Not All Gold Glitters the Same: Unpacking Investment and Sentiment for Effective Persuasion to Drive Gold Monetization in India

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Abstract

Popular understanding suggests that gold jewellery is both a form of investment and has sentimental value for the Indian consumer, while gold in bar or coin form largely has investment value only. However, policy approaches tend to consider "gold" as an amorphous entity wherein all forms of gold are similar, and are, thus, patently unclear about which form of gold constitutes investment or sentiment, or both. Clarity on this aspect will enable better achievement of the government's aim of monetizing part of the 22,500 tonnes of gold held by individuals and temple trusts in India. We attempt to unravel this puzzle by conducting a face-to-face survey in eight Indian cities with 611 households (which replicates and builds upon our earlier online survey), and establish that consumers strongly associate gold jewellery with both sentiment and investment, even as they associate gold bars with investment. Consumers are also more willing to part with gold bars than gold jewellery although both are placed in bank lockers. Our research not only highlights the specific case of a hitherto understudied yet ubiquitous product in the world's most populous country, but also provides theoretical and practical implications to enhance policy effectiveness in a complicated consumption context.

Keywords: gold monetization, gold bar, gold jewellery, jewellery, India, investment

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India is one of the world's largest consumers of gold with a demand of 700 tonnes (Jadhav 2021) but, given the relatively low volume of production, import of gold in India is high, at USD 34.6 billion in 2021 (Press Trust of India 2021). This imposes a heavy burden on the economy by contributing to 30 percent of the current account deficit. About 25,000 tonnes of gold in India lies in private hands, with four-fifths of this held by individuals and the rest under institutions such as temples. As a result, a large proportion of India's gold remains as an idle asset and is not available for circulation in the economy (Narayanan, Gopalakrishnan, and Sahay 2020). This reality is recognized not only by policy makers but also by investors and industry observers (Iyer 2024).

In 2015, the government of India enacted the Gold Monetization Policy (RBI 2018) in order to bring back idle gold into circulation by offering a gold deposit scheme whereby existing gold could be monetized and held as an asset on paper through the Gold Monetization Scheme (GMS). However, the GMS has found limited traction with consumers and has raised deposits of a miniscule 20 tonnes so far (Malhan 2020). In 2023, gold consumption decreased because jewellery consumption decreased while investment increased compared to the previous year (Ghosal 2024).

In this research, we investigate reasons for the relative low adoption of the GMS through the lens of consumer psychology and behavior with respect to gold to determine ways to persuade consumers to adopt the GMS. As Narayanan et al. (2020) point out in their research on consumer attitudes towards gold in India, gold holds tremendous sociocultural meaning for Indian consumers, in addition to its economic or monetary value. Narayanan et al. (2020, p. 3) note that gold has "both investment value (monetary value, driven by cognitive associations) and sentimental value (emotional value, driven by affective associations)."

We attempt to unpack this value by examining the mix of gold products held by individuals to suggest that certain forms of gold have greater sentiment associations whereas other forms have investment associations. Not only do these associations impact consumer behavior such as usage or substitution with other assets, but they are also likely to guide consumers' willingness to part with their gold and replace it with a paper asset. In sum, this research has two major research questions:

- 1. How does the form of gold (jewellery, coins, bars) determine its purpose (investment vs. sentiment)?
- 2. How can the relationship between form and purpose of gold enable policy efforts towards gold monetization?

While anecdotal observations and industry understanding do exist with respect to how the form and purpose are interlinked, there is very limited systematic research to address these questions. We conduct this research through surveys with two multi-city samples of 611 (inperson) and 566 (online) gold consumers, in order to determine psychology and behaviors related to gold as investment and as sentiment. The prevailing view of gold consumption considers all forms of gold to be equally amenable to the GMS, but our research systematically uncovers deep-seated nuances within gold holdings: gold jewellery is considered as meant for emotional or sentiment reasons whereas gold bars are for rational or investment purposes. These findings were complemented by three experiments with the same

samples were conducted in order to determine the effectiveness of communication intended to persuade consumers to participate in the GMS. We show that presenting the GMS as an alternative to holding gold in the locker increases the attractiveness of the GMS.

The findings of this research inform the consumer dimension of the GMS, particularly with respect to the nature of gold that can be effectively targeted and the communication that is likely to be most effective in drawing participation to the GMS. Theoretically, this research is situated in work on symbolic and cultural associations of possessions (Belk 1988). By examining nuances in consumer sentiment towards gold and highlighting that not all gold is the same for the consumer, we extend research on the "possession-self link" between individuals and their most meaningful possessions (Ferraro, Escalas, and Bettman 2011) for a possession with high monetary value.

Theoretical background

Consumers attach emotional and/or rational value to products, depending on the extent to which products evoke emotions (feelings) and/or cognitions (thoughts, Shiv and Fedorikhin 1999; Zajonc and Markus 1982), and these impact consumers' interaction with products (Dhar and Wertenbroch 2000). Emotions could be connected to symbolic value of a product that provides meaning through associations of self-worth (Ferraro et al. 2011), such as through social status. Emotional relationships with products could be a vehicle for personally relevant memories (Zauberman, Ratner, and Kim 2009).

Research on possessions shows that consumers value possessions as part of their "extended self" (Belk 1988) and individuals' possessions could, over time, be construed as "inalienable wealth" of families (Curasi, Price, and Arnould 2004). In sum, people's possessions, regardless of their monetary value, are emotionally important to them and could, at times, be inseparable from them.

Products could also evoke cognitions or rational thoughts, which make these products valued for their function or purpose. These products do not evoke emotions and might be handled with less emotional attachment; they are also likely to be replaceable. For instance, an ordinary pen used for writing is an instrumental object. The worth of these products is typically determined through the cost of purchase or cost of replacement. An asset held for the purpose of financial investment is (expected to be) viewed in a rational manner, through an assessment of monetary value of the asset and a calculation of returns. A rational thinking style is, thus, more suited for investment decisions, rather than an emotional or affective thinking style (Park and Sela 2018). When gold is held for investment, the associated sentiment (emotions) could impact thoughts related to investment (cognitions).

Context of gold in India: Investment and sentiment

Gold has a ubiquitous presence in India. Consumers' associations with gold range from wealth and social status to sacred and ancestral. Gold that consumers possess could be in the form of jewellery, mainly used for adornment. This is purchased during festivals such as

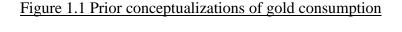
Akshaya Tritiya, on special occasions such as weddings, for gifting, and other social uses, driven by the color and glitter of the metal as well as its shape. The presence of gold in the Indian consumer psyche is also clear from advertisements for leading brands such as Tanishq and Malabar Gold.

The second use of gold is for investment and credit. Investment includes purchase of gold bars and coins, and is carried out for the purpose of securing one's assets through solid gold, often placed in a bank locker. Investment might also take place by purchase of jewellery which is not frequently used. Such jewellery could be used as a source of credit by taking a gold loan or pawning with local agencies in times of need. These findings have been documented in detail by Narayanan et al. (2020) through a nation-wide survey of gold consumers.

Given the two interlinked purposes of gold – investment and sentiment – and the presence of multiple emotional associations, the value that consumers place on gold goes beyond the monetary value of the object. Indeed, despite the obvious lower resale value of a piece of gold jewellery compared to an equal amount of gold as bars or coins due to "making charges" (ET Now Digital 2020), the high emotional value attached to the object might make it so valuable as to be nearly irreplaceable.

We suggest that every instance of gold purchase is motivated by sentiment or investment or both. Investment and sentiment are not strict divisions, since a piece of jewellery could have been bought for adornment, but need for credit could result in pawning of the jewellery, which then becomes an act of investment rather than sentiment. We illustrate our observations through the conceptual framework in figure 1.

Figure 1. Conceptual framework for gold consumption



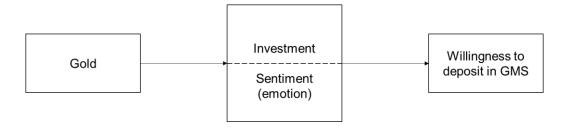
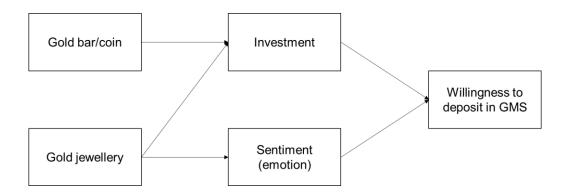


Figure 1.2 Conceptualization of gold consumption proposed in this research



As illustrated in figure 1.1, prior notions of gold consumption and monetization have implicitly considered the consumer's "gold" as an amorphous entity without specifically considering the types of gold involved. Consider, for example, the advertisement for the GMS from a large national bank (appendix A). As a result, the motivations for holding gold – investment and sentiment – are also indeterminate. In the current conceptualization illustrated in figure 1.2, the forms of gold and the corresponding motivations are clearly demarcated.

While the former notion considers all forms of gold to be equally amenable to monetization, the proposed understanding of gold consumption predicts different levels of willingness to monetize for different forms of gold. Gold that is meant for investment but not sentiment is likely to be more monetizable and amenable to deposit in the GMS compared to gold that is meant mostly for sentiment (and investment). We formally state the first set of hypotheses:

H1: Gold consumption has one of the following three primary motivations: a) sentiment, b) investment, and c) combination of investment and sentiment.

H2a: Gold consumption for sentiment is mainly in the form of jewellery and artifacts.

H2b: Gold consumption for investment is mainly in the form of coins and bars.

H3a: Gold consumption for sentiment is associated with low willingness to part with (exchange, sell, or convert) the gold.

H3b: Gold consumption for investment is associated with higher willingness to part with (exchange, sell, or convert) the gold.

Locating the GMS in the Indian consumer psyche

Given that the GMS aims to persuade consumers to part with their gold, we suggest that gold that is earmarked by the consumer as sentiment is unlikely to be drawn into the GMS. Given the role of gold in Indian society, a vast majority of individuals are likely to possess gold that is of sentiment value, which they might not easily part with for a paper asset. Unlike this, gold that is earmarked for investment, either bars and coins, or gold jewellery, does not involve significant sentiment, and is amenable to monetization under the GMS. We posit that

persuading consumers to participate in the GMS needs to take cognizance of this nuance with respect to their gold.

H4: Ease of conversion into paper asset under the GMS is high for gold earmarked by the consumer for investment and low for gold earmarked for sentiment.

For gold that is earmarked for investment, consumers are likely to think rationally, and this could make them receptive towards communication that highlights the relative advantage of a paper asset instead of solid gold. Benefits such as interest earned and freedom from security worries would then be perceived as important. We posit that compared to gold earmarked for investment, the GMS would be viewed as an equal or better alternative.

H5: Paper asset is perceived as an equal or better investment compared to physical gold earmarked for investment.

Overview of studies

We conducted two studies to test our hypotheses. The first study involved a survey and an experiment conducted with a general sample of gold consumers across the country, and was conducted online during the pandemic as face-to-face data collection was impossible. Study 2 also comprised a survey and experiments using scenarios to elicit consumer beliefs and behavior with respect to gold consumption. The purpose of study 2 was to build upon and validate the findings of study 1 through additional questions and replication in a face-to-face setting. The findings of the two studies are directionally concurrent.

Study 1. Online survey and experiments with gold consumers

The objective of this study was to understand nuances of gold consumption behavior with respect to investment and sentiment. The study was conducted in two parts: in the first part, a survey of gold consumers was undertaken to determine psychology and behaviors related to gold. In the second part, experiments were conducted to determine ways of persuading consumers to participate in the GMS.

The two parts were conducted with a sample of 566 Indian participants managed by the online data collection platform Dynata. Online data collection was adopted in order to reach a wider group of participants with respect to age, gender, and occupation. We did not opt for face-to-face door-to-door data collection because the covid-19 pandemic prevented face-to-face data collection during the period of data collection. The main phase of data collection was preceded by a pilot phase with a sample size of 166, which guided the modification of the questionnaire.

Participants

Assuming that potential customers of GMS need to hold a minimum quantity of gold beyond what they use for adornment, we selected consumers who stated that they own at least 160 grams (20 sovereigns) of gold. (To enhance quality and veracity of the responses, the extent

of ownership of gold was asked at the beginning and end of the study, in grams and sovereigns.) These consumers are more likely to engage with the GMS and are better candidates for early adoption of GMS.

A summary profile of participants is provided in table 1. The participant sample is distributed across age, gender, income, and geography, i.e., across states of India with high and moderate gold consumption. We largely focused on the urban population as their gold holdings are significant and the reach of GMS is likely to be initially towards the urban population.

Table 1. Description of participants, study 1

Variable	Description					
Number of	566 (main study)					
participants	166 (pilot study)					
Age	Mean = 38.4 years, min = 25 years, max = 63 years					
Gender	50% women					
Household income	Above INR 30 lakh per annum 36%					
	INR 10 lakh to INR 30 lakh per annum 64%					
Gold ownership*	Mean = 509 grams					
Geography	North (Delhi NCR) 29.5%					
	East (Kolkata) 12.4%					
	West (Mumbai/Thane/Pune/Ahmedabad) 29.2%					
	South (Bangalore/Chennai/Hyderabad) 29.0%					

^{*} Given the online nature of the study, we expect some upward social desirability bias and unwillingness to disclose true gold holdings, but the anonymous survey is expected to be informative for the purposes of this research. Study 2 is, hence, conducted face-to-face.

Topics of study

This study was designed to understand consumer psychology and behavior with respect to gold, in order to delineate investment and sentiment. The full questionnaire is available upon request.

Part 1. Survey

The survey included questions on the following topics. The complete survey is available from the author upon request.

- 1. Gold purchase behavior and ownership
- 2. Awareness of the GMS

- 3. Association of different forms of gold with sentiment and investment
- 4. Savings and investment beyond gold
- 5. Demographic information

Part 2. Experiments

Three experiments were designed to determine the most effective means of persuading consumers to shift towards the GMS paper asset instead of solid gold. Each experiment was conducted with the full sample of participants and utilized a one-way between-subjects design. The experiments were planned to test the following:

- 1. Effect of message content on willingness to adopt GMS: General persuasive message for switching any form of gold to GMS (status quo) vs. persuasive message aimed at switching gold coins and bars to GMS
- 2. Effect of message tone on willingness to adopt GMS: General persuasive message focusing on investment elements (status quo) vs. persuasive message that differentiates sentiment and investment elements
- 3. Effect of comparative presentation on willingness to adopt GMS: Comparative presentation of investment gold as asset vs. GMS paper asset

Findings part 1: Consumer survey to examine investment and sentiment

We present the findings from the relevant questions. Data was analysed to determine a) investment and sentiment associations with respect to different forms of gold, as well as b) consumers' willingness to sell, exchange, or deposit different forms of gold.

Sentiment and investment – variation by form of gold

We first test the extent to which gold jewellery and gold bars correspond to investment and/or sentiment. Consumers were asked the extent to which a) gold jewellery and b) gold bars were perceived as being meant for investment vs. sentiment, along 9-point scales. Analysis of the data through a repeated measures t-test shows that:

Compared to jewellery, bars are overwhelmingly considered as meant for investment: Mbar = 8.09, SD = 1.31; Mjewellery = 7.42, SD = 1.95; t(565) = 9.07, p < .0005.

Compared to bars, jewellery is overwhelmingly considered as meant for sentiment: Mbar = 6.77, SD = 2.59; Mjewellery = 7.89, SD = 1.40, t(565) = 11.607, p < .0005.

Compared to investment, sentiment is the more suitable purpose of jewellery: Minvestment = 7.42, SD = 1.95; Msentiment = 7.89, SD = 1.40; t(565) = 5.738, p < .0005.

Compared to sentiment, investment is the more suitable purpose of bars: Minvestment = 8.09, SD = 1.31; Msentiment = 6.77, SD = 2.59; t(565) = 11.654, p < .0005.

These findings clearly indicate a correspondence between gold jewellery and sentiment, as well as between gold bars and investment. Our findings align with the prevalent perception in the gold ecosystem and jewellery industry that consumers hold emotional attachment towards gold jewellery but not for gold bars. This observation provides strong support for hypotheses H1, H2a and H2b. H2a and H2b posited that gold consumption for sentiment is mainly in the form of jewellery and artifacts, while gold consumption for investment is mainly in the form of coins and bars.

Willingness to sell, exchange or deposit various items of gold

First, we consider participants' responses to a question designed to measure their relative willingness to sell or exchange, but not pawn, various items of gold in different forms. This would provide an indicator of the willingness to let go of gold possessions for the GMS.

In order to study the phenomenon realistically, we used a novel ranking paradigm by showing participants gold objects and asking them to rank the objects according to the suitability for a given purpose. We presented participants with a set of gold objects (figure 2) that are commonly present in many Indian households or held in the bank locker (Narayanan et al. 2020). Estimates of the amount of gold in grams and sovereigns were provided so that all participants perceived the objects in the same manner.

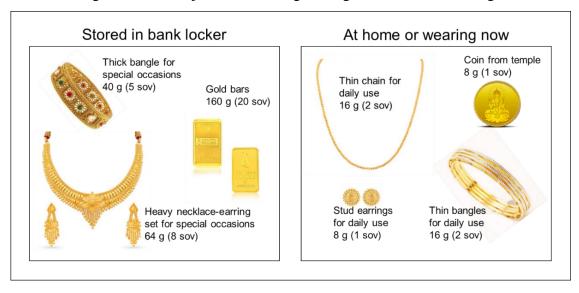


Figure 2. Gold objects for eliciting willingness to sell or exchange

Participants ranked the seven objects according to their willingness to sell or exchange the items. Figure 3 shows the share of participants who marked the particular item as rank 1, and in the top two ranks, for each item, for sale or exchange (figure 3.1) and depositing in the GMS (figure 3.2). The figure shows that gold bars are most amenable to exchange or sale whereas jewellery, even those jewellery items that lie in the locker, are not easily sold or exchanged. Participants were also asked to rank each item in terms of willingness to deposit as part of the GMS.

60% 53% 50% 40% 40% 32% 28% 30% 23% 32% 20% 24% 13% 12% 10% 11% 11% 10% 6% 0% 5% Gold bars 160 Thick bangle Heavy Coin from Thin chain 16 Stud earrings Thin bangles necklace set temple 8 g (1 8 g (1 sov) g (20 sov) 40 g (5 sov) g (2 sov) 16 g (2 sov) 64 g (8 sov) sov)

Figure 3.1. Share of participants who marked each gold item as rank 1 (blue line), and in the top two ranks (brown line) for sale or exchange

Note: 32% of respondents ranked gold bars first when considering sale or exchange. The highest percentage of respondents who ranked any jewellery first is only 24%.

Top 2 ranks

Rank 1

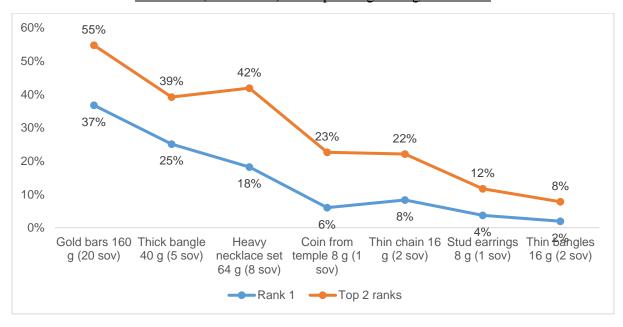


Figure 3.2. Share of participants who marked each gold item as rank 1 (blue line), and top two ranks (brown line) for depositing through the GMS

Note: 37% of respondents ranked gold bars first when considering depositing through GMS. The highest percentage of respondents who ranked any jewellery first is only 25%.

The above findings provide support to hypotheses H3a, which posited that gold consumption for sentiment (in the form of jewellery) is associated with low willingness to exchange, sell, or deposit the gold under the GMS. The findings also lend support to H3b, according to

which gold consumption for investment is associated with high willingness to part with (exchange, sell, or convert) the gold. As expected, consumers are most willing to sell, exchange, or deposit gold in the form of gold bars which are associated with investment and much less willing to part with gold jewellery which are also lying in the locker.

Further, these findings support H4 which is specific to the GMS and show that consumers are more willing to use investment-oriented gold (gold bars) for the GMS rather than sentiment-oriented gold (gold jewellery).

Findings part 2: Experiments on persuading consumers to participate in the GMS

Persuasion through comparative presentation of the GMS

Experiments 1 and 2 were inconclusive for various reasons including a possible ceiling effect, and we focus on the results of experiment 3. In this study, participants were presented with a message intended to persuade them towards adopting the GMS. The images used as the message (stimuli) are presented in figure 4. Since this study is conducted with a between-subjects design, approximately half the participants were shown the comparative presentation (figure 4.1) and the other half were shown non-comparative presentation (figure 4.2). Participants were then asked how attractive they found the GMS based on the advertisement message they had just seen, and marked their answers on a 9-point scale.

Figure 4: Images shown as stimuli for experiment 3

Gold in the bank locker

**No interest accrued*

**Risk of theft while moving*

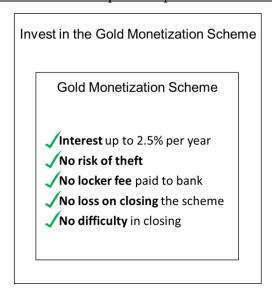
**Locker fees paid to bank*

**Losses on selling gold later*

**Difficult to sell gold later*

Figure 4.1 Comparative presentation of GMS

Figure 4.2 Non-comparative presentation of GMS



An independent samples t-test showed that participants who saw the comparative presentation of GMS found the GMS significantly more attractive (M = 8.20, SD = 1.20) compared to participants who saw the non-comparative presentation of the GMS (M = 7.97, SD = 1.56), t(523) = 2.002, p = .023, one-tailed. Results of this experiment, thus, provide support for H5 which posited that in comparison to gold as investment, GMS is perceived as a better asset. At the same time, presenting GMS through a comparison against holding gold in physical form is likely to make the GMS more attractive and enhance persuasion towards gold monetization.

Study 2. Corroboration and augmentation of the first study

The objective of this study was similar to that of study 1, with the additional aim of replication and building upon the findings of the previous study in a face-to-face setting. This study was conducted in two parts: a survey of gold consumers, and a set of experiments to determine ways of persuading consumers to participate in the GMS. The two studies were conducted with a sample of 611 Indian participants through the market research agency Hansa. The main phase of data collection was preceded by a pilot phase with a sample size of 52.

Participants

We selected consumers who stated that they own at least 160 grams (20 sovereigns) of gold. As in the case of study 1, these consumers are more likely to engage with the GMS and are better candidates for early adoption of GMS.

A summary profile of participants is provided in table 2. The participant sample is distributed across age, gender, income, and geography, i.e., across states of India with high and moderate gold consumption. We largely focused on the urban middle class population as their gold

holdings are significant and the reach of GMS is likely to be initially towards the urban population.

<u>Table 2. Description of participants, study 2</u>

Variable	Description						
Number of participants	N = 611						
Age	Mean = 41 years, SD = 10.3 years Min = 25 years, Max = 65 years						
Gender	49% women, 51% men						
Household Income (Annual)	₹10,00,000 to ₹20,00,000 – 76% ₹20,00,000 to ₹30,00,000 – 14% ₹30,00,000 to ₹40,00,000 – 9% ₹40,00,000 to ₹50,00,000 – 1% Over ₹50,00,000 – 0.2%						
Gold Ownership	Mean = 253 g, SD = 181 g Max = 3200 g, Min = 160 g						
Geography	Ahmedabad – 9% Bangalore – 11% Chennai – 12% Delhi – 20% Hyderabad – 12% Kolkata – 6% Mumbai – 21% Pune – 9%						
NCCS classes	A1 – 38% A2 – 41% A3 – 21%						
Occupation	Business / Self-employed – 40% Service/Salaried – 30% Homemaker – Full time – 24% Homemaker + Part time business/work – 5% Others – 6%						

Education	PhD or other higher degree – 1% Postgraduate or masters degree – 36% Undergraduate or bachelors degree – 25% 12th standard and/or diploma, but not a graduate – 27% 10th standard or below – 11%
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Topics of study

This study was designed to understand consumer psychology and behavior with respect to gold, in order to delineate investment and sentiment, to corroborate and develop upon the findings of study 1. The full questionnaire is available from the author upon request. The topics of study for the survey were similar to that of study 1. Additionally, we asked questions on the risk propensity of the participant. For the experiments, we only conducted two of the experiments, to study the following:

- 1. Effect of message content on willingness to adopt GMS: General persuasive message for switching both gold jewellery and bars to GMS (status quo) vs. persuasive message aimed at switching gold bars to GMS vs. persuasive message aimed at switching gold jewellery to GMS
- 2. Effect of comparative presentation on willingness to adopt GMS: Comparative presentation of investment gold as asset vs. GMS paper asset

Findings: Consumer perceptions of gold for investment and sentiment

Predictors of awareness of GMS

Overall awareness of GMS among the sample is 21%. We conduct a binary logistic regression of participants' awareness of GMS against a set of predictors that are afforded by our survey. The aim of this analysis is to examine the dimensions along which GMS awareness campaigns have been effective, and the predictors or covariates that we use are not exhaustive. We find that the significant predictors of the awareness of GMS are income (B = .370, p = .008, categorical variable as in table 2), city (B = .135, p = .006, categorical variable as in table 2), and stated gold ownership (B = .002, p = .071, grams), but not age and gender. Importantly, awareness of GMS is positively correlated with ownership of gold bars (B = .827, p < .001).

Predictors of gold bar ownership

While gold jewellery ownership tends to be relatively prevalent across customers, the ownership of gold bars is not so uniform (226/607 participants), and is important for our research. A binary logistic regression shows that gold bar ownership is not predicted by age,

gender, income or gold ownership. However, the city (B = -.162, p < .001) and ownership of risky investments (B = -.244, p = .021, 0/1/2 = owns low/medium/high-risk investments) are strongly associated with gold bar ownership. (We consider only 607 participants whose gold ownership is <=1000 g in order to minimize cases of overstating of gold holding.) We posit that gold bar owners are likely to be consumers who consider various forms of investment beyond traditional investments like gold jewellery and real estate, and look at gold as one option for investment among many others such as mutual funds and equity.

Sentiment and investment – variation by form of gold

We tested a set of statements (9-point scale, 1=strongly disagree, 9=strongly agree). A ceiling effect is likely in these responses as participants might indicate high agreement with most statements and the differences during comparison could be limited. However, our analysis indicates clear variations.

Comparison of 1) "When I buy, gold jewellery from a jewellery shop, it is mainly for **investment** purposes" against 2) "When I buy gold bars from bank or MMTC it is mainly for investment purposes" helps us understand which form of gold is used for investment: M1 = 7.32, 7.43, paired-sample t-test t(610) = -1.9, p = .029, Cohen's d = -.0767. This finding shows that **gold bars**, rather than gold jewellery, are more strongly associated with investment.

Comparison of 1) "When I buy gold bars from bank or MMTC it is mainly for **emotional value**, i.e., for wearing daily or on occasions, for gifting, etc" against 2) "When I buy gold jewellery from a jewellery shop, it is mainly for emotional value, i.e., for wearing daily or on occasions, for gifting, etc" helps us understand which form of gold is used for investment: M1 = 7.25, 7.44, paired sample t-test t(610) = -3.37, p < .001, Cohen's d = -0.1363. This finding shows that **gold jewellery**, rather than gold bars, is more strongly associated with sentiment and emotion.

Comparison of 1) "When I buy, **gold jewellery** from a jewellery shop, it is mainly for investment purposes" against 2) "When I buy gold jewellery from a jewellery shop, it is mainly for emotional value, i.e., for wearing daily or on occasions, for gifting, etc" directly helps us understand the purpose of gold jewellery: M1 = 7.32, M2 = 7.44, paired sample t-test t(610) = -1.85, p = .032, Cohen's d = -.0748. This finding shows that the purpose of gold jewellery is **emotion and sentiment** rather than investment.

Comparison of 1) "When I buy **gold bars** from bank or MMTC it is mainly for emotional value, i.e., for wearing daily or on occasions, for gifting, etc" against 2) "When I buy gold bars from bank or MMTC it is mainly for investment purposes" helps us understand the purpose of gold bars: M1 = 7.25, M2 = 7.43, paired sample t-test t(610) = -2.74, p = .003, Cohen's d = -.1109. This finding shows that the purpose of gold bars is **investment** rather than emotion and sentiment.

Together these comparisons support H1, H2a and H2b. No significant differences were found by gender in the above comparisons.

Willingness to deposit various items of gold in the GMS

The findings on this aspect are similar to that of study 1. We conduct a different analysis by separately considering participants who own (229, 37%) and do not own gold bars (382 out of 611, 63%). Table 3 shows the seven gold items that were shown (figure 2) and the number of participants who ranked each item 1, or in the top two ranks in terms of willingness to deposit in the GMS. Participants were informed that the thick bangle, gold bars, and heavy necklace-earring set were in the locker and the other gold items were at home or in personal use.

<u>Table 3. Number and percentage of participants who rank each of the seven items of gold in</u>
<u>first position, and in first or second position</u>

	Participants who own gold bars				Participants who do not own			
	(229)				gold bars (382)			
				Top 2				Top 2
	Rank	Top 2	Rank	ranks	Rank	Top 2	Rank	ranks
	1	ranks	1 %	%	1	ranks	1 %	%
Thick bangle for special								
occasions 40 g (5 sov)	59	118	26%	52%	112	202	29%	53%
Gold bars 160 g (20 sov)	73	119	32%	52%	113	196	30%	51%
Heavy necklace-earring								
set 64 g (8 sov)	46	99	20%	43%	75	175	20%	46%
Thin chain for daily use								
16 g (2 sov)	32	57	14%	25%	51	98	13%	26%
Coin from temple 8 g (1								
sov)	13	35	6%	15%	18	41	5%	11%
Stud earrings for daily								
use 8 g (1 sov)	2	13	1%	6%	7	26	2%	7%
Thin bangles for daily								
use 16 g (2 sov)	4	17	2%	7%	6	26	2%	7%

Note: column titled "top 2 ranks %" adds up to more than 100% as number of top 2 ranks for any item can exceed number of participants.

For participants who own bars, 32% rank gold bars as the first item they would monetize, and 52% consider gold bars the first or second item they would monetize. Only 26% rank thick bangle first. For participants who do not own gold bars, the ranks are closer to 30% for both gold bars and thick bangle, as expected. Their willingness to monetize is considerably lower for other items.

The above findings provide support to hypotheses H3a, which posited that gold consumption for sentiment (in the form of jewellery) is associated with low willingness to exchange, sell, or deposit the gold under the GMS. The findings also lend support to H3b, according to which gold consumption for investment is associated with high willingness to part with

(exchange, sell, or convert) the gold. As expected, consumers are most willing to sell, exchange, or deposit gold in the form of gold bars which are associated with investment and much less willing to part with gold jewellery which are also lying in the locker.

Further, these findings support H4 which is specific to the GMS and show that consumers are more willing to use investment-oriented gold (gold bars) for the GMS rather than sentiment-oriented gold (gold jewellery).

For the experiments that were conducted with the same sample, we do not find significant differences in persuasion. This could imply that building awareness of GMS is more important than the exact message used. However, targeting higher income consumers and gold bar owners might be more beneficial in increasing conversion to GMS.

General discussion

Through two multi-city national surveys, we find evidence for our hypotheses H1-H5 regarding consumers association of different forms of gold, bars/coins and jewellery, for investment and sentiment. We establish empirically that consumers typical consider gold jewellery mainly for sentiment and gold bars/coins mainly for investment. Second, using a novel empirical paradigm that asks consumers to rank gold products in terms of their willingness to sell, exchange or deposit to GMS, we show that consumers are more willing to let go of gold bars rather than gold jewellery, even when both are placed in a bank locker. This observation is more pronounced for participants who own gold bars. We also find that awareness of GMS is strongly associated with ownership of gold bars.

Overall, findings from our research show that consumers consider gold jewellery as associated with sentiment or emotions, and gold bars to be associated with investment. This effect is observed even when the consumer is shown specific items of gold as well as when the consumer's stated response is considered. With respect to persuading consumers towards the GMS, we find that given the investment associations for gold, it is possible to enhance the attractiveness of the GMS by comparing it against holding gold in the locker.

Our findings contribute to research on possessions (Belk 1988) that studies the role of symbolic and cultural associations of consumers' possessions in providing meaning. We highlight a facet of consumer attachment to possessions (Kleine and Baker 2004) by examining how the complex combination of rational and emotional thinking are evinced in a novel and highly prevalent instance of attachment to possessions, particularly for a possession with high monetary value. By examining nuances in consumer sentiment towards gold, we show that despite widespread beliefs in the industry, not all gold glitters the same for the consumer.

Implications for gold policy

Our research provides important implications for the gold industry and for gold policy.

Consumers' willingness to deposit is higher for gold bars

We provide evidence that depending on the form of the gold, i.e, jewellery and bars/coins, consumers have different investment-sentiment associations, and hence different levels of willingness to sell, exchange or deposit to the GMS. Accordingly, persuasion efforts towards the GMS will find greater success if they incorporate the consumer's differential willingness to part with their gold.

While jewellery does constitute 60-70% of gold held by Indian households, our research shows that jewellery is not easily amenable to being deposited without scope for recovery. Instead, gold bars which constitute a smaller share of about 30% of total gold held by households and form approximately 6000 tonnes are more amenable to monetization. Even 10% of this gold will nearly equal the annual demand for gold in India. In the early stages of the GMS, gold bars provide an easier way to gain traction for the scheme compared to gold jewellery.

Higher income groups are most easily addressed

In this research, we deliberately avoid targeting based on consumer profile, say, a focus on urban consumers or high-income class consumers since the GMS is intended to be a mass program and gold is not viewed as a luxury product per se (PRICE Research 2020). At the same time, our research suggests that higher income groups tend to own gold bars and higher income is associated with greater levels of awareness of the GMS. As a result, we suggest that the major part of the initial GMS effort is best targeted towards higher income classes.

However, the manner of persuasion might drive consumers to self-select, such that consumers who have a relatively high amount of gold beyond their sentiment needs (based on a standard that each consumer sets on his/her own) can adopt GMS for their gold-related investment needs. A considerable number of consumers are likely to have gold, particularly gold bars, that is lying in bank lockers as unutilized asset, and the GMS can tap into this gold. Through this process, the intention is to let sentiment gold remain with customers while shifting investment gold towards GMS. This will enable driving government policy without impinging on sociocultural aspects of gold (Narayanan et al. 2020).

Comparative advertising provides more effective persuasion

We provide an additional implication related to positioning of the GMS in marketing communication. The findings of our research indicate that the GMS is best conveyed as an investment instrument that provides benefits over and above that of holding solid gold while also reducing the hassles associated with keeping gold in the locker. By providing a comparison with solid gold, the benefits of the GMS are highlighted and this could enhance persuasion towards the GMS.

Conclusion

In this research, we do not comment on the development of the ecosystem required to implement the GMS such as purity testing centers, refineries, banks, and others. We assume that the processes that consumers need to go through in order to monetize gold will be relatively seamless. Having the ecosystem and processes is critical to the GMS, but a discussion of these is beyond the scope of this work.

The gold consumer in India is interesting for investors, policy makers, and new companies who are emerging in this sector. A recent small-sample study of Indian women with a net worth over INR 10 crore, conducted by Waterfield Advisors, showed that 62% were willing to invest in equity whereas the similar number for gold was 54% (Podishetti 2024). Such observations show that the Indian gold consumer is evolving rapidly and risk propensity is changing. New business models in the gold industry enable consumers to use their gold jewellery as an investment.

In the face of such developments, our research clarifies the consumer's relationship with gold by going beyond anecdotal evidence to show how the form of gold and its purpose are interlinked. At the same time, this research provides policy recommendations to implement the GMS effectively.

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Appendix A

Recent email advertisement for gold monetization by SBI

