Gold Monetisation Scheme for India

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Currently India is the largest consumer and importer of gold in the world. Monetising the gold within the country is, therefore, important for macroeconomic stability, and requires a credible scheme for valuing, storing, and tracking the metal.

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Gold imports contributed nearly 30% of the trade deficit of India between 2009–10 and 2012–13. Faced with this unsustainably high trade deficit in 2013 the government imposed high excise duties and import payment restrictions on gold. This had a limited impact and towards the second quarter of 2013 after banning the import of gold coins and imposing tight restrictions on gold bullion imports, the imports were linked to the level of exports. The 80:20 rule stipulated that 20% of all gold imported must be exported before further imports can be made.[1] The new regulations resulted temporarily in imports of gold falling drastically[2] even as unofficial gold continued to enter the country.[3]

In spite of all the measures put in place by the government to restrict gold imports, Indian demand for gold at 842.7 tonnes in 2014 was the highest in the world, at 26.2% of the world demand for gold. The gold monetisation that the Union Budget proposes is therefore an important instrument to contain the impact of high demand for gold on the economy.

Refine Gold in India

An important issue with regard to import of gold is that gold may be imported in finished form or in the form of mine doré[4] that is then refined to produce gold. The share of doré has been gradually increasing from 0.02% of gold imports in 2010–11 to 8.54% in 2013–14. The advantage of doré refining over importing finished gold is that the value addition gets done within the country thereby generating employment,[5] saving foreign exchange,[6] and generating tax revenues for the government as direct taxes are paid on income from refining. Economic policy should then prefer promotion of the domestic refining industry over imports.

However, over and above these traditional economic benefits there is a core competence that a refining facility brings that is extremely important to leverage at this juncture. This is the ability to assay[7] metals and the associated logistics of moving metals in a secure manner across locations. These are exactly the competencies that banks lacked, due to which there was extremely limited success of erstwhile schemes to mobilise gold for productive purposes in the economy. In interviews with public sector banks we found that the infrastructure for assaying, vaulting, transport, and associated software to support such services was lacking.

Assaying Facilities Needed

Since banks deal with currency and credit and are not accustomed to dealing with the subtleties of precious metals they tend to give little attention to the earlier schemes that were floated such as the Gold Deposit Scheme. Public sector banks engaged with such schemes more because there was a request from the government and even then they resorted to lumpy transactions such as from temple trusts rather than engaging with individuals. Temple trusts for instance accounted for 46% of the Gold Deposit Scheme at the State Bank of India (SBI).

For a gold mobilisation scheme to be successful three important considerations must be kept in focus:

- Valuation: Establishing the purity of the gold in a transparent and efficient manner within a defined time frame is essential.
- Storage and Distribution: Well-developed logistics to prevent fraud, tampering, and enable inventory tracking.
- End-to-end customised enterprise resource planning (ERP) software.

The integrity of the valuation process is crucial for the success of such a scheme. An approved assayer who has credibility and who ascertains the quantity of fine gold that is tendered by an individual is of utmost importance. In India, traditionally jewellers have been assaying the jewellery, bars, or coins that are brought to them. There has been no standardisation of the testing tools used, and the accuracy of the scales that are being used leaves a margin for error. An important first requirement for a gold monetisation scheme to work therefore is the opening of purity verification centres in various locations[8] around India that can accurately assay the gold that is brought by individuals who wish to participate in the scheme. The ingredients of a purity verification centre are listed in Box 1.

Box 1: Constituents of a Purity Verification Assaying Centre

Objective

The objective of such a centre should be to provide customers with a world class facility for purity determination in a defined time frame. It should have an online software to post the results of the assaying and to auto credit metal accounts.

Customer Interaction

A customer is central to the assaying process. There should be facilities to book an appointment slot online or through mobile apps. The gold material brought by the customer should be verified in the customer's presence and the customer should have the ability to witness how the material is being treated in order to provide a high level of confidence. Finally the entire process of purity determination should be completed within an hour and the outcome auto-credited online into a customer's metal account with a bank.

Equipment

(a) A hand-held X-ray fluorescence (XRF) analyser would conduct a preliminary quick-shot verification to identify the karat of the gold. If the customer is satisfied with this initial verification then she can give the go-ahead to proceed.

(b) Accurate weighing in Mettler-Toledo balances to be calibrated daily with check weights.

(c) Induction melting furnace(s) to ensure better homogeneity during melting so as to improve purity testing. This involves a process that can take up to 15 minutes and minimises the formation of slag.

(d) Molten metal is then to be poured into specially designed moulds, then cleaned by pickling and its purity verified by a high performance XRF machine which has the accuracy of +/- 0.1% for homogenised metal.

Logistics

The centres should be connected with a refinery with a full-fledged logistics department that has integral insurance cover for metal movement throughout the country.

The important managerial issue is about how to organise such purity verification centres that are crucial to the success of a gold monetisation scheme. It turns out that the Government of India is fortunate in that it has a joint venture between the Public Sector Undertaking, Metals and Minerals Trading Corporation of India (MMTC), and Produits Artistiques Métaux Précieux (PAMP SA), Switzerland, the world's largest independently-owned precious metals refiner. MMTC–PAMP India was incorporated in 2008 and has set up the world's most advanced gold and silver refining and minting plant[9] that became fully operational in end-March 2012. It has a highly sophisticated laboratory and has the credentials that will encourage a customer in any part of the world, let alone India, to transact in a scheme that monetises their gold.

MMTC–PAMP has been accredited as a London Bullion Market Association (LBMA) good delivery gold refiner just two years after the start of production — a record for any refinery in the London market's history. In its joint venture PAMP ensures that the MMTC–PAMP laboratory in India functions in compliance with high standards by training chemists to work in accordance with the Swiss Precious Metals Control Law (LCMP) and with the directives issued by the Central Office for Precious Metals Control in Bern (BCMP). Its state of the art assay laboratory is equipped with services such as the ICP,[10] Spark Spectrometer, and precise wet lab and quality control instrumentation, and is manned by experienced Chemistry Masters trained extensively at the PAMP assay laboratory in Switzerland. MMTC has retail outlets in all the regions of India as well and it is most appropriate for the Government of India that is a co-owner of this world-class entity to throw its weight behind MMTC–PAMP to open up purity verification centres around the country.

After a preliminary assay is carried out at a purity verification centre, the depositor should immediately be credited with a fine metal balance in her bank metal account. In the earlier system, the depositor had to wait for 90 days to receive a certificate of gold content as the assay was done after the material reached the India Government Mint. Under the current recommendations, the individual can view her account online and verify the metal credit that has been uploaded after the purity has been ascertained. There is also a simplification of the redemption procedure from the earlier requirement of giving a 30-day notice to the bank, now to the proposed internet-based platform where the customer will not be required to give advanced notice. She may also at redemption make an online request for a rollover of the deposit (in tranches of a year) instead

Figure 1: Lending in the Gold Monetisation Scheme

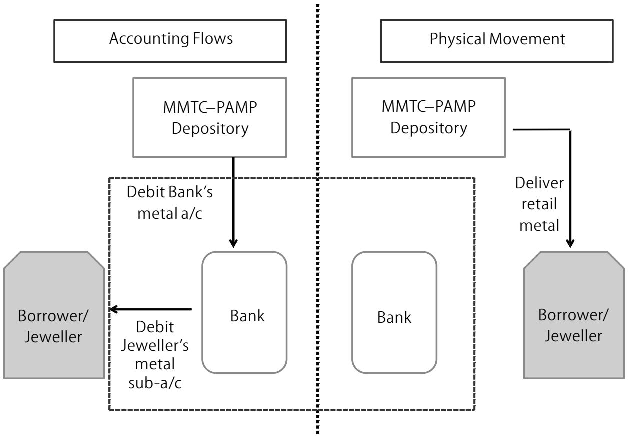
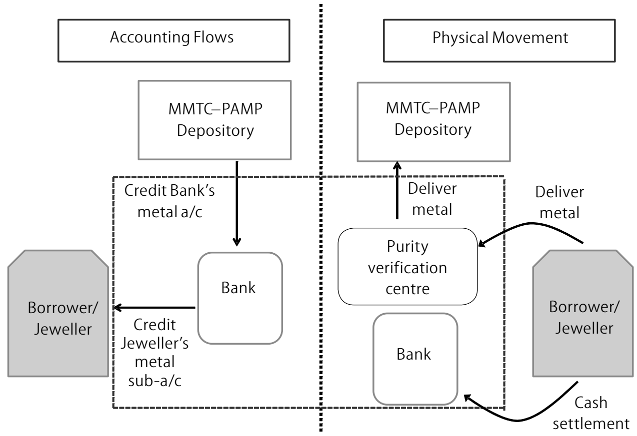


Figure 2: Redemption in the Gold Monetisation Scheme



of for the delivery of the metal on payment of a delivery charge.

If redemption of a deposit is to be made in gold then to make it efficient for all parties concerned it would be advisable to have standardised forms of redemption. For instance, redemption could be made in bullion bars of 1 kg, 100 gm, or 50 gm. For quantities less than 50 gm settlement could be that the depositor is given delivery in the form of minted coins with a minimum weight of 1 gm and the bank purchases any residual quantity below 1 gm from the depositor. Alternatively, the bank purchases any quantity less than 50 gm from the depositor.

Transport and Insurance

All back-end logistics (transport of gold, storage, and insurance) should be managed by MMTC–PAMP rather than by banks which do not have the expertise on this count. The purity verification centre receives scrap metal that it transfers[11] to the refinery which in turn refines the metal within a limited period of, say, seven days. The refined metal can then be transferred and assigned to the bank loco MMTC–PAMP.[12] The metal is now available with the bank for lending and it can also begin to pay interest on the corresponding deposit made by the customer from this time onwards. This time period of seven days is quicker than the current 90 days' time from the date of deposit before the metal is available to the bank for lending.[13]

An effective way for the bank to lend to a jeweller without substantial paperwork would be for the jeweller to open a metal account at the bank. The bank would then credit the metal account of the jeweller online. The jeweller in turn would then direct MMTC–PAMP to physically deliver the metal and incur a delivery charge from the refiner for the transport of the gold. The MMTC–PAMP depository at the refinery would at physical delivery of the gold to the jeweller debit the bank's metal account and the bank in turn would debit the jeweller's metal sub account (Figure 1).

At maturity of the metal loan, the settlement can be made in a similar manner. The jeweller can do one of two things. Either the jeweller can deliver metal to the purity verification centre which is then transferred by MMTC–PAMP to its depository at which time the bank's metal account is credited with the amount of metal. Alternatively, the jeweller can pay in currency at the bank. The bank will simultaneously purchase the equivalent amount of gold from MMTC–PAMP, which will then credit the metal account of the bank. The online software would record a transaction where the bank has raised a settlement invoice on the jeweller and the MMTC–PAMP INR (Indian Rupee) account would be simultaneously credited with the total transaction value (Figure 2).

This simple organisational structure, whereby the banks handle the currency side of the transaction, and MMTC–PAMP provides all the infrastructure related to the precious metal part of the transaction allows each side — banks and the refinery — to leverage their competencies whilst providing value to customers in a transparent and credible manner. An Achilles heel of the earlier Gold Deposit Scheme was related to the delivery of physical gold. In the proposed monetisation scheme, the MMTC–PAMP would be required to maintain dedicated Brink's vaults and storage at various locations. This would create an all-India loco stock which would facilitate lending by banks to jewellers. Since physical gold will now be transported across locations there are some minor taxation issues that need to be addressed by the Ministry of Finance:

- Since banks will purchase gold to settle gold loans and metal stocks will be generated at various locations it would require that depository vaulting services under the monetisation scheme be exempted from service tax. As a corollary, redemption of gold deposits will involve the movement of the precious metal. The delivery charges for all metal movement should also be exempt from service tax.
- The purchase of gold by the banks will depend on its availability which could be either interstate or within the state. For interstate purchases Central Sales Tax (CST) is liable to be levied on the transaction and in turn banks will then charge Value Added Tax (VAT) to the jeweller. To facilitate movement of the gold across locations it would be important to exempt CST for the purposes of the monetisation scheme.
- At the time of making a deposit at a purity verification centre the depositor will usually not be in a position to provide evidence that customs duty has been paid on the gold she is depositing. A jeweller providing gold scrap for refining gives a declaration that customs duty has been paid failing which there is

an excise charge that is incurred. For households who have gold handed down for generations or who have purchased it from small jewellers there will be no paper trail available as to the customs payments on the import of the gold. Hence, gold deposited under a monetisation scheme should be exempt from the payment of excise (currently 1%).

Incentives to Monetise Gold

A tension that individuals face in bringing in their gold to a gold monetisation scheme is the fear of investigation by tax authorities after subscription to the scheme. In many families in the country gold has been part of the family inheritance for generations. Also, in many instances gold is purchased from unorganised goldsmiths who do not provide ownership documents or a purchase trail. Under the current situation banks are not required to report any deposits in cash by their customers that are less than Rs 1 million. The same limit could be applied for any deposit of gold made into a gold monetisation scheme. Also the current minimum cap on gold deposits at 500 gm excludes many middle-income households. The minimum cap on gold deposits can be reduced to 50 gm. For any deposit of gold below say 500 gm or Rs 1 million worth of gold, only identity and address proof should be required. After that know your customer (KYC) requirements could be enhanced to include permanent account number (PAN). It is important to stress that KYC requirements should be implemented[14] so as to improve confidence in the system and to introduce transparency. Such requirements have the advantage that they make it difficult to trade in smuggled gold. The fact that any customer must already have a savings account with the bank and the metal account is an add-on facility will simplify KYC documentation.

The taxation system is currently conducive for gold monetisation schemes and requires no change. Interest earned on gold deposits are exempt from income tax as a result of the amendment to Section 10(15)(vi) of the Income Tax Act as amended by the Finance Act, 1999. Finally, a gold deposit is also exempt from capital gains that arise from trading or redemption as per Section 2(14)(vi) of the Income Tax Act as amended by the Finance Act, 1999. Nomination facilities for such deposits in individual or joint names as per depository rules should be available. Deposits of gold should also be transferable as per depository rules.

The returns being offered on gold deposit schemes have hitherto not been attractive. SBI from September 2010 has been offering 0.75% per annum for three years, and 1% for four to five years with the interest calculated in gold currency (XAU)[15] and payable in equivalent rupees. It is possible to pay 2% to 3% annual grammage return that will make the scheme attractive (Table 1). The minimum deposit unlike earlier can also be for a year with multiples of one year extensions in order to provide flexibility to the depositor.[16] The period of deposits that the SBI offers of three to five years should be changed to one to seven years. Premature payment with a penalty after a lock-in period of one year as currently operates could be continued. The bank may also offer a loan facility to the gold metal depositor higher than the current 60% loan-to-value ratio, since the collateral is gold of verified purity.

Table 1: Cost of Funds for Gold Monetisation Policy

Cost of Assaying:		
(a) Purity verification cost:	0.1%–0.2%	
(b) Refining cost:	0.5% –0.75%	
(c) Logistics cost:	0.5%–0.75%	
(d) Refiner administrative costs (software, insurance, administration):	0.5%–0.75%	
Sub-Total		1.6%–2.45%
Cost of banks:		
(a) Gold price hedging cost:	NIL since no need to hedge	
(b) Operational expenses:	0.3%–0.5%	
(c) Interest paid to depositor:	2.0%–3.0%	
(d) Risk premiums:[17]	1.0%–1.5%	
Sub-Total		3.3% –4.5%
Total Cost		4.9%–6.95%

The cost of funds for the scheme may be estimated as shown in Table 1. This estimate of cost of funds of 4.9% to 6.95% compares favourably with the 8% to 10% cost of dollar borrowing from external sources.[18] Our conversations with jewellers and business groups in the gold industry indicates that in the first month of the scheme being put in place, it would be possible to collect 15 tonnes of gold with 10 assaying centres set up. By the end of the first year it would be possible with extensive marketing of the scheme to scale this up to 40 tonnes of gold per month. Additional assaying centres that may be set up will of course increase the inflow of gold that individuals wish to monetise. On a conservative estimate, it would then be possible, by the end of the first year itself, to have collected 100 to 150 tonnes of gold from the scheme. This amounts to 12.1% to 18.2% of the gold imported into the country in the last year.[19] To put it in a different perspective — it amounts to 0.5% to 0.75% of the estimated minimum of 20,000 tonnes of gold lying unproductive in the country.[20]

The Sovereign Gold Bonds mentioned in the budget are a costly way of trying to reduce investor demand for holding physical gold. To pay at maturity, the following three components will have to be hedged: the gold price exposure will have to be hedged with bullion banks, as will the exchange rate and customs duty have to be hedged as the return on such bonds is redeemable in gold. The other budget announcement of introducing an India Gold Coin with the Ashoka Chakra on it is long overdue. Such coins should provide assurance to a buyer that the purity, weight, and quality of a gold coin is up to international standards and that means production by a refinery which has the capability to deliver a brand that is acceptable internationally. Internationally, gold coins that have established a brand such as the South African Kruger gold coin, the Canadian Maple Leaf, or the Australian kangaroo gold coin, have a purity of 24 carat and they are aesthetically pleasing. The high growth in the sale of coins through bank channels (estimated at upwards of 35%) indicates a pent-up demand. The current market has largely unbranded coins with uncertain purity, which prevents the recycling of gold in the country. Besides, coins are a sure way to increase the number of organised players in the value chain in India.

Over time, as the programme to bring in gold into productive use gains visibility as well as scale, the amount of gold brought into circulation would grow and this would have favourable implications for the country's current account and balance of payments at the macroeconomic level and also unlock the value of gold held by individuals at the microeconomic level.

NOTES

1 Gold re-exports as a percentage of total gold imports have been declining even before the new regulations, from 41% in 2008–09 to 29.2% in 2011–12.

2 The sharp depreciation of the rupee as well as the Hindu inauspicious period of *shradh,* during July–August, when purchases of valuables are postponed also contributed to the decline in imports.

3 There were reports that a gold market for 10 *tola* bars has surfaced again due to the ease with which they can be concealed (a tola in India is around 0.375 troy ounces).

4 Doré is an impure alloy of gold and silver produced at a mine which will be refined to high purity metal. The industry median for gold doré is 65% gold and 35% silver.

5 It is estimated that direct employment in refining is about 300 persons per 100 tonne refinery along with an indirect employment of about 200 persons.

6 The average foreign exchange saved is about $20 million per 100 tonnes.

7 Assaying is the testing of gold, either as ore, bullion, coin, or jewellery, to determine its fineness or purity.

8 In our interaction with jewellers and refiners we found that a typical assaying centre could be set up in an area not exceeding 45 square metres.

9 The refinery is also one of the largest in Asia with a refining capacity of 100 MT of gold and 600 MT of silver per annum with a provision for tripling the gold refining capacity and more than doubling the silver refining capacity.

10 Inductively Coupled Plasma Spectrometry is the modern process for assaying gold.

11 The refiner, MMTC–PAMP must utilise the services of approved transport providers for such materials such as Brinks or G4S. Insurance cover for the metal at the purity verification centre is also a requirement to enter this business. Typically a refinery will have insurance cover for the metal at its plant as well as coverage against terrorist attacks. All metal movements and the risk associated with them should be the responsibility of the refiner, MMTC–PAMP, and the banks should not have to bear any risk on this account.

12 In this type of business, loco is the place at which gold is physically held and to which a particular price applies.

13 This reduces the maturity mismatch drawback that banks earlier were faced with.

14 To have compliance with the Prevention of Money Laundering Act self-attested affidavits or undertakings could be used as a documentation simplification measure.

15 This is the price of 1 troy ounce of 9999 pure gold in monetary units.

16 Since the assayer's software will provide for real-time tracking of the quantity of the metal deposit as well as the duration of the deposit it will enable banks to manage the maturity transformation of the gold on deposit in the form of onward lending.

17 Risk premiums in principle will be minimal as all dealings are in metal.

18 The cost of dollar borrowing here is taken to be 6% to 7% and includes a 2% to 3% hedging cost.

19 The World Gold Council estimates that 825 tonnes of net import of gold took place in India in 2013.

20 The All India Gems and Jewellery Trade Federation estimates the amount of gold lying unproductive as 25,000 tonnes.