#### Influence of reference prices on purchase intentions and hedonic valuation of gold in India

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### 1. Executive Summary

In India, gold is entwined emotionally, culturally and socially. As one of the largest consumers in the world, Indians consistently purchase gold (75% is in the form of jewellery) mainly during festivities. Such purchases are sometimes preceded by periods of deliberation and discussion while at other times, the purchases are unplanned. Due to a dynamic nature of the gold market, prices change everyday and are often displayed on popular media sources. There has been considerable changes in price within 5 years and sometimes even within a year. It was not clear whether and to what extent price plays a role in gold purchases, although it has often been tacitly assumed that it does. In a previous research project by the World Gold Council (WGC) that investigated "the role of gold in India" conducted in September 2006<sup>1</sup>, it was observed that gold demand is quite priceinelastic so Indian demand is not necessarily negatively affected by increases in gold prices. The question thus becomes, what then lends value to gold and to what extent does price factor in the decision making process regarding gold purchase. In 2014, sampling indians through surveys by the WGC showed that most respondents say they would do nothing in response to changes in the price of gold. This was meant to suggest that gold demand is not dependent on price fluctuations but it was nevertheless pointed out in the study that higher volatility of prices reduce purchases. Thus, we realized that the nuances of thinking and affective valuation of gold has multiple aspects. It is colored by customer segments (or persona), occasions and fore-planning. People discuss about prices but report a marginal effect in surveys.

To comprehensively examine and understand the affective valuation of gold by Indians, we used a mixed method approach. First, 16 people who had purchased gold in the past and belonged to a varied demographic background were interviewed (Qualitative study). Subsequently, using the

<sup>&</sup>lt;sup>1</sup> Available at <a href="https://www.gold.org/research/role-gold-india">https://www.gold.org/research/role-gold-india</a>

themes from the qualitative analysis, we conduced an online survey on another group of 61 random people to lend more support for certain aspects of thinking about gold.

Among one group of people, who were not regular investors, we found a marginal effect of price and the actual purchase was mostly driven by occasions. For investors though, price played an important role. Accordingly, we created two persona that capture these two different mindsets.

While the initial aim of this study was focused on price, many other interesting aspects of gold emerged which are important for the indian gold market and strategizing sales. The qualitative analysis brought out multiple important aspects of gold. It turned out to be a social asset which resonated with almost all of our participants. Quite specific to the indian culture, gold was conceived to be a "stree-dhan" literally meaning a lady's wealth. Participants also discussed about the hedonic value associated with such an asset and the norms of passing it on in the family. On a socio-cultural side, gold was a gift almost mandated for socially close ceremonies, especially weddings; as it was quite clear that gold was a more valuable asset to be gifted. Importantly, the valuation and perception of gold being an asset is related to it being an investment. We tried to dig up reasons why gold was seen as a good investment. Beyond being an investment, there were also hedonic and normative roots associated with gold which did not allow it to be normally traded as other commodities. Some also discussed physically separating gold into mental buckets (mental accounting) where part of the gold was for trading and part of it was a non-tradable social investment. Price emerged as a nominal marker and most people perceived gold as a stable longterm investment which appreciates over decades. While the dominant understanding was that gold will appreciate more in the future, irrespective of the purchasing price, the experiences of gains and losses was also evident. Thus, we realized that the importance of price is colored by purchase occasions, motives, goals, future intentions and there is a hedonic value beyond the economic aspect. These nuances was possible to unearth through informal interviews with a variety of people. Additionally, a follow-up online survey helped us compare and corroborate the reasons underlying certain aspects of thinking. For example, we were able to compare different sources about the value of gold, how does gold get reflected as an asset, what is really meant by "stree-dhan". We could also compare different market scenarios based on differing reference prices to examine what kind of markets are preferred by people for purchases. People wanted to purchase more when the price was reducing after being stable for some time.

Thus, tis project helped us gain some reasonable understanding not just about the role of price and economic valuation of gold, but also the cultural, hedonic, normative and social associations among indian customers which would be an important input for gold marketing.

### 2. Qualitative study

#### Method

In this study, we adopt a qualitative methodology. We make use of a discovery-oriented research approach aimed at uncovering a detailed understanding of the phenomenon of interest. We have chosen the study setting, keeping in mind the need to maximize information richness. For this, we have chosen informants in the city of Ahmedabad, who have exhibited gold buying behaviour in the past.

We chose our first informant through convenience sampling. The rest of the informants were chosen through snowball sampling. Our sample set consists of 16 informants. This includes a combination of male and female respondents. We conducted semi-structured depth interviews with our informants. A typical interview was conducted over a duration of 30-45 minutes. All interviews were audio recorded after obtaining prior information from our informants. The interviews were later transcribed. The final set of questions that were typically covered in an interview is given in appendix A. The interviews were typically conducted at the respondents' homes. Before the start of the interview, the purpose of the interview was explained to the informants. Confidentiality was assured and it was stressed that there were no right or wrong answers. We usually began with a 'grand tour' question where informants were asked about the significance of gold in their personal lives. Our interview protocols were flexible, and informants were encouraged to be elaborate in their responses. The interview flow was led by the informant and interventions were made only when it was felt that the person was veering away from the topic.

We coded the data from the interviews and developed themes and sub-themes from the data. As part of the analysis, each interview transcript was reviewed and verbatim sections were extracted. The extracts were then analyzed and coded into the emerging themes from the study.

#### Results

In this section, we discuss some of the key themes that emerged from the study. We find that in addition to the transactional value of gold, it also has a social value. This in turn, makes gold a

complex investment vehicle. We also find that the importance of price is nominal and marginal. Next, we discuss these themes in detail.

#### (a) A social asset

In addition to its material value, gold is accorded social value. Our informants equate gold possession with social status. Certain family occasions are associated with the gifting of gold. The social value of gold gets reflected in diverse ways, some of which we discuss below:

#### Gold as 'streedhan'

The meaning of gold as a possession is interpreted in myriad ways by our respondents. A common, yet powerful interpretation considers gold as 'streedhan'. Literally, streedhan means a 'lady's wealth'. Female respondents co-opt this literal interpretation. It is an asset that they have sometimes inherited, but it is also an asset that they continue to build up through regular purchases over their lifetimes. They consider gold as their personal wealth and a means of security. Minal's excerpt about the importance of gold as her personal possession brings out many of these characteristics.

By all means the concept of 'Streedhan' is very important. The men have inherited all the things like money and properties and whatever other things they have got from their parents. But for girls, gold is their 'Streedhan'. It is never touched by anybody including the husband. And suppose she needs money for some unforeseen eventuality in her life, she can always get money from the gold.

The interpretation of gold as 'streedhan' is also accepted by male respondents. Male respondents are willing to accept the boundaries set by this conceptualization and are willing to cede their ownership and authority over this asset. By doing this, they consider this to be an exclusive domain of assets, typically out of their reach. The relative lack of resistance to this idea of gold as streedhan is discussed in this excerpt from Ashok's interview. The similarity of tone adopted by Ashok in this excerpt, as compared to Minal's views regarding streedhan is indicative of a common view point.

I believe that whatever gold I buy for my wife and daughter is ultimately their own. It gives them safety and happiness. Even if they are not wearing it all the time, its possession gives them security like it is their own. They are emotionally attached to their ornaments, and it is their security.

### An asset to be passed on

The social value of gold is also in evidence in the attitude adopted by our informants with regard to its eventual destiny. There is a strong sentiment that the gold that is inherited, and later built up

through purchases, will be passed on to the next of kin. Through this, gold is conceptualized as an asset that provides security to the next generation. Additionally, gold is considered an asset that needs to remain within the family. This sentiment is clearly visible in Atul when he visualizes gold as "jewellery in lockers". Also, Hardik, while alluding to this pervasive sentiment, obstinately declares his intentions in the following excerpt

Gold is something which will remain in the family. Whether we use it or not, it will always remain in the family. It will get passed on to my children. But that's it.

# A socially mandated gift

The social importance of gold is most clearly visible in its use as a gift. Informants tend to cite the role of tradition, when discussing gold in the context of a gift. In many cases, this is socially mandated. The transcendence of gold over its material value is brought out in this excerpt from Hemant's interview. In this, he brings out the intangible social value of gold by comparing it to a household appliance of a similar material value.

For example, your budget is Rs. 10000 and you could decide to gift a microwave oven. But instead of a microwave over, if you gift gold worth the same amount, it will be valued more socially even if the price is same. In case of gold they will feel much better as compared to a microwave. Its just a kind of feeling that exists in the society.

In summary, gold has a social value, in addition to its material value. However, in addition to the social value of gold that our informants repeatedly state, gold is also considered an investment. Its perception as an investment, however, differs markedly from other vehicles of investment. Based on our analysis, we argue that the view of gold as an investment is often filled with contradictions, and is always complex. We discuss this in the next section.

### (b) A complex investment vehicle

Based on our analysis, it is evident that gold is considered as a valuable investment. This view of gold is largely built on the perceived stability and liquidity that gold is considered to possess. As an investment, gold is evaluated against other investment options like mutual funds, investments in equity, fixed deposits and the like. However, the complexity of gold as an investment vehicle draws largely from the specific traits that informants attribute to it. This makes gold a complex investment vehicle, which we discuss next.

# Perception of stability and liquidity

As an investment, two qualities that are prized by informants are its perceived stability and liquidity. Informants consider their own life histories and consider gold as an asset that continuously appreciates. Nupur's excerpt below broadly represents the sentiment of our informants in the classification of gold as an investment that continuously appreciates.

Gold is always better and more useful for us as its price always increases. I look back at some of our purchases from the past. At the time of birth of my first daughter, the gold price was Rs.2500. At time of birth of our second daughter, it had increased to Rs.3500. Even now, I see that it is increasing. So, I have always thought that whatever we had bought earlier...that was a good decision.

The other characteristic that is imputed to gold is its stability as an investment. The physical form of gold lends permanence to gold as an investment, which is markedly different from other investment options. Our informants cite its use in the world economy as a means of exchange, implying their belief in its continued relevance. Ashish's excerpt below, is an important illustration of this thought.

Gold is different as it is the only investment in which the money that you park in it can be redeemed overnight, and also in any country. This gives 100 percent security. If a country becomes bankrupt, then also gold is there. That is why I consider 20% of everybody's wealth should be in gold.

Finally, gold is considered a liquid investment. Informants frequently discuss the ease with which it could be converted to cash. A common mention in our informant interviews is the ability to convert gold into cash, specifically in times of dire need. An example for this is Hiren's excerpt below. During the course of the interview Hiren mentioned that he had never sold gold. However, he cited the example of a friend as an example of the liquidity of gold.

For me, gold is a stable means of exchange. It can be used particularly at times of need. I can give you an example. Once my neighbor was sick. His wife sold her gold and used the money for the medical expenses. Of course, as the situation became better, she once again bought gold from their savings.

The excerpt above is also an indication of how gold is converted to cash as a final resort. As Hiren points out, the loss of gold was quickly redressed when the financial situation became favourable. The reluctance to part with gold is another facet of gold as an investment. This is discussed next.

#### A reluctance to sell

Among our informants, a common refrain was the great reluctance to sell gold. Even though there

was broad agreement about the stable nature of gold as an investment and the security of liquidity that it offered, the reluctance to sell gold is a common feature of informant narratives. Generally, our informants had never sold gold and on many occasions, were adamant that they would never sell it in the future. As Hemant noted, "Whatever the case, we will never sell gold. It has been decided." A common strategy that was in evidence was the exchange of old gold for new ornaments. This was deemed as the only valid justification for the sales of gold. Atul's response to a question about whether he would sell gold, in the following excerpt, is representative of this broad sentiment.

No, I have never sold gold. There have been times when I have converted gold bars into jewellery. I exchanged it with jewellery. But for me, I don't consider that as a sale. It is just dissolution of jewellery and getting new gold from that.

The difference between gold and other assets centres around this reluctance to sell. For example, Hardik is a regular investor in equities, and regularly trades in them. He tracks their prices regularly and transacts in them based on their market prices. He considers the ability to strike a good deal in equity trading, as an example of his business acumen. As Hardik mentions, "I always test myself in the selling and buying of stocks...However, for gold it is totally different. The decisions with respect to gold are also very different." During the course of the interview, Hardik mentioned that he regularly tracks the prices of gold. However, in discussing the possibility of selling the gold in his possession, Hardik takes a view that contradicts his identity as an active investor. The excerpt below, is an illustration of this.

It will be our last option. I have never sold it before. I remember that the only time I sold gold were a few pieces, and the only reason why I did that was because they were broken and were of no use. And even in that case, I didn't receive money for that. I bought some new gold with the money.

Even though there is a great reluctance to sell, a coping strategy to sell it when in need is in evidence in the nature of mental classification that is adopted for gold as an investment. This is discussed next.

#### Placing gold into mental buckets

There are instances in the life histories of the informants where it becomes necessary to sell gold. Even though the reluctance to sell gold is a foundational perspective, the anticipation of situations where gold might need to be sold is a practical reality. In order to deal with this, there is a tendency to mentally demarcate gold as an asset. Typically, gold that might need to be sold is bought and collected as coins and gold bars. Gold ornaments on the other hand, are typically not for sale. As

Ashok notes, "Whatever I have bought for my wife and my daughter, I don't touch that for selling." By making a clear classification, the hypothetical liquidity of gold can be converted into a practical reality. As Keval notes in the following excerpt, the classification is therefore of 'social gold' and 'financial gold'. This mental classification, in turn is reflected in the physical differentiation of the gold in possession.

From 2012 onwards, I decided I make two separate investments - one for social gold and the other for financial gold. From social gold I am not going to sell anything because it is for my daughter. But financial gold I am going to sell. If the price goes up, I will sell.

In summary, gold as an investment vehicle is complex. In contrast to other forms of investment, transactions in gold are heavily biased towards buying, rather than selling. There is a tendency to consider gold as a family asset. Gold instils a feeling of security, and the predominant impulse is to pass it on within the family. In anticipation of the possible need to sell it in the future, a coping mechanism is to build clear mental buckets, which enable sales, if required.

The impact of price in these transactions is important, but peripheral. We discuss this next.

### (c) Price as a nominal marker

Gold is considered a stable investment, with important social implications. In addition, the general perspective adopted is that it is an ever-appreciating asset over the long term. Crests and troughs in the price of gold are anticipated. However, the dominant expectation is that gold will continue to appreciate over the long term. The role of price is therefore of a nominal marker, against which hypothetical gains and losses are measured. The regret or joy experienced in terms of hypothetical losses and gains is the principal role played by price. Hemant's excerpt below, provides an indication of this.

I remember, in the past, the price of gold was low and then it suddenly became high. I remember thinking that it would have been better if we had purchased gold at that time instead of investing in the bank. Of course, the price is now quite low for the purchases that we made. Five years ago, the difference would have been quite high. If I had purchased gold 5 or 10 years back with the amount that I had invested, the benefit that I would have got would have been double or even triple.

In addition, gold prices are tracked sporadically. Usually, prices of gold are aggressively sought for,

closer to buying occasions. As Chirag notes, "I am interested in checking the price of gold, primarily from an academic point of view." It is therefore the purchase occasion that plays a greater role than the price. We discuss this next.

### Directed by purchase occasion

The buying occasion plays an important role in the importance accorded to price. For example, if the purchase is being made for gifting on a social occasion, the prevailing price does not play an important role. The social context of the gift also plays a role in this. As Anisha notes, "In terms of gifts to close family members, price is not important." Hemant describes the role played by the price of gold in the case of gifting, in the following excerpt

When it is for a gift particularly, I and as per my knowledge other people will not consider the price of the gold because they have a compulsion to give it on a particular day. So, during that period, whatever is the price, people will normally buy. So there is no bargain or anything.

Another example of an occasion driving gold purchase, and as a consequence diminishing the importance of price, is childrens' marriages. Here, yet again, the occasion drives the purchase. For this occasion, gold is a part of the ritual associated with the occasion. In this too, therefore, the importance of price in gold purchases is marginal. Manoj discusses this in the context of the emotions associated with the occasion, in the following excerpt:

For the purpose of marriage, price doesn't matter. I feel that on such occasions, it is only the choices available for the different types of ornaments that matter. At this time, we become emotional. For example, it is our daughter's marriage, and she likes a particular necklace. We might have planned and budgeted for a specific weight of fold. But then, even if it is a little more, we will still buy.

Finally, there are certain religious occasions which are associated with the buying of gold. Diwali, Dhanteras, and Pushyanakshatra are religious occasions which are identified with the buying of gold. There is an awareness that the price of gold could go up during such occasions, in conjunction with the increase in its demand. However, the level of prices is not an important consideration for gold purchases made during these occasions. As Manoj explains,

On these days I never see the price. Whatever the price may be, I buy. It is because I fell that these days are auspicious to buy gold. So, on such days, I might not buy in bulk. But I will definitely buy.

Finally, I discuss the reduced importance of price, in the context of planned purchases. I elaborate on this, next.

### Planned hoarding

The marginal importance accorded to price is also visible in the case of continuous purchases over a period of time, a phenomenon we term as planned hoarding. This ties in with the social value of gold, which has already been discussed. Such buying is usually associated with the anticipation of a social occasion for which gold will be required. A common occasion for which planned hoarding is in evidence is for marriages in the family. Planned hoarding in this case involves the buying of small quantities of gold over a period of time. An example for this is the buying pattern exhibited by Minal. Minal is a working woman, and has one daughter. She is clear that the gold she collects over her lifetime will be passed on to her daughter. She believes that it will be a part of her daughter's 'streedhan'. She buys a limited, fixed quantity of gold at the start of every month. As Minal says,

It is a practice that I have followed for some time and I intend to continue it. It does not matter whether the price of gold goes up or down. My capacity is 10 grams a month, and a total of 120 grams for the year. I will continue to buy this amount in every month.

In summary, the price of gold is only a nominal marker. Gold is rarely sold even if the price of gold has appreciated. Purchases are rarely deferred based on fluctuations in price. The tracking of gold prices is done to calculate hypothetical gains and losses. Certain social occasions are associated with the purchase of gold. Also, for planned hoarding, the immediate prices are only marginally important.

#### 3. Creation of segments along persona of customers

The two major informative categories or persona that was extracted from the interviews are as follows:

<u>Persona 1</u>: Those who purchase gold for specific occasions and gifts mostly in form on jewelry and regard gold as a non-trading asset

These people would be predominantly purchasing small jewelry items for family or at times as gifts for acquaintances or extended family during a fixed date mostly related to religious or social needs (like marriages). They are not regular purchasers and are not keen to act on price changes. The budget for the purchases are somewhat fixed (at least, the limits are fixed). They do not regard gold as a investment that can traded depending on appreciation or deprecation of value. Most purchases take the form of finished jewelry but can also constitute coins for carving out the design later if given as gifts. They focus more on the design of gold, know the prices vaguely but do not care about market changes on a regular basis.

Importantly, these are people for whom price is not a major factor in purchases. Most purchases happen for specific occasions like gifts for spouse or children or other close relatives at specific dates. Sometimes, they also purchase for religious or cultural reasons like Diwali. Hence, the market price of gold is of little importance but the budget for the purchase is a significant factor at a pre-purchase stage. At point of purchase, small changes in budget is acceptable depending on what they see at shops. They do care about quality and are open to purchasing from local jewelry shops or more recently, from larger branded outlets. The decisions are often taken jointly by couples and can sometimes involve their children (unless it is a surprise gift for them). These gifts (even when within own family) are not seen as "investment" even though they regularly think them as fixed assets which is a buffer for any sudden requirement of money (specially for women daughters and wives). However, they are not keen on selling gold items even when it would be profitable to do so. Ornaments are not regularly valued in form of assets but it is kept as a long term asset. Gold is seen as a very personal item of high emotional value and hence it does not make it conducive to trade.

Price does factor into the decision making process by changing the quantity of gold purchases. As prices peek high during festive occasions, sellers ofter multiple discount schemes to encourage purchases and customers do purchase but adjust the quantity based on price on that day. So, there is some influence of price during such purchases but the effect is small, making it look as if the gold market overall is relatively price inelastic.

They regard the social value of gold as qualitatively higher and different from other forms of items like electronics or even cash. They do think back and compare prices with reference to different time points. Some people feel gold has appreciated and some feel gold has depreciated over the years depending on the time frame one focusses on. For example, in the last forty years, price has appreciated while in the last five years as of this research (2016), price of gold has

depreciated. Interestingly, they do not want to act depending on whatever happens to gold prices in the market. Price is just one of many factors they have to look at a planned purchase but price is an important factor when comparing older purchases even though no actions are taken based on such price comparisons.

For this group of people, gold is not a good investment option and they would rather trade other liquid assets like equity shares. However, they have a personal hedonic relationship with gold as one which bars them from separating it from them under most circumstances.

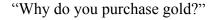
<u>Persona 2</u>: Those who actively invest and trade gold solely or in addition to other purchases for gifts

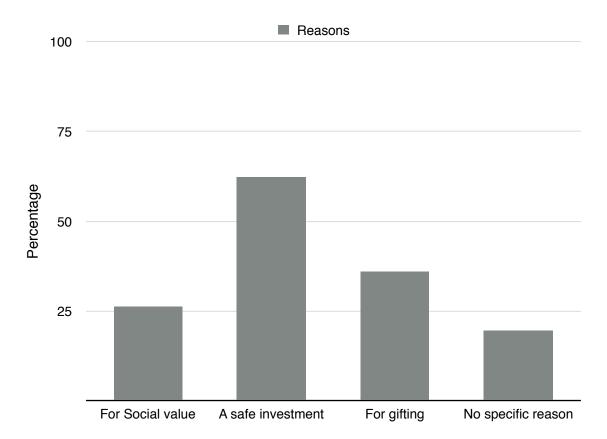
In addition to some overlapping attributes from Persona 1, the following are additional informative elements of persona 2. They would but for social and religious purposes mostly related to events or plans to gift in daughter's marriages (where the amount of gold to be gifted could be pre-fixed) based on financial capacity. However, being investors, they are more price conscious and make planned purchases based on market conditions. They track high-lows in gold prices in different nations and keeps a tap on international affairs, purchase gold futures for MCX, and exchange traded funds for gold. They procure price information online, stock exchanges outside india (like NYSE or LSE) from locally from more than one jeweller before making a purchase. They might be more eager to buy bars or coins and not jewelry to eliminate reduction during buy-backs and to allow one to design ornaments at a later date. They are conscious about price volatility, typically resist purchases when the price goes up and then comes down. In general, they prefer not buy during occasions like Akshay Tritia or Diwali and even if they buy, the amount is minimal just to keep up with a social norm. These people mostly have fixed jewellers and ask the jewellers to inform them when price falls, change quantity of purchases depending on market price changes. Thus, they could be making two separate investments and account for them differently in their mind - social gold (not going to sell, keep for family - mostly for women like daughters) and financial gold (for trading). These two stocks of gold could be kept physically in different places and accounted differently mentally. Falling gold prices could be good for social gold as amount of gold is fixed but it is a concern for financial gold though it is a hedge against inflation.

## 4. Quantitative survey

We selected some important aspects from the themes that evolved from the qualitative analysis and conducted a survey online. The questions of interests were embedded within other demographic questions so that they were not apparent to the participant. Here we report only those questions of interest. The link was circulated via emails and posted on social networking sites. Sixty-one participants voluntarily participated (males = 37.7%;  $M_{age} = 31.70$ , ranging from 21 to 52 years).

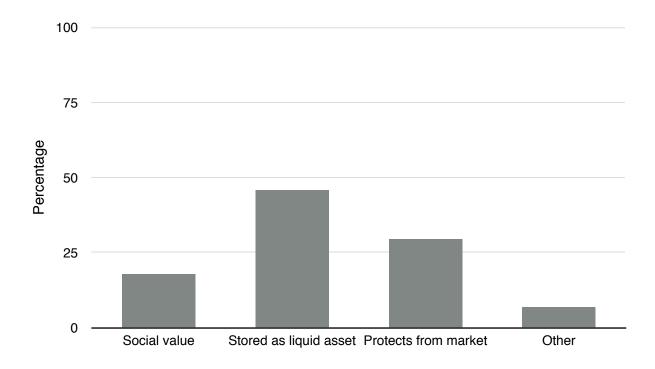
(a) Why gold?: We first intended to understand the major motivations for purchasing gold. In the interviews multiple reasons had been stated. Participants were required to choose which reason(s) were predominant for them for purchasing.





(b) Gold as an investment: It had come out repeatedly that the value of gold had some aspects which were beyond the economical or tradable value. We were inquisitive that if given the different aspects of valuing gold, what would people choose.

"According to you, from where does the value of gold come from?"



To corroborate this, in another question we asked whether they thought gold is a valuable investment compared to other investments like mutual funds? 63.9% participants reported affirmatively showing that gold's value stems from it being seen as a stable investment. We later followed up with another question asking why did they think that gold was a valuable investment. In agreement with the results obtained from the qualitative interviews, most people believed gold prices continuously increase over large spans of time (35.6%) and gold is one of the most stable investments (37.3%). Others said that gold can be easily converted to cash (23.7%) and only a few said that gold is not a valuable investment (3.4%).

#### (c) Asset and "stree-dhan"

While there was little dis-agreement in gold being an important asset, the way that asset gets reflected in the thinking varied among people. We asked participants to choose "How does the asset of gold get reflected most importantly?" Corroborating previous responses, a majority said that gold is a form of investment that is always appreciating (62.3%), some said it is an asset that remains in the family (26.2%) and few said that it is a "stree-dhan" which is only for the women (11.5%). When specifically asked whether they believed that gold is a 'stree-dhan' - a property of only the women in a family, 67.2% responded negatively while 32.8% agreed. This showed that although people often talk of gold as 'stree-dhan', the concept is not unanimously accepted.

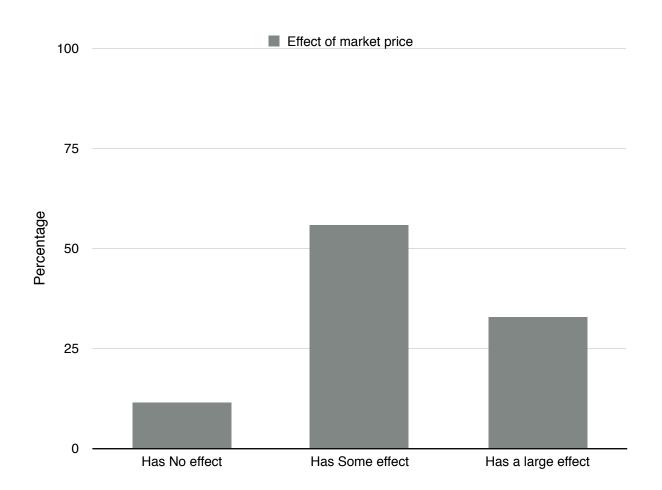
We also asked, what did they understand by stree-dhan, focused on ownership and decision capabilities. Six options were given which asked whether it is the property of the wife, husband or both and who would decide its use - wife, husband or both. Mixed responses were received although a majority said that 'It is the property of both the husband and the wife. Both husband and wife should decide its use' (41%). The next common response was 'It is the property of the wife. Only the wife should decide its use' (26.2%). The other responses were 'It is the property of the wife. Both the husband and wife should decide its use' (14.8%), 'It is the property of both the husband and wife. Only the wife should decide its use' (6.6%). 11.5% participants said they do not understand what is meant by stree-dhan.

In coherence with the interviews, when asked whether they would sell gold, most people are against selling. 85.2% participants said 'I would not sell gold unless am in a very difficult economic circumstance', while 11.5% said 'I would sell gold depending on market rates' and 3.3% said 'I would never sell gold under any circumstances.

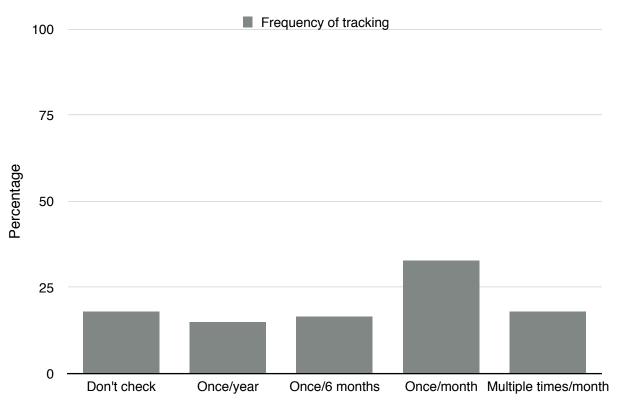
Our survey participants somewhat echoed the mental accounting idea of separately storing gold for investment and social purposes. A slight majority, 59% said 'I would store all gold together and I do not have any categories'. However, others adhered to a mental accounting approach in two different ways. 19.7% said 'I would store all gold in two categories: which can be traded and which cannot be traded while another 21.3% said 'I would store all gold together but I would have two categories: which can be traded and which cannot be traded'.

## (d) The role of price

Some previous surveys by WGC suggested a marginal effect of price but we had previously argued that people often talk about prices in daily discourses. Prices also came up multiple times during our qualitative research. So, we asked participants the role of changing market prices on their intentions and plans for purchasing gold? A majority of our participants attributed an important role to market changes.



One question asked them how often did they keep track of gold prices? It showed most people keep up with changing prices in the gold market.



When asked whether price plays a role when purchasing gifts, 41% participants told that they do. In the qualitative interviews, many were of the opinion that price plays a tertiary role for gifts although they did mention a budget range for gifts. 47.5% participants said 'Yes if it is for somebody outside immediate family but not if it is for immediate family'. Only 11.5% said price would never play a role when it is purchased as a gift.

We finally presented four different scenarios framed as gains, losses, non-gains and non-losses but those scenarios also signal the changing market contexts. Participants were asked to decide under which scenario they would want to purchase gold. This helped us clearly examine the typical market changes and find which scenario is most affectively favored by people. The four framed scenarios were: (a) Firstly it was Rs. 30000, then it was 30000, now it is 26000, (b) Firstly it was Rs. 22000, then it was 22000, now it is 26000, then it was 22000, now it is 26000 and (d) Firstly it was Rs. 26000, then it was 30000, now it is 26000. Please note that the final prices were same across conditions. 41% opted for (a), 18% choose (b), 9.8% choose (c) and 31.1% choose (d). It is important to note that these scenarios do not simply signal gains or losses, but also probable directions of the market. This was revealed when we discussed these scenarios among participants in the qualitative analysis.

Overall, it was clear that price continues to play an important and guiding role in planning about gold purchases. Additionally, we also find beyond economic valuations, gold has multiple complex hedonic attributes that make it a complex investment vehicle, embedded in emotional, social, normative and societal values.

#### Appendix A

#### Qualitative interview guide questions

- 1. When you think of gold, what comes to mind? Could you please elaborate?
- 2. Do you believe that gold has a social value?
  - a. If yes, could you please elaborate?
  - b. Do you gift gold? What are the occasions that you gift gold?
  - c. Can you describe a recent occasion when you purchased gold for gifting?
  - d. What are some of the social occasions in which gold is important to have?
  - e. How do you think most of the gold that you purchase will end up? (For example, will it be gifted to your children?)
  - f. With respect to price, how important is it when you are planning to buy gold for yourself or very close family members like spouse/children compared to when you are planning to buy for distant others?
- 3. Is there a fixed "budget" that you go in with, when going to purchase gold / ornaments?
  - a. What determines the budget? Time of the year? Bonus? Occasion (marriage, anniversary,festival etc.)
  - b. How flexible is the budget? What does this flexibility depend on occasion? person for whom being bought?
  - c. To what extend do they compare prices to decide upon a time when they are purchasing for marriages?
- 4. Would you consider gold as an investment?
  - a. How open are you to selling gold that you have already purchased?
  - b. Do you track prices of gold actively?
  - c. Is the type of gold that you purchase different if it is for an investment?
  - d. What proportion of your "assets" would you want gold to be? 10%? 20%? 40%? Why?
  - e. In comparison to other assets like land, bank deposits, equities etc., do you think gold is different? If so, could you please elaborate?
  - f. What proportion of your gold holding is in jewelry and what proportion in coins / bullion?
  - g. Given that the price of gold has fallen substantially in the last 2 years, are you planning to accumulate more gold?
  - h. Do you separately store gold that you might buy/sell as an investment and gold that you will keep for your family and social needs like marriages separately? Why/Why not?
- 5. Could you tell me a little bit about the role that price plays in your gold purchase decisions?
  - a. How does the price of gold influence the timing and quantity of purchase?
  - b. How do price changes influence your thinking about purchasing gold?

- c. How important is frequency of price changes / fluctuations (market volatility) and if so in what manner does it influence their purchase decisions and planning for purchases?
- 6. Do you believe in hoarding gold for the future?
  - a. A common practice that I have seen in many households is the gifting of gold to the daughter during marriage? Is this a concern for you? Can you please elaborate on your thoughts regarding this?
- 7. Is there a difference between gold bought for social needs and gold bought as an investment?
  - a. How do you differentiate between the two? Could you please elaborate?
  - b. Could you give me an example of a gold purchase done as an investment? In what form was that gold bought? Where is it stored? Do you plan to sell it anytime? If so, what is your thought process for the same?
  - c. Could you give me an example of a gold purchase done for a social occasion? In what form was that gold bought? Where is it stored? Do you plan to sell it anytime? If so, what is your thought process for the same?
  - d. In your mind, do you consider gold bought for investments to be different from gold bought for social occasions? If yes, could you please elaborate on this?
  - e. Is there a physical separation of gold bought for social needs and gold bought for investment?
- 8. Where do you usually purchase gold from?
  - a. Is there a regular jeweler who you buy from?
  - b. What are the typical quantities of gold that you purchase on a single occasion?
  - c. Do you do any price comparisons when you buying in an unplanned manner like after a sudden wish to purchase a piece of jewelry?
  - d. What are the sources of information to know about price changes?
  - e. What is the time period that you consider when comparing prices?
  - f. How is purity of the gold checked? Where do you check it? Why? How often?
- 9. Can you tell me something about the gold buying process?
  - a. Do you usually buy gold alone or with a family member? Who accompanies you normally? Can you describe a recent incident when you purchased gold?
  - b. What is the nature of the inputs of the friend / family member (if applicable) in the purchase process? IF COUPLE, What are the couple dynamics when a couple examines prices and decides to purchase at a specific price for marriages or on festive occasions?
  - c. Is there an element of bargaining involved in the gold buying process? Could you elaborate by giving an example?
  - d. Do you buy gold on certain occasions (considered auspicious) like Diwali, DhanTeras, AkshayTritia? If so, why do you do so? Is the price of gold at such times an important consideration? Could you describe a recent purchase on any such occasion?
- 10. Present the scenarios for price changes and ask related questions

- a. What do they think when they see the prices have gone up (loss) and in situations when prices have come down (gains)?
- b. Comparing situations where price which was X had gone up and then come back to X and another situation where the price was X which went down and has come back to X. Which situation would make you more comfortable to buy? Why?
- c. How do such changes influence your plans and valuation?
- d. Based on which factors and when do you make the decision to purchase at a particular price?
- 11. Some people think gold as "stree dhan" for the wife or daughter. What are your views about it?