Viability of a Gold Exchange in India

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Viability of a Gold Exchange in India

Executive Summary

Despite being the second largest importer of gold in the world with a demand of nearly 1,000 tonnes, India lacks many key elements of the gold ecosystem. Many jewellers and traders import gold in refined form from markets like Dubai and Singapore. Further, the gold market remains fragmented in India and non-trivial price arbitrage exists across the channels of gold buying and selling. A gold spot exchange in India could be a national channel to buy and sell standardized quality gold in India and to create a national pricing structure of gold. The exchange could provide quality storage and vault facilities, and facilitate the financing of gold inventory at internationally competitive rates.

To evaluate the viability of setting up a spot gold exchange in India, we carried out a survey of a wide range of participants in the gold value chain, organized a focus group discussion with the key players in the market, and analysed the experience of international gold exchanges.

International Experience

As the global gold market continues to shift from West to East, several Asian countries have set up global scale physical infrastructure required for refining, storage, transport and trading of gold. Across the different international markets examined, gold exchanges and related infrastructure appear to have significantly contributed to the development of an efficient market for gold by way of: efficient price discovery; assurance in the quality of gold; active retail participation, use of gold bars, gold coins and gold linked financial products for investment instead of jewellery; greater integration with financial markets through gold leasing and lending; and acting as a channel for gold recycling.

Field Survey and Brainstorming Session

To understand the gold market in India and the scope for a Gold Exchange, we conducted a field survey which yielded the following key conclusions:

- Most of the demand for physical gold in India is routed through hubs outside India, particularly Dubai. The quality of gold available and the price in various parts of the country vary significantly.
- Large players procure gold directly from miners and traders in overseas gold hubs, but some of them have expressed keen interest in using a

gold exchange set up in India. While we do not disbelieve the large players who indicated that they would source gold from an Indian gold exchange, we have accounted for the possibility that their participation might be lower than their stated intention.

- The medium and small jewellers are often forced to dependent on large players and face significant price disadvantage. They are keen to source gold through a gold exchange.
- Resellers constitute a significant part of the demand from jewellers and refiners. There is no transparency in the activities associated with the reselling of gold into the market.

In addition to the field survey, we organized a brainstorming session that brought together leading jewellers, refiners, bankers, commodity exchanges and other participants in the gold value chain to discuss the need for and the design of a spot gold exchange. Participants were of the view that as gold does not have a standard price in India, a national-level spot exchange would benefit all stake-holders by ensuring transparency in pricing and standardization. It would also help India evolve as a gold trading hub. The session envisaged a domestic and an international exchange which would allow two-way trading in physical gold and also have other derivative products for hedging purpose. The exchange could utilize existing infrastructure and could be launched by promoters who already have the experience of operating other exchanges in India or abroad. The consensus was that the exchange would be feasible if it attracted a minimum trade quantity of about 100 tonnes and this was feasible given the annual demand of about 1,000 tonnes in India. The participants felt that it is ideal to have the following infrastructure as part of the exchange: gold vaulting facilities set up by experienced promoters, logistic arrangements to achieve T +1 delivery across 21 major locations in India, quality assurance of gold and standardization.

Setting up a Gold Exchange in India

Our assessment based on conversations with a wide variety of potential stakeholders and participants is that if 10% of India's gold imports flow through the exchange, this 100 ton volume would provide the minimal liquidity to sustain a contract. This minimal liquidity would attract larger participation and snowball into a vibrant contract that becomes the dominant forum for price discovery and for investment in physical gold. Our assessment based on our survey is that this minimal initial volume is eminently feasible. Survey participants indicated that their participation in the spot exchange is likely to be well above 10%, and even if we discount these stated intentions (particularly for large players, 10% appears to be quite feasible). Our survey also showed that there are significant segments that are under served by the existing market structure, and they would be keen on the greater transparency afforded by the exchange.

The gold exchange should offer a wide range of contracts to meet the needs of the gold industry:

- Domestic Spot Gold Contract
- Global Spot Gold Contract denominated in US dollars based on delivery outside the Domestic Tariff Area (DTA)
- Dore Swap Contract
- Gold Lending and Borrowing Mechanism (GLBM)

A separate clearing corporation only for the Gold Exchange or for the global contract would not have the scale and resources to achieve global acceptance. A large global clearing corporation or a leading domestic clearing corporation would be preferred. It would also be advantageous to provide a facility for dematerializing the gold held in the Exchange vaults.

Promoters of the exchange should be neutral players to ensure transparency and integrity. Participants in the gold industry (like jewellers, refiners and traders) would suffer from conflicts of interest in promoting and operating a gold exchange. The neutrality requirement means that existing commodity exchanges, stock/derivative exchanges, banks and other financial entities are natural candidates for promoting a gold exchange in India.

The whole complex of domestic and global gold contracts would benefit immensely from global collaboration and partnerships: partnership with gold markets in Singapore, London and Shanghai; minority equity participation by multilateral financial institutions like the ADB and the BRICS bank; and technical collaboration with professional bodies like the LBMA.

We would like to emphasize that governance is one of the key things that an Indian Gold Exchange would bring to the table. Governance measures would include: an India Responsible Gold Policy, Gold Quality Assurance, Risk Management, Clearing and Settlement, and Regulation and Supervision.

To provide gold vaults inside and outside the DTA in close proximity, the Gold Exchange must be located in or close to an SEZ. An International Financial Services Centres (IFSCs) has two big advantages: a regulatory regime that provides global credibility, and sufficient exemptions from capital controls to make the global contract feasible. Based on our survey, the geographic location of the Exchange within India is not a critical factor.

Exchange Trading and Capital Controls

For the domestic gold contracts, the participation rules could be as follows:

Domestic Participants	Foreign Participants
All domestic entities (jewellers, refiners, traders, banks, financial institutions, individual investors)	Foreign Portfolio Investors (FPIs) on lines similar to stock markets

Participation in the global contracts would be subject to different rules:

Domestic Participants	Foreign Participants
Domestic players who are allowed to trade or hedge in global markets in accordance with FEMA. Resident individuals within the $250,000 limit under the Liberalized Remittance Scheme for investment outside India.	All foreign participants and not just FPIs.

Taxation

As in other Asian countries like China and Singapore, investment grade gold traded on the exchange should be exempted from indirect taxes like VAT and GST, but should be subject to Commodity Transaction Tax (CTT). This proposal to levy CTT in lieu of VAT/GST is likely to be broadly revenue neutral (if not revenue accretive) for the government.

Conclusion

A spot Gold Exchange in India is eminently viable and would help create a vibrant gold ecosystem in India commensurate with India's large share of global gold consumption. The Gold Exchange would lead to efficient price discovery, assurance in the quality of gold, active retail participation, greater integration with financial markets, and greater gold recycling. The Gold Exchange would also help in the gold monetization efforts of the government.

The Gold Exchange must set high standards of governance and aim at achieving leadership in Asian gold markets. To this end, it must be promoted by neutral players who do not suffer from conflicts of interest and must be regulated by SEBI, which is the regulator for stock, derivative and commodity exchanges in India. It must also seek global partnerships and collaborations to increase its global reach.

A Gold Exchange located in an International Financial Services Centre would offer the greatest benefits in terms of ability to offer domestic and global gold contracts, gold vaults inside and outside the Domestic Tariff Area, and ability to attract international participants. Within the constraints of capital control regulations, both the domestic and global contracts on the Gold Exchange must be open to the widest range of participants.

Viability of a Gold Exchange in India

1 Background and scope of the study

India is the second largest importer of gold in the world with a demand of nearly 1,000 tonnes. Despite this, most of the gold is imported in refined form from markets like Dubai and Singapore, which forgoes the value added activity which could be undertaken in India. Lacking the infrastructure to procure gold at globally competitive prices in India, many jewellers and traders use the Dubai and Singapore markets. India provides a substantial chunk of the gold demand in these countries. Further, the gold market remains fragmented in India and non-trivial price arbitrage exists across the channels of gold buying and selling. India has a large inventory of household and institutional gold holdings, however, the share of recycled gold in the Indian market remains tiny. Increased recycling can reduce the import reliance and the attendant problem of foreign current outflows.

The absence of a spot exchange in India is in stark contrast to the success of gold futures trading in India. During 2013-14, about 9,000 tonnes of gold (with a value of ₹25 trillion) were traded in the futures exchanges in India[1]. This is about nine times the annual demand of 1,000 tonnes of gold in India, but the futures trading is almost entirely cash settled.

Against this background, the study attempts to examine the role and feasibility of a gold spot exchange which could act as an exclusive institution focused on gold trading. The exchange could be a national channel for buying and selling standardized quality gold in India and to create national pricing structure of gold. The exchange could involve quality storage and vault facilities, and facilitate the financing of gold inventory at internationally competitive rates. Specifically we examine (a) potential demand for the facilities of a gold exchange by various value chain partners in India (b) the scope of activities of the gold exchange given the potential demand and (c) economic viability of the gold exchange.

We have gathered the view of the gold value chain participants on the feasibility of a gold exchange through a survey and a focus group discussion of the key players in the market. The survey has uncovered the current practices of gold procurement, cost associated with the current procurement practice, perceived benefits of current practices, perceived benefits and the need for a gold exchange in India. We have also analysed the global experience of gold exchanges, and drawn on the lessons from these countries to understand the viability, design and governance of a Gold Exchange in India.

[1]Source: Forward Markets Commission, Monthly Report, March 2014

2 Gold Exchanges: Global Experience

2.1 Turkey

Turkey imports around 180 tonness of gold annually and it is the world's fourth largest gold consumer, accounting for about 6% of the global demand. It is estimated that Turkish households have at least 3,500 tonnes of gold[2]. Gold is intimately linked to the Turkish culture, like in India. Gold is gifted during almost all important life events and it is used as a medium of exchange even today. Investors use it as an inflation and currency hedge. Turkey's jewellery fabricating skills are exemplary and it has significant jewellery exports. Many international brands source their designer jewellery products from Turkey. Like India, Turkey faces significant shortage of local production to match the demand. It has a small but growing gold mining industry. The domestic gold production was about 33 tonnes in 2013, leaving a large gap between domestic demand and production[??].

Till about 1980s, the gold sector in Turkey was highly regulated. A number of reforms overtime has modernised the gold sector in Turkey. Some of the key reforms are given below:

- Turkey started to significantly liberalize gold trade from 1993. The Central Bank of the Republic of Turkey allowed a greater role for market forces in gold trade. In 1995, it established the Istanbul Gold Exchange (IGE) to provide a price discovery mechanism and to ensure the quality of gold. IGE offered spot contracts in gold and later launched gold futures and options. The IGE had been very successful in creating a link between precious metals markets and financial markets, and enhanced its position as a regional financial centre. The IGE prices quickly established the benchmark price for gold in Turkey.
- In 2011 Turkey started monetising its stock of gold and started to further integrate gold into its financial system. As part of the gold monetization it allowed (a) commercial banks to hold part of their required domestic currency reserves in either foreign currency or gold and (b) buy and sell gold coins and jewellery. The substitution of high-yield Turkish lira with gold for reserves made banks more stable[??]. This has created an incentive for commercial banks to draw gold from the households into the banking system and banks aggressively promoted gold current accounts, gold accumulation plans, gold structured products, and a range of lending products. Some of the products include (a) gold accounts which allow savers to trade gold, Turkish lira and foreign currencies (b) interest bearing fixed term gold savings accounts

[2] Source: "Turkey: gold in action", World Gold Council Report, 2015.

and (c) gold-dispensing ATMs so consumers can easily buy hallmarked bars.

- By the end of 2013, commercial banks held around 250 tonnes, equivalent to $10.4 billion worth of gold. While most of the stock was accumulated from investors switching from Turkish lira and foreign currency into gold accounts, it also included 40 tonnes of household stock of gold. The proportion of recycled gold had been rising in the Turkish market. The recycling is supported by the establishment of several LBMA accredited refineries.

- In April 2013, the IGE was merged with the Istanbul Securities Exchange (IMKB) and Futures and Options Exchange (VOB). These together created Borsa Istanbul (BIST), and succeeded in creating an efficient structure to boost Istanbul as a financial centre. Like other gold exchanges BIST serves as a gateway for gold imports. BIST is also responsible for licensing gold importers and assayers, and for maintaining the quality of gold imported through it. Gold traded on BIST is tax-free. This has laid the foundation for gold as a part of Turkey's financial system.

The initiatives of Turkey has led to a number of tangible outcomes (a) it has been able to monetize around 300 tonnes of gold (b) with a number of gold related products, the consumer appetite has started to shift away from physical gold (c) the creation of high quality gold infrastructure has increased trust in the domestic market and significantly increased the pricing efficiency and (d) the current account deficit has significantly narrowed as an outcome of the new policy initiatives in gold.

2.2 China

China is the world's largest consumer of jewellery and physical bullion and accounts for about 26% of the world demand in 2013.[3] It is also the world's largest gold producer and importer. The Chinese domestic demand for gold originates from jewellery, investment, industry and the official demand. The aggregate Chinese demand is around 1,400 tonnes in 2014, out of which the domestic market contributed nearly one-third.[4] Gold is central to Chinese households and jewellery, which accounts for about 60%, is the mainstay of the private sector gold demand in China.[5] The role of gold as an investment

[3]Source: China's Gold Market: Progress and Prospects, World Gold Council Report, April 2014.

[4]Source: Understanding China's Gold Market, World Gold Council Report, 2014.

[5]Source: China's Gold Market: Progress and Prospects, World Gold Council Report, April 2014.

vehicle has seen an exponential growth in the recent years with the high economic growth in China. Today, it is one of the preferred vehicles of savings among households.

Prior to 2002, the entire gold market in China was tightly controlled by the People's Bank of China (PBOC). PBOC set up the Shanghai Gold Exchange (SGE) in October 2002, as part of the efforts to liberalize the gold sector. SGE offers spot and futures contracts in gold, silver and platinum. It is expected to provide the Chinese, direct access to the gold wholesale market. It also monitors the physical gold traded in the Chinese market. Most of the gold entering the Chinese market from imports, domestic mining and recycling go through SGE for the initial trading, except the gold imported by jewellers with import/export license. All the Chinese citizens are allowed to buy gold and trade at the SGE through a commercial bank, by opening an SGE account. SGE has over seven million individual and 8,000 institutional clients.

It took several years for SGE to become the primary channel for gold imports and trading in China. It was only in 2007, the physical gold demand in China matched the deliveries from SGE [6]. The standard gold traded at SGE is exempted from value added tax.

SGE focuses on meeting the domestic physical bullion demand and it has become the main vehicle for investment in physical gold in China. The gold spot price of SGE dominates the Chinese market. The gold price at SGE is mostly synchronised with the international gold prices. To ensure synchronisation with the international markets and to facilitate arbitraging, SGE offers night trading sessions which overlap with major international markets. Institutional clients are the most important traders at SGE and commercial banks account for most of the trade in the exchange (about 58%). It has wide membership from domestic commercial banks, foreign banks, and firms in involved the production, trading and investment in gold.

The average daily volumes of 99.99 percent purity contract on SGE increased to about 20.43 tonnes in October 2014 from 11.7 tonnes in October 2013. As against the SGE volume, London Bullion Market Association (LBMA) has an average volume of 493.3 tonnes[7]. While the volume at SGE is very small compared to the London, it is attracting significant trading attention from international institutions.

Gold is recycled in China either for cash or for gold. Gold, recycled and converted into standard bars by refineries have an incentive to trade through

[6]Source: The Mechanics Of The Chinese Domestic Gold Market, `https://www.bullionstar.com/blogs/koos-jansen/the-mechanics-of-the-chinese-gold-market/`

[7]Source: Shanghai Gold Trade Passes Record as China Seeks More Sway, downloaded from `http://www.bloomberg.com/news/articles/2014-12-03/shanghai-gold-exchange-bullion-trading-volumes-expand-to-record`

SGE owing to the value added tax benefit. Only approved refineries are allowed to sell recycled gold bars to SGE. In 2013, recycled gold accounted for more than 100 tonnes of the total supply in Chinese domestic supply.

Chinese commercial banks dominate physical gold financing and account for a significant share of the trading volume. Only approved commercial banks in China can import gold into the country and they are traded at SGE before entering the Chinese domestic market. Banks offer various gold related products such as gold accumulation plans, gold trading, gold pledging and gold leasing[8]. Banks sell gold coins and bars to households. The exchange also facilitates the market for gold lending and plans to develop a national gold lending market. In 2014, China set up an international gold exchange inside the Shanghai free trade zone. The approved members in the exchange include the top-tier international banks. The new exchange attempts to place Shanghai as an alternative to London for international gold traders. China also has a vibrant derivative market in gold which is largely operating at the Shanghai Futures Exchange (SHFE).

On the whole, while the Chinese market still continues to be indirectly under the control of the state, it has made rapid progress towards emerging as a powerful gold hub in the world. Its current status is largely aided by the (a) establishment of exchanges which became regional leaders in price discovery and trading volumes (b) creation of world class gold related infrastructure (c) a favourable tax regime and (d) supportive policy for investment in gold and gold linked products by households.

2.3 Singapore

Singapore traditionally has a strong cultural affinity with gold. People believe in using gold for preserving their capital. Singapore was an important gold trading centre in the Far East until 1993, when an adverse tax regime was implemented. Recently, Singapore has launched various initiatives to regain its position as the leading regional player, given the strong demand for physical gold in the East and South Asia. It offers a competitive tax structure for gold trading and investment. It has exempted investment in precious metals from good and services tax from October 2012. There are no licensing requirements for import/export of metals which allows almost free flow of precious metals through Singapore. It has set up world class gold related infrastructure such as gold bullion manufacturing and refining.

It has set up all the essential elements linked to gold storage, trading and refining, to become a regional gold hub. The Swiss-based refiner, Metalor has set up a world-class gold refinery. The refinery, approved by the LBMA, has an annual capacity of 150 tonnes. It primarily sources gold scrap from

[8]Source: Understanding China's Gold Market, World Gold Council Report, 2014.

jewellers in the region. A secure gold vault measuring 22,000 sq.m. is also created next to Singapore's Changi International Airport, called Singapore Freeport. Major international banks, JP Morgan, Deutsche Bank, UBS and ANZ, have set up gold vaults in Singapore. A number of secure logistics providers, including Malca Amit, Brink's and others operate the vaults in the Singapore Freeport. They offer their rich experience and expertise in precious metal-handling and offer custom-made logistical solutions for investments banks, private banks and bullion dealers. Singapore has also set up a few gold dispensing automatic teller machines.

SGX (The Singapore Exchange) offers gold contracts for physical settlement. The first such contract was launched in September 2014. In an attempt to offer a benchmark price for 1 kg gold bars in the Asian region, Singapore recently launched a wholesale kilobar contract on SGX, with a lot size of 25 kilograms of 99.99 per cent purity bars. The contract is targeted at industrial users and institutions including central banks and aimed to set a transparent price benchmark for physical delivery in Asia. [9] It is physically settled on a 6-day rolling basis with SGX as the central clearing agency. Four major international banks, JP Morgan, Standard Chartered, Standard Bank and Bank of Nova Scotia are the market makers. While it was aimed to become an alternative to the 'London gold fix', so far it has failed to attract significant liquidity. The reluctance of banks to dis-intermediate the kilobar market is speculated as one of the main reasons for the failure of the contract. The intermediary driven OTC market is also claimed to have the benefit of financing and delivery bundled into the transaction, unlike the contract offered at the exchange. Further, the OTC market has the added advantage of physical delivery at the customer location whereas the exchange traded contract mandates delivery only at the designated warehouse.

Despite being neither a major producer nor a major consumer, Singapore has emerged as a major gold hub by creating the necessary physical and regulatory infrastructure. The presence of vibrant financial markets and wealth management services seem to have contributed to the emergence of Singapore as a gold hub. However, it appears that Singapore increasingly faces tough competition from China, the largest producer and consumer of gold. China seems to have the advantage of high domestic market demand and stringent regulation which forces the gold demand to flow through the exchange. While the retail contributes to a significant part of the demand at the Shanghai exchange, Singapore appears to be largely reliant on the wholesale demand.

[9] Singapore to launch gold contract, Financial Times, June 25, 2014.

2.4 Dubai (UAE)

Dubai has been a gold trading centre for long in the Middle East. It acts as major conduit between the producers in Africa and the consumers in Asia and Europe. The proximity to top consumers, China and India, coupled with a low tax regime and high quality infrastructure have helped Dubai emerge as a major gold hub in the world. Nearly 40% of the physical gold in the world passed through Dubai in the year 2014.[10] The total value of the gold traded in Dubai in the same year is about $75 billion.

The establishment of Dubai Multi Commodities Centre (DMCC) in 2002 to provide the physical and market infrastructure for all the participants in the gold value chain, gave a significant boost to the role of Dubai in world gold trade. Dubai is also home to large gold refining capacity of more than 1,000 tonnes per annum. A large gold vault is set up by DMCC and operated by Brink's Global Services, as part of the gold ecosystem. Dubai has set a standard in the delivery of small gold bars, targeted at retail demand, which fully complements the London good delivery. It has set the standard for 1 kg gold bars of 99.5% purity. The Dubai Gold and Commodities Exchange (DGCX), set up by DMCC to specialize in gold trading, provides a range of derivative contracts in gold. The derivative contracts include a rupee denominated contract targeted at non-resident Indians.

DGCX plans to offer a physically settled dollar denominated gold spot contract in 1 kg gold bars of 99.5% fineness. It intends to build on the thriving OTC market for gold in Dubai. The exchange traded contract is claimed to reduce counter party risk and would allow margins below the OTC market. The trading is set to begin in early 2016 after its soft launch in the second half of December 2015. The trading hours would start ahead of the Indian bourses and last till 8pm Dubai time. The contract is targeted to establish Dubai as the benchmark for the price of 1 kg gold bars.

Dubai also developed Dubai Commodities Receipt (DCR) against which owners can obtain financing at attractive terms[11].

The gold business in Dubai has strong linkages with India. A number of jewellers of Indian origin operate from Dubai, selling gold jewellery to the non-resident Indians and collecting scrap gold for recycling. For a number of large jewellery chains in India, their Dubai operations acts as the centre for sourcing the gold required for the Indian operations.

Active jewellery trade, presence of refineries, a vibrant financial sector, and the establishment of DMCC and DGCX have been identified with the evolution of Dubai as a major gold hub in the world. Specifically, the success

[10] Gold industry shifts east as Dubai plans huge refinery, spot contract, accessed at `http://www.reuters.com/article/emirates-dubai-gold-idUSL6N0NP03R20140505.`

[11] A revised recent version of the DCR is called a DMCC Tradeflow Warrants.

of Dubai is attributed to many factors such as:

- Fair and simple rules on gold import, export and trading
- Low tax base which exempts gold trade from VAT and direct taxes
- High quality infrastructure of refiners, storage and transport facilities
- Efficient financing arrangements for gold offered by many banks

Despite the volumes attracted by Dubai, there are reports of it becoming a destination for conflict gold, from different zones in the world such as the DR Congo. One of such incidents involved a major refiner who accounted for nearly 45% of Dubai's refining capacity.[12] There is a view that the dual role of DMCC as a regulator and as a trade promotion agency precipitates some of the infringements.

2.5 Conclusions from Review of International Gold Exchanges

There is increasing demand for a benchmark for physical delivery of gold based in Asia. The global gold market continues to shift from West to East. China, Singapore and Dubai (UAE) have set up global scale physical infrastructure required for refining, storage, transport and trading, and a conducive regulatory infrastructure, to take early lead on this front in Asia. Across the different international markets examined, Turkey, China, Dubai (UAE) and Singapore, the gold exchanges and related infrastructure seem to have significantly contributed to the development of an efficient market for gold by way of:

- Efficient price discovery by channelling demand-supply information into a central mechanism. Without the exchange the price related information was fragmented across different channels with significant arbitrage opportunities. The exchanges in these countries have by and large synchronized the local prices with the international benchmark prices.
- Assurance in the quality of gold for individual and institutional buyers through standardization of quality with the help of support infrastructure such as LBMA accredited refineries, vaulting, storage and financing facilities.

[12]Sources: (1) City of Gold - Why Dubai's first conflict gold audit never saw light of the day, February, 2014 (2) Dubai Under New Scrutiny as Gold Trade Grows, The Wall Street Journal, April 2014.

- Active retail participation and use of gold bars and coins for investment instead of jewellery. Substitution of investment physical gold with gold linked financial products.
- Greater integration with other segments of financial markets through gold leasing and lending.
- Acting as a channel for gold recycling by working through accredited refineries. The recycled gold finds its way into the market through the gold exchange.

The Asian countries which have emerged as major gold hubs largely seem to have the following in common:

- A cultural affinity with gold and the use of gold as an investment vehicle by households. A vibrant jewellery sector is present in most of the countries.
- Active spot and derivative contracts in gold.
- A well-functioning financial system and its integration with the gold markets.
- High quality gold infrastructure for refining, vaulting, and transportation.
- A favourable tax regime.

3 Gold Demand and Gold Markets in India

The demand for gold in India exceeded 800 tonnes in the year 2014 according to the World Gold Council. India is the second largest consumer of gold in the world after China. With only a tiny domestic production, India is largely reliant on imports for meeting the domestic demand for physical gold. The surge in gold demand invariably weighs down India's balance of payment situation and it often leads to government restrictions on gold imports.

Indians have a strong fascination for gold throughout history. It is an object of display by way of jewellery for many Indians. Households regard gold as a store of value and a hedge against inflation and currency depreciation. Households and institutions in India are estimated to hold about 22,000 tonnes of gold. For households gold is somewhat a liquid asset with plenty of opportunity for selling or pawning. A number of non-banking financial companies specializes in issuing loan against gold. The liquidity of gold jewellery increases its attraction as an investment vehicle among low and medium income households, particularly for those less informed about other financial investments. India has a vibrant jewellery sector well-known for highly artistic hand-crafted jewellery.

The demand for gold in India can broadly be classified into demand for gold as an investment, demand for gold in industry, central bank purchases, and the demand for gold jewellery. The jewellery demand for gold is the largest component of the demand, accounting for around 55% of the overall demand in the first nine months of 2014. Gold in India is mostly imported by entities like nominated banks/nominated agencies/ premier or star trading houses/SEZ units/EoUs. It is mandatory for nominated banks and other entities make available gold for domestic use only to the entities engaged in jewellery business/bullion dealers and to banks authorised to administer the gold deposit scheme against full upfront payment.

We have carried out a field survey to understand the gold sourcing practices of Indian jewellers and some other key gold value chain partners. The survey covered a representative sample of large, medium and small jewellers, refiners and bankers. The key findings of the survey are summarised below:

3.1 Large jewellers with nationwide presence

The large jewellers appear to source their gold requirements from banks, foreign refiners and local supply through recycling by retail customers. The highlights of the different sources are as follows:

- Banks: Indian banks sell gold to large jewellers at internationally competitive prices except the addition of a small commission.
- Refiners from abroad: On placing the customer order, gold price is fixed between the customer and jeweller, often based on the LBMA prices. Raw gold is purchased by the jeweller on the same day at prices marginally below the LBMA prices. Sometimes, the required gold is bought through an affiliated entity based abroad. Jewellers, often have long term contracts with the suppliers to ensure timely delivery and quality. Typically, once the order has been placed to the supplier, the gold price risk is hedged through shorting of gold futures in the Indian commodity exchange. The raw gold is processed and sold at the retail outlets. The suppliers typically provide 90 days credit to the jeweller.
- Local customers: A non-trivial portion of the gold demand of the large jewellers is met by local suppliers, who either recycle their gold jewellery or secure them from undisclosed sources.

3.2 Medium sized jewellers

We classify those with annual turnover ranging from 100 kg - 1,000 kg as medium sized jewellers. Most of them purchase gold from other large jewellers or from resellers. Some of their source of supply include entities which supply jewellery items directly by engaging artisans. 30-35% volume comes from resellers, which includes supply by retail customers. They purchase gold by paying cash and most of them hedge the gold. Jewellers who export the products make 25-30% profit. Most of them are positively disposed towards the exchange as they feel it would help to reduce the market power of the big players in the sector. They also foresee that establishing an exchange shall bring transparency and increase market share as unorganized players shall be forced to follow industry standards.

3.3 Small jewellers

We classify those who sell than 100 kg a year as small jewellers. Most of the small jewellers meet their requirements from local artisans or artisan's associations who supply them jewellery against order or purchase it directly off-the-shelf. The metal prices are often linked to the gold prices quoted by large jewellers in the locality. In most of the regions, there are no well-established mechanisms to ensure homogeneity in the quality of the items supplied. However, in Southern India it is common to test the quality of supply through hallmarking agencies. Most of the small jewellers do not obtain any credit or financing from their suppliers. Some of the large groups engaged in the supply of jewellery often provide credit. Small jewellers do not seem to procure any significant amount of gold from resellers.

There is lack of information about the source of supply of gold to the artisans or artisan associations. It can be presumed that most of their procurement is from resellers of gold in the local market. The small jewellers have expressed keenness in procuring the gold from a centralised and transparent facility like a gold exchange.

3.4 Refiners

The refiners largely import their gold from outside the country, mostly from Africa via Dubai at 2% - 2.5% discount on the LBMA prices. They earn a margin of about 0.5% on the locally sourced gold scrap. For the imported quantity, they hedge both the gold and currency, gold by the refinery and and currency by the end buyers. Financing the deal is a problem as Indian banks are not as flexible the international banks. The proportion of locally sourced gold ranges from 10-30%. The refiners have the view that a gold exchange would help them to source at internationally competitive prices within India.

3.5 Banks

The major public sector banks only import from Top-5 Banks worldwide who quote their own rates. The import procedure typically involves, foreign banks leasing gold to the importing Indian bank. At specified lease rates gold is imported to the vaults of the local banks. Lease rentals are not changed during the first month. The local bank later sells the gold to ultimate buyers. Typical buyers are the big jewellers, star traders or bullion dealers. Sale of the gold takes place at the rate specified by the selling bank. The local banks get a commission of about $0.2 per ounce.

Banks report that in recent times with the direct import by the users, the demand has declined significantly. Bank of Nova Scotia has its own business channels established in India along with the appropriate licence and it does not depend on local Indian banks for its trade.

3.6 Conclusions from the Field Survey

To understand the gold market in India and the scope for a Gold Exchange, we conducted a field survey (described in the Appendix). The conclusions from the survey are summarized below:

- Most of the demand for physical gold in India is routed through hubs outside India, particularly Dubai.
- Large jewellers and refiners are able to procure gold at a discount to the LBMA prices.
- Some of the large players have expressed keen interest in procuring gold from a gold exchange set up in India, despite their current practice of procuring directly from miners and traders in overseas gold hubs. At one level, it may appear that large players with good access to a global supply chain would have little incentive to trade on a local exchange. But we have also observed a similar phenomenon in other commodities (base metal and oil seeds for example) where large Indian players have significant participation in Indian exchanges despite having access to global markets. Basis risk, shorter lead times, price arbitrage, and diversification of supply sources appear to motivate their participation in Indian exchanges. Keeping this in mind, we do not disbelieve the large players who have told us that they would welcome an Indian gold exchange, and would source gold from there. Nevertheless, we

have scaled down our estimates of likely trading volume on the spot exchange to account for the possibility that the participation of the large traders might be lower than their stated intention.

- The medium and small jewellers are often forced to dependent on large players and face significant price disadvantage.
- The medium and small players have expressed willingness to source gold through a gold exchange. They believe that the establishment of a gold exchange would challenge the dominance of the large players in the market.
- Resellers constitute a significant part of the demand from jewellers and refiners. There is no transparency in the activities associated with reselling of gold into the market.
- The quality of gold available and the price in various parts of the country vary significantly. There is potential for standardization of quality by creating the support infrastructure. A national level price benchmark could help bring much needed transparency in the sector.

3.7 Brainstorming session

We have also conducted a brainstorming session on the idea of a gold exchange focusing on the following specific questions.

- Should India have a Gold Exchange?
- Is a Gold Exchange viable under current legal/tax regime?
- What critical legal/tax changes are required?
- What is the scope of services to be offered: exchange, vaults, bullion hub?
- How large is the infrastructure requirement?
- Who are the ideal stakeholders for the project?

The session was well-attended by participants from the entire gold value chain, including jewellers, refiners, logistics providers and banks.

The brainstorming session had the view that as gold does not have a standard price in India, a national-level spot exchange would benefit all stakeholders by ensuring transparency in pricing and standardisation. It would also help India evolve as a gold trading hub. The session envisaged a domestic and an international exchange which would allow two-way trading in physical gold and also have other derivative products for hedging purposes. The exchange could utilize existing infrastructure and could be launched by promoters who already have the experience of operating other exchanges in India or abroad. The session had the view that banks should be allowed to participate in gold trading.

The session evolved with the view that the exchange would be feasible with (a) improved regulatory environment to create liquidity in the contracts (b) lower or no commodity transaction tax and (c) a tax structure at par with other international financial centres.

It had the view that the gold trade above a certain quantity could be compulsorily routed through the exchange as practised in some other countries to make the exchange initially viable.

The participants felt that it is ideal to have the following infrastructure as part of the exchange:

- Gold vaulting facilities set up by experienced promoters
- Develop a distribution network to achieve T +1 delivery across 21 major locations in India
- Empanel refineries for quality assurance of gold and standardization

The common view during the session was that the exchange would be feasible with a minimum trade quantity of about 100 tonnes. Given the annual demand of about 1,000 tonnes in India, the threshold quantity appeared feasible to achieve.

4 Setting up a Gold Exchange in India

4.1 Economic Viability

All stakeholders that we interacted with were supportive of the idea of a gold exchange in India. But two segments stand out as beneficiaries of a domestic gold exchange and are likely to use it extensively:

1. Medium size jewellers ($100 - 1,000$ kg of annual turnover) currently source their gold from large jewellers or from resellers. Medium size jewellers believe that an exchange would give them a more level playing field.
2. Refiners view the exchange as providing an attractive platform for them to get better price realization.

An international exchange with a gold vault located outside the domestic tariff area is attractive to a much large number of players because of the ability to fund that gold inventory in global markets.

Looking to the future, there are signs of revival of gold mining in India, decades after the closure of the old mines. If and when this happens, the Gold Exchange would provide a vital venue for the mines to sell their gold.

Our assessment based on conversations with a wide variety of potential stakeholders and participants is that if 10% of India's gold imports flow through the exchange, this 100 ton volume would provide the minimal liquidity to sustain a contract. This minimal liquidity would attract larger participation and snowball into a vibrant contract that becomes the dominant forum for price discovery and for investment in physical gold.

Our assessment based on our survey is that this minimal initial volume is eminently feasible because there are significant segments that are under served by the existing market structure, and they would be keen on the greater transparency afforded by the exchange.

4.2 Scope and Activities of Gold Exchange

The gold exchange should offer a wide range of contracts to meet the needs of the gold industry:

Domestic Spot Gold Contract This gold contract would be based on delivery in the domestic market – since this would be in the Domestic Tariff Area (DTA), the gold price of this contract would be in Indian rupees and would be inclusive of import duties. This contract would be supported by a range of logistic facilities including:

- Gold vaulting facilities in the DTA
- T+1 delivery at the principal gold centres in India
- Gold assaying facilities

Global Spot Gold Contract This gold contract would be based on delivery outside the Domestic Tariff Area (DTA), and the gold price of this contract would in US dollars and would not include import duties. This contract would be supported by a range of logistic facilities including:

- Gold vaulting facilities (offshore vault) provided by a globally acceptable custodian outside the DTA preferably in the SEZ of an International Financial Services Centre (IFSC). In the initial stages, it is possible that some OTC gold players could manage the physical gold more economically, but as the trading volume and financing activity scales up, the credibility of the vault operator would become more important.

- Facility to move the gold from the offshore vault into the DTA quickly and smoothly on payment of import duties and compliance with associated requirements.
- Ability to transfer the gold from the offshore vault outside India quickly and smoothly on the basis that the gold has not yet entered the DTA.

Dore Swap Contract The Dore Swap Contract would meet the needs of the growing gold refining industry in India by allowing refiners to hedge their refining margins. The India Responsible Gold Policy discussed below would be a critical element in the success of the Dore Swap Contract.

Gold Lending and Borrowing Mechanism (GLBM) The GLBM would serve many purposes:

- Link the spot gold contract with the forward and futures markets in gold.
- Facilitate financing of gold inventories in the organized financial sector.
- Shift some of the gold leasing activities currently undertaken outside India to the Indian markets.

4.3 Clearing and Settlement

The success of the global gold contracts requires globally credible clearing arrangements. There are two possible choices for the clearing corporation:

1. A large global clearing corporation
2. A leading domestic clearing corporation

A separate clearing corporation only for the Gold Exchange or for the global contract would not have the scale and resources to achieve global acceptance.

It would also be advantageous to provide facility for dematerializing the gold held in the Exchange vaults.

4.4 Exchange Promoters and Stakeholders

Promoters of the exchange should be neutral players to ensure transparency and integrity. Participants in the gold industry (like jewellers, refiners and traders) would suffer from conflicts of interest in promoting and operating a gold exchange. The neutrality requirement means that existing commodity exchanges, stock/derivative exchanges, banks and other financial entities are natural candidates for promoting a gold exchange in India.

There are major advantages in letting an existing exchange promote the Gold Exchange as a segment within its range of activities:

- Globally, exchanges are consolidating across product segments, and absent regulatory segmentation, all asset classes tend to trade on the same exchange. One example is the merger of Turkey's gold exchange (IGE) with the Turkish stock and derivative exchanges to form BIST. Similarly, the formation of the Singapore Exchange by the merger of the stock exchange (SES) and the derivative exchange (Simex) created a multi-asset exchange which now also offers a spot gold contract.
- The economic viability of a gold exchange is easier to establish if it is a segment of a larger exchange which has already incurred the fixed costs of operating a commodity exchange.
- Indian exchanges (stock, derivative and commodity) are all regulated by the Securities and Exchange Board of India (SEBI) which has achieved global acceptance as a credible regulator. This is especially important for the success of the global gold contract.
- A single exchange trading domestic spot gold, global spot gold, gold futures, and other elements of the gold complex of contracts would facilitate price discovery, arbitrage (and potentially cross-margining).

While Indian commodity, stock and derivative exchanges are all potential promoters of the Gold Exchange, an existing commodity exchange would have the advantage of experience in managing the physical delivery which is a complication that is not present in financial contracts. Based on our discussions, we believe that Indian commodity exchanges are willing and eager to launch the Gold Exchange.

4.5 Global Collaboration

The whole complex of domestic and global gold contracts would benefit immensely from technical collaboration and partnerships (including minority equity participation) with established global players.

- Partnership with gold markets in Singapore, London and Shanghai would be beneficial in helping establish the Gold Exchange as an important Asian reference price for gold. Dubai is another possible partner subject to appropriate due diligence.
- A minority equity participation by multilateral financial institutions like the ADB and the BRICS bank would also establish the credibility of the Gold Exchange in the global marketplace.
- Technical collaboration with professional bodies like the LBMA could potentially help in contract design and delivery standards.

4.6 Governance

We would like to emphasize that governance is one of the key things that an Indian Gold Exchange would bring to the table. Governance has several aspects that are important in this context:

Responsible Gold Asia is the major consumer of gold in the world, and ultimately, Asia must play the leading role in ensuring that its gold purchases do not contribute to conflict, human rights abuses, terrorist financing or money laundering. India with its democratic traditions and common law systems has the potential to assume leadership in Responsible Gold in Asia. The Gold Exchange and its regulators need to take the initiative in this regard. In an environment where some participants have concerns about the quality of compliance with responsible gold standards in Dubai, the opportunity for India is greater.

Gold Quality As India becomes a significant refiner of gold, it is essential that it creates the domestic infrastructure to assure quality of gold at all stages of the gold value chain. The Gold Exchange has a critical role to play in this regard.

Risk Management, Clearing and Settlement In the context of high profile failures in commodity exchanges in India and China in recent years, it is essential that the Gold Exchange conforms to the highest standards of risk management, clearing and settlement.

Regulation and Supervision The Gold Exchange should leverage upon the credibility of India's financial regulators to gain global acceptance.

4.7 Location

Based on our survey, the geographic location of the Exchange within India is not a critical factor. Our respondents were of the view that with logistic arrangements for T+1 delivery across 21 major locations in India, the exchange can be anywhere in India.

As discussed in Section **??**, the Gold Exchange would need gold vaults inside and outside the DTA in close proximity to achieve the biggest gains from the domestic and global spot gold contracts. This means that the Gold Exchange must be located in or close to an SEZ which is the best location for a vault outside the DTA. Most SEZs in India are manufacturing SEZs which do not have the regulatory and operating infrastructure to support the complex requirement of exchange trading. The only SEZs that have the infrastructure for this are the financial services SEZs. These International Financial Services Centres (IFSCs) have two big advantages:

1. A regulatory regime that provides global credibility, and

2. Sufficient exemptions from capital controls to make the global contract feasible

4.8 Exchange Trading and Capital Controls

Within the constraints of capital control regulations, both the domestic and global contracts on the Gold Exchange must be open to the widest range of participants. Even if initially much of the participation might come from domestic players, it is important to make the contracts attractive to foreign participation to achieve greater liquidity and better price discovery. Clearly, all domestic players should be allowed to trade the domestic gold contracts. In the absence of capital account convertibility, it is not possible to open up this contract to all foreign players. However, as in the stock market, Foreign Portfolio Investors (FPIs) should be given access to this contract. The participation rules for the domestic gold contracts could therefore be as follows:

Domestic Participants	Foreign Participants
All domestic entities (jewellers, refiners, traders, banks, financial institutions, individual investors)	Foreign Portfolio Investors (FPIs) on lines similar to stock markets

When it comes to the global contracts, clearly, there should be free access to all foreign players. However, in the absence of capital account convertibility, there will have to be restrictions on participation by domestic players. The principle should be that domestic players should have at least the same level of access to the global contract as they have to exchanges located outside India. Participation in the global contracts could therefore be as follows:

Domestic Participants	Foreign Participants
Domestic players who are allowed to trade or hedge in global markets in accordance with FEMA.	All foreign participants and not just FPIs.
Resident individuals within the $250,000 limit under the Liberalized Remittance Scheme for investment outside India.	

4.9 Taxation

In many Asian countries like China and Singapore, investment grade gold traded on the exchange is exempted from indirect taxes like VAT and GST. This makes eminent sense for India as well because it is likely to be broadly revenue neutral (if not revenue accretive) for the government:

1. The exchange traded gold leaves a clear trail that would reduce the widespread evasion of taxes at the downstream stage. The revenue lost from VAT/GST at the exchange could be more than compensated by higher recovery of taxes at the point of sale to the end consumer.

2. Gold traded at the Exchange would attract CTT (Commodity Transaction Tax). Every gold bar that is delivered through the exchange mechanism would typically have been traded several times on the Exchange without actual delivery. Since even non delivery trades would attract CTT, the revenue loss from VAT/GST exemption would be partially offset by this revenue gain. This logic is quite similar to the logic for exempting long term capital gains on equity share trades that have been subject to STT (Securities Transaction Tax). In practice, STT revenues gained have been more than the capital gains tax foregone. The same is likely to happen here as well.

3. Over a period of time, as the Gold Exchange becomes a major vehicle for investment flows into gold, large CTT revenues would flow to the government from this route as well.

4. Even in the unlikely event of a revenue loss from the VAT/GST exemption, this would be well justified by the economic gains from the Gold Exchange.

There is a demand from the industry for exemption from CTT (Commodity Transaction Tax). This might be difficult for the government to accept unless the entire STT/CTT regime is rolled back.

4.10 Gold Exchange and Gold Monetization

India has recently launched an ambitious programme for gold monetization including Gold Bonds and Gold Deposits. Global experience indicates that the Gold Exchange would help in this endeavour in many ways:

1. It would provide hedging mechanisms to the banks that offer gold deposits and to the government for its Gold Bonds.
2. It would provide investment instruments for Gold ETFs which are also useful methods of gold monetization.
3. By dematerializing the gold held in its vaults, it would create one more vehicle for gold monetization.

4.11 Gold Exchange and the Balance of Payments

One of the concerns of the government in relation to gold has been the adverse impact that the large gold imports have on the balance of payments. The Gold Exchange is likely to have a favourable impact on the balance of payments for several reasons:

1. The exchange would be able to prompt some of the refining related value chain activities to get relocated to India due to centralized demand from the gold exchange. For instance, instead of the import of refined gold bars, gold dore bars could be imported directly from large miners for local refining in India. The value addition created through local refining would translate into saving of foreign exchange outflow.
2. Transparent prices at the exchange and the establishment of high quality refiners might prompt greater recycling of the gold stock in India. Increased gold recycling would make India less dependent on the import of physical gold, which will ease the pressure on the balance of payments.
3. The spot exchange might also make it easier for upcoming gold mines in India to sell their output, and thereby reduce gold imports.

4. The spot exchange could also give a fillip to the gold monetization schemes of the government which could also reduce the need for gold imports.

5 Conclusion

A spot Gold Exchange in India is eminently viable and would help create a vibrant gold ecosystem in India commensurate with India's large share of global gold consumption. The Gold Exchange would lead to efficient price discovery, assurance in the quality of gold, active retail participation, greater integration with financial markets, and greater gold recycling. The Gold Exchange would also help in the gold monetization efforts of the government.

The Gold Exchange must set high standards of governance and aim at achieving leadership in Asian gold markets. To this end, it must be promoted by neutral players who do not suffer from conflicts of interest and must be regulated by SEBI which is the regulator for stock, derivative and commodity exchanges in India. It must also seek global partnerships and collaborations to increase its global reach.

The gold exchange should offer a wide range of contracts to meet the needs of the gold industry:

- Domestic Spot Gold Contract
- Global Spot Gold Contract denominated in US dollars based on delivery outside the Domestic Tariff Area (DTA)
- Dore Swap Contract
- Gold Lending and Borrowing Mechanism (GLBM)

A separate clearing corporation only for the Gold Exchange or for the global contract would not have the scale and resources to achieve global acceptance. A top global clearing corporation or a top domestic clearing corporation would be preferred. It would also be advantageous to provide facility for dematerializing the gold held in the Exchange vaults.

As in other Asian countries like China and Singapore, investment grade gold traded on the exchange should be exempted from indirect taxes like VAT and GST, but should be subject to Commodity Transaction Tax (CTT). This proposal to levy CTT in lieu of VAT/GST is likely to be broadly revenue neutral (if not revenue accretive) for the government.

A Gold Exchange located in an International Financial Services Centre would offer the greatest benefits in terms of ability to offer domestic and global gold contracts, gold vaults inside and outside the Domestic Tariff Area, and ability to attract international participants. Within the constraints of capital control regulations, both the domestic and global contracts on the Gold Exchange must be open to the widest range of participants.

Appendix: Participating Organisations in the Survey Interaction and Brainstorming Session

Sl.No.	Category	Location
Jewellers		
1	Small Jeweller	South India
2	Small Jeweller	South India
3	Small Jeweller	Western India
4	Small Jeweller	Western India
5	Small Jeweller	Western India
6	Medium-sized Jeweller	Western India
7	Medium-sized Jeweller	Western India
8	Medium-sized Jeweller	South India
9	Large Jeweller	South India
10	Large Jeweller	Western India
11	Large Jeweller	Doha
12	Large Jeweller	Doha
13	Large Jeweller	Dubai
14	Large Jeweller	Dubai
15	Large Jeweller	Dubai
16	Large Jeweller	Dubai
Refiners		
17	Refiner	Western India
18	Refiner	South India
19	Refiner	Western India
20	Large refiner	Dubai
21	Large refiner	Dubai
22	Large refiner	Dubai
23	Large refiner	Dubai
Banks		
24	Large PSU bank	Western India
25	International Bank	Western India
26	Large private sector bank	Western India
27	Private sector bank	Western India
28	Financial services infrastructure firm	Western India
Gold logistics		
29	Domestic gold logistics provider	Western India
30	International gold logistics firm	Western India
Exchanges and associations		
31	Indian Bullion & Jewellers Association	India
32	Gold exchange	DMCC, Dubai
33	Commodities exchange	India
34	World Gold Council	India