term plan of the government to stabilize the precious metal market. Looking at the volatility of the market, this is a good approach. With time we will see the market will catch up with these changes. Continuous and uneven changes in duties have multiple effects on the market. Some traders gain, whereas many lose. I hope if this equal duty on all the precious metals remains for a longer period of time, it will benefit all. In my opinion, if the incentive and duty will remain constant for a longer time, it will result in healthy competition in the market.

**Mr Shailesh Choksi, Managing Director, Choksi Heraeus**

Overall, the union budget for 2023-24 is growth oriented. We commend the government for continuing its push on manufacturing, renewables and job creation. The increase in import duty of silver may not have any major impact on the industrial demand for silver, as silver is usually a small fraction of the cost in many products. The case may be different for silver jewellery and silver articles.



**Mr Chirag Thakkar, Director, Amrapali Gujarat**

In India, about 50 to 60% of silver goes for manufacture of jewellery and silverware, providing employment and export opportunities. Most of these manufacturers are small artisans. About 10 to 20% silver goes for manufacture of industrial products such as silver contact, brazing alloys, silver paste and so on. Thus, silver is an essential raw material for further value-addition by the industry. Therefore increasing customs duty on silver will result in restricting imports of silver into the country and will affect the competitiveness of Indian manufacturing which will have cascading impact on final price !!!



**Mr Rahul Mehta, MD, Silver Emporium**

Consumers will not be happy with the increase in the silver duty, which will lead to an increase in silver prices in the domestic market. Silver has always been a preferred investment for the common man. Indian silver market is growing, and with continuous education on quality to consumers, quality standards of silver articles are improving in India.

With the record import of silver this year, we expect demand to slow down in the coming months due to higher silver prices.



**Mr Bhavik Chinai, Group CEO, BVC Logistics**

The overall budget for 2023-24 has been neutral towards business and positive towards individuals. The announcement to develop 50 new airports and helipads, once ready, will make secure logistics significantly faster and safer. The huge infrastructure investment bumped up to 10,000cr by 33% will have a positive cascading effect on all industries, provide more employment and thereby increase the circulation of money in the economy. The reduction in Import duty on Seeds for Lab-grown diamond manufacturing will accelerate India's rise to a global manufacturing leader in the entire diamond industry, lab grown as well as natural.

Other ease-of doing-business initiatives like making PAN the universal company identifier, reducing compliances & more commissioners for faster dispute resolution are highly positive for improvement in day-to-day functioning for businesses. For the logistics & jewellery industries, we look forward to implementing this budget positively.



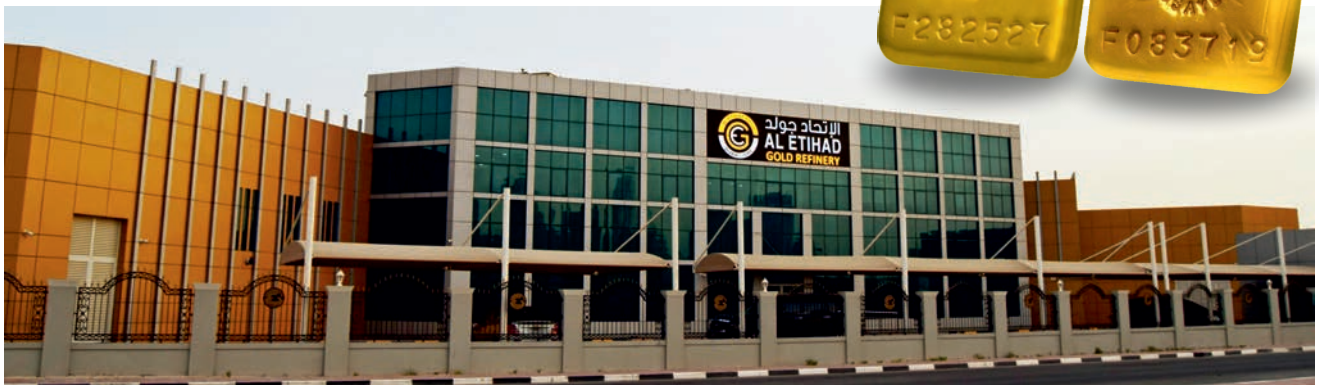


# AL ETIHAD GOLD

## PURITY & QUALITY AT ITS BEST

Al Etihad is a story of awe-inspiring growth and transition, a journey that has made the company one of the most recognised and trusted gold and silver brands globally.

[www.aletihadgold.com](http://www.aletihadgold.com)



P.O. Box 283648 | Tell: +971 4 242 4813 | Fax +971 4 242 4836

# Price Risk Management Via MCX Bullion Derivatives Contract

**Mr Shivanshu Mehta**, Head - Bullion, MCX

*Characterised by expiries every month and smaller denominations, therefore, carrying lower premiums, Gold and Silver mini contracts would enable small and medium-sized jewelers to hedge their bullion price risk.*

MCX Gold and Silver Prices are considered the benchmark for value-chain and end-consumers alike. It is understood that most pricing is done MCX (+/-). MCX Bullion contracts are designed considering the need of all market participants namely Bullion traders, Corporates, Retail jewellers, importers, investors and end consumers.

Further, MCX Gold and Silver prices reflect on all four elements: USD/ INR exchange rate, Custom Duty tariff, international gold and silver

prices along with the domestic premium/discounts. Spot-Futures integration is thus seen via our compulsory delivery contracts.

MCX prices mirror both international price movement as well as domestic spot prices with high degree of co-relation as shown in the charts below:

Correlation of Exchange futures price vis-à-vis international futures price in CY- 2022: Gold: 99% and Silver: 99%



**Mr Shivanshu Mehta**

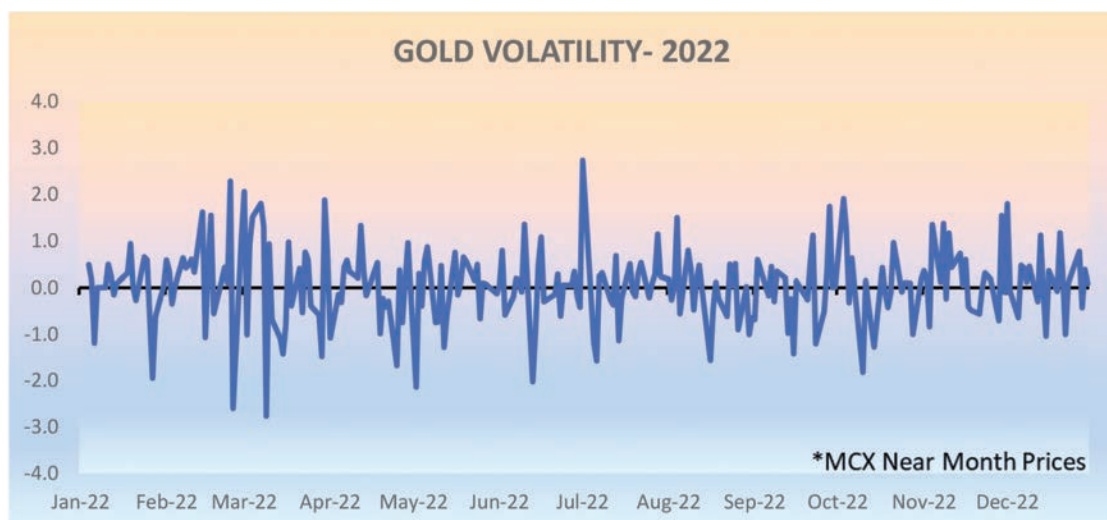
The turnover of bullion futures contract during CY-2022 was about 27 lakh crore. The turnover of bullion options contract in the CY 2022 of 4.15 lakh crore had seen significant increase of around 200% as compared to last year turnover of 2 lakh crore.



Correlation of Exchange futures price vis-à-vis MCX Spot price in CY-2022: Gold: 98 % and Silver: 98 %



In volatile situations there is a need to hedge via MCX futures and options contracts to safeguard the profit margins. The strong convergence of the MCX futures and physical commodity markets in India, reflects the attractiveness of the exchange-traded commodity futures market in India as an efficient platform for price risk management.



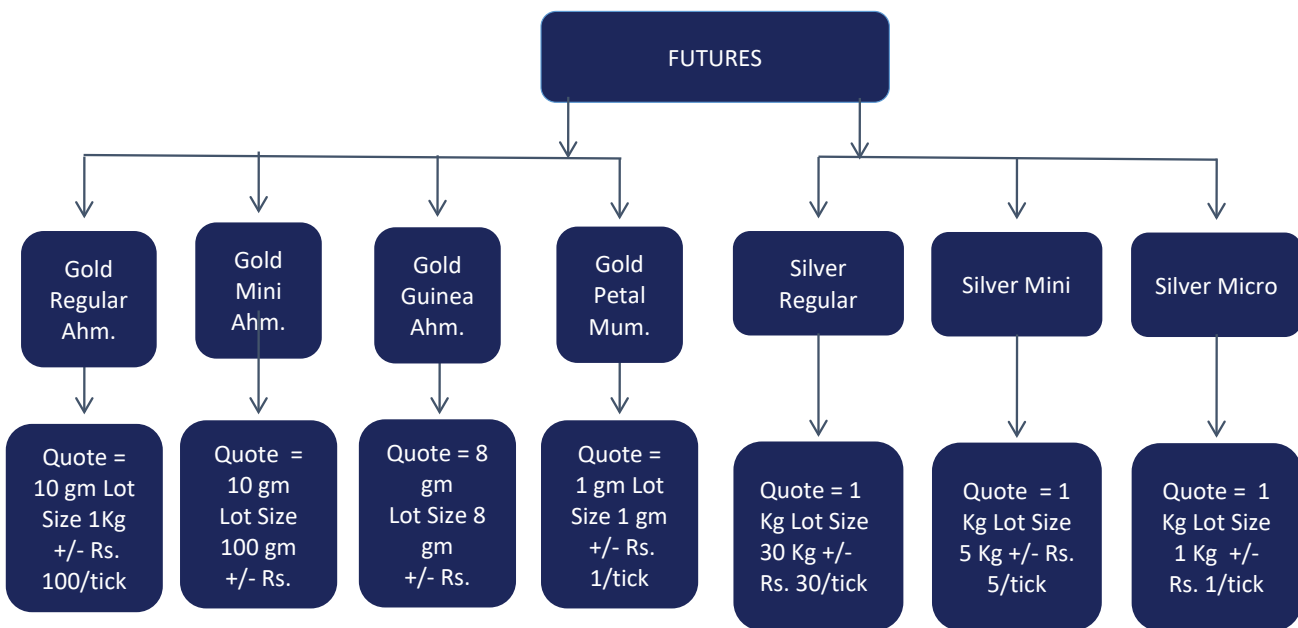
\*ANNUALIZED GOLD VOLATILITY IN 2022: 13%



\*ANNUALIZED SILVER VOLATILITY IN 2022: 23%

### DENOMINATIONS AVAILABLE FOR TRADING AND PERFORMANCE

MCX offers Gold 1kg, Gold Mini 100grams, Gold Guinea 8gram and Gold Petal 1gram futures contract and in Silver we have Silver 30kg, Silver Mini 5kg and Silver Micro 1kg futures contract backed by physical deliver.



Denominations available for trading in Options on futures contracts are Gold 1 kg, Gold Mini 100 gram, Silver 30 kg and Silver Mini 5 kg.





MCX bullion contracts witness the participation of bullion importers, traders and jewelers for hedging, as well as delivery. This is seeing a broader increase by way of small and medium jewellers from across cities and towns of India becoming part of the Exchange eco-system.

The turnover of bullion futures contract during CY-2022 was about **27 lakh crore**. The turnover of bullion options contract in the CY 2022 of **4.15 lakh crore** had seen significant increase of around **200%** as compared to last year turnover of **2 lakh crore**.

After receiving overwhelming response for Gold 1kg and Silver 30kg options contract, we received requests from jewelers to introduce smaller denomination options. MCX launched Silver Mini Options contract with Silver Mini Futures as underlying on July 19, 2021 and Gold Mini Options contract with Gold Mini (100 Grams) Futures as the underlying on April 25, 2022. Characterized by expiries in every month, smaller denominations, and therefore, carrying lower premiums, which would enable small and medium-sized jewelers to hedge their bullion price risk.

The volume of Gold all variants and Silver all variants for futures and options contract during the year 2022 is as table 1 below:

**Table 1:**

Month	Volume-Gold Futures (In Metric Tonnes)	Volume-Silver Futures (In Metric Tonnes)	Volume-Gold Options (In Metric Tonnes)	Volume-Silver Options (In Metric Tonnes)
Jan-22	162	16,002	35	431
Feb-22	182	16,635	28	836
Mar-22	275	18,339	107	310
Apr-22	155	14,969	27	652
May-22	196	17,547	71	368
Jun-22	183	23,626	23	899
Jul-22	194	20,584	63	637
Aug-22	160	22,006	28	1568
Sep-22	227	25,941	77	804
Oct-22	195	24,045	39	1372
Nov-22	201	28,640	103	3338
Dec-22	140	22,708	53	1064

#### KEY MILESTONES ON BULLION OPTIONS CONTRACTS DURING CY 2022:

- Gold Options with Gold (1 Kg) Futures as underlying registered it's highest turnover (post LES) of **Rs. 4638 crore** on May 24, 2022.
- Gold Mini Options with Gold (100 gram) Futures as underlying registered it's highest turnover of **Rs. 540 crore** on December 27, 2022 and

MCX bullion contracts witness the participation of bullion importers, traders and jewelers for hedging, as well as delivery. This is seeing a broader increase by way of small and medium jewellers from across cities and towns of India becoming part of the Exchange eco-system.

registered it's highest Open Interest of **5917** lots on November 18, 2022

- Silver Options (30 kg) registered a turnover of **Rs. 1619** Crores and volume of **262 MT** hitting all time high On November 23, 2022 and registered it's highest Open Interest of **196 MT** on November 18, 2022
- Silver Mini (5 kg) Options with Silver Mini Futures as underlying registered it's highest turnover and Volume of **Rs.200 crore** and **33 MT** respectively on November 4, 2022 and registered its highest Open Interest of **28 MT** on November 14, 2022.

#### BULLION DELIVERIES: SHOWS ACCEPTANCE OF PRICE BY PHYSICAL INDUSTRY:

All Gold contracts are "Compulsory Delivery" contracts and settled based on Indian polled prices. Deliveries of **132 MT** of Gold & and over **4362 MT** of Silver have taken place on MCX since inception.

The newly designed one gram gold future contract (first ever deliverable one gram gold contract in the world) saw successful delivery of **68 kg (68137 coins)** since its launch in October 2019.

Silver (1kg) Micro & Silver (5 kg) Mini contracts saw successful delivery of **171,055 kg** of Silver Kilo bars.

The delivery figures for Gold and Silver in the CY-2022 is as table 2 below;

**Table 2:**

Month	Delivery-Gold (Qty. in kgs)	Delivery-Silver (Qty. in kgs)
Jan-22	82	-
Feb-22	187	49,513
Mar-22	1,428	18,360
Apr-22	382	21,173
May-22	115	7,410
Jun-22	332	29,540
Jul-22	107	8,640
Aug-22	576	61,097
Sep-22	922	12,180
Oct-22	483	-
Nov-22	1,006	66,366
Dec-22	325	10,350

Stock on MCX vault during the CY 2022 is as table 3 below;

**Table 3:**

Month	Warehouse Stock - Gold (on last working day of month)	Warehouse Stock - Silver (on last working day of month)
Jan-22	418	89,936
Feb-22	648	93,485
Mar-22	1547	87,772
Apr-22	512	89,816
May-22	427	51,340
Jun-22	485	80,653
Jul-22	572	1,35,053
Aug-22	744	1,52,438
Sep-22	413	99,380
Oct-22	1099	1,588,25
Nov-22	997	1,97,845
Dec-22	854	2,27,199

## ATMANIRBHAR BHARAT MISSION – EMPANELMENT OF DOMESTIC GOLD REFINERS

To make the Exchange's bullion derivative contracts more relevant to the physical market players and in line with the broader national objective of 'Atmanirbhar Bharat', MCX empaneled domestic refiners as per "MCX Good Delivery Norms for BIS-Standard Gold/Silver" effective from March 6, 2021 and saw a successful delivery of **3756** kgs valued at **1902 crore** till January 5, 2023 contract.

In the year 2022, it has seen successful delivery of gold refined by domestic MCX empaneled refiners to the tune of **3119 kg** valued at **Rs. 1599 crore**.

This initiative of empaneling domestic refiners by MCX may serve the nation by reducing disparities, encouraging quality gold recycling and reducing import dependence.



# THE WORLD'S MOST CONSIDERATE® PRECIOUS METALS



Learn more  
[abcbullion.com/considerate](http://abcbullion.com/considerate)



# Silver Nanowires for flexible and printed electronics

**Mr Jayesh R. Sonawane & Dr Amol A. Kulkarni\***

Chemical Engineering & Process Development Division, CSIR-National Chemical Laboratory, Dr Homi Bhabha Road, Pune – 411008, India

\*Contact: aa.kulkarni@ncl.res.in

*CSIR-National Chemical Laboratory has developed the first-ever scalable continuous process for manufacturing silver nanowires. The laboratory is further exploring the development of conducting inks for printed electronics using silver nanowires.*

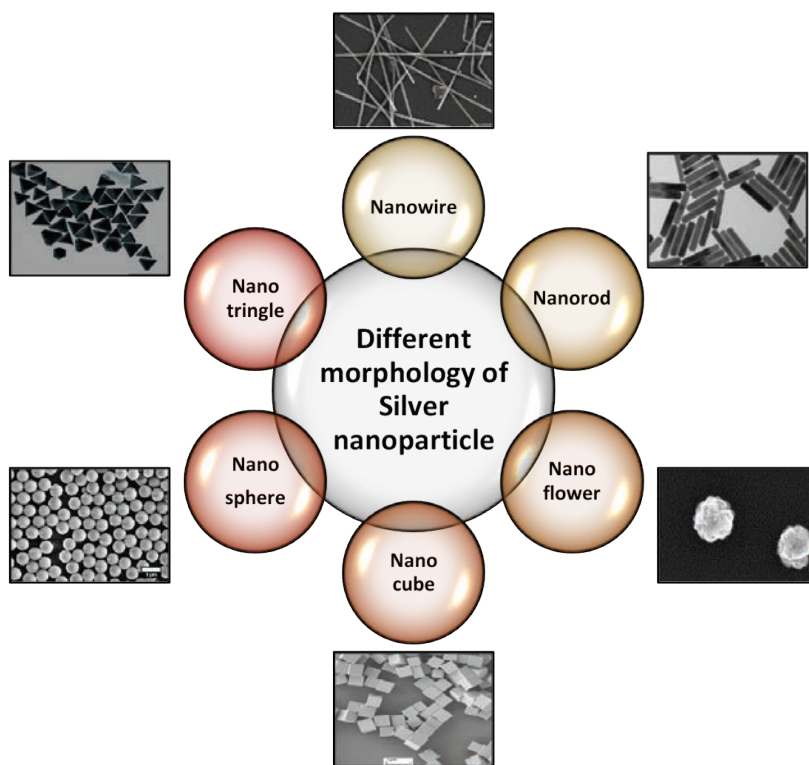


Metal nanomaterials (viz. Gold, Silver, Copper, Nickel, Platinum, Palladium, etc.) have unique dimension-dependent electrical, catalytic, thermal, and optical properties that has potentially benefit applications such as transparent electronics, flexible/stretchable conductors, photonics, solar cells, wearable devices, sensor, electrocatalysts,

and lithium-ion batteries. The properties and applications of the materials vary with morphology. Among many of these metal nanomaterials, silver has a unique standing. Silver nanomaterials have tremendous applications in the field of electronics due to their unique properties and stability. There are various methods to synthesize nanosilver with different

morphologies. The shape and size of the material can be tuned by changing the reaction conditions, using different surfactants and also using different reactants. The different morphologies of the silver nanomaterials are shown in the figure below.

Silver nanowires are an excellent alternative to indium tin oxide (ITO) for a transparent conductor. Indium is a rare metal, and the price of ITO is rising dramatically due to its high demand for transparent electronics and scarcity.



Different morphologies of silver at nanometer length scale

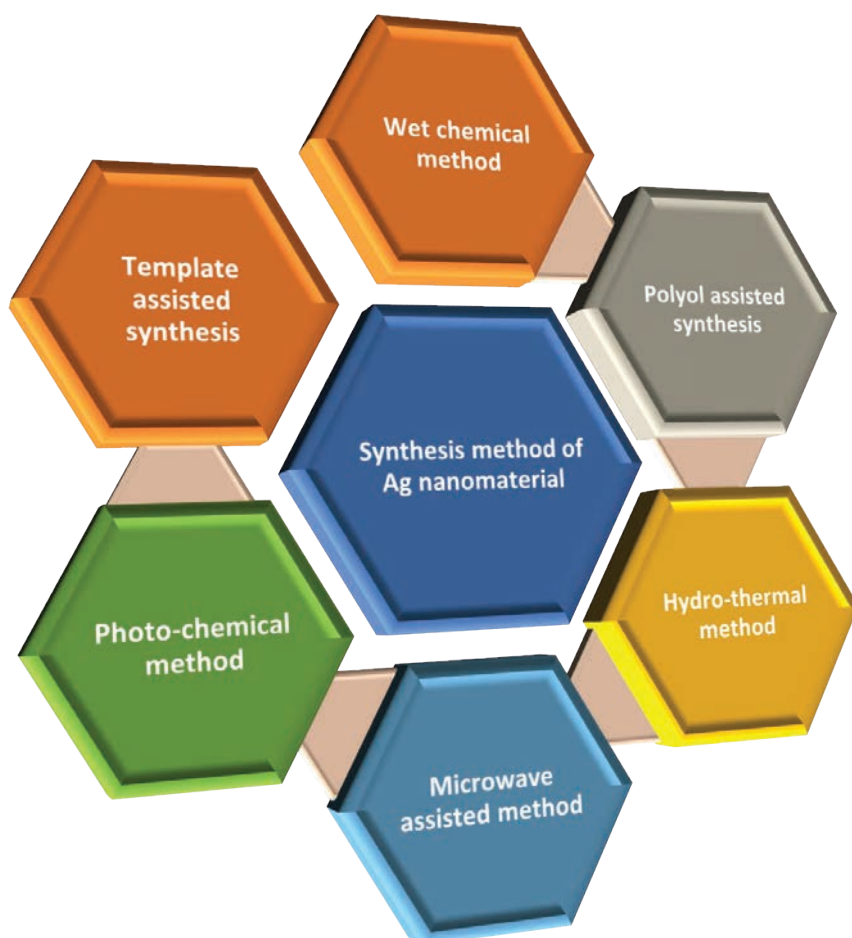
The optical properties of silver nanoparticles can be tuned by varying particle shapes and sizes. Silver nanocubes have been used in numerous applications, such as plasmonic sensing, surface-enhanced Raman scattering (SERS), metamaterials, catalysis, and bio-nanotechnology. The sharp corners and edges of the silver nanocubes give additional plasmonic modes at different resonance wavelengths in the spectrum. Silver nanoflowers are used for the preparation of highly conductive ink due to their hierarchically-structured petals that can actively coalesce at a low curing temperature which constructs the percolation pathway. Due to its excellent coalescence property of nanoflowers, it provides higher conductivity with a lower concentration of conductive filler.

Silver nanotriangle can easily tune the band gap in the range of 1.2–2.8 eV by controlling the edge length of nanotriangles during the synthesis process. It is a promising candidate for the light-harvesting application with a wavelength in the visible and near-infrared range.

Silver nanowires have piqued the interest of researchers due to their unique morphology among the various shapes of silver nanomaterials. Generally, nanowires have a diameter of <100 nm and a length >10  $\mu\text{m}$  (aspect ratio > 100, it is nothing but the ratio of length and diameter of nanowire). Silver nanowires have a good balance between their stability and cost. They also show good mechanical strength and high thermal as well as electrical conductivity

for flexible and stretchable applications. Silver nanowires provide high transparency with low haze since their aspect ratio is higher as possible. Forming a good percolation threshold within the dispersed AgNWs network is necessary to achieve good electrode conductivity. As a result, silver nanowires are an excellent alternative to indium tin oxide (ITO) for a transparent conductor. Indium is a rare metal, and the price of ITO is rising dramatically due to its high demand for transparent electronics and scarcity.

There are various methods for synthesizing silver nanomaterials. Among all the techniques, a polyol method is one of the best for synthesizing monometallic and bimetallic nanoparticles, nanorods, nanowires, nanoparticles and nanosheets. Synthesis of AgNWs happens prominent by this method. The polyol method can produce nanomaterials on a large scale and typically has the advantage of its inherent reducing ability to prevent the oxidation of nanomaterial while storage since the formed nanomaterials remain in the solvent. In polyol-assisted synthesis, ethylene glycol is used as the solvent as well as a reducing agent at the higher reaction temperature. Ethylene glycol convert into acetaldehyde at a higher temperature (>120  $^{\circ}\text{C}$ ) to reduce the metal precursor to form a metal atom. The method looks simple, however needs critical controls and engineering that must ensure uniform size nuclei as well as unidirectional growth. These wires find applications in making conducting inks, smart textiles, touch screen, flexible electronics, coatings for EMI shielding, etc., demand for all of which are exponentially increasing.

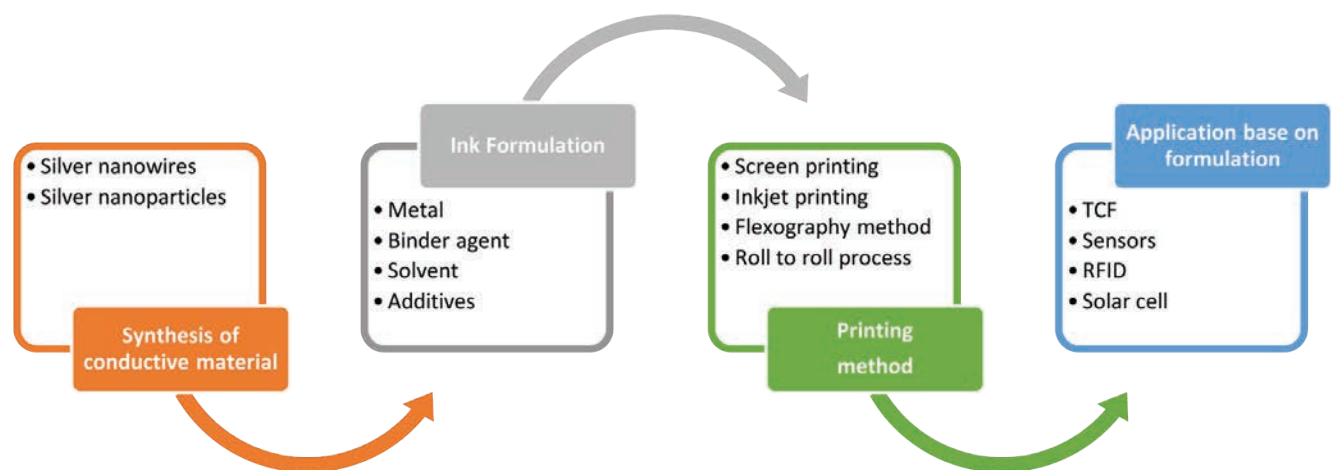


### Applications of Silver nanowires

Conductive inks have attained significant attention due to their application in flexible and transparent electronics. A conductive material is the most crucial component in ink formulations. The physical properties of the ink, such as viscosity, surface tension, and dielectric constant of ink, may be varied based on the quantity of conductive material, resin, solvent and additives added. The most commonly used conductive material for flexible and transparent electronics is silver nanowires due to their higher electrical conductivity, stability, and less expensive than the traditionally used ITO in transparent electronics.

sensors, RFID, healthcare devices, and optoelectronics. According to the Silver Institute’s reports, the electronics market segment revenue growth is estimated at 11.1% by 2025, and conducting material payout in the electronics market exceeds 5% of total revenue, as evidenced by figure. In addition to this, it finds applications in the consumer electronics market, such as laptops, desktops, tablets, televisions and displays, smartphones, appliances, entertainment systems, gaming systems, and many other electronic devices. It is primarily used in touch screen devices as an alternative to ITO. Silver nanomaterial conductive ink is relatively easy to print by screen, inkjet, and

roll-to-roll printing methods for flexible substrate application. One of the advantages of nano ink is that, it cures at low temperatures, making it promising for flexible applications. In addition, silver nanowires offer good corrosion resistance, stretchability, and bendability characteristics. The printing technique for the flexible substrate makes possible the mass production of flexible electronic circuits, OLED displays, and healthcare devices by printing silver nano conductive ink. The use of organic light-emitting diode (OLED) products for ambient lighting in homes, workplaces, and automobiles will increase in popularity.



Representation of process involved from conductive material synthesis to application development.

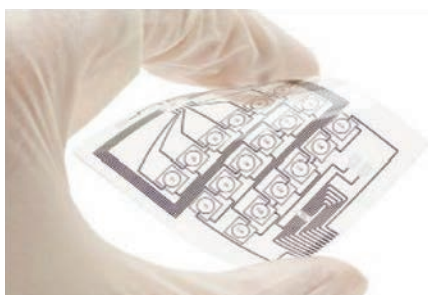
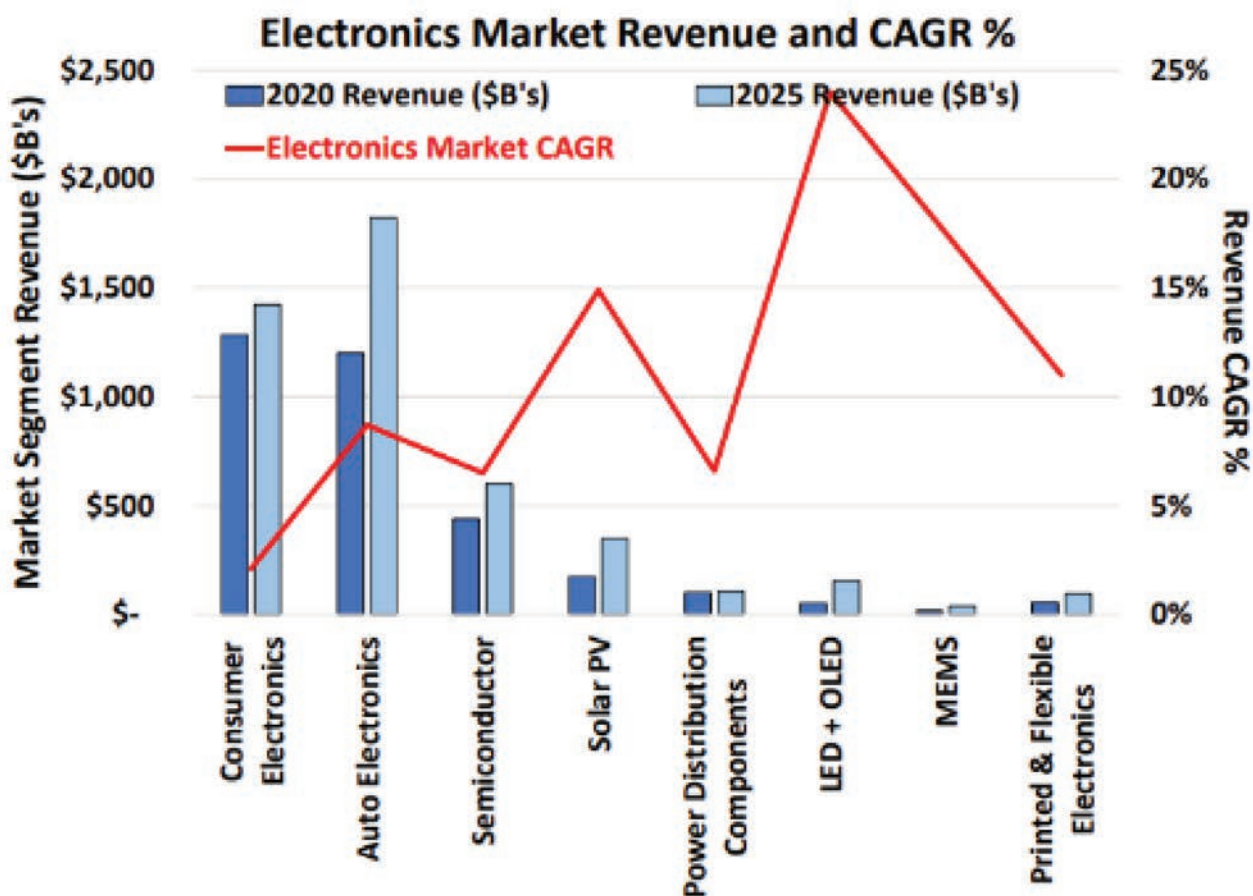
Printed electronics enable the fabrication of large, transparent and flexible components. Traditional electronic devices are printed by vacuum deposition, photolithography, and electroless plating processes cannot produce flexible and transparent electronic components. These methods are expensive and produce large quantities of chemical waste. Printed transparent or flexible electronics depend on the substrate and conducting ink's property and have wide applications in solar photovoltaic,

The silver nanowire market is expected to grow during the forecast period of 2022-2025 as it holds a share in the electrical and electronics segment. The expansion of the electric vehicle segment is expected to rise by CAGR 66.52% in India by 2029, which will raise the industrial demand for silver nanowires as it is used in car display, sensors and electrode for batteries

Equilibrium between  
design and beauty



valcambi  
suisse



The silver nanowire market is expected to grow during the forecast period of 2022-2025 as it holds a share in the electrical and electronics segment. The expansion of the electric vehicle segment is expected to rise by CAGR 66.52% in India by 2029, which will raise the industrial demand for silver nanowires as it is used in car display, sensors and electrode for batteries.

The conventional power plant generates more carbon monoxide and radioactive waste in the environment, causing serious health problems such as asthma, cancer and heart issues. An alternative to this is the photovoltaic cell,

which is a clean and green energy source. The solar cell process can reduce the carbon footprint. Silver nanowires/nanoparticles are used in the photovoltaic cell as an electrode to conduct electricity. Which is coated onto the silicon wafer in the form of a busbar and finger to conduct the converted electrical energy from solar energy. It is globally predicted that the solar cell market will reach by CAGR of 17% over the forecast period of 2022-2030. The increasing demand and government promotion for the solar and industrial need for silver nanomaterial have to be considered. Silver nanowires made it possible to harvest solar energy with maintaining

complete transparency. Integrating a photovoltaic cell with full transparency at the rooftops and windows of buildings will make the net zero energy conservation by the building.

CSIR-National Chemical Laboratory has developed the first ever scalable continuous process for manufacturing silver nanowires. The laboratory is further exploring development of conducting inks for printed electronics, using silver nanowires as well as with other conducting nanomaterials including copper nanowires. ■■■



# Organised jewellery retailers to outpace industry growth over the medium term; outlook remains Stable



**Mr Vipin Jindal**, Assistant Vice President & Sector Head, ICRA Limited

**Mr Raunak Modi**, Senior Analyst, ICRA Limited

*Most organised jewellers have recommenced expansion with a focus on capturing the untapped market in tier 2 and tier 3 cities in H1 FY2023. The total store count of ICRA's sample set is expected to increase by ~10% in the next 12-18 months, which is expected to translate into market share gains and economies of scale*



**Mr Vipin Jindal**



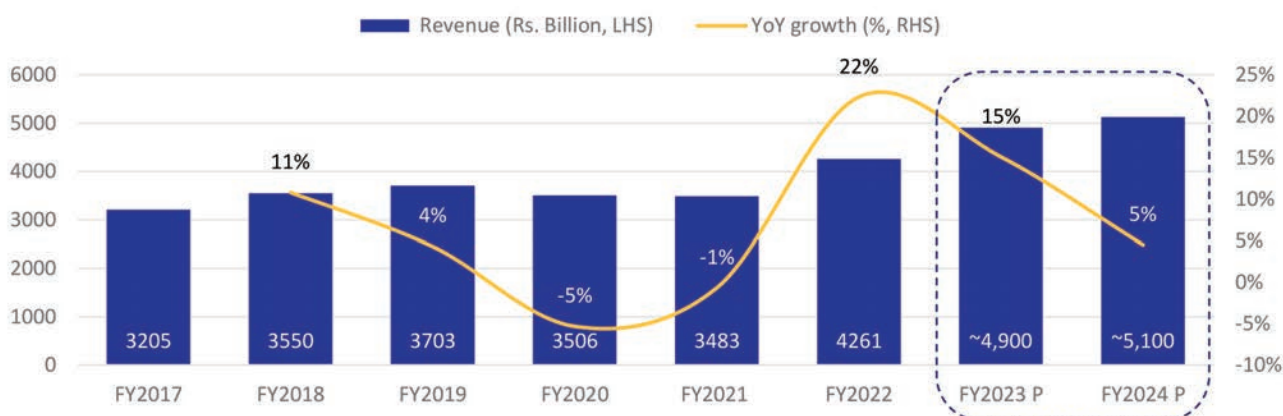
**Mr Raunak Modi**

The organised jewellery retailers in India are expected to continue to outpace the industry over the medium term on the back of industry tailwinds in the form of accelerated shift in market demand from unorganised retailers and planned expansion of retail presence to capitalise on the tailwinds. ICRA estimates its

sample set of 15 major organised jewellers to record revenue growth of ~20% YoY in FY2023 (revenue growth was 28% in FY2022) against the expected industry growth of ~15% YoY in FY2023. The debt protection metrics and liquidity position of players in the

sample set is expected to remain comfortable, supported by higher earnings on the back of improved scale of operations, despite likely moderation in margins and part debt-funded store expansions being undertaken. The industry outlook is Stable.

## EXHIBIT: Industry outlook – fiscal trends



Source: WGC, CMIE, ICRA Research

Domestic gold jewellery retail industry is likely to record a healthy growth of ~15% YoY in FY2023 (industry had grown by ~22% YoY in FY2022) owing to robust growth recorded during H1 FY2023 (up ~35% YoY), mainly on account of Akshaya Tritoaya and a low base, which was impacted by the pandemic last year. Demand growth in H2 FY2023 is likely to remain muted due to a high base on account of pent-up demand in Q3 FY2022. While the ongoing festive and wedding season sees healthy demand, evolving domestic inflation scenario, slow rural economic recovery and soft consumer sentiments remain the key demand constraints.

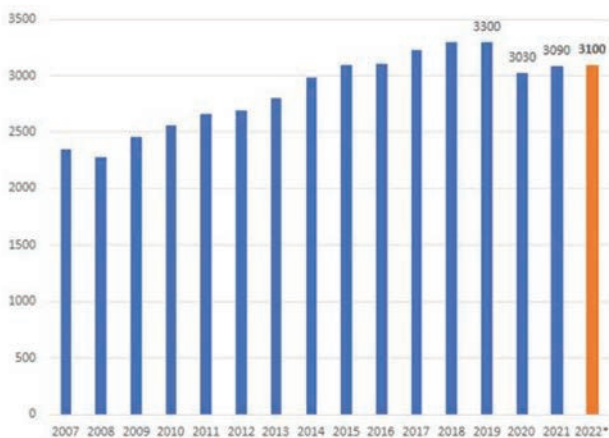
The industry growth is likely to moderate to ~5% YoY in FY2024 due to the high base of FY2023,

coupled with evolving macro-economic scenario. Nevertheless, the revenue of organised jewellery retailers is likely to grow at a much higher rate of ~10% YoY in FY2024, supported by the accelerated shift in market share to the organised sector driven by tightening regulations, change in consumer preferences towards branded jewellery and planned expansion of organised jewellers into tier 2 and tier 3 cities.

While ICRA expects the operating margins of organised players to contract by ~100 basis points (bps) in FY2023 and ~40-50 bps in FY2024, the margin is expected to sustain at ~7% levels over the medium term. The margin moderation follows normalising gross margins, which remained elevated due to inventory gains in

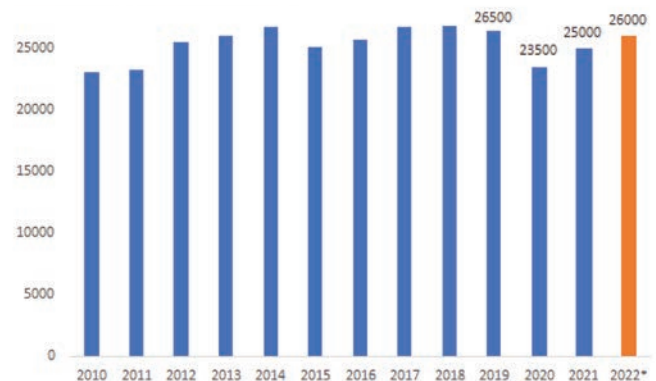
FY2020-FY2022, and firm operating costs due to store expansion and advertising. Despite the expected increase in debt levels to fund store expansions, the debt protection metrics for the larger players is expected to remain comfortable, as reflected by the estimated interest coverage of more than 4.5 times and total outside liabilities to tangible net worth ratio of less than 1.5 times over the next 12-18 months against 5.4 times and 1.4 times, respectively, in FY2022. Most organised jewellers have recommenced expansion with a focus on capturing the untapped market in tier 2 and tier 3 cities in H1 FY2023. The total store count of ICRA's sample set is expected to increase by ~10% in the next 12-18 months, which is expected to translate into market share gains and economies of scale.

Global Gold Production Trends



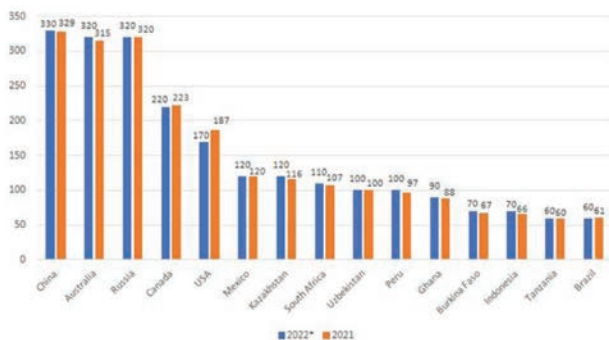
Note: Value in tons / Source: USGS

Global Silver Production Trends



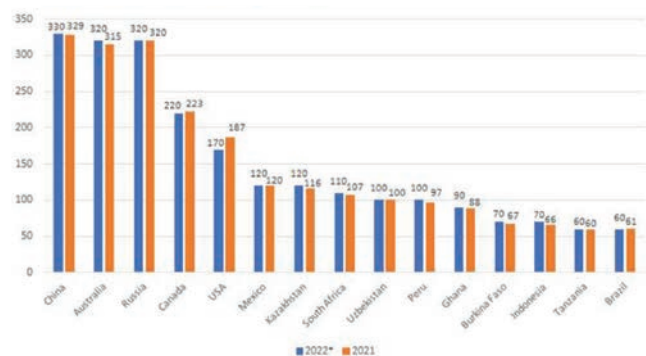
Note: Value in tons / Source: USGS

World Largest Gold Producing Countries



Note: Value in tons / Source: USGS

World Largest Gold Producing Countries



Note: Value in tons / Source: USGS





# SOVEREIGN METALS LIMITED

Sovereign Metals Limited is in the business of refining precious metals (gold and silver) and supplying highest and most consistent quality products and related services and solution to customers at their place of convenience by leveraging its competent and customer-focused human resources, industry-leading technology infrastructure and transparent and globally compliant-sourcing practices.

Sovereign Metals Limited would pursue environmentally sustainable manufacturing practices and would strive to be a world leader in its chosen segment from India.

[www.sovereignmetals.in](http://www.sovereignmetals.in)



# CPD Exports Cautious after Strong FY22 Show, Margin dip Imminent:

Mr Ujjwal Patel, Associate Director, CARE Ratings Limited

*While overall exports of CPD declined by just 8% at USD 16.6 billion during 9MFY23 (9MFY22: USD 18.0 billion) in value terms, CPD exports volume declined by 24% to 183.30 lakh carats during 9MFY23 (9MFY22: 241.07 lakh carats) reflecting the absence of Alrosa's smaller goods and a dip in the consumer demand from China, which consumes smaller-sized diamonds below 0.30-carat as compared to the US, which consumes larger sizes/ higher-value stones.*

## **Demand for natural diamonds crossed pre-COVID-19 levels in CY21**

The demand for global natural diamond jewellery as well as global polished diamonds witnessed a robust recovery at USD 87 billion and USD 28 billion, respectively, in CY21, crossing the pre-pandemic levels of CY19 by around 10%. The year-on-year (y-o-y) growth of natural diamond jewellery demand was significant at 29% and consequently the demand of polished diamonds grew by 51% on a y-o-y basis in CY21. Over and above the fiscal stimulus, the lack of alternatives in terms of other luxury spending, experience-based activities, travelling, etc., made diamonds a preferred choice for customers, who had excess liquidity due to a reduction in the overall expenditure. Moreover, the reduction in unemployment rates and vaccination drives in the second half of the financial year resulted in faster inventory turnover and earlier-than-usual orders for depleted inventories.

Overall, more than half of the global natural diamond jewellery demand is contributed by the US, followed

by China and Japan, which accounted for about 11% and 5%, respectively, in CY21.

## **Midstream segment mirrors industry performance**

With a global share of more than 90% in the processing of rough diamonds, the midstream segment, dominated by Indian entities, reflected a mirror image of the industry performance post-COVID-19, marked by a steady increase in the overall exports. The recovery in demand after the lifting of lockdown restrictions in the US and China resulted in a faster-than-expected recovery in demand from Q2FY21 for five straight quarters, both in volume as well as value. Contrary to the expectation of softening in the prices of rough diamonds post Diwali break, it continued to increase, thereby creating an imbalance in the pricing parity of rough diamond vs polished diamond, marked by an increase in CPD exports by 11% to USD 6.2 billion in Q4FY22, but with a decline in volume by 15% to 64 lakh carats over Q3FY22. On an annual basis, the exports of CPD rebounded significantly by 49% y-o-y to USD 24 billion.



Mr Ujjwal Patel

## **Impact of war and macro-economic environment on CPD exports**

Russia's invasion of Ukraine and resurgence of COVID-19 in China (the second-largest export market) and its zero-tolerance policy leading to intermittent lockdowns, impacted the overall performance of the industry in the current financial year. With the absence of Alrosa's rough, which accounts for about 25% of global production with 40-50% market share in smaller-sized diamonds, CPD exports declined by 24% at 183.30 lakh carats during 9MFY23 (9MFY22: 241.07 lakh carats). Nevertheless, CPD exports declined by just 8% at USD 16.6 billion during 9MFY23 (9MFY22: USD 18.0 billion), primarily on account of elevated CPD prices, which also reflects the absence of smaller size Russian rough and a dip in the consumer demand from China.

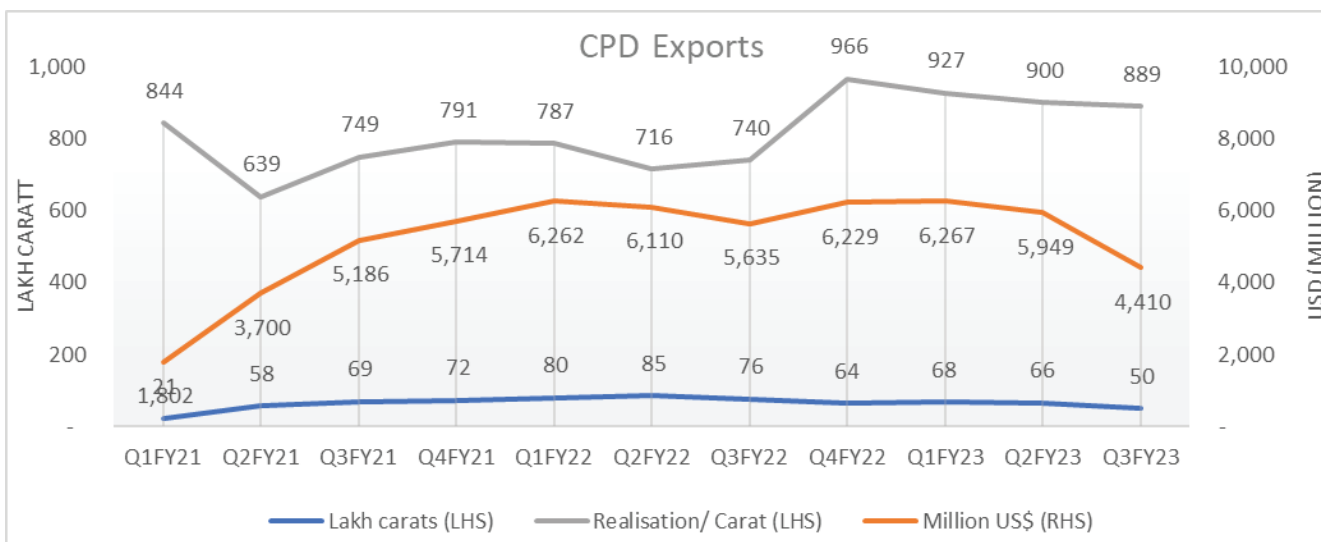
Disruption in supply from Alrosa, the largest rough diamond miner, has helped De Beers clock 18% y-o-y growth at USD 5.67 billion in CY22 (CY refers to the period January 01 to December 31) in rough diamond sales, primarily backed by increase in the prices.

**Rough diamond prices impact pricing parity**

Rough diamond imports increased with the resumption of operations post subsiding the effects of COVID-19 and reflected an increasing trend in value terms till Q4FY22. However, it was

the increase in the procurement price per carat during H1FY23 to a certain extent reflects the absence of Alrosa, which is estimated to have the largest share in smaller-size diamonds.

**Chart 1: CPD exports from India**



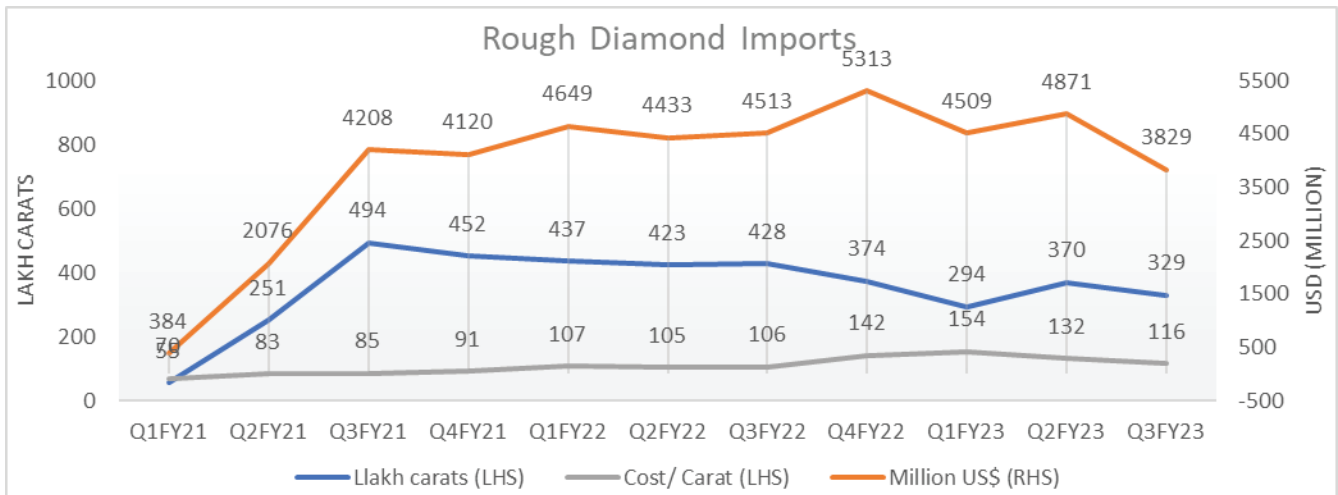
Source: Gems and Jewellery Export Promotion Council (GJEPC)

Overall exports of CPD to the US and China grew y-o-y by 58% (to USD 9.8 billion) and 11% (to USD 6.4 billion), respectively, during FY22, and cumulatively accounted for 66% of the total exports from India. While US continues to be the largest market, its share has reduced marginally to 38% of the total exports at USD 5.9 billion during 8MFY23, marking a dip of 11% in value terms as compared with 8MFY22, and CPD exports to Hong Kong (the second-largest export market) also reduced y-o-y by 24% to USD 3.4 billion (22% of total CPD exports) during 8MFY23 due to a resurgence of COVID-19, real estate, and banking crisis in mainland China. Consequently, loss in market share by top two consumers was captured by diamond trading bourses located at Dubai and Antwerp.

primarily due to increase in the rough diamond prices as there was m-o-m drop in volume from Q2FY21 till Q1FY23. The average cost of rough diamond imports increased by 30% m-o-m in March 2022 and April 2022 to USD 217/ carat in April 2022 from USD 126/ carat in February 2022 on account of uncertainty w.r.t rough diamond availability following the sanctions imposed by the US. Although the prices have reduced marginally in Q2FY23, it was higher by 25% when compared with Q2FY22. The same can be corroborated by 23% decline in the volume of rough diamonds import to 992.75 lakh carats during 9MFY23. In value terms, total import of rough diamonds was USD 13.2 billion, a dip of 3% over 9MFY22. In addition,

Indian cut and polished diamond (CPD) players recovered significantly in FY22, crossing the pre-pandemic levels by a fair margin, as the demand for diamond jewellery reached an all-time high of USD 87 billion, primarily due to robust demand from the US.

**Chart 2: Imports of rough diamonds in India**



Source: GJEPC

CARE Ratings Limited (CARE Ratings) expects that the inflationary pressures leading to rise in the interest rates, increase in travel and experience-related activities, slowdown in China, and geopolitical uncertainties will outweigh the performance of the Indian diamond industry in the near term.

CARE Ratings expects the entities operating on a moderate scale with dependence on the secondary market to be impacted more when compared with entities having long-term supply contracts at both ends of the value chain. With the focus of the entire value chain to improve efficiency, reduce speculative movements in the prices, and promote sustainable and ethical luxury, we expect organised players with mine-to-market partnerships will continue to gain a larger market share once the demand stabilises.

**Way ahead**

Overstimulation of the US economy with more than USD 5 trillion in stimulus payments followed by Russia's invasion of Ukraine has build-up inflationary pressure on essentials like clothing, food and energy. Strong recovery of the entire diamond value chain post lifting of lockdown restrictions due to the lack of alternate avenues for spending on the backdrop of overstimulated economies buoyed the demand of diamond jewellery. The outlook is now overturning with a decrease in the disposable income on the backdrop of withdrawal of excess liquidity, the surge in inflation across all key economies and decadal high

interest rates. Moreover, the situation was further exacerbated by the zero-tolerance stance of the Chinese government leading to intermittent lockdowns in various key cities and domestic property, and a banking crisis in China, the second-largest diamond jewellery market in the world. With gradual opening of market post relaxation of lockdown restrictions, demand for smaller size diamonds is showing a positive traction.

Against this backdrop, sustained recovery in demand from these two key consuming nations remains crucial for the overall performance of the Indian midstream segment in the near to medium term.

Indian entities are expected to witness moderation in income as well as profitability during FY23, after reporting healthy growth during FY22. The polished production has reduced below operational capacity since December 2022 with entities opting for reduced working hours and weekly offs. Nevertheless, overall credit profile of entities in the organised segment is envisaged to remain stable on the back of adequate liquidity, nil long-term debt repayment obligations and augmented net worth base. ■■■

# High-quality, cost-effective and innovative investment solutions: USP of Indigo Precious Metals

**Mr David J Mitchell, CEO & Founder, Indigo Precious Metals**

*Auctus Metal Portfolios' core activities include trading physical precious metals on behalf of our clients and offering state-of-the-art vaulting solutions together with our third-party vaulting agents Malca-Amit who operate at Le Freeport, Singapore*

## **In what ways does IPM Group or Auctus Metal Portfolios differ from banks and other platforms that offer physical gold investment products**

Clients approaching the banks or other gold investment products such as ETFs are generally expected to have already made their decisions about their investment plans. However, I would suggest the vast majority of investors have very little knowledge on when to buy precious metals, why metals, what are the cycle time frames and the valuation prognosis, which metals to buy over and above each other and why, what is the unbiased opinion of global capital flow shifts and hence the correct diversification requirements? IPM Group and Auctus Metal Portfolios concentrate on all these critical questions on behalf of our client base to ensure they make the right investment decisions. Our pricing is also incredibly competitive versus the banks and global market place; and this applies not only to our bullion but also our world class vaulting solution.

Our group encompasses 3 distinct standalone companies. We focus on delivering high-quality, cost-effective and innovative investment solutions across the physical precious metals space for our

clients. Our unique offerings sets us apart from our competitors as we offer a diverse range of services, enabling customers to select the ideal option for their specific requirements.

'Indigo Precious Metals Group' ([www.ipmbullion.com](http://www.ipmbullion.com)) is an active, retail bullion dealership offering a wide range of products encompassing brands, denominations, sizes and grading across the full range of precious metals and critical metals. We provide active market information and in-depth support, alongside product information best suited to the clients unique circumstance. We store the investment grade metals with a third-party vaulting agent at Le Freeport Singapore (A Class, ultra-secure vaulting solution) or we conveniently transfer the precious metals worldwide to our clients by insured courier.

'Auctus Metal Portfolios' ([www.auctusmetals.com](http://www.auctusmetals.com)) was developed for larger investors (Minimum Investment: S\$250,000) looking for higher returns from a portfolio of actively managed physical precious metals. They demand a higher level of service that is more bespoke and tailored to their goals of producing alpha outsized returns over and above a static holding of metals.



**Mr David J Mitchell**

Our third company named 'Bullion Software Solutions' provides the extensive suite of bespoke software and database management tools to fully support the companies within the group.

## **What are the advantages one has in the purchase of physical gold as compared to gold-linked ETFs?**

You have to consider the purpose of the diversification into precious metals and whether this is part of your long-term portfolio or are you short-term trading the market. ETFs are very much designed as trading vehicles and not for the purpose of long-term investments.

ETFs are purely a paper derivative of the metal, you cannot stand for delivery and take possession of the gold. There are also 'force majeure' written into the prospectus of ETFs such as the GLD, hence you do have third party risk in holding an ETF, unlike

Our team instigates physical precious metal swaps, adjusting the allocation of a client's physical holdings from one precious metal to another, in order to take advantage of clear price signals dictated by the algorithmic models and maintain optimal weightings of the respective precious metals at all times.

holding physical precious metals in your own wholly segregated vault.

Larger funds have recognised that holding physical vaulted metals is actually more cost effective than the ongoing running costs of holding ETFs. You must then ask yourself if paper gold fulfils the primary purposes for you versus the outright ownership of gold.

ETFs and physical holdings have different pros and cons, and the best option depends on an individual's investment goals and risk tolerance. Here are a few factors to consider:

**Cost:** ETFs usually have lower expense ratios compared to mutual funds, but they still come with trading fees, management costs and bid-offer spreads. Physical holdings only incur storage and insurance costs.

**Liquidity:** ETFs are more liquid and tradeable as they can be bought and sold on an exchange throughout the day, whereas physical holdings can be a little more challenging to sell and their value can be affected by the supply and demand of physical metals, although with IPM Group and Auctus Metal Portfolios we are able to provide immediate liquidity.

Physical ownership also acts as direct collateral.

**Trust:** Owning physical assets provides greater control and certainty over the assets you own, whereas ETFs are subject to the financial stability of the institutions running it, and the underlying availability and price of the asset (gold for example) which has a negative 3rd party exposure to ETF's.

It's important to consider your individual financial situation, local country or government risks, the overall investment timeline and intended goals before making a decision.

**As a physical metal management system company, can you detail your business ecosystem, core activities, and geographical presence?**

Auctus Metal Portfolios is a precious metals advisory headquartered in Singapore that uses algorithmic models to optimally weight & actively manage our clients' vaulted physical precious metal holdings across Gold, Silver, Platinum, Palladium and Rhodium to maximize their net returns. Our team instigates physical precious metal swaps, adjusting the allocation of a

client's physical holdings from one precious metal to another, in order to take advantage of clear price signals dictated by the algorithmic models and maintain optimal weightings of the respective precious metals at all times.

Auctus Metal Portfolios' core activities include trading physical precious metals on behalf of our clients and offering state-of-the-art vaulting solutions together with our third-party vaulting agents Malca-Amit who operate at Le Freeport, Singapore. As Auctus Metal Portfolios deals in large volumes, we maintain very close relationships with international wholesalers and the world's leading refineries & mints to ensure that liquidity is never an issue for our clients. Our high volume metal purchases/swaps also ensures that we are able to secure the very best prices in the market, which further amplifies our client's overall net returns.

In addition to assisting our clients to maximize their gains from their diversified portfolio of physical precious metals, our clients store their precious metals with a third party vaulting agent at one of the world's most secure vaulting facilities in Singapore to mitigate any counterparty risks. Clients' precious metals are stored within the client's own wholly segregated vault under their family name and they are fully insured by Lloyd's of London and independently audited.

Auctus Metal Portfolios' client base spans across the world as global investors seek to take advantage of this progressive and active management approach to precious metals.



**Can you detail the profile of your clients and how they evaluate Auctus as a preferred metal management company?**

Auctus Metal Portfolios offers an entirely new approach to investing in physical precious metals. We have successfully solved that age-old problem of generating a higher positive return on physical metal holdings and this is the guiding principle behind the creation and ongoing success of Auctus Metal Portfolios.

Clients that invest into Auctus Metal Portfolios are generally high net worth individuals, asset managers and family offices that understand that precious metals are a medium to long term investment and are not only seeking wealth preservation, but also to generate a significant outperformance over and above the benchmark which is physical gold. Our client base is entirely global and covers all continents.

Auctus Metal Portfolios has consistently delivered a significant alpha return over and above a static holding of either gold or silver. Many of our clients are already invested in precious metals, or are familiar with investing in precious metals. These clients want to actively grow and generate a return on their physical precious metal holdings whilst maintaining full control and title ownership of their physical metals at all times with zero third party risk.

Given the current economic climate, our clients are acutely aware that we have entered into a super-cycle across the commodity complex and precious metals in particular, which are forecast to be substantially revalued moving forwards.

Can you detail Auctus Metal Portfolios' proprietary algorithms to

manage clients' physical portfolios and the return on investment you have generated for your clients?

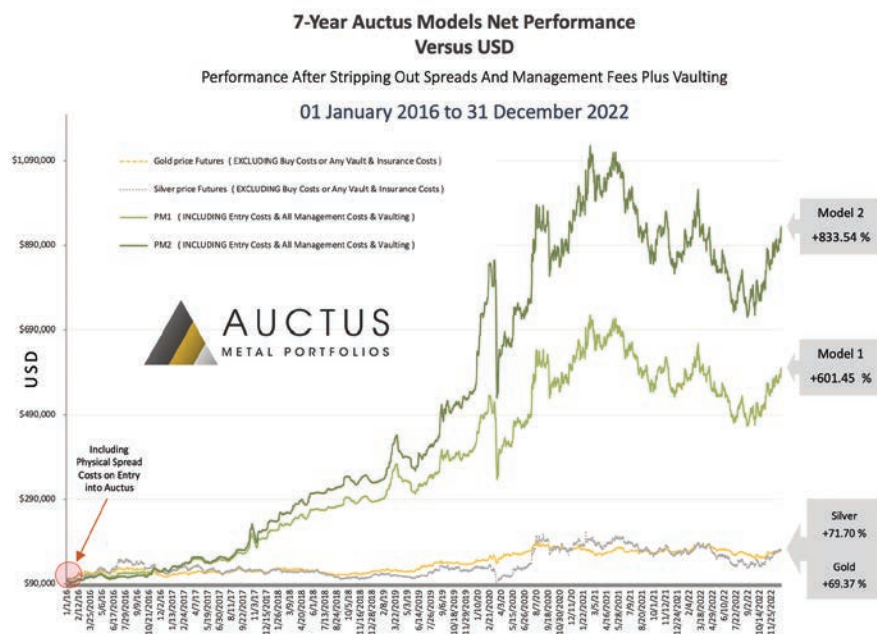
Auctus Metal Portfolio's proprietary algorithms analyses an historical database with live price feeds constantly updating, utilising 55 variables that are used to identify how to accurately weight each client's initial investment across the precious metals and when to re-weight clients' vaulted physical precious metal portfolio.

A crucial part of our expertise is understanding the excellent re-balancing opportunities that manifest throughout the year and accurately weighting each client's basket of physical precious metals on their date of entry. Our process for weighting client's initial investment into metals and the periodic rebalancing of their portfolios, takes into consideration historical and ongoing metal price ratios, technical & Gann analysis, global supply-demand curves, implied volatility, momentum analysis, recognition of ore grade degradation and production costs, backwardation curves, lease rates, forward industrial demand curves and capital flows; to name just a

few. This exhaustive approach enables us to recognise distinct changes in price trends and therefore take advantage of (often severe) pricing anomalies that occur between the 5 inextricably linked precious metals.

- 7-Year Calendar Performance: +833.54% Net Return to Clients since 1 Jan, 2016
- 4-Year Calendar Performance: +161.00% Net Return to Clients since 1 Jan, 2019
- 3-Year Calendar Performance: +40.63% Net Return to Clients since 1 Jan, 2020
- 2-Year Calendar Performance: -7.43% Net Return to Clients since 1 Jan, 2021
- 1-Year Calendar Performance: +4.53% Net Return to Clients since 1 Jan, 2022
- % Net Return to Clients since 1 Jan, 2022

The net returns detailed above are calculated after all transaction costs (bid / offer spreads on physical metals), vaulting costs and our Auctus Metal Portfolios' management fees have been accounted for. Since inception on 1 January 2016, we have generated



annualized net compound returns of +37.59% (as of 31 December 2022).

### **Besides gold, where do you advise investing in other precious metal space?**

Throughout the year and more importantly over the major cycle time frames, each metal offers unique pricing opportunities or anomalies, of which the vast majority of the market simply outright ignores. The industrial end users rely on market research from various agencies to plan their procurement plans, but that's as far as it goes in the precious metal space.

For example, platinum today is offering investors a huge opportunity to benefit from a wholly differing structure versus the last 10 years or so of its price action, focusing on the global supply-demand picture. It's an extensive situation change and best phrased as a 'perfect storm' with falling ore grades, disruptive and falling global production, rising cost of production at a time of rapidly rising industrial demand. Much of this demand is linked to global changes as a result of ever-increasing pollution controls as well as new energy sources including the hydrogen economy. Above ground liquid available stockpiles have been decimated over the last 10 plus years by China importing enormous amounts of platinum from the market-place for its own tactical sovereign holdings. There a quite a few opportunities

covering precious metals and critical metals, which cannot be covered here but we are always open to discuss these with clients.

### **What, according to you, are the major structural changes that are going around in the precious metals space?**

Again this is a big question that has many strong roots in place and growing stronger, there have been several structural changes in the precious metals space in recent years, including:

- Increased demand for sustainable and environmentally friendly mining practices, leading to a shift towards more responsible sourcing and production methods, which in turn is tightening supply and raising costs of production.
- Growth in the use of precious metals in industries such as electronics, renewable energy, electric vehicles, hydrogen economy, pollution controls and the rising technology loadings requiring greater amounts of platinum group metals are all driving up industrial demand for these metals significantly.
- The introduction of new technologies such as blockchain and digital crypto tokens, which have led to a growing interest in precious metals as a store of value and as a diversification.
- Growing geopolitical tensions, war and civil unrest along with

amplified economic uncertainty and negative growth patterns, which have led to increased demand for precious metals as a safe haven asset.

- Global sovereign Central Banks around the world have been net buying gold every year since 2010 into 2022, the greatest central bank buying spree since the 1960's. 2022 saw the greatest net officially reported buying spree of the last 13 years. Un-official procurement raises their net buying dramatically.
- The global debt crisis is growing rapidly as Central Banks start to raise interest rates expeditiously in the face of the worse negative nominal interest rate yield picture since World War 1. Higher rates increase the serviceability costs of existing debt thereby increasing the demand for debt over and above the already expanding debt growth. Then we have the stagflationary economic environment backdrop that invariably forces governments to increase spending. Thereby leading us into a condition that the global monetary debasement is quickening its pace.

Overall, these changes are leading to a more dynamic and rapidly evolving precious metals market, with very attractive new investment opportunities across this greater super-cycle that we are now in.



# ASSAYING AND REFINING CONFERENCE 2023

**Sunday 12 – Wednesday 15 March**  
**Hilton London Tower Bridge, London, UK**

- Meet leading industry figures and specialists
- Comprehensive programme, technical sessions and expert speakers
- Exceptional networking opportunities

Interested In Sponsoring or Exhibiting?  
Enquire now by emailing  
[events@lbma.org.uk](mailto:events@lbma.org.uk)

**REGISTRATION  
IS NOW OPEN**

DON'T MISS OUT,  
BOOK YOUR  
PLACE TODAY

[lbma.org.uk/events](https://lbma.org.uk/events)



**ALL INDIA GEM AND JEWELLERY DOMESTIC COUNCIL**

PROMOTING • PROTECTING • PROGRESSING

1501 & 1502, 15th Floor, Panchratna Building, Mama Parmanand Marg, Opera House, Charni Road East, Mumbai 400004  
Tel: 91-22-6738 2700 • Fax: 91-22-6738 2706 • Email: info@gjc.org.in • Website: www.gjc.org.in  
CIN U91990MH2005NPL 154999

Formerly known as "ALL INDIA GEMS AND JEWELLERY TRADE FEDERATION"



## Press Release

### All India Gem & Jewellery Domestic Council Installation Ceremony of Committee of Administration (COA) 2023-24

Mumbai, January 30, 2023: The Installation ceremony of Committee of Administration (COA) of India's prestigious gems and jewellery industry body the All India Gem and Jewellery Domestic Council (GJC) concluded successfully on 29th January 2023 at Hotel St Regis, Mumbai

Attended by more than 200 prominent jewellers from across India, Mr. Saiyam Mehra the New Chairman of GJC and Mr Rajesh Rokde, Vice Chairman GJC took official charge of this prestigious body. Mr Ashish Pethe in a glittering felicitation ceremony held in St. Regis at Mumbai will continue as the Immediate Past Chairman of GJC.

Mr. Ashish Pethe, Immediate Past Chairman, said, "It was two years back when I took an oath of the office of COA in Goa. Now, the time has come to hand over Chairmanship to Mr. Saiyam Mehra. I hope, I have done justice to the task entrusted to me. I thank my entire board for reposing faith in me and giving me the privilege to lead this august organisation,"

Mr Pethe thanked past Chairmen, Nitin Khandelwal, Ashok Minawala, Bachraj Bamaalwa, Vinod Hayagriv, GV Sreedhar, Haresh Soni and IPC during his tenure, Anantha Padmanaban for extending phenomenal support and pushing him to deliver more.

Speaking on the occasion, Mr Saiyam Mehra, Chairman GJC said, "Speaking on the occasion, Mr Mehra said, "I am thankful to the entire COA for having faith in me to lead this prestigious organization as its Chairman. As the chairman of GJC, I shall continue the legacy of my predecessors and strive for the betterment of the entire gems and jewellery fraternity. I shall endorse the COA's vision and address the interest of all our esteemed members through activating each zone with the formation of zone-wise committees that will take care of zonal activities".

He further added, "My priority goal is and follow up with the government on issues that benefits the industry. I shall also try to bring the entire industry on one platform.

Mr Mehra further quipped, "Our motto is to protect, promote and progress. Additionally, I shall work hard to educate the new generation about fair trade practices by conducting Labham, create new business opportunities to increase contribution to the country's GDP."

The GJC has already sent its Union Budget expectations and its COA aggressively dedicate time towards the Council's motto of Protect, Promote and Progress. As the youngest chairman of GJC, Mr. Mehra stressed working together and achieving this goal for the betterment of the entire gems and jewellery industry.

Mr. Rajesh Rokde, Vice Chairman GJC, said, "I thank the COA for such a great honour given to me. As a Vice Chairman, I shall shoulder the big responsibility of the GJC and try to put in my 100 per cent to serve the industry. I shall work hand in hand with the Chairman Mr Mehra and other COA members to elevate the industry to the next level,"

The event concluded with the installation of the entire COA for the year 2023-24.

#### About GJC

The All India Gem and Jewellery Domestic Council (GJC) represents over 6,00,000 players comprising manufacturers, wholesalers, retailers, distributors, laboratories, gemologists, designers and allied services to the domestic Gems & Jewellery industry. The Council functions with the objective to address the industry, its functioning and its cause with a 360° approach to promote and progress its growth, while protecting the industry's interests. GJC, since the last 17 years, has been serving as a bridge between the government and the trade by undertaking various initiatives on behalf of and for the industry.

**For further information, please feel free to contact All India Gem and Jewellery Domestic Council (GJC):  
Mr. Mitesh Dhorda, GM; Mobile: 9820410448; Email: mitesh@gjc.org.in**



## Introduction of 1 gram Gold contract with delivery-based settlement on NSE Commodity Derivatives segment.



In addition to the Gold Futures (1 Kg) contracts and Gold Mini (100 gms) contracts, NSE is pleased to launch 1 gram Gold contracts w.e.f. June 07, 2021, on its NSE Commodity Derivatives segment.

### Key Highlights

- Assured delivery of 999.0 purity gold
- Competitive making charges
- Delivery only from NSE approved Domestic Refiners or London Bullion Market Association (LBMA) certified Refiners
- One step closer to Atmanirbhar Bharat

### List of NSE Approved Refiners

- M/s Augmont Enterprises Pvt. Ltd.
- M/s GGC Gujarat Gold Centre Pvt. Ltd.
- M/s Kundan Care Products Ltd.
- M/s M. D. Overseas Ltd.

For more details, log onto [www.nseindia.com](http://www.nseindia.com) or contact your **SEBI registered broker**

**DISCLAIMER:** The information contained in this brochure including text, graphics or other items are provided on an 'as is', 'as available' basis. NSEIL does not warrant the accuracy, adequacy or completeness of this information and material and expressly disclaims liability for errors or omissions in this information and material. No warranty of any kind, implied, express or statutory, including but not limited to the warranties of non-infringement of third party rights, title, merchantability and fitness for a particular purpose is given in conjunction with the information and materials. In no event will NSEIL be liable for any damages, including without limitation direct or indirect, special, incidental, or consequential damages, losses or expenses arising in connection with this brochure or use thereof or inability to use by any party, or in connection with any failure of performance, error, omission, interruption, defect, even if NSEIL or representatives thereof, are advised of the possibility of such damages, losses or expenses.

Organised by



Title Sponsor



Platinum Sponsor



Platinum Sponsor



Powered by



Supported by



Silver Refinery Partner



Logistics Partner & Lanyard Sponsor



Free Zone Partner



Silverware Partner



Media Partner



Knowledge Partner



Sustainability Partner



Supporting Bodies



28-30 April 2023  
Le Meridien Resort & Spa, Jaipur

For more details, visit:  
[www.silverconference.in](http://www.silverconference.in)

For sponsorship, delegate registration & exhibition queries,  
[abhinaya@eventellglobal.com](mailto:abhinaya@eventellglobal.com),  
+91 9343734140

**Register Now**

## IBJA Opening & Closing Rates for Gold and Silver

(All rates in INR)

Date	Gold 999		Gold 995		Gold 916		Gold 750		Gold 585		Silver 999	
	(AM Price)	(PM Price)	(AM Price)	(PM Price)	(AM Price)	(PM Price)	(AM Price)	(PM Price)	(AM Price)	(PM Price)	(AM Price)	(PM Price)
	10 Gms	10 Gms	10 Gms	10 Gms	10 Gms	10 Gms	10 Gms	10 Gms	10 Gms	10 Gms	1 Kg	1 Kg
01-02-2023	55113	55163	54892	54942	50484	50529	41335	41372	32241	32270	68527	68349
01-03-2023	55702	55581	55479	55359	51023	50912	41777	41686	32586	32515	69659	69227
01-04-2023	55905	56142	55681	55917	51209	51426	41929	42107	32704	32843	68880	69371
01-05-2023	55957	55796	55733	55573	51257	51109	41968	41847	32735	32641	68200	67678
01-06-2023	55584	55587	55361	55363	50915	50918	41688	41690	32517	32518	67591	67888
01-09-2023	56336	56259	56110	56034	51604	51533	42252	42194	32957	32912	69074	68791
01-10-2023	56148	55974	55923	55750	51432	51272	42111	41981	32847	32745	67964	67629
01-11-2023	55974	56115	55750	55890	51272	51401	41981	42086	32745	32827	67629	68363
01-12-2023	56110	56097	55885	55872	51397	51385	42083	42073	32824	32817	68025	67963
01-13-2023	56254	56462	56029	56236	51529	51719	42191	42347	32909	33030	67848	68115
01-16-2023	56814	56883	56587	56655	52042	52105	42611	42662	33236	33277	69236	69167
01-17-2023	56825	56752	56597	56525	52052	51985	42619	42564	33243	33200	69049	68661
01-18-2023	56825	56752	56597	56525	52052	51985	42619	42564	33243	33200	69049	68661
01-19-2023	56642	56670	56415	56443	51884	51910	42482	42503	33136	33152	67264	67444
01-20-2023	56990	57050	56762	56822	52203	52258	42743	42788	33339	33374	68509	68453
01-23-2023	57013	57044	56785	56816	52224	52252	42760	42783	33353	33371	68371	68273
01-24-2023	57362	57322	57132	57092	52544	52507	43022	42992	33557	33533	68006	68137
01-25-2023	57138	57138	56909	56909	52338	52338	52854	42854	33426	33426	67947	67894
01-27-2023	57062	57189	56834	56960	52269	52385	42797	42892	33381	33456	68350	68192
01-30-2023	57288	57079	57059	56850	52476	52284	42966	42809	33514	33391	68334	68149
01-31-2023	57041	56865	56813	56637	52250	52088	42781	42649	33369	33266	67949	67671

The above rates are exclusive of GST

## Bullion - Data & Statistics

Gold Spot Market International (Per Troy Ounce)				Silver Spot Market International (Per Troy Ounce)			
Spot Gold	02 <sup>nd</sup> Jan	31 <sup>st</sup> Jan	% Change	Spot Silver	02 <sup>nd</sup> Jan	31 <sup>st</sup> Jan	% Change
Australia (AUD)	2680.19	2734.47	2.03	Australia (AUD)	35.27	33.68	-4.51
Britain (GBP)	1515.73	1564.81	3.24	Britain (GBP)	19.95	19.27	-3.41
Canada (CAD)	2479.00	2568.01	3.59	Canada (CAD)	32.62	31.63	-3.03
Europe (Euro)	1714.14	1775.10	3.56	Europe (Euro)	22.55	21.86	-3.06
Japan (Yen)	238841.00	251161.00	5.16	Japan (Yen)	3143.00	3092.00	-1.62
Switzerland (CHF)	1690.37	1769.50	4.68	Switzerland (CHF)	22.24	21.78	-2.07
USA (USD)	1829.24	1927.30	5.36	USA (USD)	24.09	23.68	-1.70

Monthly Exchange Data (Gold) (From Jan 02-31)						
Exchange	Contract	Open	High	Low	Close	% Ch.
COMEX <sup>2</sup>	Gold April 23	1847.20	1966.50	1846.10	1945.30	5.60
SHANGHAI –SHFE <sup>4</sup>	Gold April 23	412.00	424.30	408.50	421.12	2.66
MCX <sup>1</sup>	Gold April 23	55503.00	57500.00	55471.00	57190.00	3.20
TOCOM <sup>3</sup>	Gold April 23	7721.00	7764.00	7674.00	8011.00	3.39

1- Rs/10 gms, 2- \$/oz, 3- Jpy/gm 4 (RMB) Yuan/gram 5 - \$/gram

Monthly Exchange Data (Silver) (From Jan 02-31)						
Exchange	Contract	Open	High	Low	Close	% Ch.
COMEX <sup>2</sup>	Silver May 23	24.45	24.94	23.05	24.04	-0.69
MCX <sup>1</sup>	Silver May 23	70538.00	72134.00	67935.00	69864.00	-0.80
TOCOM <sup>3</sup>	Silver April 23	93.90	93.90	89.00	89.00	-5.22

1- Rs/kg, 2- \$/oz, 3- Jpy 0.1/gm

Gold Spot Market, India			Rs/10gm
Spot Gold	02 <sup>nd</sup> Jan	31 <sup>st</sup> Jan	% chg
Ahmedabad	54874.00	56719.00	3.36
Bangalore	54080.00	56330.00	4.16
Chennai	54080.00	56050.00	3.64
Delhi	54020.00	56280.00	4.18
Mumbai	54942.00	56637.00	3.09
Hyderabad	54080.00	56050.00	3.64
Kolkata	54390.00	56750.00	4.34

Currency Change (Monthly)		
	02 <sup>nd</sup> Jan	31 <sup>st</sup> Jan
EUR/USD	1.0662	1.0861
USD/AUD	1.4697	1.4182
USD/GBP	1.2045	1.2308
USD/INR	82.75	81.77
USD/JPY	130.73	130.12

Silver Spot Market, India			Rs/kg
Spot Silver	02 <sup>nd</sup> Jan	31 <sup>st</sup> Jan	% chg
Mumbai	68349.00	67671.00	-0.99

Sources:

www.mcxindia.com  
 www.Ncdex.com  
 www.cmegroup.com  
 www.tocom.or.jp/Indian  
 www.barchart.com

www.forexpros.com  
 Domestic Spot precious metals prices Newspaper  
 www.lbma.org.uk/index.html  
 www.netdania.com



## Bullion - Data & Statistics

### LBMA Gold & Silver Price (Per Troy Ounce)

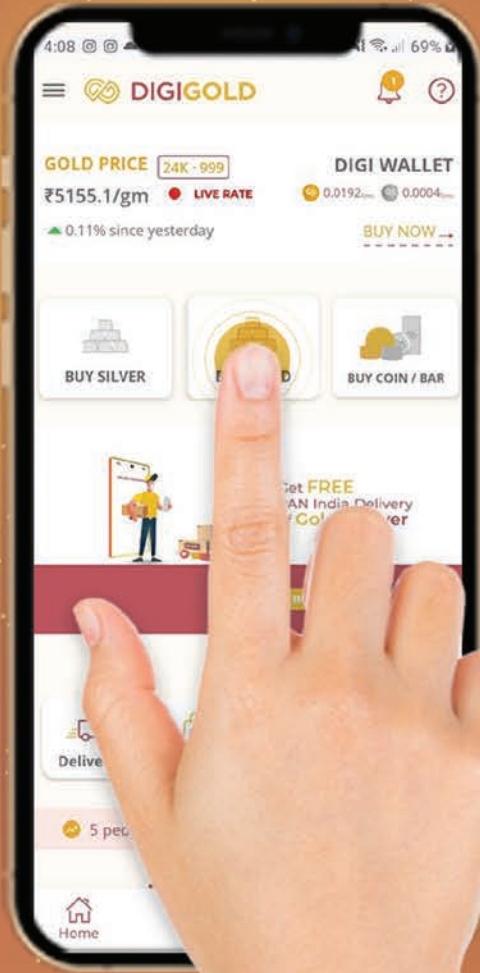
GOLD AM			GOLD PM			SILVER				
DATE	USD AM	GBP AM	EUR AM	USD PM	GBP PM	EUR PM	DATE	USD	GBP	EUR
01-03-2023	1835.05	1540.16	1742.01	1843.25	1532.29	1743.16	01-03-2023	24.295	20.360	23.080
01-04-2023	1857.55	1539.35	1749.63	1857.30	1540.26	1749.58	01-04-2023	24.290	20.150	22.910
01-05-2023	1850.25	1539.04	1743.49	1834.00	1540.01	1740.47	01-05-2023	23.410	19.470	22.060
01-06-2023	1834.50	1547.40	1746.08	1852.20	1551.77	1758.11	01-06-2023	23.455	19.800	22.350
01-09-2023	1873.80	1544.01	1756.50	1878.85	1541.03	1750.71	01-09-2023	23.850	19.640	22.320
01-10-2023	1875.20	1540.48	1746.37	1878.65	1545.94	1749.59	01-10-2023	23.515	19.350	21.910
01-11-2023	1884.25	1553.56	1753.86	1872.35	1540.76	1738.10	01-11-2023	23.870	19.690	22.210
01-12-2023	1883.10	1549.41	1750.72	1882.55	1553.67	1748.14	01-12-2023	23.700	19.480	22.020
01-13-2023	1904.05	1556.56	1756.11	1907.15	1563.86	1763.54	01-13-2023	23.675	19.450	21.900
01-16-2023	1915.10	1567.32	1768.02	1917.00	1570.41	1770.92	01-16-2023	24.170	19.800	22.320
01-17-2023	1904.95	1561.87	1761.89	1913.80	1557.64	1762.80	01-17-2023	24.100	19.670	22.260
01-18-2023	1911.55	1548.74	1760.35	1920.70	1547.12	1767.81	01-18-2023	24.185	19.550	22.350
01-19-2023	1907.50	1546.60	1762.53	1918.60	1552.91	1773.94	01-19-2023	23.445	18.980	21.660
01-20-2023	1928.75	1560.55	1778.89	1924.90	1557.24	1778.80	01-20-2023	23.870	19.320	22.050
01-23-2023	1927.20	1556.02	1768.01	1914.85	1550.26	1763.39	01-23-2023	23.675	19.160	21.760
01-24-2023	1936.50	1573.60	1782.94	1920.75	1565.41	1771.70	01-24-2023	23.710	19.250	21.820
01-25-2023	1925.85	1565.52	1771.40	1930.80	1562.21	1772.28	01-25-2023	23.430	19.030	21.560
01-26-2023	1936.45	1562.52	1776.31	1932.45	1561.61	1774.96	01-26-2023	23.710	19.130	21.750
01-27-2023	1928.25	1558.03	1770.71	1923.05	1553.44	1769.98	01-27-2023	23.725	19.180	21.810
01-30-2023	1926.75	1552.00	1765.67	1924.10	1554.48	1766.32	01-30-2023	23.635	19.090	21.690
01-31-2023	1905.20	1546.83	1759.83	1923.90	1562.01	1772.87	01-31-2023	22.995	18.660	21.220

**Disclaimer:** All references to LBMA Gold Price are used with the permission of ICE Benchmark Administration Limited and have been provided for informational purposes only. ICE Benchmark Administration Limited accepts no liability or responsibility for the accuracy of the prices or the underlying product to which the prices may be referenced.

LBMA Silver Price ("Benchmark") is owned by The London Bullion Market Association ("LBMA"), calculated by CME Benchmark Europe Ltd. ("CMEBEL") and administered by Thomson Reuters Benchmark Services Ltd. ("TRBSL").

None of LBMA, CMEBEL, TRBSL, their group companies, nor any of their or their group companies' respective directors, officers, employees or agents (collectively the "Disclaiming Parties") shall be liable in respect of the accuracy or the completeness of the Benchmark or the market data related thereto ("Market Data") and none of the disclaiming parties shall have any liability for any errors, omissions, delays or interruptions in providing the Benchmark or market data.

It will just take  
**One Click**



BUY



SELL



SIP



GIFT



DELIVERY



SAFE  
WALLET

Get access to **India's most trusted digital platform** for  
**GOLD and SILVER** by Amrapali Gujarat.



DOWNLOAD NOW



Preferred Refinery



Powered by



[www.digigold.com](http://www.digigold.com)



+91 75740 09400



## FOR OVER A CENTURY WE HAVE RESHAPED VALUE RESPONSIBLY.

When it comes to gold, provenance, quality and sustainability go hand-in-hand. Which is why we are always evolving how we source our metal - from extraction to beneficiation - to ensure that we embrace legal, humanitarian and sustainability principles. We meet the highest standards, and then work to exceed them. That way, we don't only preserve our business, we preserve our industry and our planet.



[www.randrefinery.com](http://www.randrefinery.com)



**RAND REFINERY**



Swiss Excellence.  
Made in India.

# FINEST SWISS CRAFTSMANSHIP WITH INTRICATE DESIGN

## GOLD BEYOND COMPARE

Rose Bar (10gm)



Lakshmi Pendant (2gm)



Ganesh Pendant (2gm)



Shankh Lakshmi (5gm)



Shankh Ganesh (5gm)



Rose Pendant (2gm)



Queen Coin (8gm)



King Coin (8gm)



24K 999.9+ Purest Gold



Finest Swiss Craftsmanship



Positive Weight & Purity Balance



100% Assured Buyback



LBMA GOOD DELIVERY REFINER

LBMA Accredited