PAHLE INDIA FOUNDATION

FACILITATING POLICY CHANGE

LEVERAGING TECHNOLOGY FOR TRANSPARENCY IN THE GOLD ECOSYSTEM

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Abbreviation

ACCC	Australian Competition and Consumer Commission
ASIC	Australian Securities and Investments Commission
AUSTRAC	Australian Transactions Reports and Analysis Centre
B2B	Business to Business
B2C	Business to Consumer
BAPPEBTI	Commodity Futures Trading Regulatory Agency (Indonesia)
BSA	Bank Secrecy Act
CIC	Currency in Circulation
CIMB	Commerce International Merchant Bankers
COD	Cash-on-delivery
e-gold	Electronic Gold
EMIs	Equated Monthly Installments
ETFs	Electronically Traded Funds
EU	European Union
FCA	Financial Conduct Authority
Fintech	Financial Technology
FMCG	Fast-Moving Consumer Goods
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
GDS	Gold Deposit Scheme
GML	Gold Metal Loan
GMS	Gold Monetisation Scheme
GSA	Gold Savings Account
GST	Goods and Services Tax
IFISAs	Innovative Finance Individual Savings Accounts
IGC	India Gold Coin
IIG	Internet Investment Gold
INR	Indian Rupee
KYC	Know Your Customer
LAGJ	Loan Against Gold Jeweller
MDR	Merchant Discount Rate
NBFCs	Non-Banking Financial Companies
NOCs	No Objection Certificates
NSS	National Sample Survey
P2P	Peer-to-Peer
PAN	Permanent Account Number
PIF	Pahle India Foundation
PMLA	Prevention of Money Laundering Act
RBI	Reserve Bank of India
SEBI	Securities Exchange Board of India
SGB	Sovereign Gold Bond
SIPs	Systematic Investment Plans
UAE	United Arab Emirate
UK	United Kingdom
USA	United States of America

1 Introduction

1.1 Acknowledging Gold as an Important Asset Class

For many decades gold as an asset class was not given its due in India. Despite its heralded features as an effective hedge against risk and inflation and store of value, gold in India, for many years, was viewed with disdain by policymakers, and as a dead asset in which money was being diverted into instead of the more pragmatic investment options. The reason for this was because purchases in gold was viewed as consumption rather than as also investment, and the reason for this was because, gold was never integrated into the formal financial system. The purchase, consumption, and investment in gold, always stayed outside of the formal financial and economic network.

In recent years, the government has taken cognisance of three important facts. First, that no matter what, Indian consumers will continue to buy gold, because it is inextricably intertwined with the Indian cultural ethos. Second, the gold ecosystem contributes significantly to the economy in terms of providing employment. Third, that instead of chastising people for investing in gold rather than in other financial assets, it is important to introduce new products that facilitate the integration of gold into the financial system. This seminal change to approach and ideology led to a spurt of reforms announced by the government with the objective of monetising existing stocks and future purchases of gold, and in bringing greater transparency to the gold ecosystem.

1.2 The Gaps in Reforms

The introduction of the revamped Gold Monetisation Scheme (GMS), the Sovereign Gold Bond (SGB), the India Gold Coin (IGC), the intention of setting up a gold spot exchange and formulating a gold policy have all been well intentioned reforms that have been announced these past years. The purpose of each reform and its expected outcome and impact has been fairly well articulated and there is little doubt that when they succeed, these reforms will indeed pave way for a more transparent gold ecosystem. Unfortunately however, the success of these reforms have been somewhat muted.

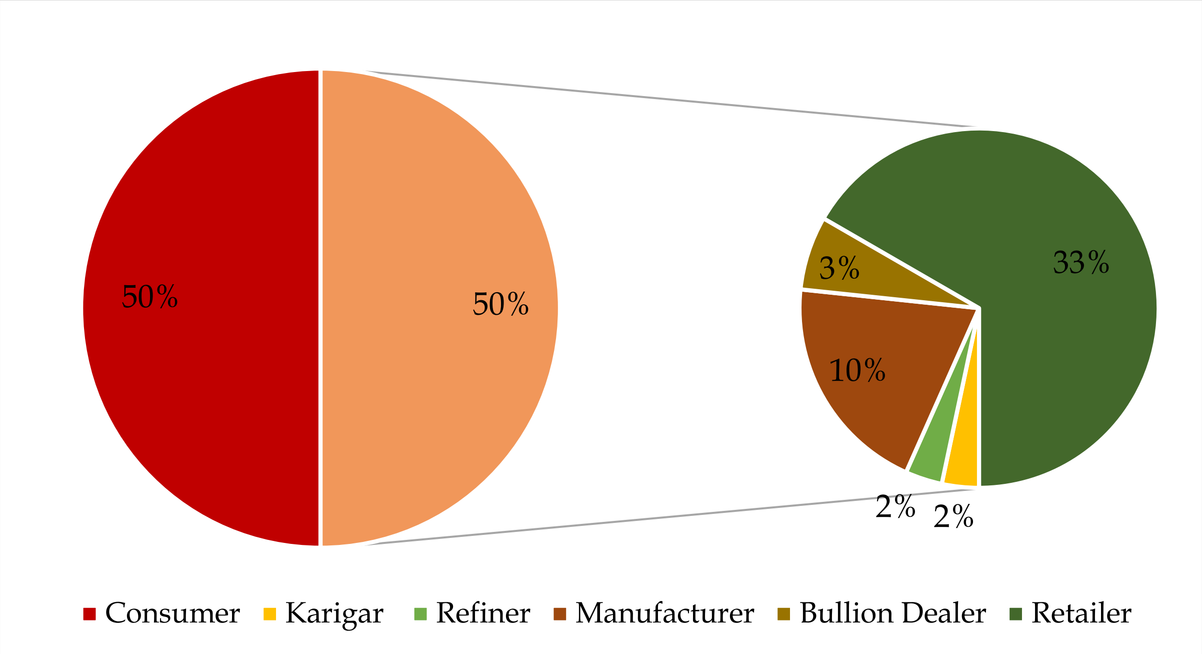
The reasons often cited for the lack lustre performance of these reforms have been attributed to operational difficulties and the multiplicity of stakeholders that makes for difficult for seamless implementation. Another impediment to successful implementation of reforms in the sector has been due to the lack of trust amongst stakeholders. This stems from a deep seated prejudice that transactions in gold are usually undertaken with black money. This perception germinated during the Gold Control era and has since remained. Even today, the instance of cash transactions in the purchase and sale of gold is high in comparison to other sectors. Even though the government has to some extent been able to reduce the extent of cash in real estate, the same has been difficult to achieve in the gold industry. A third reason that has often been cited has been the unwillingness of the Indian consumer and businesses involved in gold to alter the way they have been functioning. While all three reasons are valid, the latter two require serious consideration for it necessitates reforms that would bring about behavioural change.

1.3 Research Objective and Research Methodology

There are two broad research objectives. First, to understand why the instance of cash transactions in the gold ecosystem is high. Second, to study the role technology has played and can play in reducing the instance of cash in the gold ecosystem.

A survey of 3000 stakeholders including, consumers, karigars, retailers, unorganised refiners, bullion dealers, and manufacturers was undertaken across Delhi NCR, Asansol, Coimbatore, Thrissur, Mumbai and Jaipur (Figure 1.1). Detailed conversations were also held with various stakeholders including larger refineries, digital gold providers, and banks to gain their perspectives and opinions.

Figure 1.1 Sample Distribution



N = 3000 (Consumer= 1500, Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300)
Source: PIF- BRIEF Survey

2. Business as Usual in the G&J Value Chain

2.1 Components of Business as Usual

Filing taxes, generating invoices, paying salaries, collecting know of your customer (KYC) details, modes of payments, and issuing purity certificates are few components of everyday business for the gold trade. Survey insights help in understanding choices and preferences and common practices across trade types in the gold industry. They also provide a preliminary insight into the extent of cash in the system and in transactions and also how many in the trade adhere to regulatory and best practices that would ensure an ecosystem of trust.

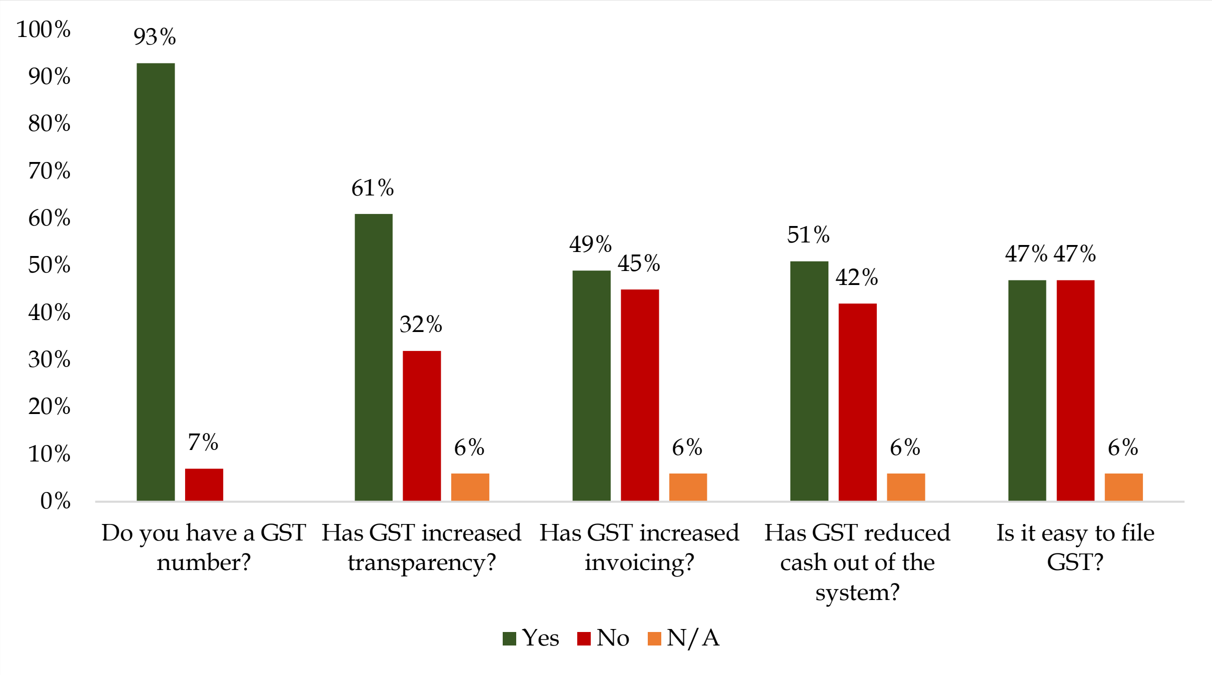
2.2 Filing of Taxes

Of the 1500 respondents from the gold trade, 96 per cent of them states that they file their yearly income tax. The remaining 4 per cent who do not, are mostly karigars and the sarafa refineries. A similar trend is also visible in possessing a Goods and Services Tax (GST) number; 93 per cent of the total respondents have a GST number. The remaining 7 per cent that do not are predominantly karigars, small refiners, and a handful of manufacturers. All retailers and bullion dealers stated that they have a GST number.

One of the stated objectives of introducing GST was to increase transparency[1] in the economy. The introduction of GST should ideally have brought about greater transparency but in terms of increasing invoicing and reducing cash transactions, the opinion is divided (Figure 2.1).

[1] Budget Speech 2017-18. www.insiabudget.gov.in

Figure 2.1 Impact of GST on Gold Trade



N = 1500 (Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300

Source: PIF- BRIEF Survey

The greatest positive impact in terms of both transparency and invoicing seems to be for bullion dealers and for those sarafa refiners who have a GST number.

2.3 Invoicing in the Gold Ecosystem

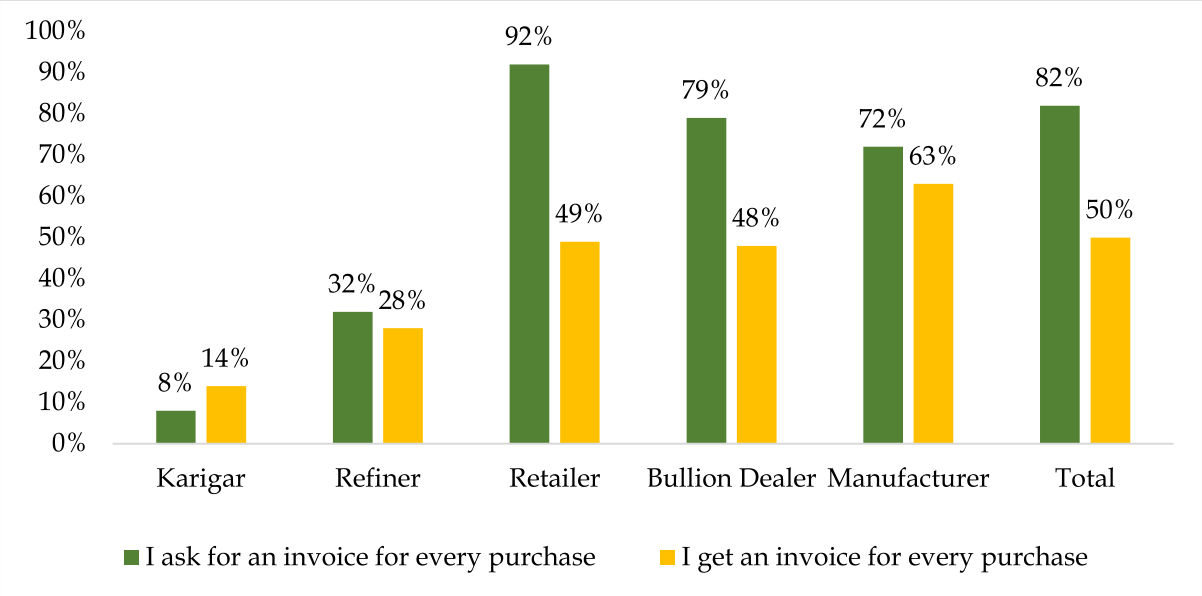
Invoicing is an important part of ensuring transparency in to the gold ecosystem. Invoicing not only ensures that the transaction is recorded and all necessary taxes are paid, it also acts as a means of validating a transaction and providing the necessary credibility to the transaction.

Ideally, providing an invoice for a transaction should not be a matter of choice or even for the asking. For many years now consumer protection groups in India have conducted workshops and created campaigns for increasing awareness on why asking for an invoice is not just important, but also necessary. In 2018, at the end of the first year of introduction of GST, the government had expressed an intention of launching a nationwide campaign to encourage all consumers to demand for a bill for every purchase[2]. Anecdotally, the most success of these campaigns have been visible amongst the traditional retailers and consumer purchases at grocery stores.

[2] http://www.uniindia.com/~/govt-to-launch-massive-campaign-demand-bill-for-every-purchase--goyal/India/news/1275644.html

With the gold sector, the lack of invoicing is not due to the lack of awareness. The nexus between a large volumes of cash transactions and the lack of invoicing has been difficult to crack. Even amongst the trade community (that is, the entire gold value chain except for consumers), the difference in the number of people who ask for an invoice every time, and those who receive an invoice every time is stark (Figure 2.2).

Figure 2.2 Invoicing Amongst Gold Industry



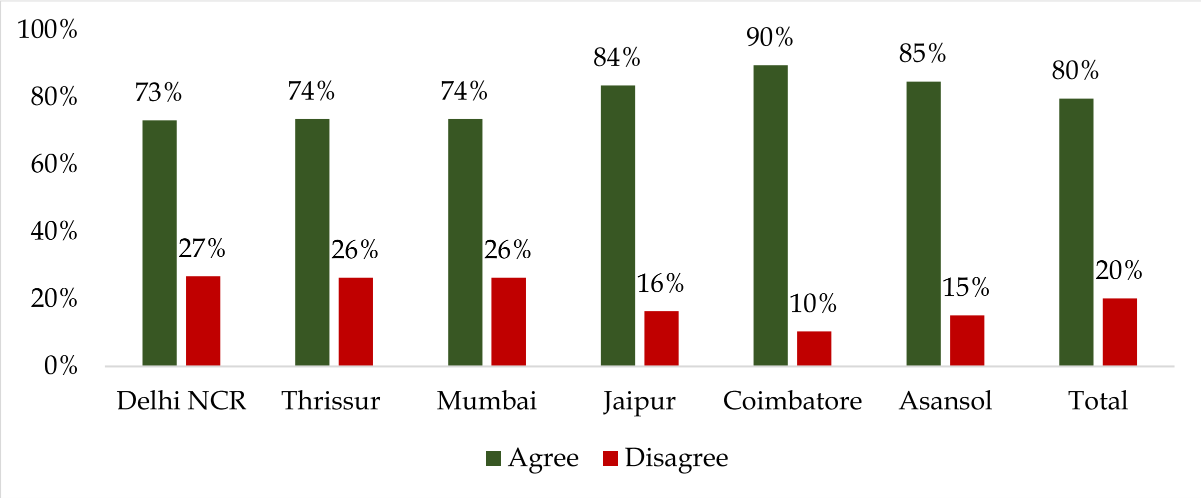
N = 1500 (Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300

Source: PIF- BRIEF Survey

The invoicing arrangement between retailers and consumers also has some interesting insights to offer. The retailer survey (1000 respondents) reveals that retailers always provide invoices and that the consumers always ask for an invoice at the time of any transaction. As per the consumer survey (1500 respondents), the consumer always received an invoice for any purchase made in the last year, be it coins or jewellery. This seems promising.

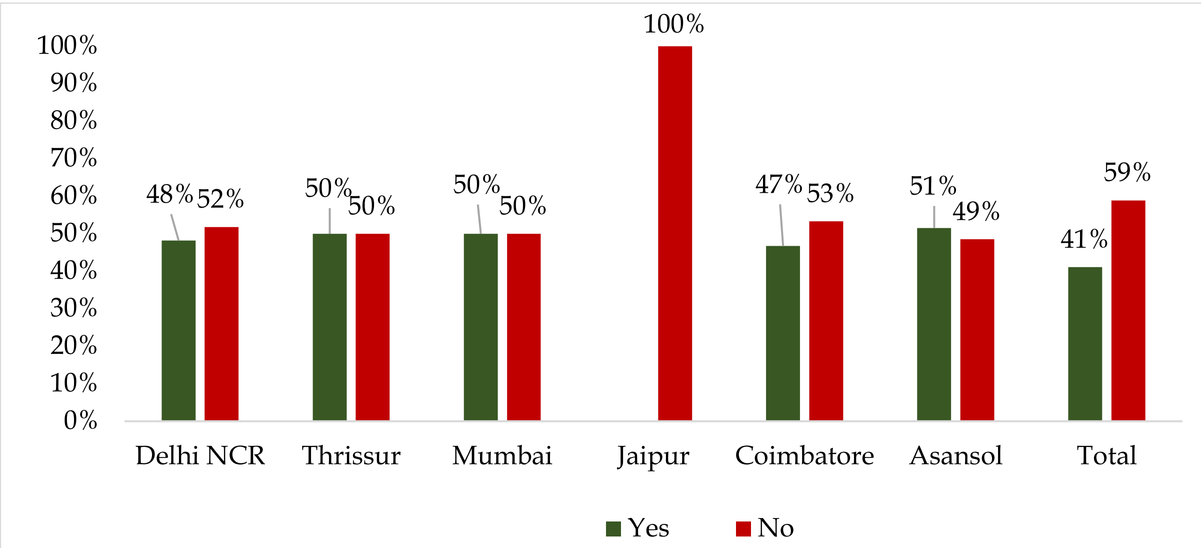
However, the consumer survey also suggests that they do not always insist (20 per cent) on an invoice (Figure 2.3). The retailer survey offers an explanation for this trend amongst consumers (Figure 2.4). As high as 41 per cent of the total retailers surveyed agreed that they would offer discounts to consumers if they didn't ask for an invoice.

Figure 2.3 Consumer – I insist on an invoice every time I purchase gold



N = 1500 (Delhi NCR= 250, Thrissur = 250, Mumbai = 250, Jaipur = 250, Coimbatore = 250, Asansol = 250)
Source: PIF- BRIEF Survey

Figure 2.4 Do you offer a discount if customers are willing to buy without an invoice?



N = 1000 (Delhi NCR= 166, Thrissur = 168, Mumbai = 166, Jaipur = 166, Coimbatore = 167, Asansol = 167)
Source: PIF- BRIEF Survey

This trend of offering discounts is not limited to just retailers. While the sarafa refiners, who are more likely to only provide a service of refining gold rather than buying or selling gold to the end consumer, offer no discounts to those who decline invoice, the same is not true of bullion dealers. Of the 50 bullion dealers surveyed, 59 per cent stated that they would offer a discount to consumers if they opt out of an invoice.

There is a definite need for policy intervention to increase invoicing. While educating consumers on the importance of insisting on an invoice is necessary, arguably, consumer education as an even well-coordinated initiative would pale in comparison to discounts being offered on an expensive purchase. In similar vein, the possibility of tracking every single transaction to ensure they are all being invoiced, especially since these tend to be cash transactions that stay outside the purview of the mainstream economy, is also miniscule. One possible solution to this problem would appear to be increasing the use of digital transactions for purchase of gold. This would ensure that all transactions are properly recorded.

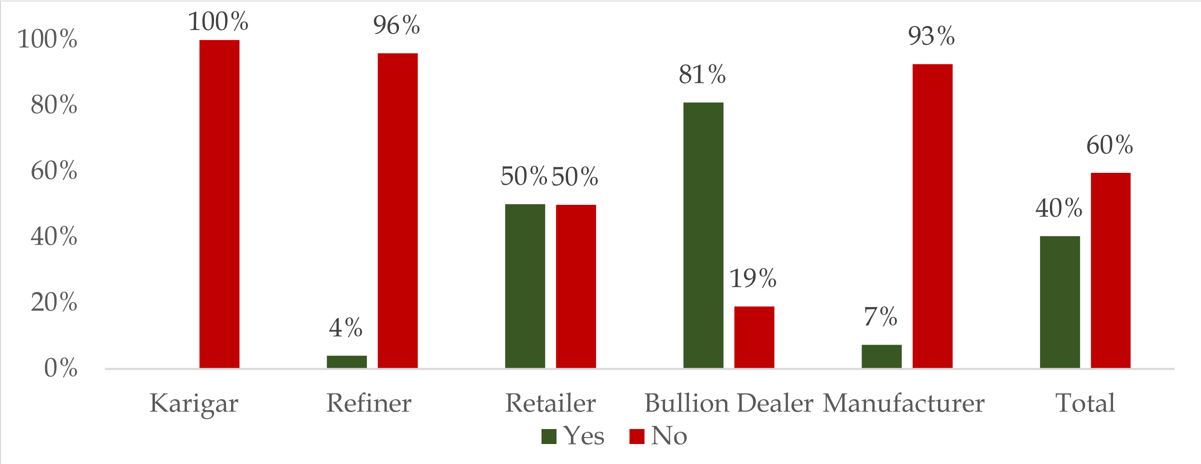
2.4 The Acceptance of Know Your Customer (KYC) Norms

KYC norms were introduced as a way to prevent money laundering. The Prevention of Money Laundering Act (PMLA) of 2002 has been much discussed in the context of the gold industry. In August 2017, the guidelines were issued to the gems and jewellery sector advising them to take KYC documents from customers for all purchases above INR 50,000. The new guidelines also required the sector to undertake new reporting of high value transactions. The result of these new guidelines resulted in a steep fall in the demand for gold, affecting the profitability of the sector. By October, there were revisions made to the guidelines through which the monetary limit for accepting KYC documents was increased to INR 2,00,000 and the gems and jewellery sector was exempted from the reporting requirements[3].

Submission or collection of KYC documents has always been a contentious issue. It is just as important to collect KYC information in business to business (B2B) transactions, as it is in business to consumer (B2C) transactions. Only 40 per cent of those in trade submit KYC documents when they transact (Figure 2.5). Bullion dealers and retailers seem to be more compliant than the rest. This could be because they are more likely to transact with larger and more organised players in the market. However, there is a clear need to increase KYC documentation in B2B transactions. Had GST managed to have a more noticeable impact reducing cash transactions and on increasing invoicing, this might not have been necessary.

[3] https://www.thehindubusinessline.com/economy/jewellers-welcome-govts-decision-to-remove-industry-from-pmla/article9892620.ece

Figure 2.5 Do you submit KYC documents at the time of B2B transactions?

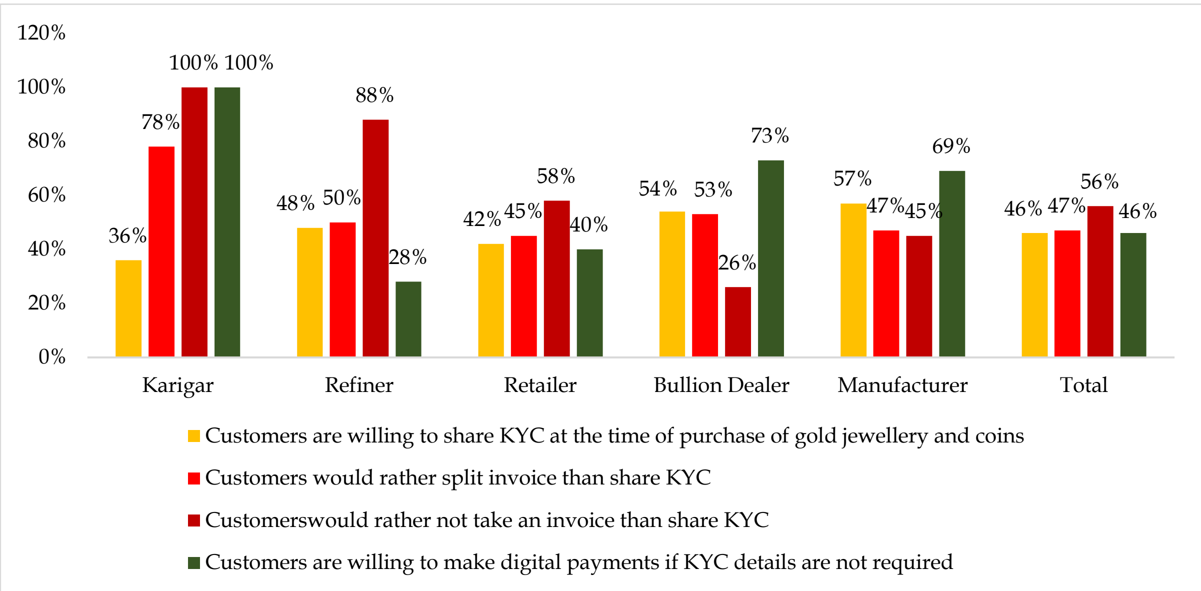


N = 1500 (Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300)

Source: PIF- BRIEF Survey

When it comes to B2C transactions, the story is not that different. Of all those in the G&J trade, the ones that regularly interact with customers are jewellers, bullion dealers, and the sarafa refiners. Of the three, 96 per cent of the jewellers stated that they always ask for KYC from customers at the time of purchase. In comparison, 47 per cent of bullion dealers ask for KYC documents from customers and mere 8 per cent of the refiners. On an average 46 per cent of the respondents agreed that customers are willing to share their KYC details when asked (Figure 2.5). There is also a fairly strong feeling (almost 50 per cent) that customers may be more willing to pay using digital modes of payment if KYC documents were not asked of them.

Figure 2.6 G&J sector's perception on consumer's reaction to KYC requirements ('Agree' responses only)



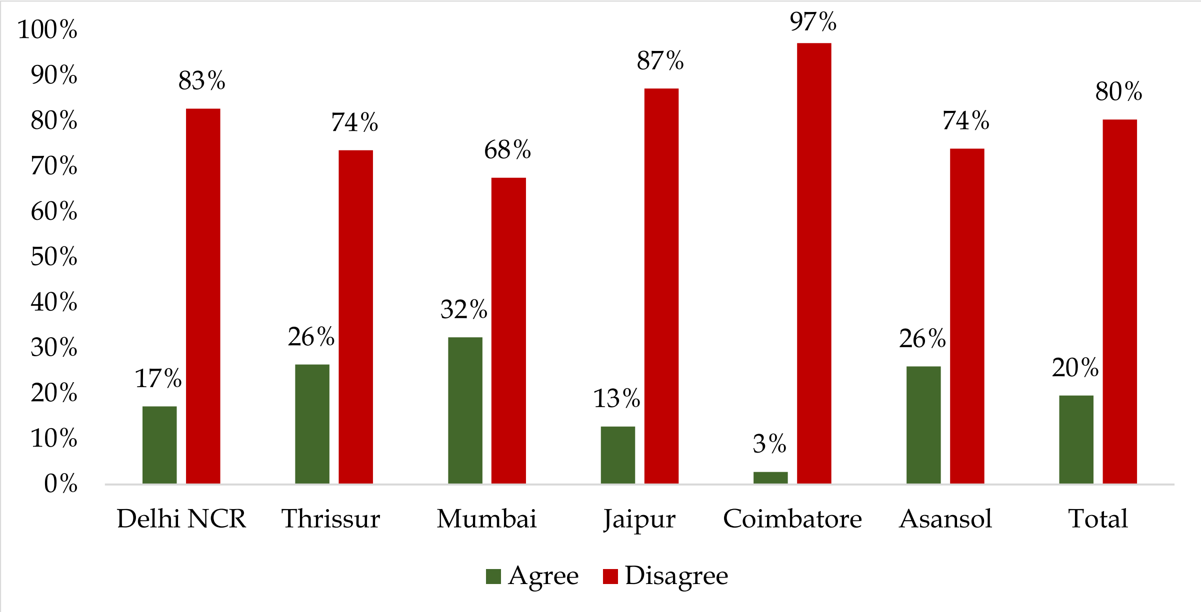
N = 1500 (Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300)

Source: PIF- BRIEF Survey

2.5 Consumers and KYC

When consumers were asked if they were comfortable to submit their KYC at the time making gold purchases, 92 per cent stated that they were comfortable to do so. The balance 8 per cent stated that they managed to buy gold without submitting KYC by either splitting invoices or by buying in different names, or that they were told by the jeweller that it would be managed. Interestingly though, when consumers were asked if they agree that their jeweller always insists on KYC every time they make a purchase, only 20 per cent agreed to the statement (Figure2.7). As per PMLA, there is a requirement to take KYC details only if the purchase value exceeds INR 2 lacs. In pure gold terms alone (24 karat), a customer could buy up to almost 40 grams of gold (depending on the price of gold) without having to submit any KYC document.

Figure 2.7 My jeweller insists on KYC every time I purchase jewellery



N = 1500 (Delhi NCR= 250, Thrissur = 250, Mumbai = 250, Jaipur = 250, Coimbatore = 250, Asansol = 250)
Source: PIF- BRIEF Survey

Of all consumers surveyed on their last purchases of gold coins and jewellery, 185 consumers had bought gold coins ranging between 1-10 grams. OF these, 8 per cent had made as recent a purchase as within the last month, 56 per cent of them bought coins in the last three months, and the remaining a year ago. Only 25 per cent of these purchases were made with either a debit (24 per cent) or credit (1 per cent) card; 75 per cent of the consumers paid cash. Even though 99 per cent of these consumers stated that they received an invoice for their purchase, only 45 per cent submitted KYC documents (even though technically they would not have had to, based on the amounts purchased).

All consumers purchased jewellery, of whom 68 per cent had purchased jewellery in the last one month and the remaining within the last three months. Of the total respondents, 44 per cent bought between 5-10 grams of gold and 37 per cent bought between 11-50 grams of gold. While 16 per cent bought less than 5 grams, 4 per cent bought over 50 grams. Interestingly, cash payments for jewellery was made by 83 per cent (compared to 75 per cent for coins). Other modes of payment, such as, credit and debit card and even mobile wallet, was 5 per cent each. Even so, 54 per cent of the respondents had submitted KYC documents, a higher percentage than those who bought coins.

When it came to gold accumulation places offered by jewellers, 328 people stated that they had subscribed to the same, of whom 56 per cent were part of plans to accumulate 11-50 grams of gold. Even though all payments were made by cash, KYC documents were submitted by all. This is an important finding that demonstrates a significant deviation in behaviour pattern on the part of both jewellers and consumers. Allowing for purchase through installments ensures higher levels of compliance from both consumers and jewellers.

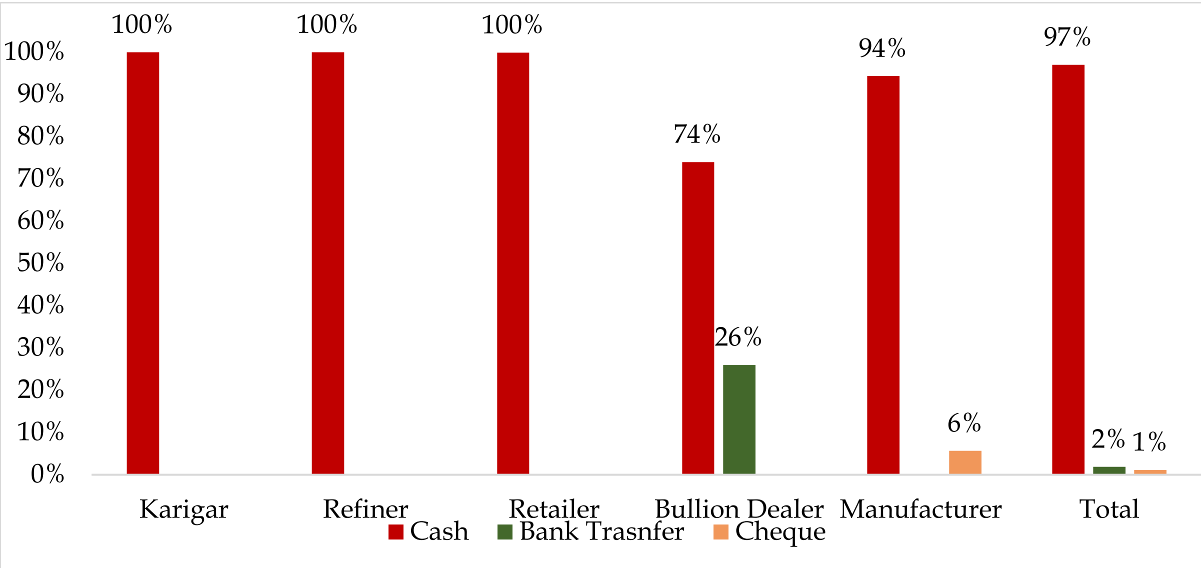
3. The Extent of Cash in G&J Value Chain

3.1 Everyday Transactions

In order to capture cash in everyday transactions, four aspects were captured through the survey of karigars, small refiners, retailers, bullion dealers, and manufacturers. These were, how salary was paid (Figure 3.1), the mode in which payment was received (Figure 3.2), how payment was made (Figure 3.3), and their perception of what customers' preferred mode of payment is for different amounts (Figure 3.4).

It was a rather surprising to note that even in this day and change, the majority of businesses in the gold value chain choose to pay their salaries through cash. Only 1 per cent of the total trade respondents stated that they use bank transfers and another 2 per cent stated they use cheques. The reason for this is not known, yet there is a clear need for policy intervention here. Adoption of technology and digital modes of payment will have to begin here. The onus of financial inclusion and to some extent digital inclusion must also rest with businesses that irrespective of the size of their payroll or the number of employees.

Figure 3.1 How do you pay salaries to your employees?

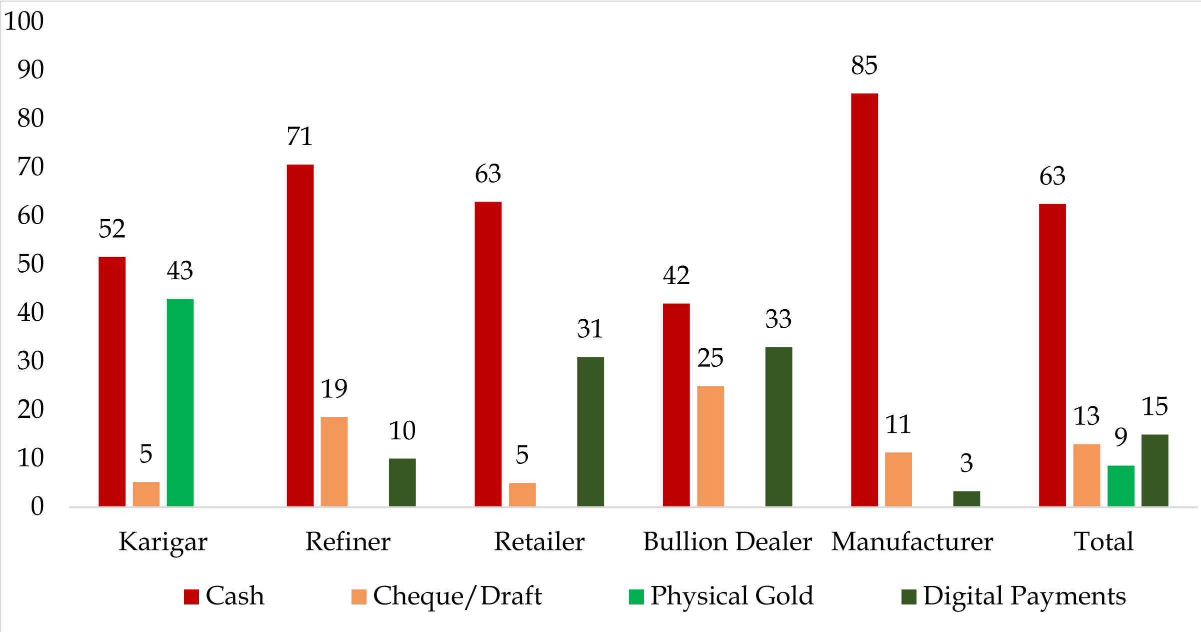


N = 1460 (Karigar= 18, Refiner = 42, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300

Source: PIF- BRIEF Survey

The trend of paying salaries is not surprising since most of the transactions in the gold value chain (in this case, up until the point of transacting with customers), predominantly happens through cash. Whether it is cash payments received or made (both at 63 per cent), the dependence on cash is high. Digital payments and cheques/drafts contribute to only 28 per cent. The remaining 9 per cent is on account of karigars who receive payments in the form of physical gold (since it is their input material). The trend is not significantly different in terms of choice of payment modes while paying vendors. The only exception to this trend amongst those in the value chain seems to the bullion dealers, for whom both the choice of mode of payment received or made is predominantly non cash. The usage of cash to transact for manufacturers, retailers and refiners is disproportionately high compared to non cash payment.

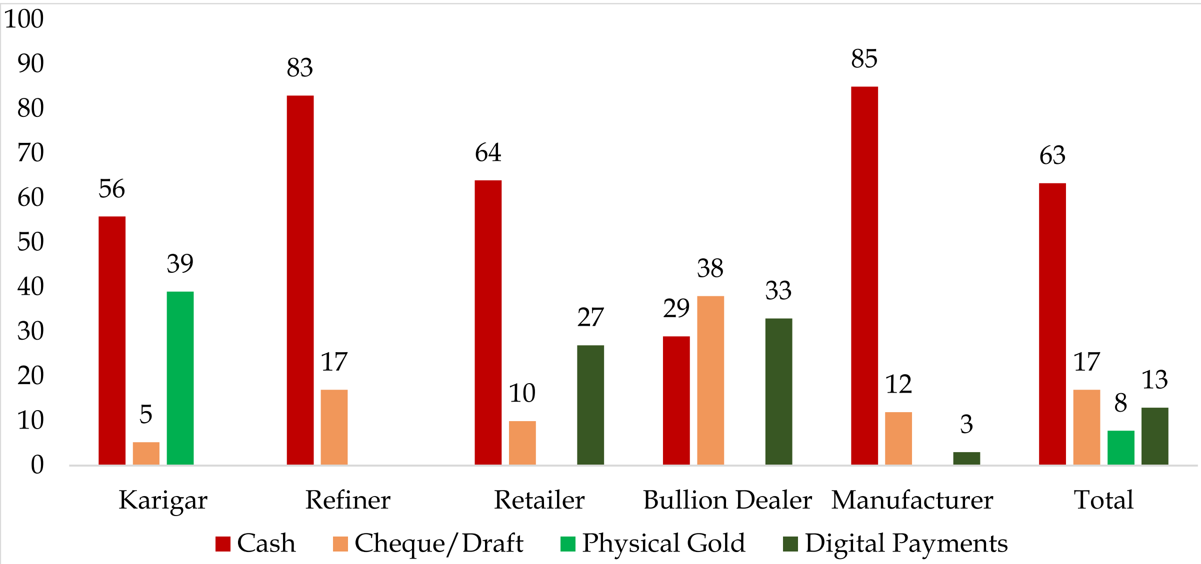
Figure 3.2 Share of mode of payments used in payments received from vendors



N = 1500 (Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300

Source: PIF- BRIEF Survey

Figure 3.3 Share of mode of payments used in payments made to vendors



N = 1500 (Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300

Source: PIF- BRIEF Survey

By analysing Figures 3.2 and 3.3, one could conclude that the cash cycle operates separately from the non cash cycle. The only shift in mode of payment received as cash to that of non cash for payments made can be seen with the bullion dealer. In order to encourage greater digital payments, charges on electronic transfers of money could be lowered as a way to incentivise the adoption of digital payments.

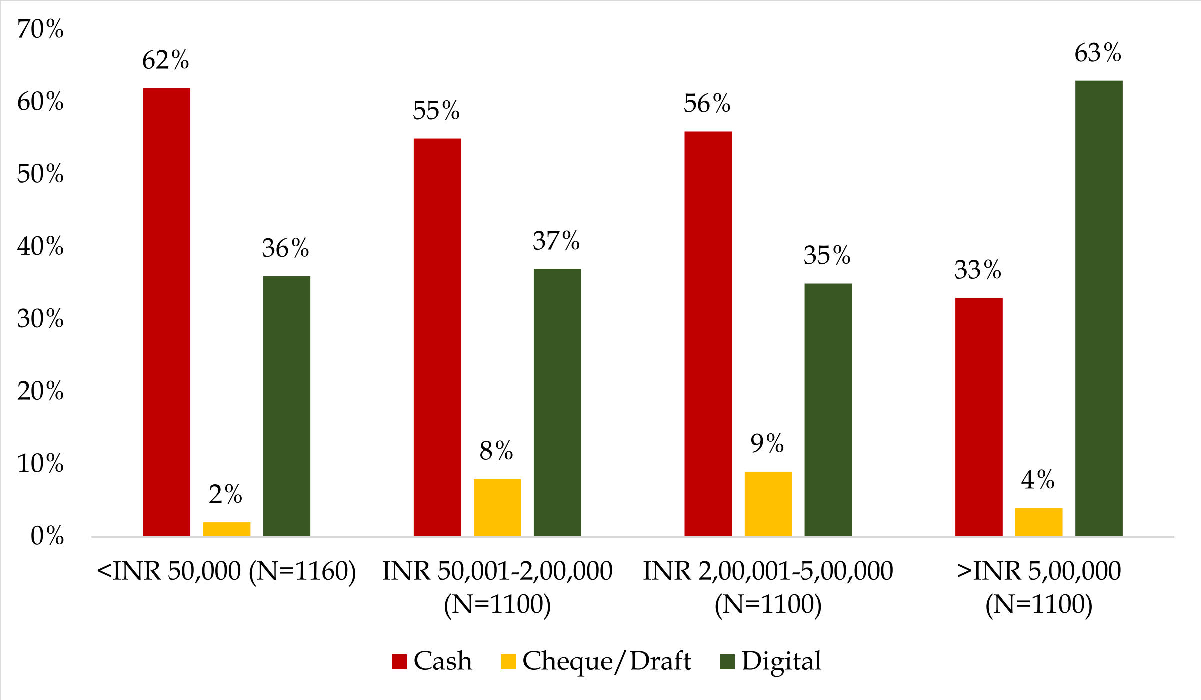
3.2 Transactions with Consumers

When businesses were asked what mode of payment consumers preferred when they transacted with them for different sets of amounts, the responses for cash are not as high as in the case of their own B2B transactions. According to businesses, on an average, 58 per cent of the consumers opt to pay through cash for amounts ranging from less than fifty thousand rupees to five lakh rupees (Figure 3.4). A slight shift to non cash modes of payment is apparent, however, the overwhelming shift to non cash modes of payment is apparent for amounts higher than INR 5 lakhs.

A similar question was asked of consumers in order to record their preferred modes of payment (not just in jewellery stores, but in general) ranging from less than INR 500 to payments over INR 50,000 (Figure 3.5). Interesting trends can be observed here. Mobile wallets are popular for payments under INR 2,000. Digital payments, such as, credit cards, debit cards, and internet banking are most popular for payments between INR 501 to INR 10,000. However, there is a decline in the adoption of digital payments between payments for INR 501-2,000 and INR 2,001-10,000, after which, the adoption of digital modes of payment shows a steady decline. This is interesting behaviour, especially since for payments over INR 50,000, cheques and drafts are preferred over cash and digital modes.

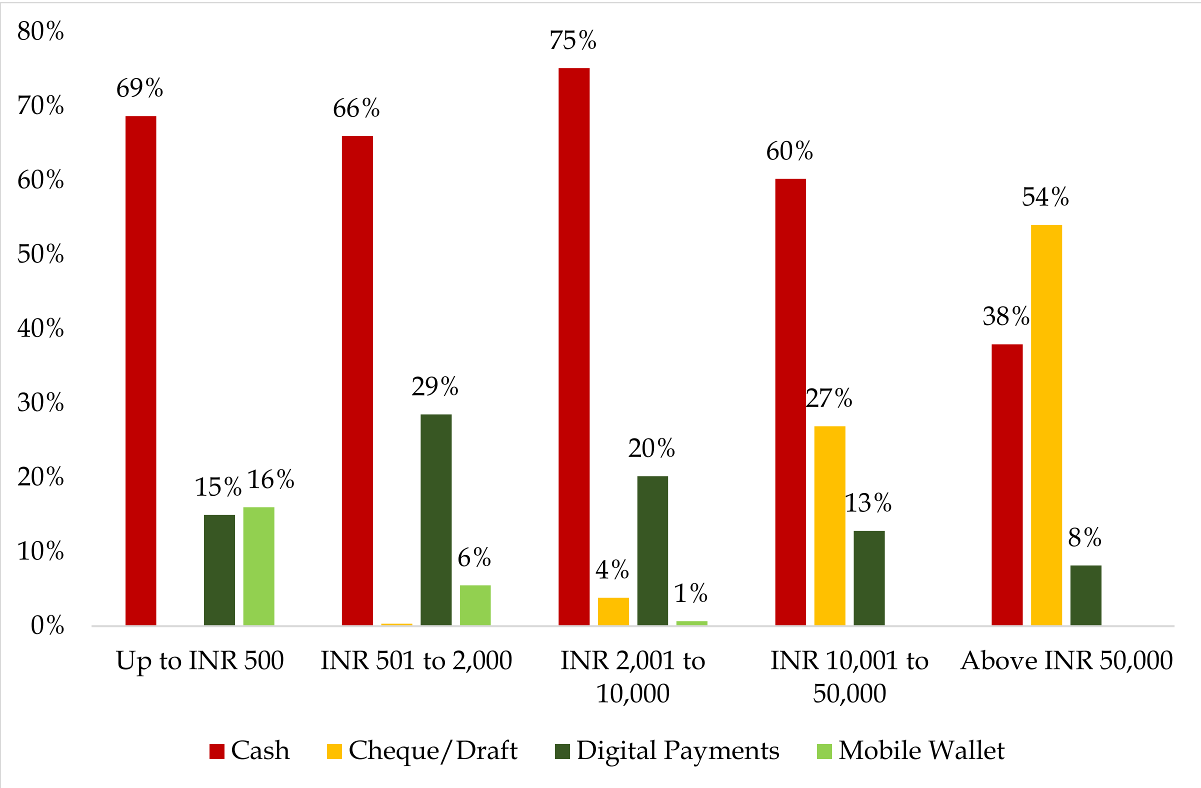
Consumer behaviour with respect to preferred modes of payment, based on the survey, indicate two things. First, mobile wallets have made a significant difference to how small payments are made. Second, what can only be viewed as either lack of trust in digital payments, higher cost of transaction, or inadequate knowledge of products, has resulted in cash still being the most preferred mode of payment for amounts up to INR 50,000. The only reasons why cheques and drafts are still preferred to card payments or internet banking would be high cost of transaction (charges and fees) or the lack of trust in these instruments. From a broader digital inclusion and Digital India perspective, the Reserve Bank of India and financial institutions must rethink their strategies for greater penetration of digital payment products, especially on charges levied. Similarly, merchants must also be suitably incentivised in order for them to encourage digital modes of payment by consumers.

Figure 3.4 Businesses' perception on consumer's preferred mode of payment



Source: PIF- BRIEF Survey

Figure 3.5 Consumer preference for mode of payment

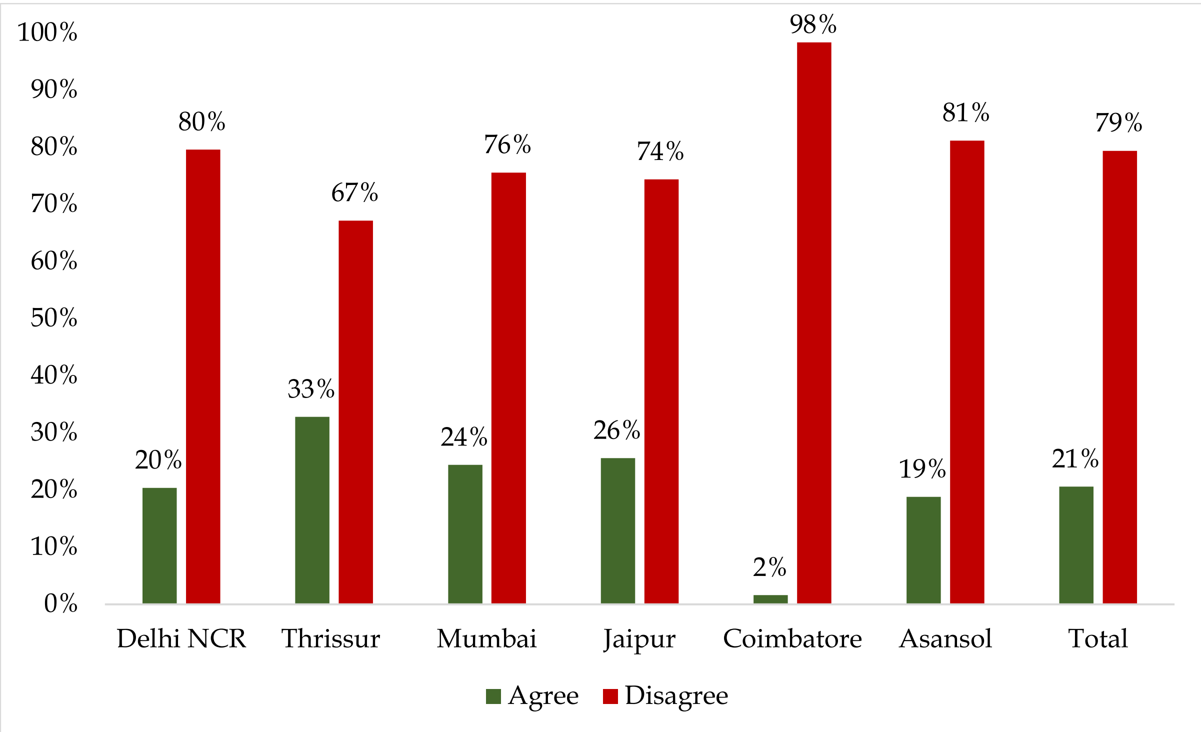


Source: PIF- BRIEF Survey

3.3 The Role of Cash in Everyday Transactions

There is little doubt that the extent of cash in the gold system is great. Before one can examine if consumers too tend to rely more on cash for transactions in their gold purchases, it is important to understand how prominent a role cash plays in the everyday transactions of the consumer. Despite demonetisation and the advent of mobile wallets along with various measures introduced by the RBI and the government to encourage digital transactions, the average Indian consumer still depends heavily on cash. Demonetisation, in a way, tested the ability of individuals to get by a couple of weeks with minimum cash and instead rely more on digital transactions. Despite what short term success demonetisation may have had on that front, currently, only 21 per cent stated that they could get by for a week using only digital modes of payment and no cash (Figure 3.6).

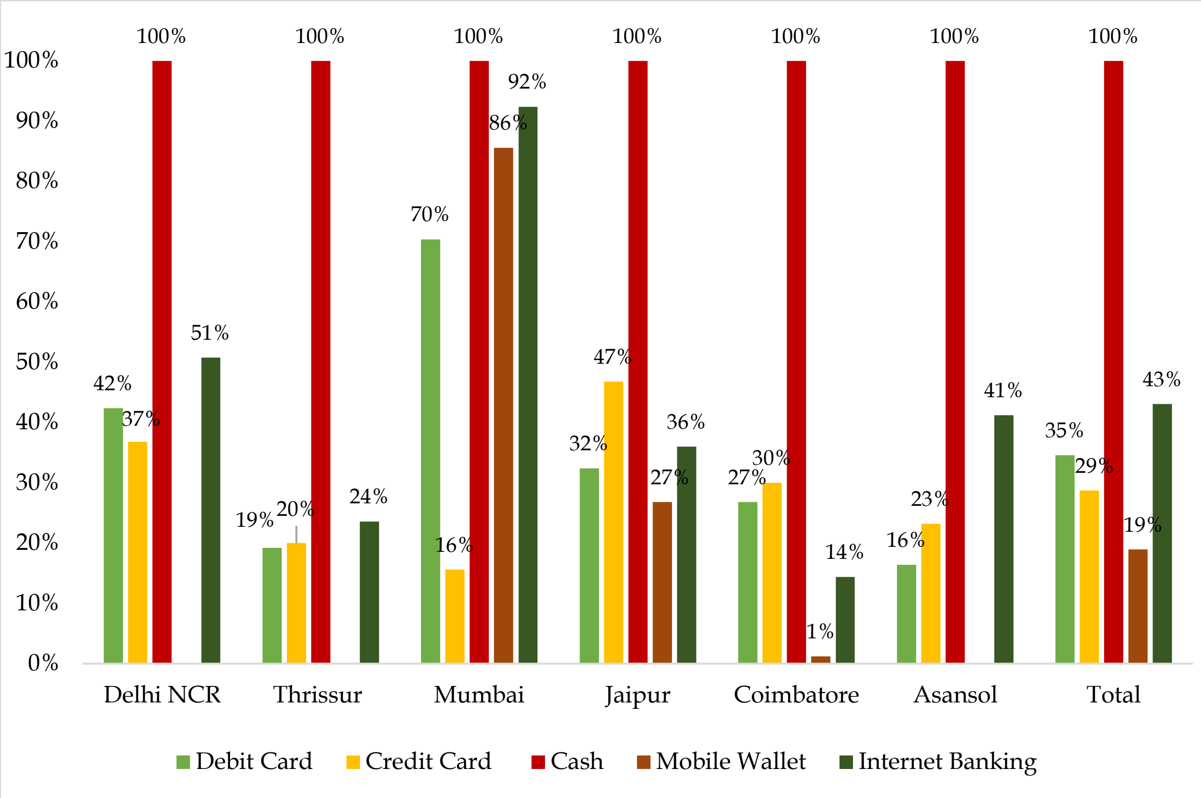
Figure 3.6 I am capable of only using digital modes of payment and no cash for a week



N = 1500 (Delhi NCR= 250, Thrissur = 250, Mumbai = 250, Jaipur = 250, Coimbatore = 250, Asansol = 250)

Source: PIF- BRIEF Survey

Figure 3.7 Consumers' preferred mode of payment for everyday transactions? (Multiple Responses)



N = 1500 (Delhi NCR= 250, Thrissur = 250, Mumbai = 250, Jaipur = 250, Coimbatore = 250, Asansol = 250)

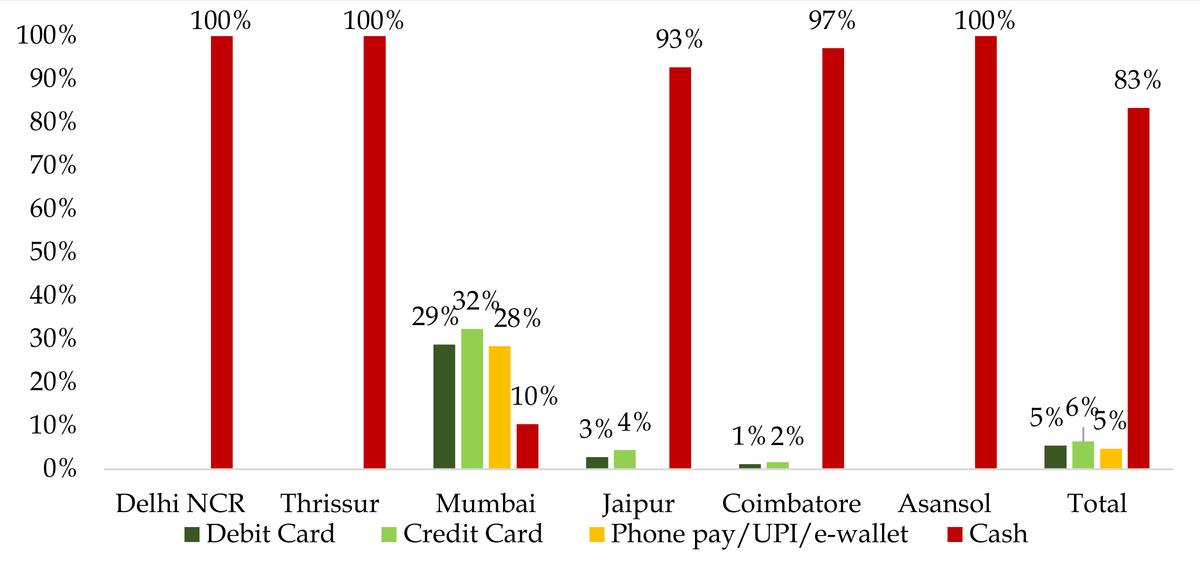
Source: PIF- BRIEF Survey

This dependence on cash is also mirrored in consumers' everyday preference of mode of payment. With multiple responses collated, it is little surprise that everyone uses cash, but even so, the use of any other non cash mode are all below 45 per cent (Figure 3.7). While cities like Delhi and Mumbai have a higher number of debit and credit users and even internet banking, the same cannot be said of cities like Thrissur, Coimbatore, and Asansol. There is a clear need to focus of tier two and below cities to ensure a better uptake of digital modes of payment.

3.4 Consumer Preferences for Mode of Payment for Gold Purchases

Of the total respondents, 96 per cent were of the opinion that jewellers prefer cash payments to digital payments. However, when consumers were asked what mode of payment they opted for while they made their most recent purchase of gold, 83 per cent admitted to paying through cash (Figure 3.8). The only outlier to the common behaviour across India was Mumbai, where digital payments seem to have been the norm.

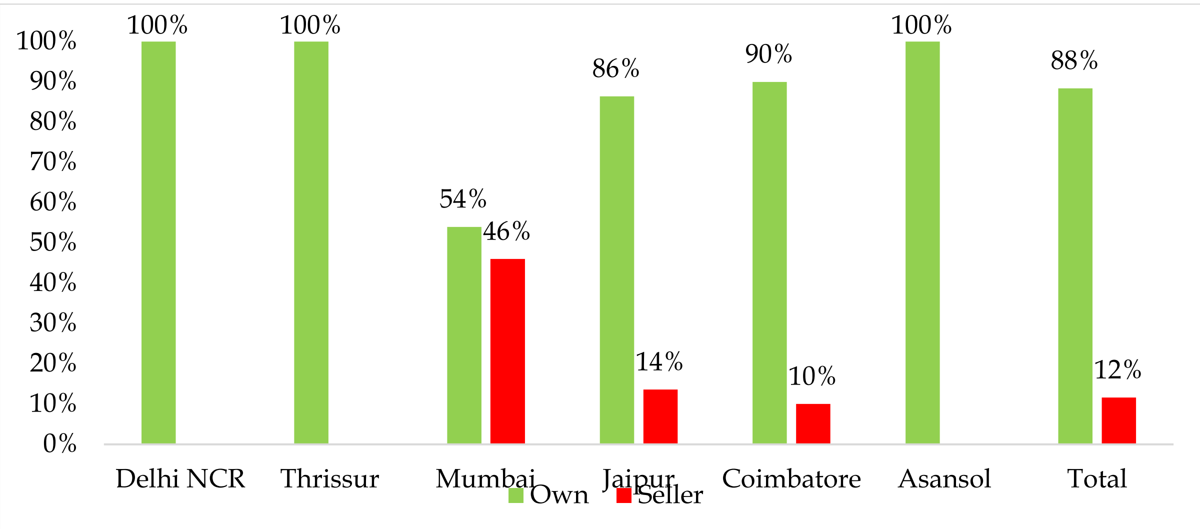
Figure 3.8 Mode of Payment Opted for During Most Recent Purchase of Gold



N = 1500 (Delhi NCR= 250, Thrissur = 250, Mumbai = 250, Jaipur = 250, Coimbatore = 250, Asansol = 250)
Source: PIF- BRIEF Survey

While one may assume that this behaviour is because consumers believe that jewellers prefer cash, survey results provided contradictory results; 88 per cent of the consumers stated that the payment option was their own. Mumbai once again presented an interesting deviation from the rest of India in that 46 per cent of the consumers stated that the choice of payment was that of the jeweller (Figure 3.9). Mumbai consumers and gold businesses seem to have embraced digital modes of payment more readily than the rest of India. Had Delhi shown similar trends, the change in behaviour could have been attributed to the size of the city, however, Delhi does not bear even a close resemblance to that of Mumbai.

Figure 3.9 Who Chose the Mode of Payment?



N = 1500 (Delhi NCR= 250, Thrissur = 250, Mumbai = 250, Jaipur = 250, Coimbatore = 250, Asansol = 250)
Source: PIF- BRIEF Survey

Jewellers and others in the G&J sector often cite consumer preference for the high instance of cash. While they are not wrong, there is also a strong feeling among the consumers that it is the jewellers that prefer cash payments. This is a difficult impasse to break. The only way in which this can be done is by incentivising both merchants and the consumers to make the shift to digital modes of payments. These incentives have to be though through.

3.5 Examples of Changing Consumer Payment Behaviour

When one analyses the preferred modes of payment for specific spending heads, the preference for making payment through digital modes is evident for fuel, education expenses and for consumer durables (Figure 3.10). The preference for digital mode of payment for educational expenses (39 per cent) can be understood in part due to the push from the educational institutions themselves. However, in the case of fuel (67 per cent) and of consumer durables (64 per cent) the success of digital payments are success stories that must be studied[4].

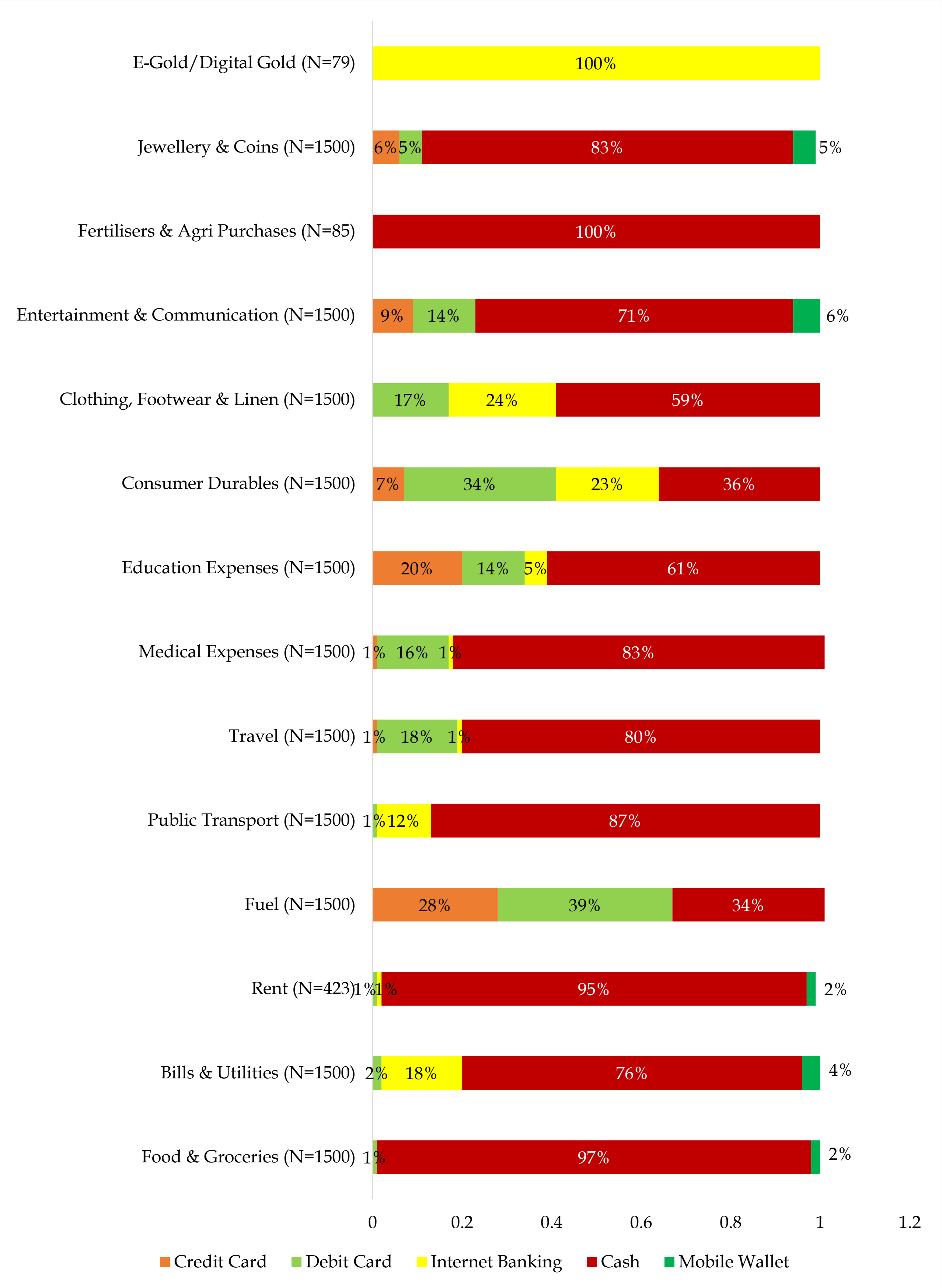
In the case of fuel purchases, the shift from cash to digital modes happened when card providers and oil companies, decided to offer attractive cash returns on card payments. This was incentive enough to cause a behavioural shift in consumers over a short time. As price of fuel rose, the cash backs looked more and more attractive over cash payments.

The consumer durables sector is more akin to the gold sector. High value products exist in both sector and like in the gold sector, the consumer durables sector also had high instances of cash purchases and low invoicing. While GST may have played a part in formalizing the consumer durables sector even more, the behavioural change in consumers to shift to digital mode of payment can be attributed mostly to the introduction of purchases with equated monthly installments (EMIs). When consumers discovered the option of being able to buy high value goods in a more affordable and convenient manner, especially since zero per cent EMIs were available, digital modes of payment become popular. As volumes grew, the merchant discount rate (MDR) charges that were once passed on to the consumer by the merchants, this practice was also discontinued, which further incentivised consumers to opt for digital modes of payment rather than cash. These incentives simply made cash an unattractive mode of payment for consumer durables.

[4] Since digital gold can only be bought through internet banking and mobile wallets, the figures are no surprise.

A similar behaviour pattern has already been discussed in the earlier chapter where consumers who participate in gold accumulation plans, their willingness to submit KYC documents was at a 100 per cent. Incentives such as those offered for consumer durables, must also be considered for the gold purchases, atleast for jewellery.

Figure 3.10 Preferred Mode of Payment Across Expense Heads



Source: PIF- BRIEF Survey

4. Adoption of Digital Payments

4.1 India's Cash Economy

The last decade has seen India take significant strides in digital inclusion. Governments have been focused on developing the digital infrastructure for better access and this has formed the bedrock for greater adoption of digital payments. India's digital transactions (in terms of value) to GDP was 561 per cent in 2014-15 and since then moved up to an impressive 769 per cent in 2018-19[5]. Even so, India's Currency in Circulation (CIC) as a percentage of GDP is as high as 11 per cent as of 2018-19, in comparison to a global average of 7 per cent[6]. Even though during the year of demonetisation, there was a slip in CIC as a percentage of GDP, it climbed back to previous levels in no time.

The dependence on cash has for long been deeply entrenched in the Indian psyche. Even today, it is not uncommon for households to withdraw a certain value of cash to keep at home for expenditures that may be incurred during the month. While anecdotal evidence may suggest that there is some behavioural change amongst the millennials, data also suggests that even though digital transactions have indeed increased, cash transactions have not come down.

In lieu of this RBI's Committee on Deepening of Digital Payments, in their May 2019 report, have laid down targets for deepening of digital payment to be achieved by 2021-22 (Table 4.1). The Committee was also of the belief that this growth will be spurred by a shift in concentration from high value low volume transactions to low value high volume transactions.

Table 4.1 Digital Payment Targets for 2021-22

Metric	Target for 2021-22
Per Capita Digital Transactions (Digital transactions volume/month)	10x (from 22 in March 2019 to 220 in March 2022
Digital Transactions Value/GDP	2x (769% in 2018-19 to 1500% in 2021-22
Number of Digital Payment Users Active in a Month	3x (100 million to 300 million in three years)
Currency in Circulation/GDP Ratio	In five years, it should tend to be around 7%, which is the global average

[5] Report of the Committee on Deepening of Digital Payments – RBI, May 2019

[6] Ibid

4.2 Assessing the Volume of Transactions in the Gold Ecosystem

Transactions in gold range from low value to high value, depending on the socio economic status of the consumer and even geography. Rural consumers are known to purchase as low as half gram of gold. The National Sample Survey[7] (NSS) estimates the monthly per capita quantity of gold ornaments consumed in urban India is 11.65g and that in rural India to be 5.18g (Table 4.2). As a percentage of total monthly per capita consumption of jewellery and ornaments, consumption of gold ornaments is nearly 80 per cent in rural India and almost 90 per cent in urban India. These are not small quantities.

Table 4.2 Monthly Per Capita Quantity Consumption of Gold Ornaments and Number of Reporting Households Per Thousand

S.No	Item	Monthly Per Capita Consumption (in grams)	No. of Reporting Households/1000
1	Rural – Gold Ornaments	5.18	26
2	Rural – Total Jewellery and Ornaments	6.67	134
3	Urban – Gold Ornaments	11.65	41
4	Urban – Total Jewellery and Ornaments	13.54	110

Source: Household Consumption of Various Goods and Services in India, NSS Report, 2012

In terms of per capita value per thirty days consumption, rural India spends INR 5.18 and urban India spends INR 11.65 (Table 4.3). Kerala records the highest urban and rural per capita value spend at approximately INR 60 in rural and INR 68 in urban. On an average, the consumption in urban India is twice that of rural India.

Table 4.3 Monthly Per Capita Value of Consumption and Proportion of Households Reporting Consumption

State	Gold ornaments			
	Rural		Urban	
	Per Capita Value per 30 Days (in INR)	*No. of Households Reporting Consumption - per 1000 households*	*Per Capita Value per 30 Days (in INR)*	*No. of Households Reporting Consumption - per 1000 households*
India	5.18	26	11.65	41
Andhra Pradesh	5.09	23	22.22	40
Arunachal Pradesh	1.95	18	3.81	37
Assam	1.03	22	1.99	15
Bihar	0.42	10	2.20	24

[7] Household Consumption of Various Goods and Services in India, NSS Report No 541 (66/1.0/3) 2012

State	Gold ornaments			
	Rural		Urban	
	Per Capita Value per 30 Days (in INR)	*No. of Households Reporting Consumption - per 1000 households*	*Per Capita Value per 30 Days (in INR)*	*No. of Households Reporting Consumption - per 1000 households*
Chhattisgarh	1.49	13	8.26	50
Delhi	2.21	6	1.33	9
Goa	1.84	8	7.55	47
Gujarat	5.85	37	15.70	84
Haryana	6.30	16	11.07	30
Himachal Pradesh	9.99	13	3.79	7
Jammu & Kashmir	1.58	36	5.29	35
Jharkhand	1.39	10	7.49	42
Karnataka	2.23	10	5.79	18
Kerala	60.55	97	68.65	93
Madhya Pradesh	3.47	51	7.34	55
Maharashtra	3.09	18	13.43	44
Manipur	1.05	15	1.18	25
Meghalaya	0.11	2	1.61	18
Mizoram	0.30	5	0.55	4
Nagaland	0.34	4	3.73	25
Orissa	3.52	30	15.93	75
Punjab	3.43	9	2.82	11
Rajasthan	7.70	13	1.79	14
Sikkim	-	-	-	-
Tamil Nadu	4.62	19	11.56	30
Tripura	2.29	31	2.70	14
Uttar Pradesh	3.41	39	6.16	45
Uttarakhand	8.46	25	3.06	30
West Bengal	2.36	15	13.41	56
A & N Island	33.62	99	41.35	112
Chandigarh	0.71	26	1.93	23
Dadra & N. Haveli	-	-	2.84	22
Daman & Diu	2.15	8	2.37	14
Lakshadweep	51.81	146	97.59	140
Puducherry	0.63	4	22.55	29

The NSS also notes that for durable goods, a better and "more meaningful" measure of understanding household expenditure would be to record the per household expenditure instead of only recording the per capita expenditure (Table 4.4). This data provides some interesting insights. Both urban and rural India spend approximately a tad over 14 per cent of their total expenditure on gold ornaments. This is the second largest single item spend. The value of this expenditure per reporting household in the last thirty days is as high as INR 926.62 for rural India and INR 1175.23 for urban

India. In urban India this is the single largest expenditure in terms of value of spend and for rural India it is the second largest by value of spend.

Table 4.4 Details of Expenditure on Durables – All India

S. No	Item	Percentage to Total Expenditure on Durables (in %)		16.5Expenditure Incurred in Last 30 Days (in INR)	
		Rural	*Urban*	*Rural*	*Urban*
1	Residential Buildings (repair)	29.9	16.5	126.97	267.45
2	Other Durables	23.0	25.8	-	-
3	Motorcycle/Scooter	11.7	13.7	157.99	160.27
4	Motor Car/Jeep	8.4	16.3	1186.01	981.56
5	Gold Ornaments	14.2	14.3	926.12	1175.23
6	Durables Total	100	100	204.61	429.22

Even though the day may be dated, there is little reason to believe that expenditure patterns would have changed dramatically in the last decade. What remains significant is that expenditure on gold ornaments in terms of both share of total expenditure and in terms of value of spend is significant. This helps us in estimating the scale of transactions both is terms of quantity of transactions and the value of transactions in the purchase of gold ornaments. If one were to consider purchases of gold coins and gold articles, which the NSS does not include in its survey, the numbers would increase significantly. It is in this context that we try to decipher why the use of digital modes of payment for gold based purchases and transactions are not as ubiquitous as is the case in other expenditure heads.

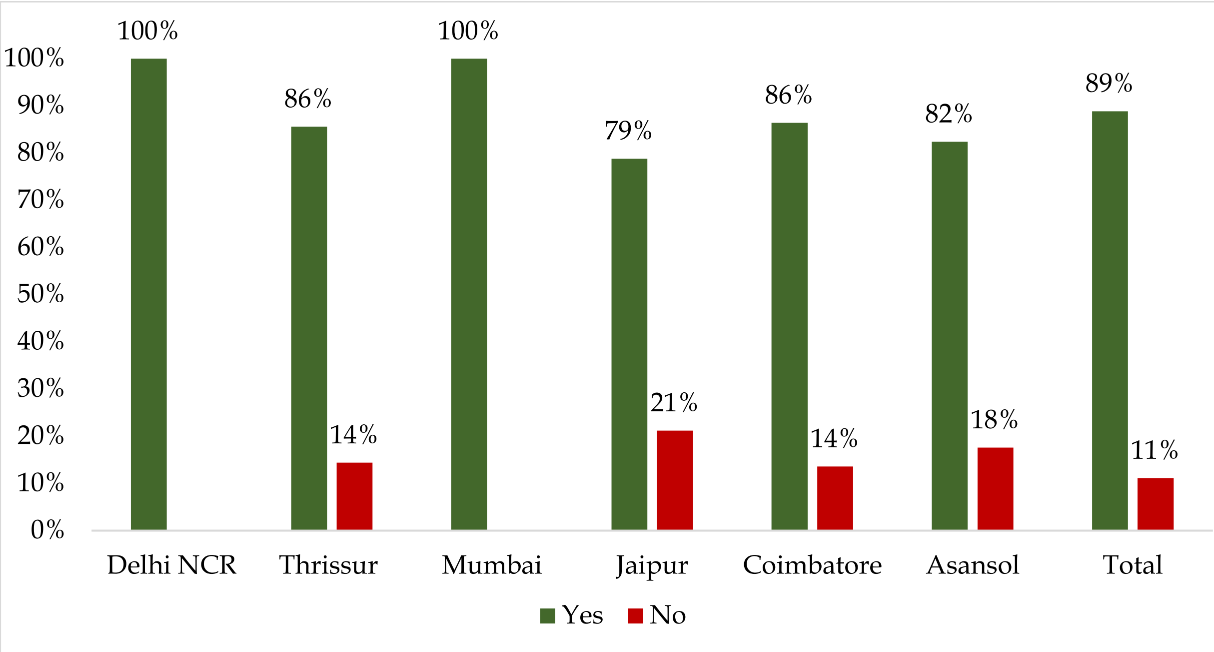
4.3 The Use of Digital in Everyday Life

In the previous chapter, under section 3.2 and 3.3, a detailed discussion of consumer's preferred modes of payment for everyday transactions was presented. As per Figure 3.6, only 21 per cent of the surveyed consumers surveyed stated that they were capable of using nothing but digital modes of payment for a week. Similarly Figure 3.10 identifies certain expense heads, such as, clothing and linen and, education expenses, where payments through digital modes is as popular as payments through digital modes is as popular as payments through cash. Infact, in the case of consumer durables and fuel, the preferred mode of payment are through digital modes rather than cash.

There may be many reasons for this skewed distribution across sectors. A couple of years ago, it was always assumed that the lack of trust in digital payment modes may have been the reason. One must remember that digital mode of payment for a large part of the Indian populations is indeed a new concept. However with the advent of e-commerce, digital modes of payment started to pick up albeit at a slow pace. Even as early as 2016, payments for purchases made through e-commerce were made through cash-on-delivery (COD). However, over time, and with continuous incentives and conveniences being offered by e-commerce, COD as a percentage of total payments has been declining steadily. In a post Covid world, this has reduced even more in the interest of safety[8].

Of all consumers who were surveyed, 89 per cent stated that they shop online (Figure 4.1). Given the decrease in COD and an increase in purchases being made through e-commerce, there is ample justification for leveraging e-commerce as a medium of sale of gold and by extension indirectly and subtly nudging consumers to opt for digital modes of payment for their purchases of gold. Even if this may not happen for very high value purchases, it is most certainly feasible for purchases upto the value of INR 1,00,000, since consumers do pay these prices for consumer durables while purchasing online.

Figure 4.1 Do you shop online



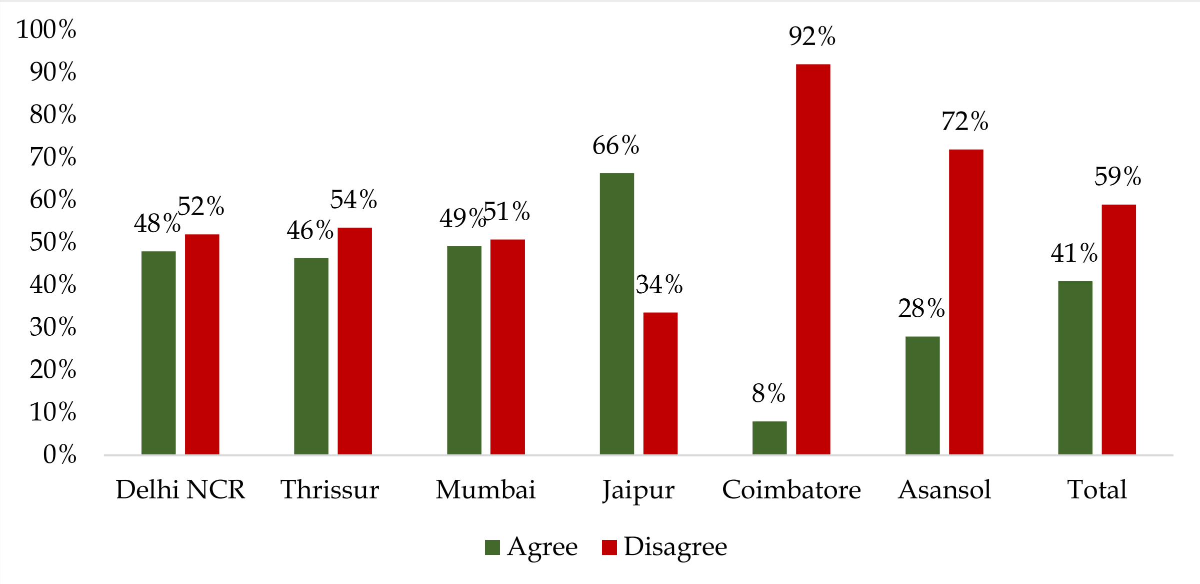
N = 1500 (Delhi NCR = 250, Asansol = 250, Coimbatore = 250, Thrissur = 250, Mumbai = 250, Jaipur = 250)
Source: PIF- BRIEF Survey

The shift from cash to digital modes of payment is also evident for smaller value payments on account of mobile wallets. Of those surveyed, 41 per cent of consumers responded that they would prefer to use mobile wallets for making payments less than

[8] https://www.livemint.com/industry/retail/online-shoppers-turn-away-from-cash-on-delivery-11601472577584.html

INR 1000 (Figure 4.2). While cities like Coimbatore and Asansol continue to prefer cash, the larger cities are more likely to use mobile wallets. This finding is also consistent with the findings presented in Chapter 3, where the instances of cash seemed significantly higher in the smaller cities than in the larger ones.

Figure 4.2 I prefer to use e-wallets (such as Pay TM, BHIM, Phone Pay) for paying amounts less than INR 1000



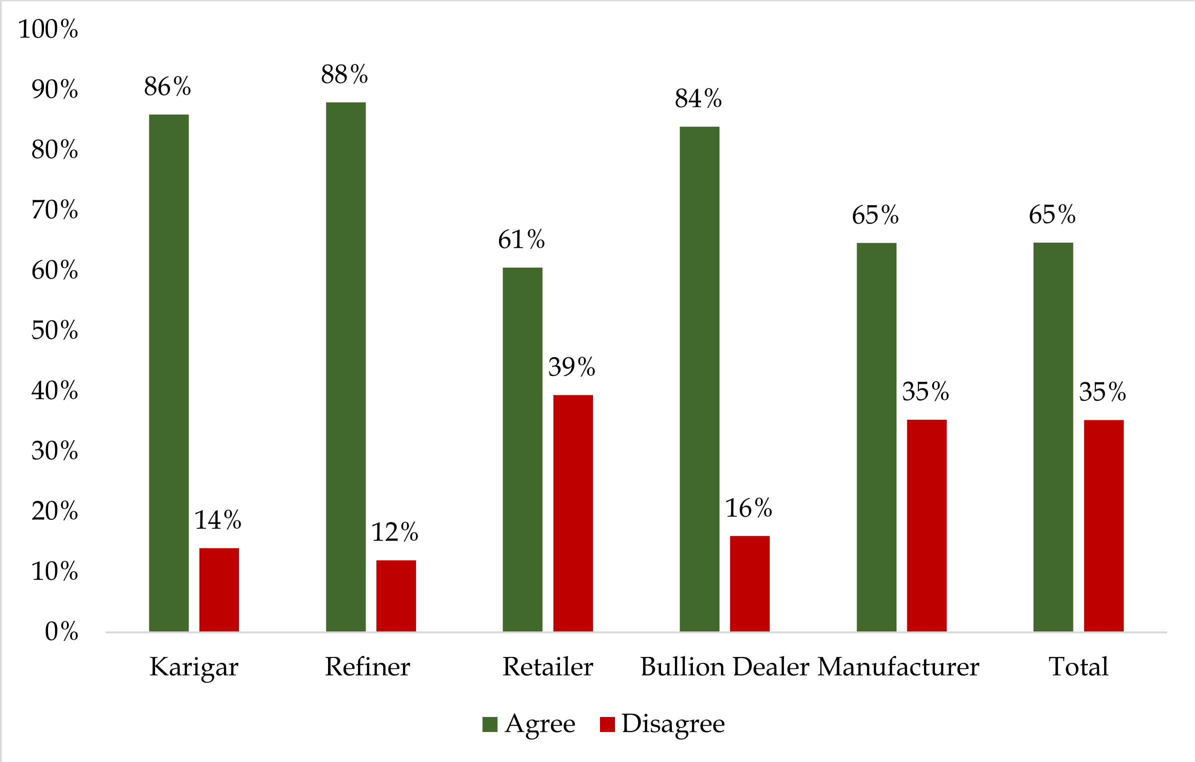
N = 1500 (Delhi NCR = 250, Asansol = 250, Coimbatore = 250, Thrissur = 250, Mumbai = 250, Jaipur = 250)
Source: PIF- BRIEF Survey

From a policy point of point of view there is a need to focus on the mid to small cities for driving digital payments. This could be either in the form of special schemes and/or better outreach, not just by the banks but also by banks and financial institutions.

4.4 Driving Digital Payments in the Gold Ecosystem

The prerequisite to driving digital payments in the gold ecosystem would be willingness on the part of all stakeholders, even if it is only with incentives. When the business stakeholders in the gold ecosystem were asked if they would adopt digital modes of payment if incentivised, 65 per cent of the respondents said that they were willing. The resistance comes largely from retailers and manufacturers (Figure 4.3). They reason often cited by manufacturers by manufacturers is that the instance of cash in their transactions with retailers is high and the retailers in turn pass the blame on the consumers.

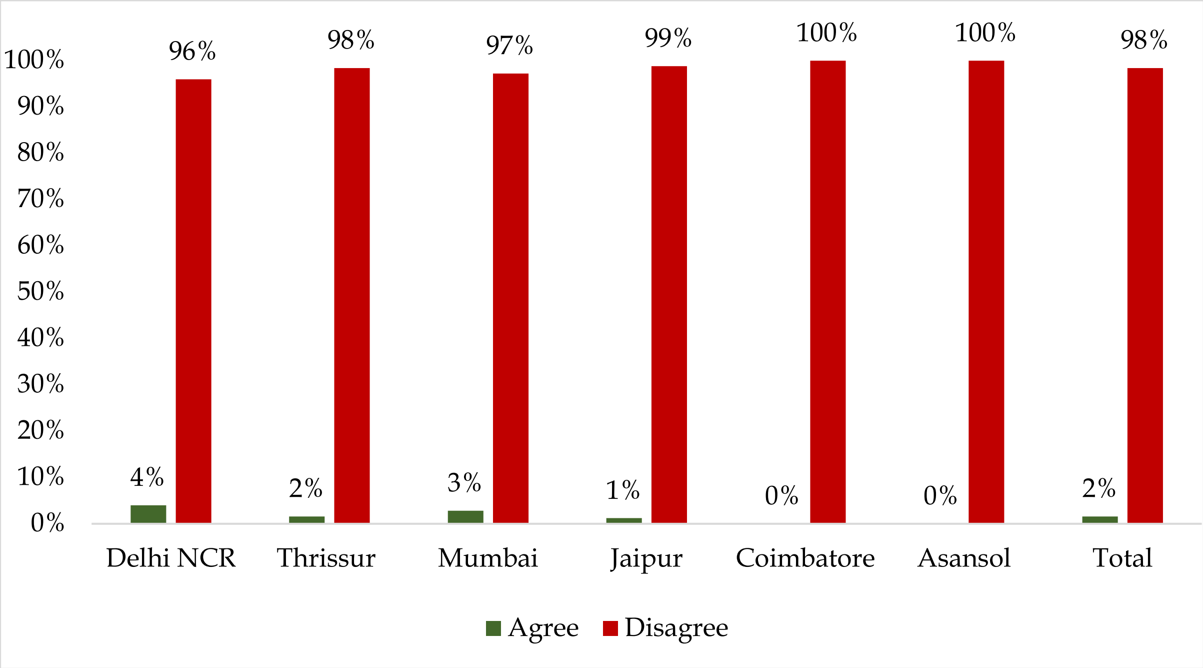
Figure 4.3 I would be willing to transact through digital means if government incentivize me for undertaking digital payments



N = 1500 (Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300)
Source: PIF- BRIEF Survey

When consumers were asked if they would be willing to use digital modes of payment for their purchases of gold, 98 per cent stated that they would not (Figure 4.4). This corroborates what most gold retailers have been saying; it is the consumer who insists on cash payment and not the other way around. When asked if consumers would be willing to make the switch to digital modes of payment if incentivised, only 30 per cent answered in the affirmative (Figure 4.5). While 30 per cent may not seem a large number at first glance, it does suggest that well thought through incentives will help both businesses and consumers in the gold ecosystem to make the change and transact using digital means. Even a shift of these proportions as shown in the survey will have a significant impact on the way the value chain transacts an on trust and transparency.

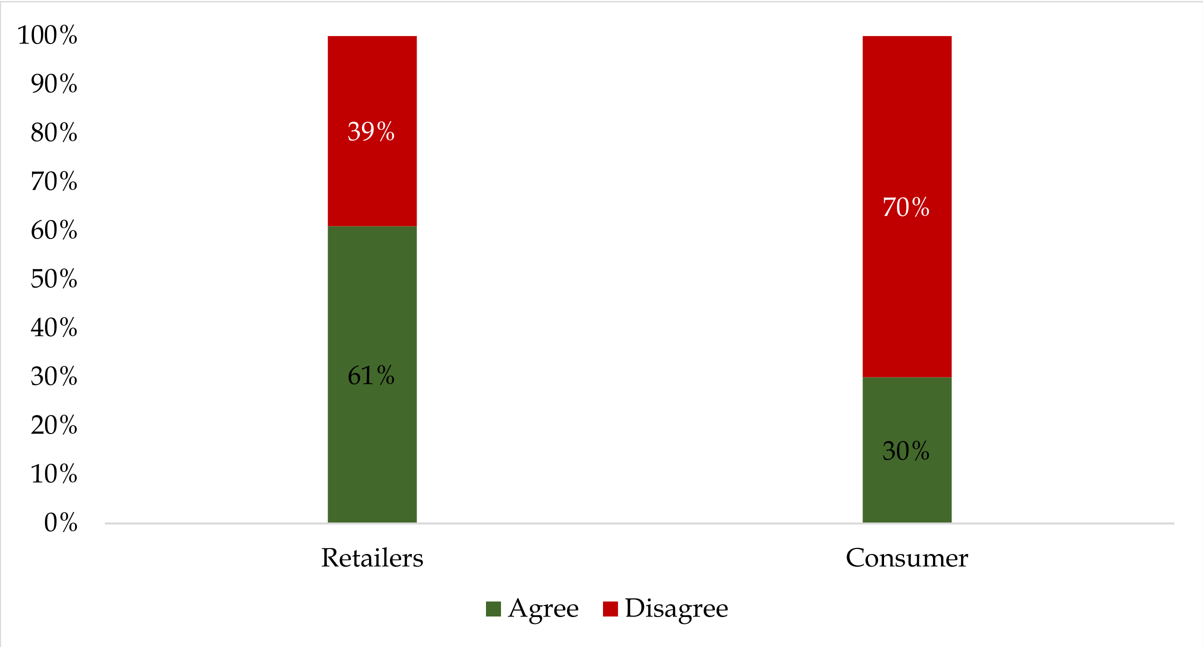
Figure 4.4 I would prefer to make the payment while buying gold, through digital medium (such as credit/debit cards, UPI, net banking etc.)?



N = 1500 (Delhi NCR = 250, Asansol = 250, Coimbatore = 250, Thrissur = 250, Mumbai = 250, Jaipur = 250)

Source: PIF- BRIEF Survey

Figure 4.5 I would be willing to transact through digital means if government incentivize me for undertaking digital payments - retailer Vs. People will shift from cash to digital mode if incentivized? – Customer



N=2500 (Retailers-1000, Customers-1500)

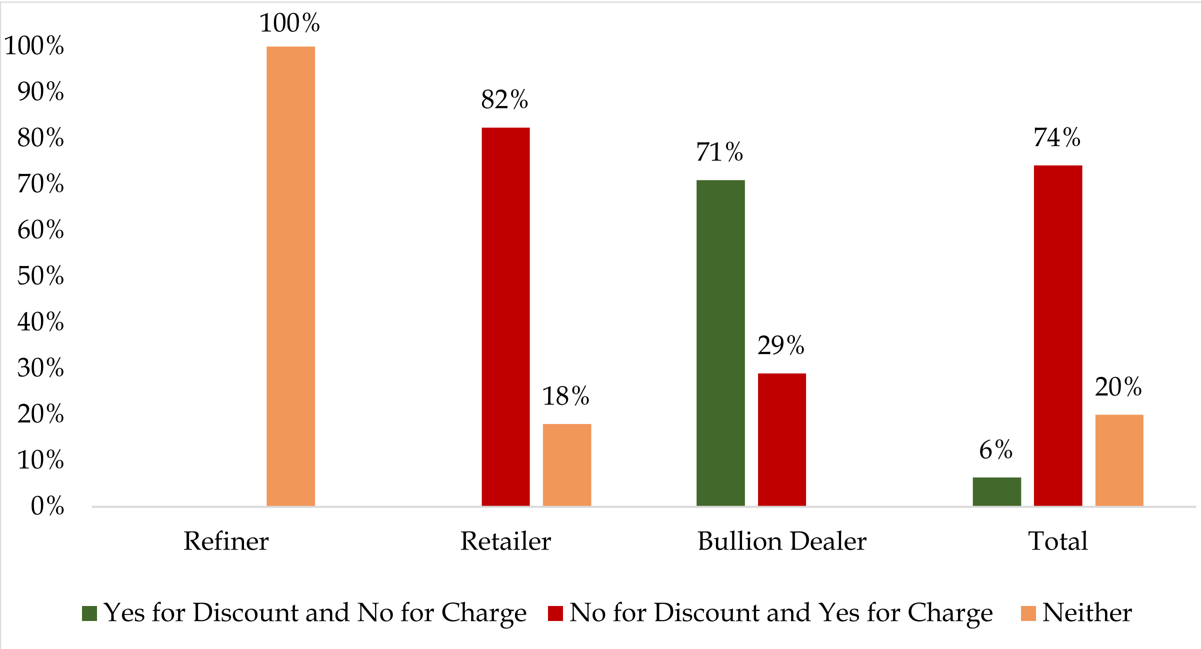
Source: PIF- BRIEF Survey

4.5 Reasons for Low Adoption of Digital Modes of Payment

It is clear that without suitable incentives, neither businesses nor consumers would be willing to make the shift to digital payment modes. Our analyses leads us to believe that there are four broad reasons that hamper the adoption of digital modes of payment.

The first and foremost reason pertains to the cost of making payments using digital means. The MDR for digital transactions for consumers in high; 74 per cent of the surveyed refiners, retailers, and bullion dealers stated that they charge the consumer an additional fee if payments are made through debit or credit cards (Figure 4.6). The RBI Committee on Deepening Digital Payments had also noted that in the case of card payments there has been a market failure on account of poor acceptance infrastructure. Infact, the Committee clearly recommends that, "…the regulator should adjust the interchange rate and let the market compete on MDR ultimately growing the acceptance ecosystem rather than inhibiting it[9]."

Figure 4.6 Do you offer discount and add a charge on credit card or debit card purchases



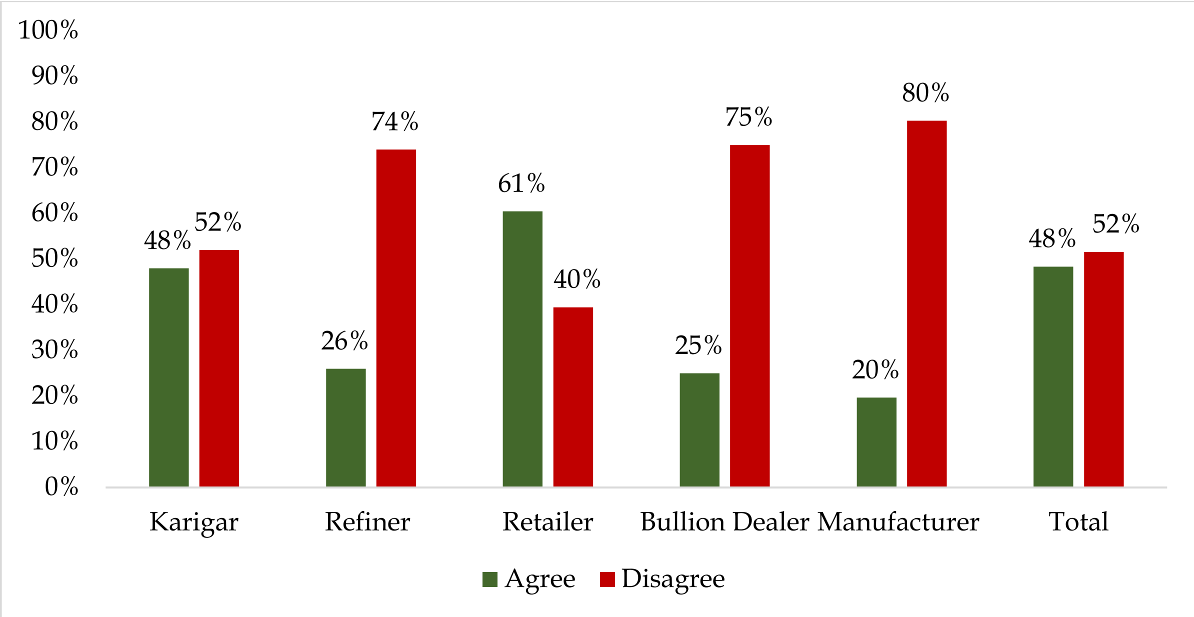
N = 1150 (Karigar= NA, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = NA)
Source: PIF- BRIEF Survey

Another impediment to adopting digital payments has been the perceptions around the same. For instance, when the businesses were asked if digital transactions would harm their business, 48 per cent of those surveyed said yes. Even though manufacturers, refiners, and bullion dealers stated that it would not harm their

[9] Report of the Committee on Deepening of Digital Payments – RBI, May 2019

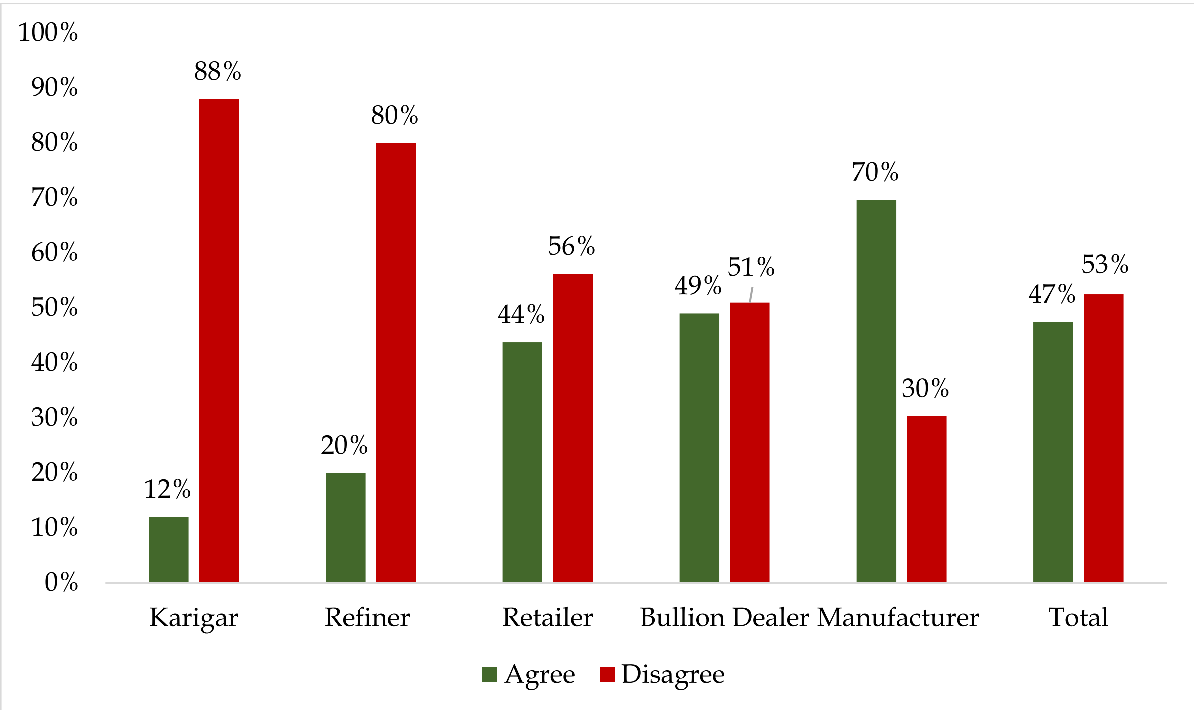
business, retailers most certainly felt it would. The karigars were divided on the question (Figure 4.7). This is on account of their perceptions on whether consumers prefer digital transactions to cash payments (Figure 4.8). Only 47 per cent of those surveyed though consumers prefer digital methods of payment to cash.

Figure 4.7 Digital transactions harms business



N = 1500 (Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300)
Source: PIF- BRIEF Survey

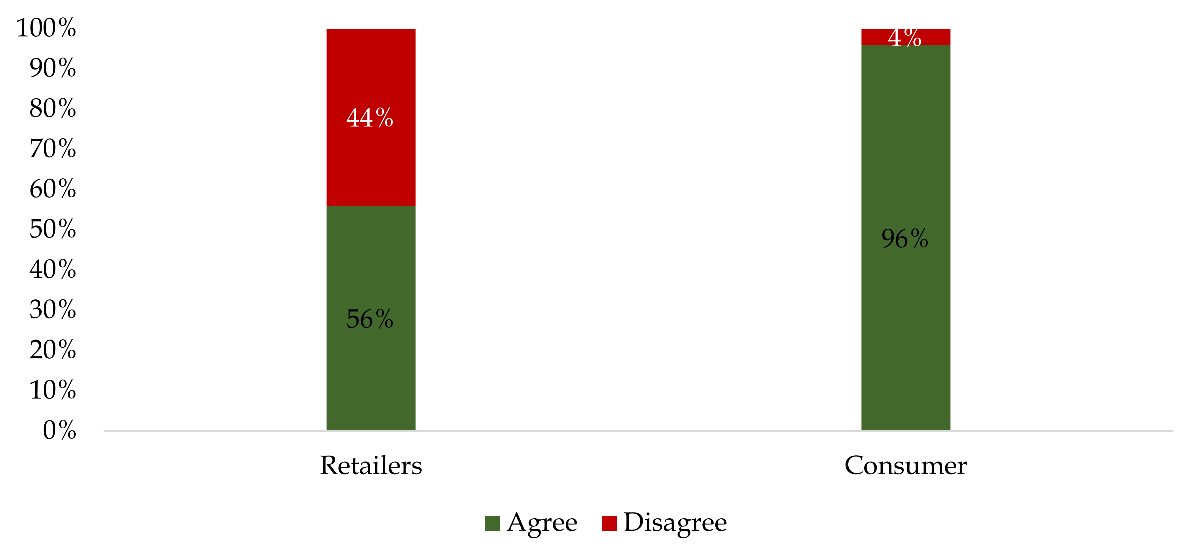
Figure 4.8 More customers prefer digital transaction to cash transaction



N = 1500 (Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300)
Source: PIF- BRIEF Survey

The third reason interestingly one that arises because each party (the retailer and the consumer in this case) each assume that the other party prefers cash (Figure 4.9). While atleast 44 per cent of the jewellers were willing to admit that consumers may infact prefer digital modes of payment, almost all the consumers were of the opinion that the retailers only prefer cash payment, even though our survey results indicate the contrary. This asymmetry in information is by far the most important aspect to solve for and this can be done either through basic regulations or through jewellers who would consciously encourage their consumers to pay through digital modes of payment.

Figure 4.9 More customers prefer digital transaction to cash transaction – Retailer Vs Jewelers prefer if you pay by cash for buying jewellery – Customer



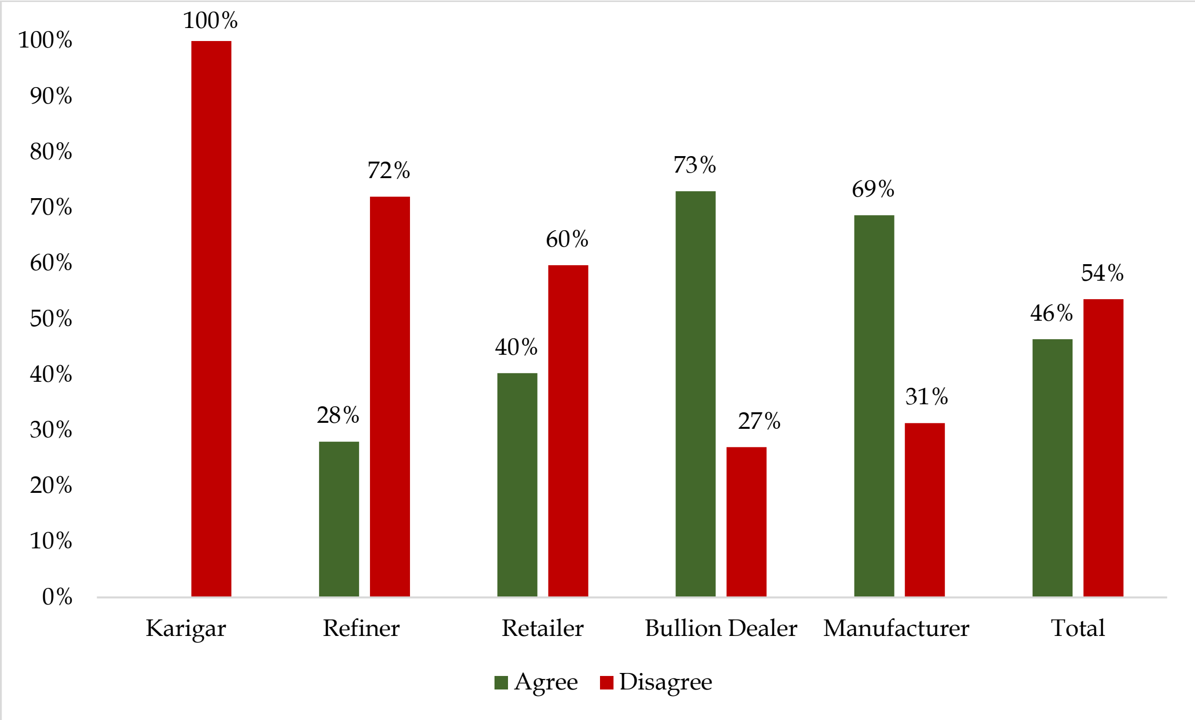
N=2500 (Retailers-1000, Customers-1500)
Source: PIF- BRIEF Survey

The fourth reason is in line with another observation made by the RBI Committee[10]. They note that the overall process of accepting digital modes of payment is further burdened by the need for addition paperwork such as KYC documents and other multiple levels of transactions and charges. Earlier chapters have already dealt with in detail the KYC requirement and the apprehension that most consumers face is sharing these details with retail jewellers or for that matter with anybody in the gold value chain. When we asked businesses if they believed that consumers would rather use digital mode of payment than share KYC, 46 per cent stated they think this likely. Infact, there were resoundingly positive answers from both bullion dealers and manufacturers, even though karigars, refiners, and retailers did not think so (Figure 4.10). However, this is something worth considering seriously since digital modes of

[10] Ibid

payments are traceable and therefore should not require any additional burden of proof from consumers.

Figure 4.10 Customer are willing to make digital payment than sharing KYC with the jeweller

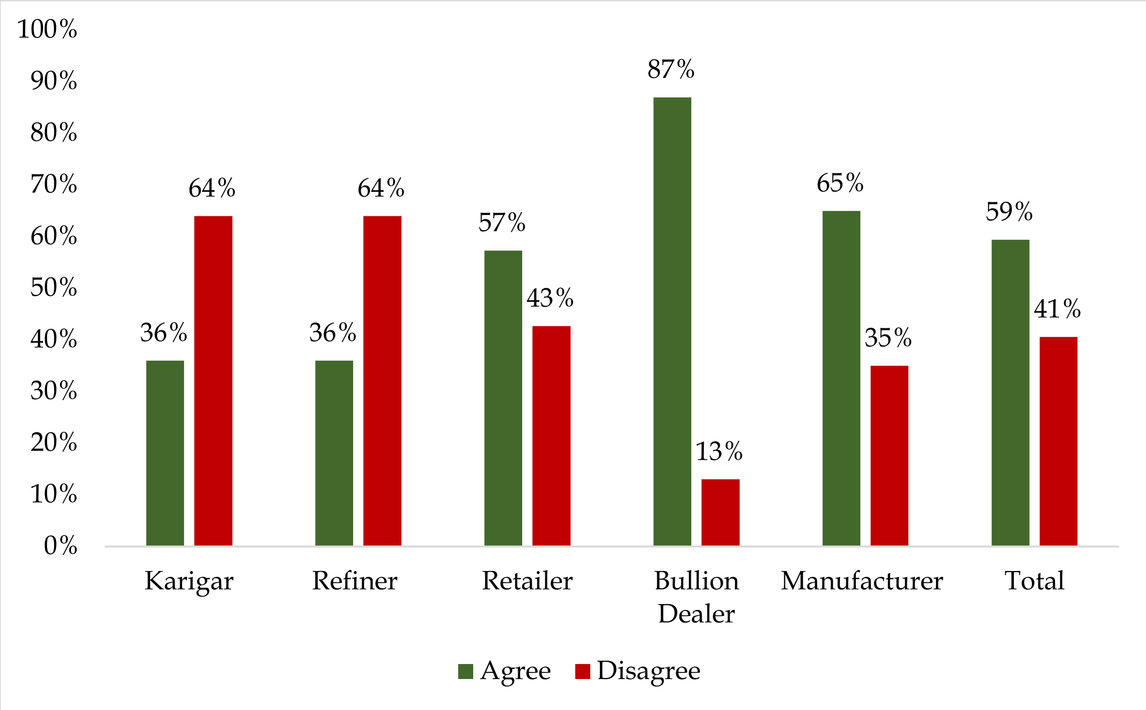


N = 1500 (Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300)
Source: PIF- BRIEF Survey

4.6 The Way Ahead

Cash is clearly a huge part of all transactions in the gold ecosystem. It is clear that there is a desperate need for incentives and other measures to break perception barriers, leverage behavioural changes taking place amongst consumers in terms of their choice of payment modes, and also provide strong incentives to increase the adoption of digital modes of payment. The easiest ofcourse is to revisit the MDR charges (Figure 4.11), since 59 per cent of those businesses surveyed are confident that the consumer will be willing to move to digital modes of payment if properly incentivised.

Figure 4.11 Customer will be willing to shift to digital mode of payment if charges on such transactions are waived off



N = 1500 (Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300)
Source: PIF- BRIEF Survey

There is also the need to acknowledge that digital inclusion is not inform across India. A differentiated approach to digital inclusion will have to be adopted in order to drive the agenda more proactively in mid and small town. Strategies that worked in big cities may not work in smaller cities.

Finally, the government has to consciously integrate digital into its existing schemes, and also encourage innovations in this area. The subsequent chapters of this study deal with these aspects in greater detail.

5. Digital Gold

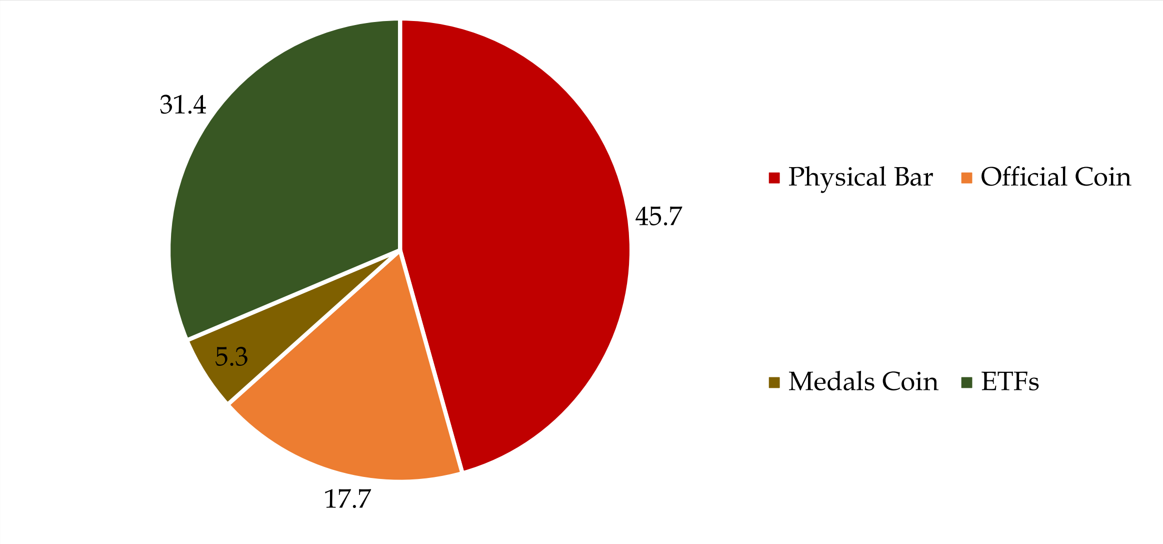
5.1 Gold as an Investment Product

For ages, gold has allured people all over the world. In earlier times, gold was used as a medium of exchange. With passage of time, the world has shifted to using paper currency although gold still continues to serve as a store of value. From central banks around the globe to an individual, gold serves as an investment instrument for everyone. In 2019, the overall global demand for gold stood at 4386.9 tonnes. Of this 48.4 per cent of the total demand came from jewellery, 28.9 per cent was from investment, technology accounted for 7.4 per cent, and 15.2 per cent was demanded by central banks[11] making it evident that gold never lost its sheen.

In the last decade, gold was mostly held in physical form such as coins, bars, nuggets, bricks and jewellery but with changing times, the options of investing in gold and gold backed products have broadened. Advancement of technology, diversified product options, increased transparency in dealing, easy convertibility, reduced storage cost, and cheaper handling charges have influenced the preference of gold investors' to a large extent. Today, gold is held in paper, electronic and digital form, even though all or most such holdings are backed by physical gold. Electronically traded funds (ETFs), gold funds (mutual funds tracking gold price), gold derivatives such as futures and options traded on commodity exchanges, gold savings certificates, and more recently electronic gold (e-gold) and digital gold are few such products where a bulk of the investment have shifted from buying physical gold. Fig 5.1 shows the percentage distribution of demand in gold by the category of investment in 2019.

[11] World Gold Council https://www.gold.org/what-we-do/investing-gold/why-invest-gold (accessed on 19th November 2020)

Figure 5.1 Percentage Distribution of Investment in Gold by Demand in 2019



Source: Compiled from World Gold Council

India has a diversified basket of gold backed and gold based products where an investor can put his money in. Apart from the existing ETFs, gold funds and gold derivative, Sovereign Gold Bond (SGB) issued by the Government of India has been quite popular among investors. The popularity of SGB can be gauged by the annual report of the Reserve Bank of India (RBI) published in 2019-20[12], which stated that since its inception in 2015, SGB has received a total subscription of 30.98t (~INR 9,652.78 crore) from its investors. The state run Gold Monetisation Scheme (GMS), a revamped version of the erstwhile Gold Deposit Scheme (GDS), which allows institutions and individual investors to deposit physical gold in bank, much the same way as currency and earn interest on it has accumulated close to 1.80t deposit till March 2019[13]. GMS along with other short term gold savings schemes run by jewellers help small investors to save in gold for future consumption. The loan against gold jeweller (LAGJ) run by banks and non-banking financial companies (NBFCs) has been serving as an excellent secured loan programme for many years now.

Digital gold also know Internet Investment Gold (IIG) is the latest investment avenue to have caught the attention of general public in India. The concept of digital gold is only a few years old in India although it has been in existence for a while at the international level, albeit not exactly in the same form. Moreover, advent of

[12] Annual Report 2019-20, Reserve Bank of India https://www.rbi.org.in/Scripts/AnnualReportPublications.aspx?Id=1291 (accessed on 21st November 2020)

[13] Annual Report 2018-19, Department of Investment and Public Asset Management, Ministry of Finance, GoI https://dipam.gov.in/sites/default/files/Annual%20Report%202018-19.pdf?download=1 (accessed on 21st November 2020)

technology has also played a significant role in bringing about a shift from physical to non-physical investment in gold.

5.2 Concept of Digital Gold

Accumulation of gold in dematerialised form is offered on various digital gold platform which is usually a tie up between a financial technology (fintech) company and digital gold provider. A fintech company can be a mobile payment application or a bank. Digital gold allows customers to make small purchases and accumulate gold over a long period of time. Such purchases are backed by physical underlying of gold which is held along with a custodian, usually a refinery. A customer can open an online gold accounts with any of the digital gold platform and start buying gold as and when he/she feels. Digital gold offers consumers the chance to accumulate gold in smaller denominations, at their convenience and in a transparent manner. Once a customer keys in the monetary or weight amount for his/her purchase, the platform credits equivalent value of gold in gram/s into the customer's digital gold account.

The price of gold on digital platform is usually pegged at a premium rate than the spot market rate. The customer has the option of taking the delivery of the gold in the form of a coin or bar when a certain fixed quantity is reached. The delivery charges and taxes are borne by the customer for taking physical delivery of gold. Alternatively, it can be sold on the digital gold platform. The sale of gold may attract various charges and taxes as per government norms. Most platforms undertaking digital gold requests a one-time e-KYC (electronic Know Your Customer) absolving buyers from going through a complicated KYC documentation process. In other words, digital gold comes across as an investment product that truly allows an investor to buy gold at his fingertip. No wonder, digital gold is becoming increasingly becoming popular across the world.

5.3 International Scenario

Digital gold is offered by various fintech companies and digital platforms around the world. Although, digital gold has gained popularity in many countries, it still remains largely unregulated. Even advanced economies with strict financial regulations and tight banking rules are yet to come up with any specific directives or operational guidelines for digital gold platforms. In absence of a standard regulatory mechanism, most digital gold platforms adhere to certain basic laws and standard guidelines such as regulations pertaining to anti-money laundering, black marketing, terror financing, banking and capital market guidelines and so on.

5.3.1 United States of America

The federal government of the United States of America (USA) does not have any specific set of rules on digital gold or buying spot gold through mobile phone. However, all registered participants of the precious metal industry have to comply with the Bank Secrecy Act (BSA) standard for Anti-Money Laundering and Fraud protection in USA. This applies to digital gold service providers too.

For example, Onegold by APMEX and Sprott, offer their customers in the United States of America (USA) the option to buy gold and silver in digitised form from a host of markets including US, the United Kingdom (UK), Canada, and Switzerland. Both platforms thoroughly vet their customers as a part of their standard operation to prevent money laundering and frauds. In case a customer fails the vetting process, the platform reserves the right to lock such customer's account and return funds back to the customer's original account.

5.3.2 United Kingdom

Operations of digital gold platforms are not much different in UK than in US. Offering purchase, sale, and redemption of gold through digital gold platform on mobile applications in UK is an unregulated business at present. However, such digital gold businesses adopt best industry practices and follow the law of the land while conducting business.

For instance, Goldex a premiere app based gold trading platform, collects know your customer (KYC) details to verify the ingenuity of the customer from a centralised electronic database. Such KYC details are also updated from time to time and additional documents are asked on need basis. In addition, Goldex also ensure that the user data is protected under the EU General Data Protection Regulation (GDPR).

5.3.3 Australia

In Australia, even though the digital gold business is not regulated, the delivery of goods and services and the conduct of companies are governed by a strict regime of regulations which are enforced by a number of regulatory bodies. Such regulations by extension are also applicable to delivery of gold and governance of a registered business entity. Few of these are the Australian Property Law, the Australian Competition and Consumer Commission (ACCC), the Australian Securities and Investments Commission (ASIC), the Australian Privacy Act of 2008, and the Australian Transactions Reports and Analysis Centre (AUSTRAC) among others.

SendGold and GoldPass by the Pert Mint of Australia are two of the largest players in the digital gold segment in Australia. SendGold stores its gold with Brinks and is insured by Lloyds of London. All gold in the SendGold system is physically audited by Bureau Veritas that includes inspection of the vault facilities, verification of all bar counts and sizes, and random verification of bars for correct weights and serial numbers. On the other hand, all digital certificates issued by GoldPass are backed by physical gold at Perth Mint, with the weight and purity of every ounce guaranteed by the Government of Western Australia. Before opening accounts, both SendGold and GoldPass undertake KYC check for their prospective customers.

5.3.4 Malaysia

Digital gold is an unregulated entity in Malaysia.

For example, HelloGold, a digital gold platform registered in Malaysia, with operations in Malaysia and Thailand is currently an unregulated entity, as gold is not a regulated product by the Bank Negara Malaysia under the ambit of the Banking and Financial Institutions Act 1989. However, HelloGold on its part, emphasises on carrying out diligent KYC checks and takes steps to prevent money laundering. Maybank and CIMB (Commerce International Merchant Bankers) in Malaysia allow their customers to buy gold directly through their website and hold the physical gold in digitised form in designated accounts.

5.3.5 United Arab Emirates

Although, digital gold platforms are unregulated entities in the United Arab Emirate (UAE), banks providing digital gold services through their accounts are regulated by their respective banking regulations.

For example, Emirates NBD and Mashreq Bank in UAE offer their customers the services similar to digital gold platforms but are bound by their native banking regulations and other financial guidelines when it comes to operation.

5.3.6 Indonesia – A Pioneer in Digital Gold Regulation

Indonesia is probably the first country which has taken steps towards regulating digital gold. Media reports[14] suggest that, BAPPEBTI, the regulator for future

[14] Maulani, Anisa M.A., 28th November 2020, "Indonesia to regulate digital gold transaction by the end of the year" (accessed from https://e27.co/indonesia-to-regulate-digital-gold-transaction-by-the-end-of-the-year-20181128/ on 30-11-2020 at 21:49 hrs)

commodity trade in Indonesia, has decided to formulate policy for regulating digital gold in the country. The policy aims to regulate the entire trade of digital gold in the country so as to ensure consumer protection and will target transactions that are being paid through instalment schemes. The regulation will make procurement of the physical underlying mandatory before a trader offers to sell gold to a consumer. Further, seller will have to get permission from BAPPEBTI and transactions will have to be ensured by clearing house.

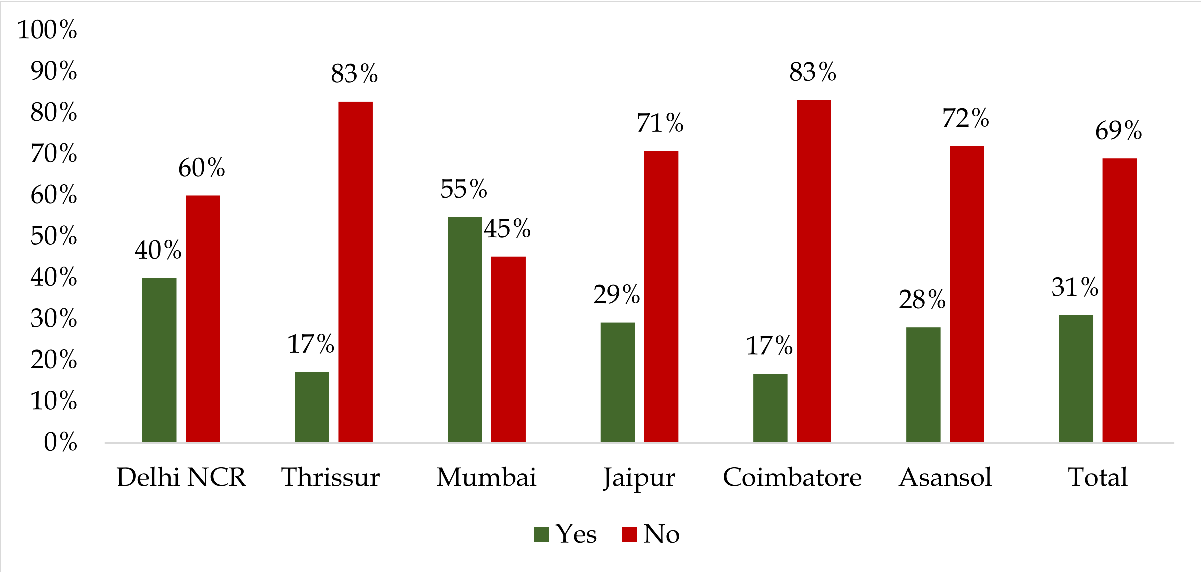
The decision to regulate the trade of digital gold by authorities in Indonesia is a clear evidence that Indonesia understands the potential of digital gold businesses and how digital gold can influence gold trade in times ahead. It is time that other countries also recognise the potential of digital gold and frame suitable policies to integrate it into the gold value chain.

6. Digital Gold in India

6.1 Background

Advent of technology, penetration of internet and a rising number of smartphone users in India had revolutionised the Indian e-commerce market in the past. With time, online shoppers have gained the confidence to look ahead of mere FMCG products and small goods. With online investment and digital payment gaining traction, online shoppers and casual investors have turned their focus on gold. The concept of digital gold was introduced in India around 2017 and has now become popular with both seasoned investors and casual buyers. Since its inception, digital gold has created further awareness on quality and pricing through a transparent and user friendly interface. Figure 6.1 shows that 31 percent from a sample of 1500 of gold buyers responded that they knew that they can buy gold through phone for as low as one rupee. The percentage were distinctly high among respondents from Delhi and Mumbai, where 40 percent and 55 percent responded to have known this. Clearly geography and urbanization has had a greater impact on this awareness.

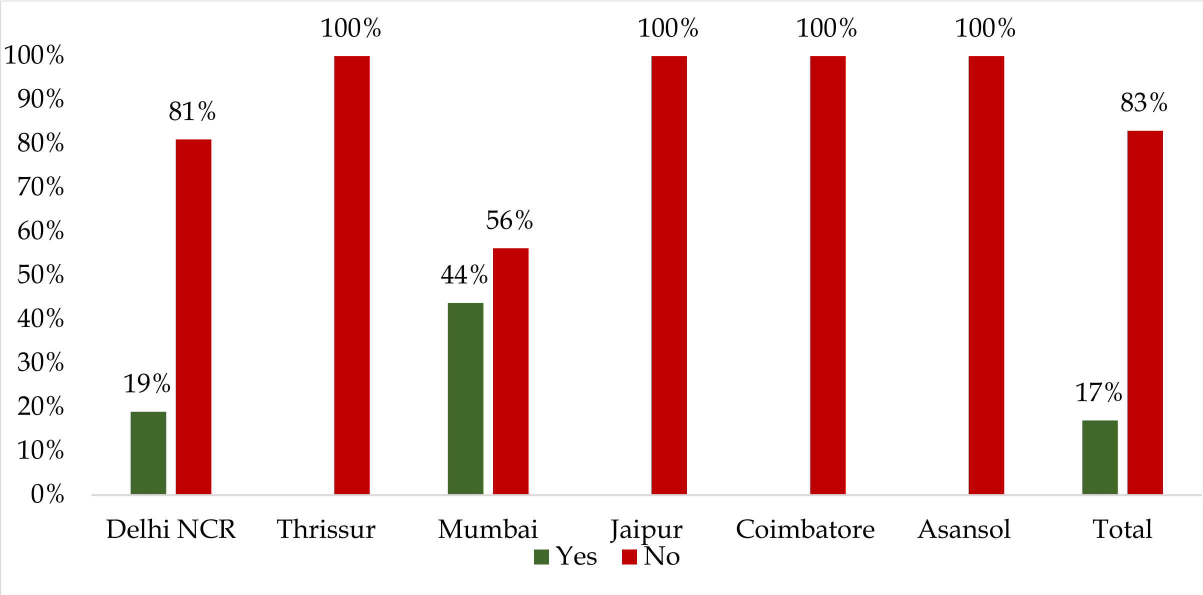
Figure 6.1 Do you know that you can buy gold through your phone for as low as INR 1?



N = 1500 (Delhi NCR = 250, Asansol = 250, Coimbatore = 250, Thrissur = 250, Mumbai = 250, Jaipur = 250)
Source: PIF- BRIEF Survey

Further, of 465 respondents who knew of digital gold, 17 percent responded to have actually bought gold through digital platforms (Figure 6.2)

Figure 6.2 If yes, have you ever bought gold through your phone?

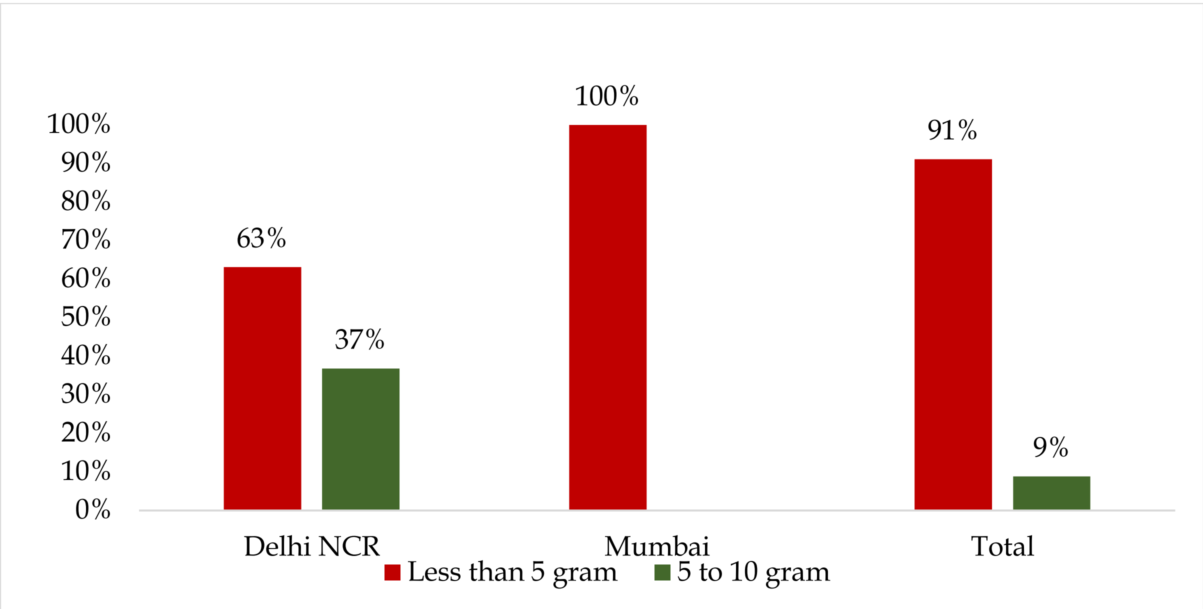


N = 465 (Delhi NCR = 100, Asansol = 70, Coimbatore = 42, Thrissur = 43, Mumbai = 137, Jaipur = 73)

Source: PIF- BRIEF Survey

It is interesting to note that digital gold has been successful in conveying its importance to buyers as an instrument of small saving. This is evident from our survey where 91 percent digital gold buyers have bought gold for less than 5g through digital gold (Figure 6.3)

Figure 6.3 How much quantity of the gold you bought last time?

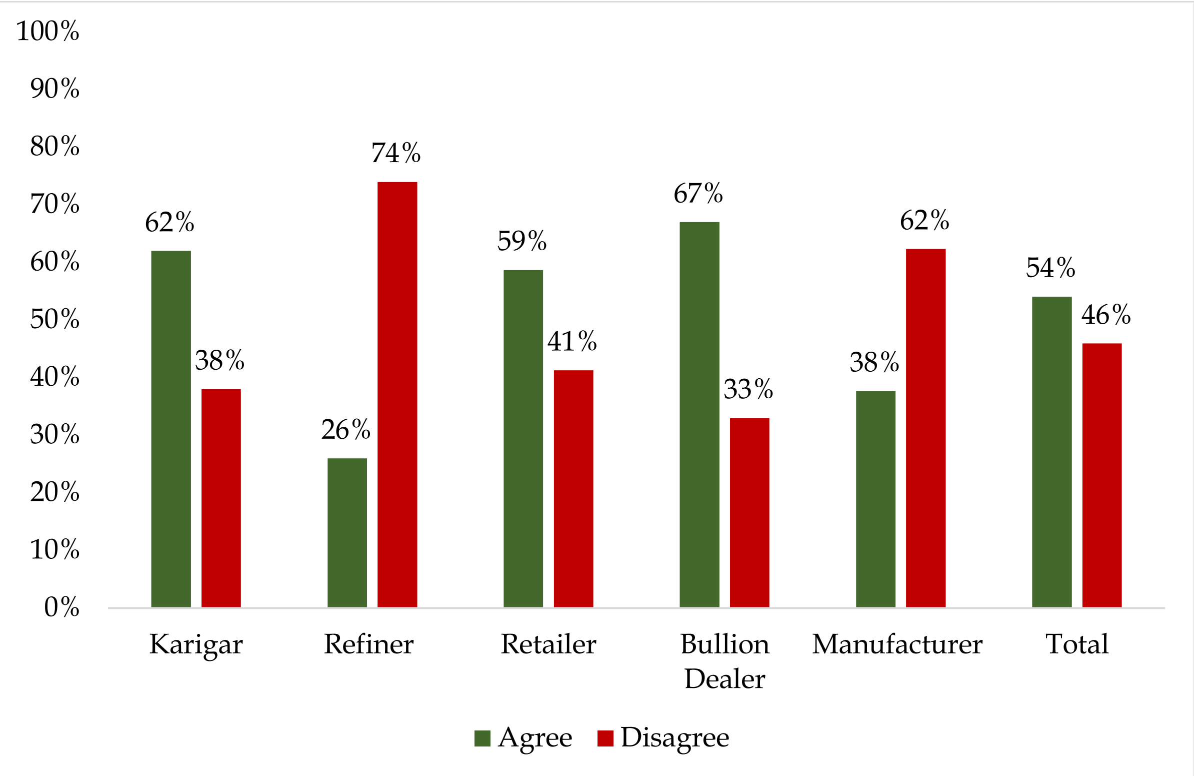


N = 79 (Delhi NCR = 19, Mumbai = 60)

Source: PIF- BRIEF Survey

It should be noted that digital gold was introduced in India at a time when millennials, mostly in urban geographies, had been shying away from investing in the yellow metal, mainly due to a host of risks that they associate with gold. Some of these risks are questionable purity, opaque financial dealings, storage, and handling charges. Most importantly, gold holding is often associated with black money and hence an unknown fear of "taxman knocking on the door" exists. Digital gold was able to put an end to most of these fears. Mandatory KYC check for enrolling customer, transparent financial dealings, assurance of purity, and zero storage charge were enough to make digital gold popular among small savers. Moreover, digital gold can be bought and sold 24x7 at the prevalent market rate from the comfort of home, making the casual buyer to simply opt for digital gold over visit to the family jeweller. Even the traditional jewellery community agrees that the digital gold has revived the lost trust over gold among millennials. PIF survey concludes that 54 per cent respondents in a survey of 1500 jewellers from different jewellery trade responded that more and more millennials are opting for digital gold over coins and jewellery now in India (figure 6.4).

Figure 6.4 Millennial (young Customer) are more prone to buying digital gold than buying coins and jewellery



N = 1500 (Karigar= 50, Refiner = 50, Retailer= 1000, Bullion Dealer = 100, Manufacturer = 300)
Source: PIF- BRIEF Survey

It is not surprising that in less than four years from its time of inception, an estimated 5-8 tonne gold has been sold through digital gold with close to 80mn digital gold account-holders which is growing at a steady pace. In 2020, an estimated 3-5 tonne of gold has been bought through digital gold in India. The digital gold platforms hold almost 2 tonne gold as underlying at present.

Quite similar to most other countries, digital gold platforms in India remain unregulated till day. Digital gold platforms are not registered as financial institutions and hence do not come under the ambit of the Reserve Bank of India (RBI) or the Securities Exchange Board of India (SEBI). Naturally, most banks and regulated financial institutions are apprehensive to get into commercial agreements with such entities. Moreover, absence of regulations are bound to attract fly by night operators to start operation in the digital gold space, which puts the nascent sector and the customers at risk.

One of the main reason for digital gold platforms being unregulated is that it is a novel product and a relatively recent one at that. Furthermore, since all such entities are registered differently, either as a private limited company or a single brand retail outlet, and hence cannot be brought under a single regulator with uniform guidelines. This said, most of the digital gold platform have secured no objection certificates (NOCs) from requisite regulators and policymakers prior to commencing their operation. All digital gold platforms in India are also known to follow basic Know Your Customer (KYC) norms and undertake KYC checks under their own volition before a customer starts purchasing gold through these platforms. This helps in enhancing transparency in dealing, making digital gold an absolutely safe investment product.

Most digital gold platform involves four common entities in the entire process apart from the customer. In case of redemption, this process is supported by one or more additional entities. These entities are as follows.

(a) Front end facilitator
(b) Digital gold platform
(c) Vault
(d) Trustee
(e) Logistic company
(f) Insurance company

The front end facilitator is typically a payment app or a bank's website, or any third party financial institution offering financial products that has tied up with a digital gold platform. Alternatively, most digital gold platforms also have their own application and website where a customer can log in to make a purchase directly. A customer can operate his digital gold account through a mobile phone or even desktop where he can choose options such as buying, selling or redeeming (taking delivery) of gold in terms of gram or rupee. The trustee performs similar function to that of a clearing house for stock or commodity exchanges. Finally, the gold is stored with a refinery and/or a vaulting company. In case of delivery, logistical support is provided by a specialised logistics company under due protection and care.

6.2 Digital Gold Operation in India

Digital gold platforms in India have been able to create a robust and secure structure for sale and purchase of gold. They offer 24 karat, 995 and 999 pure gold and offer for as low as one rupee. It should be noted that the customer is charged for minting of such coins/bars in case of delivery. Most platforms even allows to set up monthly systematic investment plans (SIPs) on their platform.

At present, all digital gold platforms in India follow strict know-your-customer (KYC) norms and it is mandatory to submit KYC documents before purchasing digital gold. Some platforms insists on submitting digital copies of permanent account number (PAN) card for buying gold above certain amount. This helps in enhancing transparency in dealing, making digital gold an absolutely safe investment product.

A digital gold customer logs onto a front-end facilitator (a fintech platform) tied up with the digital gold seller/s, chooses the seller of his/her choice, selects the amount of gold either in monetary terms or in weight of gold, and then can choose to pay by the preferred mode of digital payment. It should be noted that one of the digital gold platforms also allows for customers to pay through cash which is collected by nominated agents of the platform from the customer personally with due KYC undertaken for amounts over INR 50,000. Price for digital gold (buy-sell quotes) is usually published by the platform and is typically derived from the wholesale market rate. The platform adds a commission over and above the market rate, which is done to cover its operating cost such as cost of insurance, custodian fee, payment gateway among others. Taxes as applicable, is added to the final price.

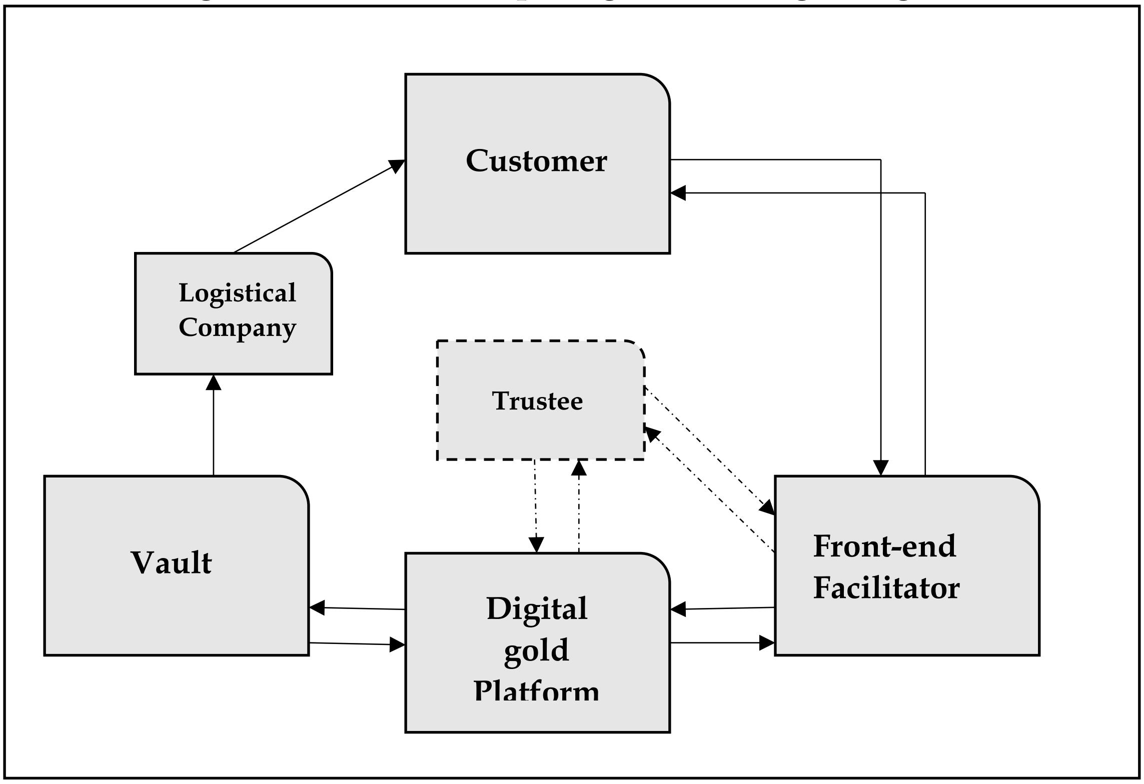
On purchase, the digital gold platform will credit an equivalent amount of gold (which can also be in fractions of grams) into the customer's digital gold account. Correspondingly an equal amount of gold is deposited with an authorised vault which acts as the custodian. Further a digital invoice is sent to the customer through email. The entire operation is monitored by a trustee who is responsible for overseeing the operation, maintaining transparency, and validating transactions in the process. The role of trustee may vary from simply monitoring the process to approving fund transfer to the digital gold platform on depositing gold into customer's account. The trustee oversees and ensures that the equal amount of gold is deposited into the customer’s account, safekeeping of the gold, and reimbursement of gold or cash to the customer in time of withdrawal. Usually, online statements are also available for download in the transaction history. Monthly/quarterly/half yearly/ annual statements of account are usually sent to all customers as per company policy of the digital gold platform.

In case of sale of gold, the customer can access the live bid ask quote as per the domestic market rate and sell the amount of gold in parts or whole. The customer chooses the amount of gold he/she wants to sell in terms of weight or monetary value, chooses the bank in which he/she wants the money to be credited. An equivalent amount of gold, as sold by the customer, is reduced from the physical stock in the vault by the digital gold platform. The monetary amount from the sale of gold is transferred to the bank account of the customer within two to three working days as per the company policy. No Goods and Services Tax (GST) is applied on the sale of gold from customer’s account. Similar to buying, the trustee overlooks the entire proceeding till the customer gets the money in his/her account.

In case, the customer wants to redeem and get physical gold delivered, the customer chooses the amount in weight (usually in multiples of 0.5gm or 1gm). Usually, the customer has the option of ordering coin from different issuers of coins (refineries) that the digital gold platform has tied up with. The delivery charges for the coin/s has to be paid by the customer in advance to take delivery. Such charges may include logistics fee, insurance charges for transit, and minting charges among others. The delivery of coin is typically undertaken by a premium logistics company and is insured till the coin is delivered to the customer’s preferred address. As usual, the trustee looks after the entire delivery.

A flow chart depicting the flow of gold in digital gold operation is given below.

Figure 6.5 Flowchart Depicting the Working of Digital Gold



6.3 Advantages and Disadvantages of Digital Gold

Like every other investment product, digital gold too has its own advantage and its drawbacks even though these advantages and drawbacks may not be applicable to all investors. Few of such qualities are as mentioned below.

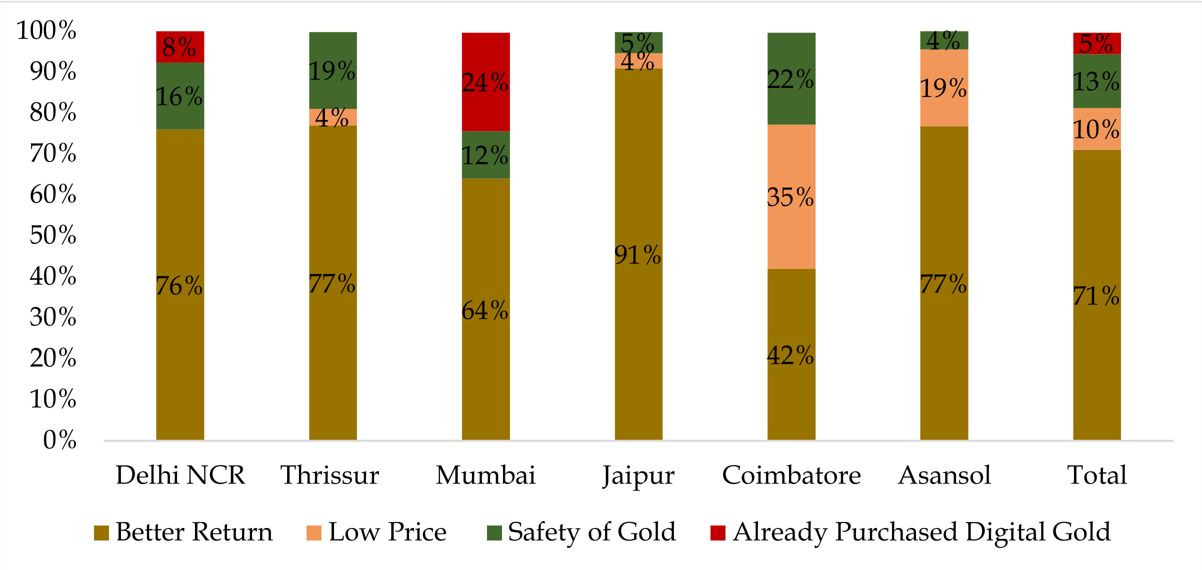
a. Unlike physical gold, digital gold has a uniform rate throughout the country. This said, digital gold commands a premium market rate which is typically above wholesale gold price in the country. Moreover, sale and purchase of physical gold is instantaneous and can be undertaken 24x7 from the comfort of one's home. It can be even gifted and transferred to another user/customer.
b. Digital gold is assured 24k gold usually of 995 or 999 purity. On the other hand determining the quality and purity of physical gold is always challenging.
c. Digital gold can be bought for as low as one rupee in India. This helps small investors to save in digital gold on a daily, weekly or monthly basis by investing very small amount which is nearly impossible in case of physical gold. Moreover, digital gold allows investors the option of SIPs which allows investors to plan their gold purchase better.
d. Sale of 24k gold is usually challenging in case of physical gold. On most occasion, these had to be sold to jewellers who would rather exchange 24k gold for jewellery which in turn results in loss of value as converting gold to jewellery involves making charges. Even gold purchased from one jeweller

may not fetch same price when sold to another jeweller. Moreover, in case a customer wishes to exchange the gold for cash, he has to sell it at a considerably less value making it a loss making proposition, especially at times of emergencies. Digital gold has the benefit of realising the true sale value of gold in a transparent manner.

e. Digital gold has the unique advantage of being backed by physical gold but absolving the customers of storage charges for a specific period of time, post which a nominal fee is charged. On the other hand, physical gold involves storage charges and there always lies the fear of theft.

When asked what would induce gold investors to purchase digital gold, most investors responded that better profit is what they would expect. Apart from that, safety of gold and low price would be preferred if they are to start investing in digital gold.

Figure 6.6 What would incentivise you to start buying digital gold over physical gold?



N = 1500 (Delhi NCR = 250, Asansol = 250, Coimbatore = 250, Thrissur = 250, Mumbai = 250, Jaipur = 250)

Source: PIF- BRIEF Survey

7. Innovations in Gold Ecosystem

7.1 Background

The previous section of this report has dealt with the operational nuances and need for regulation of the digital gold space in India. This section will deal with how technology can be used to bring efficacy in the gold value chain and create a robust gold ecosystem in India. This section would specifically look at the scope to integrate digital gold into the gold value chain and brought under GMS, utilised to promote peer-to-peer (P2P) transfers and redeemed at jewellery stores. It will further explore the concept of interoperability among digital gold platforms. Finally, this section will look at possibilities of introducing block chain technology in the gold value chain to track and trace movement of gold and creating a fraud alert system in the gold value chain.

7.2 Integration of Digital Gold in the Gold Value Chain and GMS

Digital gold has become an integral part of the gold trade operation in India in the last few years. With more millennial buying gold through digital gold platforms, integration of digital gold with the gold value chain has become vital now. If regulated, digital gold can be an important link between banks, jewellers and gold buyers in India. Digital gold can play an active role in the gold monetisation scheme run by banks. Moreover, digital gold can ease the pressure of banks and importing agencies by allowing jewellers to source gold from them. This will also benefit digital gold buyers whose gold sits idle with digital gold platforms.

The Gold Monetisation Scheme (GMS) was launched in November 2015 to give an option to households to deposit their unused gold with banks and earn interest, and the banks accepting these deposits were to use the gold towards minting and sale of the Indian Gold Coin (IGC) and for lending to manufacturers and jewellers as the Gold Metal Loan (GML). The scheme has been met with limited success. As of 2018-19, the total amount of gold collected through GMS was 16.27 tonnes (Table 1), of which the majority has been because of voluntary contributions through temple trusts, who have been depositing gold from the time of the Gold Deposit Scheme (GDS). The retail response to the scheme has been lukewarm at best. Even amongst the retail investors, it has been the high net worth individuals who have contributed to GMS. Some of the reasons attributed to the poor success of GMS are the cumbersome process involved, the lack of sufficient marketing material and information on the public domain, the high cost and relatively low returns of implementing the product for banks, and the lack of credible avenues for utilisation of gold collected through GMS.

The gold monetisation drive will get a massive boost if digital gold is allowed into GMS. Currently, close to 2 tonnes of gold is lying idle with refineries which can be brought under GMS. However, banks are not allowed to accept digital gold under GMS as digital gold is currently a non-regulated entity. In the past when a large private sector bank had tried to access digital gold for GMS, RBI had come down heavily citing technicalities in the process. Bringing digital gold under GMS will be the easiest way to mobilise idle gold. Since, GMS involves bank tying up with refineries and considering the fact that all underlying physical gold of digital gold are held by the same refineries, it will only involve book entry instead of real physical movement of gold. The customers of digital gold platforms can be asked to consider to opt for moving their idle gold into GMS accounts and earn interest from it. In fact, auto sweep in facilities may be considered for digital gold accounts, which will automatically transfer the a portion of gold above a certain limit, as pre-determined by the customer, much like a customer savings account and fixed account in a bank. . While most people are unwilling to part with jewellery due to their sentimental value, they could be easily convinced to allot digital gold which is purely for investment purpose and lacks the general touch and feel effect among consumers. If digital gold is brought under the regulatory ambit, even banks can take advantage of this programme and start with gold savings account (GSA). Hence it is only natural that digital gold be brought under regulatory ambit and allowed in GMS accumulation. Regulating digital gold will further help in allowing banks to start gold savings account and further allowing fixed deposit from such accounts into GMS.

7.3 Promoting Peer-to-Peer (P2P) Lending through Digital Gold Platforms

In April 2016, the Financial Conduct Authority (FCA) in UK has authorised P2P platforms to host Innovative Finance Individual Savings Accounts (IFISAs) so that retail lenders can earn tax free income from P2P lending. This paved the way to accept precious metal as collateral for P2P lending in UK. Such lending are considered as good as secured lending. The concept of collateralising precious metal is similar to the 'Loan against Gold Jewellery' (LAGJ) programme run by banks and non-banking financial companies (NBFCs) in India. Recently, several private players have started offering LAGJ online although, the collection of the jewellery is undertaken at home.
To continue market innovation and new product development, RBI should consider replicating the FCA initiatives by extending LAGJ to be offered on P2P platform. Not only that, this model should further extended to allow Gold (Metal) Loan (GML) on P2P platforms in India. Small savers accumulating digital gold over a period of time can transfer gold to jewellers to make jewellery as and when they feel the need. If digital gold platforms are allowed to host P2P lending, they can further lend gold (metal) to jewellers over P2P platforms. This is will ease the pressure on banks for

lending gold to jewellers as raw material. In fact, this will help in tapping the huge gold deposit lying in household as more people would be willing to utilise the idle gold. The jewellers can repay back gold the same way how they repay back banks. In fact to ease the burden on import, digital gold platforms may be allowed to buy back gold from local refiners adopting India Good Delivery Standard to replenish the lender's account.

However, this may need few regulatory tweaking to the Master Directions issued by RBI on P2P lending by NBFCs in November 2017. RBI master directions have clearly stated that these directives are only applicable to NBFCs. First, for digital gold platforms to undertake P2P lending, they need to be designated as financial entities and RBI need to designate such financial entities as hosts (for P2P lending) apart from NBFCs into the directive. Second, P2P lending has to be undertaken only in cash, but for both LAGJ and GML on P2P platforms, RBI needs to allow asset mortgage/lending of precious metal on such platforms.

If this succeed, digital gold can successfully achieve what the GMS failed to achieve. This will also enhance transparency in the supply and credit chain.

7.4 Redeeming Digital Gold at Jewellery Stores

In India, gold is typically bought keeping future usage in mind. On most instances, accumulated gold is used later for making jewellery. Currently, gold buyers would purchase coins from banks or jewellers and convert them to jewellery when needed. This needs the consumer (gold buyer) to physically take the coins to a jeweller for this purpose. Moreover, certain jewellers would not accept 24k coins from another jeweller citing impurity and low caratage. This problem may arise even if the coin is hallmarked. The customer would have already lost a part of the value of gold in the storage cost of coins, undervaluing the coin would only pinch his pocket. On the other hand, if jewellers accept gold directly from digital gold platforms, they will have the assurance of receiving 24k pure gold backed by proper paper works and packaging. Moreover, the customer will also save on the expense of storage cost. The transfer will be seamless without the need for the customer to actually visit the jewellery store and will be backed by digital footprints.

7.5 Interoperability in Digital Gold

Digital gold platforms should contemplate creating interoperable platforms which enable customers to operate between two platforms and transfer gold from one platform to another similar to bank accounts. Customers should be also given the choice to transfer his or her gold holding from one platform to another in case he/she is not entirely satisfied with the offered services on one particular platform.

7.6 Scope of Technology in Gold Ecosystem

Technology plays an important role in developing financial markets including gold trade. While the Indian gold ecosystem has seen several innovations over the years in field of purity determination, price discovery (through exchanges), and, recently trade of gold (through digital platforms), little has been done to actually ensure tracking and tracing of gold in the gold value chain. Closely related to this, fraud alert system in the gold value chain also remains underdeveloped.

7.6.1 Scope of Blockchain Technology in the Gold Value Chain

Gold circulation in India is usually transparent till the time it stays under the ambit of formal financial system, post which, it is lost. To put it simply, gold movement can be traced till the time it stays within banks, exchanges and other regulated entities and disappears as soon as it is out of the formal financial market. It is not uncommon to buy gold in India without any formal paperwork or any digital footprint. This has led to a rise in use of gold for circulating black money and other illegal transactions. Such dealings not only cost the government exchequer but also help in terror financing, encourage smuggling and illegal activities in India and abroad. The government on its part has been trying to arrest such dealings by trying to track businesses through policy measures including GST however, due to the informal nature of the business and its geographical spread has had limited success. What has not been tried yet is the use of technology for tracking and tracing mechanism.

Blockchain technology is perhaps best known for being the platform used for dealing in cryptocurrency. However, unknown to most people is the fact that blockchain technology as a platform has many other uses apart from just dealing in cryptocurrency. These include safeguarding personal identity, safe sharing of medical data, tracking food safety, protecting copyright and tracking music rights, keeping track of title transfers in real estate and automobiles, enabling digital voting, and most importantly, tracking value chain. As per the website of Blockchain Council[15], several countries such as Australia, China, Japan, UAE, Malta, Switzerland, USA, Estonia, UK and Singapore among other countries have been using blockchain technology for tracking and tracing different value chains.

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[15] *https://www.blockchain-council.org/blockchain/top-10-countries-leading-blockchain-technology-in-the-world/ (accessed on 8th December 2020, 13:00hr)*

Using blockchain technology in the gold value chain can help in tracking and tracing a piece of gold till it reaches the last buyer. In fact, this can actually help in tracing a piece of gold even if it is melted and re-casted or made in a new piece of jewellery. The blockchain platform will use coding techniques where every dore will be tracked from its place of origin and its movement will be recorded onto to a database every time it changes hand. Even if the gold is melted and converted to a piece of jewellery or broken into smaller pieces, the tracking mechanism will record the same with newer QR codes being assigned to them but linked to the old dore. They will be recorded in the same data block with detailed descriptions of the new products and can be traced from their very origin. However, this needs all stakeholders including consumers coming on board to make the process a success. Implementing blockchain technology in the gold value chain in India can enhance transparency in dealing, maintain quality, and reduce illegal transactions.

7.6.2 Tamper Proof Packaging

Quality control and maintaining gold standard is perhaps one of the biggest challenges in the Indian gold industry. This is due to absence of proper anti-counterfeiting mechanism, lack of technical know-how to distinguish fake/under-valued gold from pure or standard quality gold, and mostly due to ignorance among gold buyers. To address this, the government along with the gems and jewellery industry have been trying to educate buyers on the dos and don'ts of buying gold. While technical know-how comes with years of experience, it is imperative that a robust anti-counterfeiting mechanism is put in place.

In November 2020, the Central Bank of Uzbekistan has launched gold bars (of 999.9 fineness in denomination of 5g, 10g, 20g and 50g) to be sold by commercial banks in a special three layer protective packaging[16]. The packaging which has a unique serial number has the following three layers of protection to prevent tampering of the gold inside.

[16] https://cbu.uz/en/banknotes-coins/gold-bars/list/ *(accessed on 8th December 2020, 13:00hr)*

a. A QR code that helps in real time digital authentication of the product
b. Cryptoprint that appears on the packaging if the packet is being opened
c. A security membrane that changes colour as soon as the package is opened

The India Gold Coin (IGC) launched in 2015 was supposed to be the defacto sovereign gold coin (backed by the Government of India's trust) with tamper proof packaging that would have been accepted as it is (if kept in the tamper proof packaging) as collateral or as deposit by banks and other financial institutions. It was targeted as an investment rather than as a raw material. However, our recent examination of the GMS brought forth that these coins are destructed during deposits to be re-minted into the same coin. The reason shown by the relevant stakeholders were that unless destroyed, the true value of the gold couldn't be determined as the tamperproof packaging could not be trusted even if backed by proper documentation. This is sheer wastage of time, money and effort. In order to create a secured tamper proof packaging and reduce such wastage, the Government of India should look to replicate such best practices into the gold ecosystem. Further, gold businesses especially jewellers minting coins should also try to replicate this technology so as to revive the fast eroding trust among gold buyers in India and abroad.

Creating a secured and full proof packaging system is sure to enhance quality control, ease working of government backed gold initiatives, and, generate trust in India produced gold.

8. Recommendations

a. Reduce import duty on gold
b. PMLA - cash transactions above INR 50000 to be compulsorily KYC supported, similar to banks. If any other means such as cheque, daft or digital payments (including cards, internet banking and wallets) are used, KYC check is not needed.
c. Salaries in cash to be discouraged. Salaries over certain limit (see labour code) to be made in bank accounts. Maintaining payroll in cash is to be discouraged.
d. MDR – Zero MDR for debit card for G&J sector. Credit card can have flat MDR above certain amount of transactions.
e. EMI option for buying gold to be explored.
f. Digital payment should be encouraged for trade to trade transactions.
g. Introduce blockchain technology in the gold value chain for track and trace mechanism
h. Replicate the three layer security packaging model adopted by Central Bank of Uzbekistan for issuing IGC
i. Start Gold Saving Account (GSA) in banks
j. Digital gold can play an important role in bringing transparency and confidence to gold businesses in India. However, in absence of regulation and policy, digital gold has been kept out of formal operations including that of banking.
k. Regulate digital gold – process, infrastructure, working
l. Sandbox model for market place cum digital platform
m. Digital gold in GMS – 1g of digital gold to be accepted under GMS
n. Allow P2P lending on digital gold platforms
o. Interoperability among digital platforms

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