

# Does Demography Influence Investment Option in Gold Deposits – Empirical Study

**Ms. Kanchan S. Jatkar**

*Research Scholar, VAMNICOM, Pune, Maharashtra, India*

**Dr. K. K. Tripathy**

*Research Guide and Director, VAMNICOM, Pune, Maharashtra, India*

## ABSTRACT

India is one of the chief consumer of gold and has deep historical connection with yellow metal. The continuous demand for yellow metal is satisfied by importing gold. Because traditionally Indian frequently purchases on gold and lock it in to bank locker or in the cupboards. The continuous import of gold is one of the main reason of creating burden on current account deficit (CAD). For curbing gold import and mobilizing households and institutional gold, gold deposit were introduced in India. For any investment avenue investors play a vital role. Thus, their awareness and investment in such options is very much important for the success of the schemes. However, the alertness of gold deposit scheme (GDS) that is sovereign gold bond (SGB) and gold monetization scheme (GMS) found less among Puneites. The demographic factors plays vital role in investments. Factors like age, gender, education found no association with awareness whereas the occupation and income has association with awareness. Hence, for the success of this scheme public awareness need to be increased. Necessary steps and effective marketing strategies are required to educate public about the advantages and benefits of GDS investments.

**Keywords:** Gold, Gold Deposit Scheme, Gold Monetization Scheme, Sovereign Bond Scheme, Awareness, Investments.

## 1. INTRODUCTION

Gold is not only part of investment for Indians; it is tradition, culture that is attached with sentiments and emotions. Without gold the celebration of auspicious days and events are incomplete in India. The fascination of yellow shiny metal is demanding continuous gold by consumer. India is second biggest consumer of gold and import approx. 900 to 1000 tonnes glossy metal every year. The gold production and mining are almost negligible in India. The increasing price of dollar and import is creating pressure on balance of payment. It is estimated that in India near about 24,000 tonnes of gold is under the pillow of households and institutions. For curbing import Indian government has announced gold deposit scheme by honourable Prime Minister Mr. Narendra Modi in the year 2015. In present scenario, sovereign gold bond is best alternative for physical gold that is in the form of paper gold with respect to purity, security, transparency, returns etc. whereas gold monetisation scheme collect investors physical gold, for mobilizing household gold and paying annual interest to investors on their deposit, rather than paying charges to bank lockers. The study was attempted to find out the general awareness of GDS and its association with demographic factor.

## 2. REVIEW OF LITERATURE

Dr.Hem Shweta Rathore, (April 2017) - analysed the investors attitude towards physical gold and sovereign gold bonds with the help of structured questionnaire. A sample size of 200 investors was considered. The factors influencing for physical gold investment and sovereign gold bond was tested using chi-square test. The study found moderate awareness of SGB and except marital status, all other factors like age, gender, education, income have significant influence on investment decision. Anu Anna Ninan (July 2018) - have studied sovereign gold bond scheme as an alternative to physical gold investment, its awareness, level of investments and its reasons. A sample of 300 were considered from government employees in Thiruvananthapuram, Kerala using structured questionnaire. The study found very low awareness of SGBS that was 24.7% only. Prof. Rashmi Chaudhary (CA) & Dr. Priti Bakshi (2016) - made comparison of Sovereign gold bond scheme and gold monetization scheme as an investment option. The study concluded by saying that due to social factors associated with the scheme

its gaining more acceptance. Jayanthi M., Poongothai T. & Preeti R. (2014) - analysed most preferred gold investment option and factors affecting toward investment decision. The study revealed that majority of investors would like to invest in physical gold (jewelry, ornaments) rather than gold coins, and paper gold. The study found that liquidity, transparency, safety, convenience and affordability are main and reliable factors of paper gold over ordinary gold. However, due to traditional values and prestige physical gold is more preferred than paper gold in India.

### 3. RESEARCH METHODOLOGY

#### Objective of the Study

The present research study is conducted to throw a light on awareness about gold deposit scheme that is gold monetization scheme and sovereign gold bond scheme among investors of Pune, India.

1. To study the awareness of gold deposit scheme among people of Pune.
2. To study the association between demographic factors and the awareness towards gold deposit scheme.

#### Hypotheses of the Study

1. There is significant association between demographic factors and awareness about gold deposit schemes.

#### Data Collection & Methodology

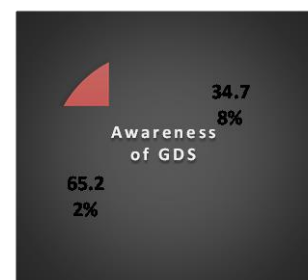
To understand the level of awareness of GDS and its association with demographic factors like age, gender, education, occupation and monthly income the study is attempted with the help of primary data and secondary data to analysis the level of awareness and its association with demographic factors. Primary data was collected using structured questionnaire from 253 retail gold investors from Pune region by using simple random sampling technique whereas secondary data were collected from reports, websites, articles, journals, research articles, online data source, etc. Percent analysis and chi-square test is used to analyses the primary data. Mean and standard deviation of investors perception towards various variable considered for investment in gold deposit scheme were calculated. This paper is planned to understand the level of awareness about GDS among Pune residents. This research will help government, financial institution, research scholars and students to understand GDS awareness in India.

### 4. RESULTS AND DISCUSSION

The responses of investors have been presented below-

**Table (1): Awareness about GDS among Pune residents**

Awareness of Gold monetization scheme or sovereign gold bond scheme	Responses
Yes	88
No	165
Total	253



(Source : Primary Data)

Figure 1. Awareness about GDS

The data shows that 253 sample size was considered for final calculation. It was seen that 88 (33.78%) people were aware about GDS while 165 (65.22%) were unaware.

Section 1. Percentage analysis and Chi-square test to check association of awareness of gold deposit scheme with demographic factors.

Table (2): Investors GDS awareness association with gender

Gender	Awareness		Total
	No	Yes	
Female	53	25	78
%	20.9	9.9	30.8
Male	112	63	175
%	44.3	24.9	69.2
Total	165	88	253
%	65.2	34.8	100

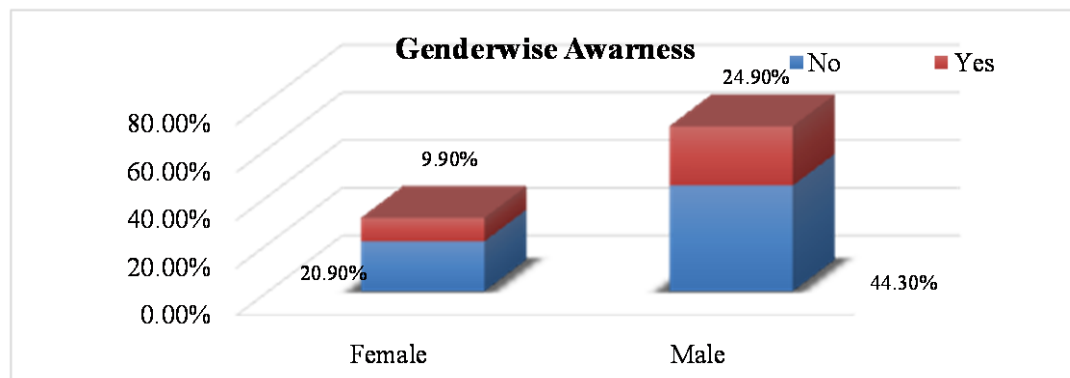


Figure 2. Percentage analysis of gender wise association with GDS awareness

Male respondents (n=175; 69.2%) were more than female respondents (n=78; 30.8%). Awareness level for GDS was high in males (n=63; 24.9%) than females (n=25; 9.9%)

Table (3): Chi-square test for gender wise association with GDS awareness

O	E	(O-E)	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
63	60.869	2.13	4.54	0.0748
25	27.130	-2.13	4.54	0.1673
112	114.130	-2.13	4.54	0.0397
53	50.869	2.13	4.54	0.0892
		0	Total	0.371

Degree of freedom –

$$v=(r-1)(c-1)$$

$$v=(2-1)(2-1)$$

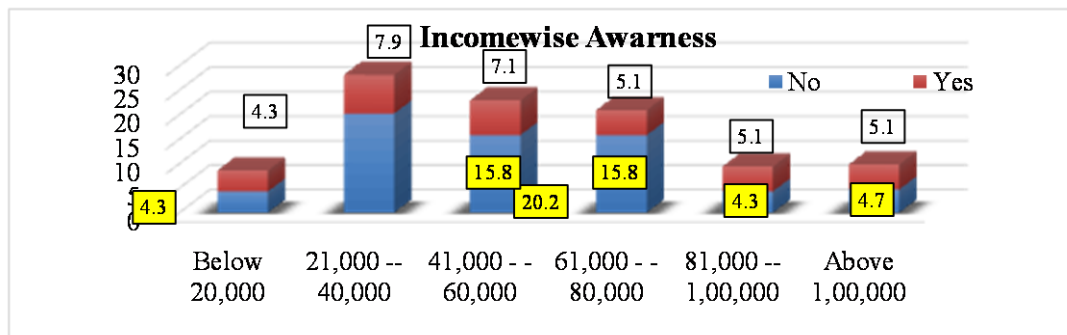
$$v= 1$$

Degree of freedom at 5% level of significance is 3.841 and chi-square value is 0.371 which is less than critical value and P value also 0.543 that is greater than 0.05 than calculated value.

The test suggests that the demographic factors gender is not having significant association with awareness of gold deposit scheme so, null hypothesis is accepted.

**Table (4): Investors GDS awareness association with income**

Monthly Income	Awareness		Total
	No	Yes	
Below 20,000	11	11	22
%	4.3	4.3	8.7
21,000 - 40,000	51	20	71
%	20.2	7.9	28.1
41,000 - 60,000	40	18	58
%	15.8	7.1	22.9
61,000 - 80,000	40	13	53
%	15.8	5.1	20.9
81,000 - 1,00,000	11	13	24
%	4.3	5.1	9.5
Above 1,00,000	12	13	25
%	4.7	5.1	9.9
<b>Total</b>	165	88	253
%	65.2	34.8	100



**Figure 3. Percentage analysis of income wise association with GDS awareness**

Income group of 21,000-40,000 had higher respondents (n=71; 28.1%), whereas income groups below 20,000, 41,000-60,000, 61,000-80,000, 81,000-1,00,000 and above 1,00,000 had 22 (8.7%), 58 (22.9%), 53 (20.9%), 24 (9.5%), 25 (9.9%) respondents respectively.

Higher aware was observed in income group 21,000-40,000 (n=20; 7.9%) in comparison with other income groups.

**Table (5): Chi-square test for income wise association with GDS awareness**

O	E	(O-E)	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
11	7.65	3.35	11.21	1.4647
20	24.70	-4.70	22.05	0.8928
18	20.17	-2.17	4.73	0.2343
13	18.43	-5.43	29.54	1.6022
13	8.35	4.65	21.64	2.5926
13	8.70	4.30	18.53	2.1307
11	14.35	-3.35	11.21	0.7812
51	46.30	4.70	22.05	0.4762
40	37.83	2.17	4.73	0.1249
40	34.57	5.43	29.54	0.8545
11	15.65	-4.65	21.64	1.3827
12	16.30	-4.30	18.53	1.1363
		0.00	Total	13.6732

**Degree of freedom –**

$$v=(r-1)(c-1)$$

$$v=(6-1)(2-1)$$

$$v= 5$$

Degree of freedom at 5% level of significance is 11.07 and chi-square is 13.673 which is greater than critical value and p-value also 0.018 that is less than 0.05 than calculated value.

The test suggests that the demographic factors income is having significant association with awareness of gold deposit scheme so, null hypothesis fail to accept.

**Table (6): Investors GDS awareness association with age**

Age Group	Awareness		Total
	No	Yes	
25 - 34	75	41	116
%	29.6	16.2	45.8
35 - 44	42	26	68
%	16.6	10.3	26.9
45 - 54	39	19	58
%	15.4	7.5	22.9
above 55	9	2	11
%	3.6	0.8	4.3
Total	165	88	253
%	65.2	34.8	100

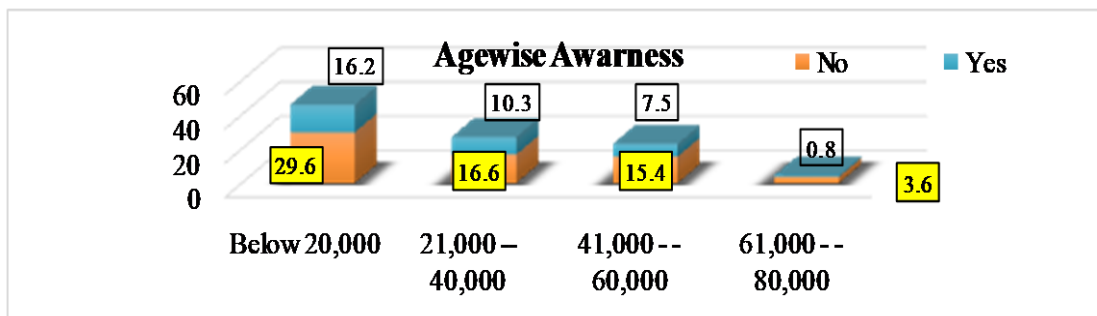


Figure 4. Percentage Analysis of age-wise association with GDS awareness

116 (45.8%) respondents were from 25-34 age group, 68(26.9%) were from 35-44 age group, 58(22.9%) from 45-44 age group and 11(4.3%) from above 55 age group respectively.

Higher level of awareness was seen in 25-34 age group with n=41 (16.2%) in comparison with other groups.

Table 7. Chi-square test for age wise association with GDS awareness

O	E	(O-E)	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
41	40.35	0.65	0.43	0.0105
26	23.65	2.35	5.51	0.2331
19	20.17	-1.17	1.38	0.0683
2	3.83	-1.83	3.33	0.8715
75	75.65	-0.65	0.43	0.0056
42	44.35	-2.35	5.51	0.1243
39	37.83	1.17	1.38	0.0364
9	7.17	1.83	3.33	0.4648
		0.00	Total	1.815

**Degree of freedom –**

$$v=(r-1)(c-1)$$

$$v=(4-1)(2-1)$$

$$v= 2$$

Degree of freedom at 5% level of significance is 7.82 and chi-square value is 1.815 which is less than critical value and P value also 0.612 that is greater than 0.05 than calculated value.

The test suggests that the demographic factor that is age, not having significant association with awareness of gold deposit scheme so, null hypothesis is accepted.

Table (8): Investors GDS awareness association with occupation

Occupation	Awareness		Total
	No	Yes	
Self Employed	18	28	46
%	7.1	11.1	18.2
Salaried	144	57	201

	%	56.9	22.5	79.4
House wife		3	3	6
	%	1.2	1.2	2.4
Total		165	88	253
	%	65.2	34.8	100

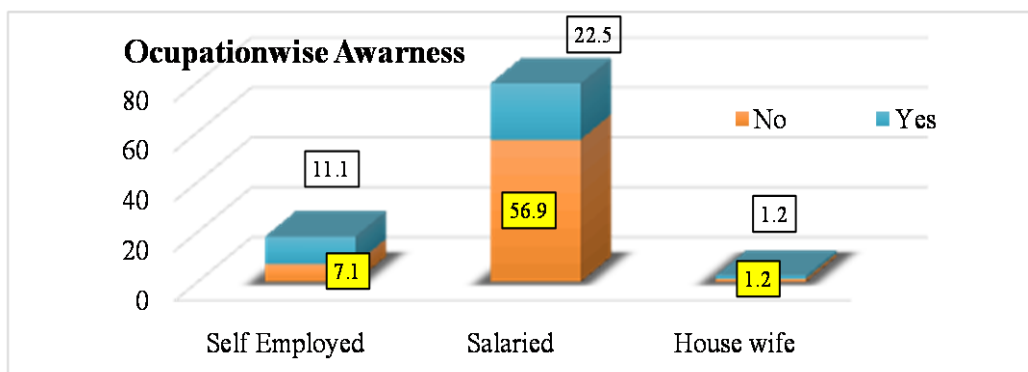


Figure 5. Percentage analysis of occupation wise association with GDS awareness

It was observed that most of the people were salaried (n=201; 79.4%) than self-employed (n=46; 18.2%) and housewife (n=6; 2.4%) respectively. The result shows that salaried people (n=57; 22.5%) were aware regarding GDS.

Table (9): Chi-square test for occupation wise association with GDS awareness

O	E	(O-E)	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
28	16.00	12.00	144.00	9.0000
57	69.91	-12.91	166.75	2.3851
3	2.09	0.91	0.83	0.3995
18	30.00	-12.00	144.00	4.8000
144	131.09	12.91	166.75	1.2720
3	3.91	-0.91	0.83	0.2130
		0.00	Total	18.070

**Degree of freedom –**

$$v=(r-1)(c-1)$$

$$v=(3-1)(2-1)$$

$$v= 2$$

Degree of freedom at 5% level of significance is 5.99 and chi-square is 18.070 which is greater than critical value and p-value also 0.000 that is less than 0.05 than calculated value.

The test suggests that the demographic factor occupation, having significant association with awareness of gold deposit scheme so, null hypothesis fail to accept.

Table (10): Investors GDS awareness association with education

Education	Awareness		Total
	No	Yes	
Less Than SSC	1	0	1
	%		
	0.4	0	0.4
SSC	5	6	11

	%	2	2.4	4.3
HSC		5	5	10
	%	2	2	4
Graduation		46	17	63
	%	18.2	6.7	24.9
Post-Graduation		102	53	155
	%	40.3	20.9	61.3
Ph.D.		6	7	13
	%	2.4	2.8	5.1
Total		165	88	253
	%	65.2	34.8	100

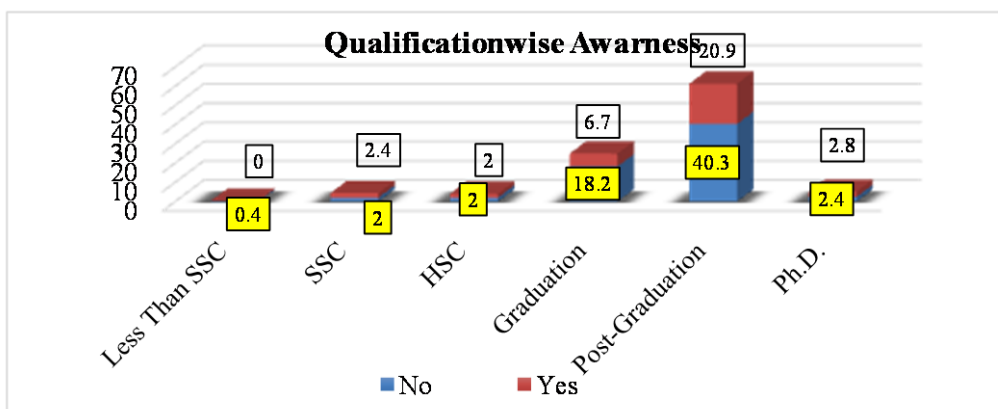


Figure 6. Percentage analysis of education wise association with GDS awareness

Respondents with post-graduate (n=155;61.3%) qualification were than less than SSC (n=1; 0.4%), SSC (n=11, 4.3%), HSC (n=10; 4%), Graduates (n=63;24.9%) and Ph.D. (n=13;5.1%) respectively.

Higher level of awareness was seen among post-graduates’ respondents (n=53; 20.9%) in comparison to others.

Table (11): Chi-square test for education wise association with GDS awareness

O	E	(O-E)	(O-E)2	(O-E)2/E
0	0.35	-0.35	0.12	0.3478
6	3.83	2.17	4.73	1.2352
5	3.48	1.52	2.32	0.6658
17	21.91	-4.91	24.14	1.1015
53	53.91	-0.91	0.83	0.0155
7	4.52	2.48	6.14	1.3583
1	0.65	0.35	0.12	0.1855
5	7.17	-2.17	4.73	0.6588
5	6.52	-1.52	2.32	0.3551
46	41.09	4.91	24.14	0.5875
102	101.09	0.91	0.83	0.0082
6	8.48	-2.48	6.14	0.7244
		0.00	Total	7.244

Degree of freedom –

$$v=(r-1)(c-1)$$

$$v=(6-1)(2-1)$$



$v=5$

Degree of freedom at 5% level of significance is 11.07 and chi-square value is 7.244 which is less than critical value and p-value also 0.203 that is greater than 0.05 than calculated value.

The test suggests that the demographic factor that is education of investors are not having significant association with awareness of gold deposit scheme so, null hypothesis is accepted.

**Table (12): Mean of overall awareness of respondents regarding various variables considered for investing in gold deposit scheme.**

Sr. No	Variables	N	(M) Mean	Std. Deviation
1	Return Potential	88	10.12	8.99
2	Liquidity	88	8.57	7.62
3	Simplicity	88	8.12	7.22
4	Transparency	88	8.57	7.62
5	Well Regulated	88	9.68	8.59
6	Flexibility	88	7.47	6.64

**Table (13): Demographic factors wise mean of awareness of respondents regarding various variables considered for investing in gold deposit scheme.**

Demographic Factor →	Age		Gender		Education		Occupation		Monthly Income	
	$\bar{x}$	$\sigma$	$\bar{x}$	$\sigma$	$\bar{x}$	$\sigma$	$\bar{x}$	$\sigma$	$\bar{x}$	$\sigma$
<b>Return Potential</b>	11.51	8.47	23.01	14.05	3.66	3.25	15.34	14.13	7.67	1.83
<b>Liquidity</b>	9.75	7.17	19.49	11.90	3.10	2.75	12.99	11.97	6.50	1.55
<b>Simplicity</b>	9.24	6.80	18.48	11.29	2.94	2.61	12.32	11.35	6.16	1.47
<b>Transparency</b>	9.75	7.17	19.49	11.90	3.10	2.75	12.99	11.97	6.50	1.55
<b>Well Regulated</b>	11.00	8.09	22.00	13.44	3.50	3.10	14.67	13.51	7.33	1.75
<b>Flexibility</b>	8.49	6.25	16.98	10.37	2.70	2.40	11.32	10.43	5.66	1.35

A low standard deviation shows that the data points tend to be very close to the mean and if standard deviation is high, it indicates that the data is spread out over a large range of values. Standard deviation of overall and demographic factors wise perception of respondents regarding various variables considered while investing in GDS is found very close to the mean.

## 5. FINDINGS

As we observe p-values and critical value at 5% level of significance, it suggests that demographic factors like age, gender and education of investors not having significant association with gold deposit scheme awareness. Whereas the factors like occupation and monthly income having significant association with among awareness about deposit scheme.

The study reveals that awareness of gold monetization scheme and sovereign gold scheme is not significantly associated with age, gender and education, however occupation and monthly income shows significant association. Gender differences in investment awareness have been reported by various studies. Males are always known as financial daredevils, here also the alertness of scheme among males is seen higher than females have no significant impact with GDS. Education specially post-graduation and graduation have positive impact on awareness. From the above statistics, it is observed that investors from age of 25 to 34 are more aware than other age group. The risk-taking ability and young generation always show positive correlation. This age group is known as 'golden age' group in investment point of view and they are always ready to take risk, by employing various financial instruments to park their funds. The golden age group respondents who are highly educated and with financially sound position are more alert and inclined towards GDS. Thus, the awareness factor regarding with reference to paper gold like GDS is low among the people of Pune.

## 6. CONCLUSION AND FUTURE PROSPECT OF THE STUDY

Indian financial landscape is very dynamic. In Indian marketplace, lots of investment options are available. In such environment, gold investment is one of the most favourite and very demanding investment option because of its liquidity, flexibility and simplicity. India already has recorded near about 24,000 tonnes of yellow metal under the below. The continues demand of gold is forcing the government for gold import and it is putting high burden on current account deficit. To restrain import of gold, gold deposit scheme 2015 was introduced in India. GDS is very efficient investment option with respect to purity, returns, transparency etc. than investment in materialistic gold. Nevertheless, the awareness about GDS is still low specially in Pune city. It has been observed that GDS has not been able to successfully mobilize enough gold. Gold deposited under GDS schemes are approximately 67.11 tonnes, which is 0.28% of total gold in India till 2017-18 which is not satisfactory. Hence, for the success of this scheme public awareness need to be increased. Necessary steps and effective marketing strategies are required to educate public about the advantages and benefits of GDS investment.

## REFERENCES

1. Kothari, C. R. (2004). Research methodology: Methods and techniques. New Age International
2. <http://internationaljournalcorner.com/index.php/theijbm/article/view/128460/89094>
3. [http://researchersworld.com/ijms/vol5/issue3\\_6/Paper\\_11.pdf](http://researchersworld.com/ijms/vol5/issue3_6/Paper_11.pdf)
4. <https://scholar.google.com/citations?user=tytH4EgAAAAJ&hl=en>
5. <https://web.ma.utexas.edu/users/davis/375/popecol/tables/chisq.html>
6. <https://www.gold.org/about-gold/gold-demand/geographical-diversity/india>

7. [https://www.researchgate.net/profile/Priti\\_Bakhshi/publication/320035026\\_The\\_Critical\\_Review\\_of\\_Gold\\_Monetisation\\_Scheme\\_and\\_Sovereign\\_Gold\\_Bond\\_Scheme/links/59ca2cfca6fdcc451d57e302/The-Critical-Review-of-Gold-Monetisation-Scheme-and-Sovereign-Gold-Bond-Scheme.pdf#page=23](https://www.researchgate.net/profile/Priti_Bakhshi/publication/320035026_The_Critical_Review_of_Gold_Monetisation_Scheme_and_Sovereign_Gold_Bond_Scheme/links/59ca2cfca6fdcc451d57e302/The-Critical-Review-of-Gold-Monetisation-Scheme-and-Sovereign-Gold-Bond-Scheme.pdf#page=23)
8. <https://www.statisticshowto.com/probability-and-statistics/chi-square/>
9. [www.rbi.org.in](http://www.rbi.org.in)