An Empirical Study on Key Factors behind Indians' Appetite for Gold

Dr. M V S Mahendra

Associate Professor, Department of Management Studies, Bhavan's Vivekananda College of Science, Humanities and Commerce, Sainikpuri, Secunderabad. Mobile: 9246177357, Email: <u>vsmahendra.mba@bhavansvc.org</u>

Abstract: Gold is primarily a monetary asset and partly a commodity. Gold is the world's oldest international currency. The present study is aimed to investigate various factors such as financial, emotional or other factors which influence the investors to invest in gold and to know whether there is a significant difference between the demographic factors and factors influencing the investment in gold. A sample of 120 members was taken for the purpose of the study. The data has been analyzed using factor analysis, Kruskal-Wallis test. The present has resulted in seven key factors in determining the Indians' appetite for gold. **Key Words:** Gold, Investment, Safety, Security.

orus. Obia, invesiment, sujety, security.

I. Introduction:

India is a land of different cultures and sub-cultures, customs, religions, food and ethnic dress preferences. With culture and tradition, a deep affection for gold and a thrust for accumulating it have the traces back in the history of the nation from many centuries.

Gold is primarily a monetary asset and partly a commodity. Gold is the world's oldest international currency. It is an important element of global monetary reserves. Gold has maintained its purchasing power throughout its 5000 year track record, as the world's only monetary metal. It is considered as a commodity as it can be acquired and stored in the form of Jewellery Bars, Coins and Gold Deposits.

II. Review of Literature:

Shanti M in her study "A Study on Perception of Investors Towards Gold as an Investment Avenue in Madurai City", the study aims at collecting investors' response towards investment in gold. 75 respondents were interviewed through structured questions. Pros and cons of investing gold have been listed. The study concludes that liquidity is the highest preferences followed by appreciate of the value of gold and beauty and pride. The analysis considers that gold can be realizable into cash.

Swathi S Godbole, Kirti A Arekar in their research paper titled "Retail Investors and Gold Buying Behaviour – A Perceptual Study of Indian Retail Investors"; their paper makes an attempt to understand the factors that influence the buying behavior of Indian retails investors with respect to gold buying. The objective of their paper was to identify the favourable and unfavourable perception of the consumers towards their belief in gold buying behavior, towards their motives behind the physical gold buying behavior, towards the risk behind gold buying and gold buying behavior due to various attributes of gold. The results of the study indicate that the ease at the time of purchase and high liquidity has resulted into gold being highly preferred investment avenue as against the others.

Janna Lisette Lutter in his paper entitled "Consumer Behaviour during Investment Gold Purchase in Comparison to other investment Instruments", aimed at studying consumer behavior regarding investment decision, compare physical investment gold purchasing to other investment instruments. The results show that gold is already know and valued by the people for its stable nature and long tradition.

Drik Baur & Thomas Mc. Dermott in their paper titled, "Is Gold a Safe Haven? International Evidences" tries to examine the role of gold in global in the global financial system. They have tested the hypothesis that gold represents a safe haven against stock of major emerging and developing countries. A descriptive and econometric analysis for a sample spanning a 30 year period from 1979-2009 shows that gold is both a hedge and a safe haven for major European stock markets and the US but not Australia, Canada, Japan and large emerging markets such as the BRIC countries. It was also found that, there is distinguish between weak and strong for of the safe haven and argue that gold act as a stabilizing force for the financial system by reducing losses in the face of extreme negative market shocks. Looking at specific crisis periods, we find that gold was a strong safe haven for most developed markets during the peak of the recent financial crisis.

III. Research Design:

Exploratory research analyses the data, and explores the relationship of variables in the study. The research explores the possibility of using the findings in future.

Sample Size: The sample size is 120 from the total population.

Statistical analysis and techniques: Factor analysis, Kruskal Wallis test are used in the study.

Objectives of the Study:

- 1. To investigate various factors such as financial, emotional or other factors which influence the investors to invest in gold.
- 2. To know whether there is a significant difference between the demographic factors and factors influencing the investment in gold.

Hypotheses:

 H_{01} : There is no significant difference between the age group of the respondents on factors affecting the purchase of gold.

 H_{02} : There is no significant difference between the education levels of the respondents on factors affecting the purchase of gold.

 H_{03} : There is no significant difference between the regions of the respondents on factors affecting the purchase of gold.

 H_{04} : There is no significant difference between the religion of the respondents on factors affecting the purchase of gold.

 H_{05} : There is no significant difference between the gender of the respondents on factors affecting the purchase of gold.

Analysis of Data:

Table 1.1: Representing the age of Sample Respondents.

Age	Frequency	Percentage
21-30 years	30	25
31-40 years	32	25.8
41-50 years	34	28.3
51-60 years	9	7.5
Above 60	16	13.3
Total	120	100

Table 1.1 represents the age of the sample respondents, from the above table it can be noticed that the majority of the respondents belong to the age group of 41 to 50 years.

ie in in an in the semple responder						
Educational Qualification	Frequency	Percentage				
Upto 12 th Class	12	10				
Graduate	18	15				
Post Graduate	50	41.7				
Ph.D	9	7.5				
Others	31	25.8				
	120	100				

Table 1.2: Education level of the sample respondents:

From the above table it can be observed that the majority of the respondents post graduates.

Table 1.3: Occupation level of sample respondents

in the second se						
Occupation	Frequency	Percentage				
Government Job	34	28.3				
Private Job	59	49.2				
Home Maker	15	12.5				
Others	12	10				
	120	100				

The above table shows the details of occupation of the sample respondents. It can be identified from the above table that most number of respondents are having private job.

1	1.4. Kengion of the sample respond							
	Religion	Frequency	Percentage					
	Hindu	62	51.6					
	Muslim	15	12.6					
	Christian	25	20.8					
	Others	18	15					
		120	100					

Table 1.4:	Religion	of the	sampl	e res	pondents.

Table 1.4 represents the details of religion of the sample respondents; it was found that most of the sample respondents are Hindus.

•	ubic fie fiegion of the respondents							
ſ	Occupation	Frequency	Percentage					
ſ	North	25	20.8					
ſ	South	46	36.8					
ſ	West	38	30.4					
ſ	East	11	8.8					
I		120	100					

Table 1.5 Region of the respondents.

The study results show that a vast number of respondents are South Indians.

Factor analysis is a very useful method of reducing data complexity by reducing the number of variables being studied. 24 variables were considered that would affect the investors' perception towards investment of gold. KMO and Bartlett's Test: KMO and Bartlett's test is used in factor analysis. This is used for the initial estimation of the factor analysis. If the KMO and Bartlett's test is greater than 0.6 it is said to be good model. The KMO result of the present study is 0.762.

Cronbach's Alpha: To test the reliability of the data the cronbach's alpha can be used. If the Cronbach's Alpha is greater than 0.7 it is said to be highly reliable. The cronbach's alpha for the purpose of the study has resulted 0.777 which means it is highly reliable.

			• Total Variance Explained						
Compone	In	itial Eigenvalues		Extraction Sums of Squared			Rotation Sums of Squared		
nt	Total	% of	Cumulativ	Loadings Total % of Cumulativ		Total	Loadings % of	Cumulati	
	Total	% of Variance	e %	Total	% of Variance	e %	Total	% of Variance	ve %
1	4.964	20.683	20.683	4.964	20.683	20.683	3.705	15.437	15.437
2	3.211	13.380	34.063	3.211	13.380	34.063	2.866	11.941	27.379
3	2.816	11.732	45.795	2.816	11.732	45.795	2.790	11.627	39.005
4	2.643	11.013	56.808	2.643	11.013	56.808	2.531	10.546	49.551
5	2.031	8.460	65.268	2.031	8.460	65.268	2.492	10.383	59.934
6	1.536	6.400	71.668	1.536	6.400	71.668	2.294	9.557	69.491
7	1.377	5.739	77.406	1.377	5.739	77.406	1.900	7.915	77.406
8	.970	4.043	81.450						
9	.890	3.709	85.158						
10	.681	2.840	87.998						
11	.656	2.733	90.731						
12	.603	2.513	93.244						
13	.420	1.749	94.993						
14	.352	1.465	96.458						
15	.273	1.138	97.596						
16	.247	1.030	98.627						
17	.142	.591	99.218						
18	.091	.380	99.599						
19	.060	.251	99.850						
20	.029	.121	99.970						
21	.007	.030	100.000						
22	4.16E-016	1.73E-015	100.000						
23	2.82E-017	1.17E-016	100.000						
24	-2.42E-016	-1.01E-015	100.000						

 Table 1.6
 Total Variance Explained

The first step in factor analysis is the factor extraction process. The main objective of this test is to identify how many factors will be extracted from the data. The factor extraction process can be done using the Principal Component Analysis method. Factors will be extracted based on Eigen value. The higher the Eigen

Name of Conference: International Conference on "Paradigm Shift in Taxation, Accounting, Finance and Insurance"

value of a factor, the higher is the amount of variance explained by the factor. A thumb rule is followed for factor extraction using the Eigen value, we retain all the variables whose Eigen value is greater than one. From table, we can conclude that the twenty four variables can be reduced to seven factors. The seven factors extracted together account for 77.4 % of total variance.

	Component						
	Value	Emotio n	Converti bility	Investme nt	Safety	Security	Hedging
Having gold is equivalent to storing value	0.282	-0.042	-0.121	0.23	0.746	0.063	0.244
Gold gives high returns in long term	0.357	0.016	-0.266	0.594	0.169	0.246	0.221
Price of gold does not change frequently	0.35	0.617	0.032	-0.072	-0.298	-0.087	0.006
Gold has good resale value	0.836	0.006	-0.142	0.18	0.06	0.009	0.072
Gold loan any time any where in the market	-0.112	0.266	0.092	0.319	0.176	0.801	0.042
Gold can be exchanged into any currency in the world	0.064	0.18	0.698	0.033	0.309	0.378	-0.053
Gold is a very liquid asset	0.055	0.931	-0.037	0.099	-0.002	-0.072	0.037
Security to bank for financing any business venture	0.057	0.187	0.158	-0.083	-0.041	0.222	-0.817
Gold Schemes	0.284	-0.074	0.692	-0.015	-0.179	0.19	0.353
Hedge against inflation	0.033	0.148	0.316	0.045	-0.061	-0.011	0.798
Diversification into my asset portfolio	-0.159	-0.27	-0.12	-0.062	0.74	0.302	-0.195
I like to invest in gold rather than having cash	0.125	-0.199	0.055	-0.21	0.013	0.784	-0.244
I buy gold and deposit in my bank lockers since it is a high value	0.736	0.298	0.037	-0.036	-0.169	0.064	-0.232
Gold is considered as a status symbol	0.153	0.028	-0.679	0.147	0.407	-0.019	-0.034
I prefer to buy gold for special occasions such as Diwali, birthday, marriage etc.	0.256	0.514	0.343	0.125	0.622	-0.224	-0.101
Though there are no specific tax benefits on purchase of gold, yet I prefer to buy gold	0.724	-0.188	0.092	-0.017	0.297	0.002	0.353
Given an option, I prefer to give and take 'gold' as a gift	0.042	0.67	-0.422	-0.347	-0.116	0.293	-0.109
Having gold makes me happy	0.11	0.596	0.031	0.208	0.424	0.452	-0.13
My neighbours have lot of gold deposits. So I would like to have too.	0.3	0.175	-0.763	-0.136	-0.069	0.218	0.035
I buy gold so that I can take advantage of higher prices of gold in future	0.52	0.139	0.044	0.292	-0.002	-0.43	0.062
I would like to invest in gold in electronic form	0.101	-0.025	0.227	0.762	0.336	-0.152	-0.038
After RBI announced gold deposit scheme, I feel like having gold as an asset	0.484	0.068	0.252	0.718	0.105	0.178	0.094
As gold can be one of the stable reserves, I would like to have gold as an asset	0.808	0.298	-0.117	-0.001	0.167	0.008	-0.136
I buy gold because it is considered as auspicious in India	0.324	0.012	0.293	-0.718	0.289	0.098	-0.033

The next step in factor analysis is Principal Component Factor Analysis with varimax rotation. The researcher has conducted the principal component factor analysis with varimax rotation to group the variables. The principal component analysis along with varimax rotation is used for grouping the variables, variables with a factor loading greater than or equal to 0.5 are grouped under a factor (Component). A factor loading is the correlation between the original variables of specific factor and the key to understand the nature of that particular factor.

Factor Number	Factor name	Variables Loaded
1	Value	Gold has good resale value
		I buy gold and deposit in my bank lockers since it is a high value
		Though there are no specific tax benefits on purchase of gold, yet I prefer to buy gold
		As gold can be one of the stable reserves, I would like to have gold as an asset
2	Emotion	Price of gold does not change frequently
		Gold is a very liquid asset
		Given an option, I prefer to give and take 'gold' as a gift
		Having a gold, makes me happy
3	Convertibility	Gold can be exchanged into any currency in the world
		Gold Schemes
		Gold is considered as a status symbol
		My neighbours have lot of gold deposits, so I would like to have it.
4	Investment	Gold gives high returns in the long run.
		I would like to invest in gold in electronic form.
		After RBI announced gold deposit scheme, I feel like having gold as an asset
5	Safety	Having gold is equivalent to storing value
	-	Diversification to my asset portfolio
		I prefer to buy gold for special occasions such as diwali, marriages etc.
6	Security	Gold loan any time anywhere in the market
	, i i i i i i i i i i i i i i i i i i i	I would like to invest in gold rather than having cash
7	Hedging	Security to bank for financing any business venture
	2 0	Hedge against inflation

The non-parametric test using the Kruskal-Wallis Test was performed to test the mean difference on the demographic factors on factors that influence the investors to invest in gold. The demographic factors that were analyzed in this study were the gender, age, profession, region and religion. The null hypothesis statement is; there is no significant difference between demographic factors on factors that affecting the investors to invest in gold. The results of Kruskal Wallis test are as follows:

H_{01} : There is no significant difference between the age group of the respondents on factors affecting the purchase of gold.

Table	Table 1.9: Kruskal Wallis Test Results – Age and Purchase of Gold						
	Chi-Square Value	Asymp. Sig.	Remarks				

Factor	Chi-Square Value	Asymp. Sig.	Remarks
Value	5.705	0.222	Not Significant
Emotion	0.403	0.982	Not Significant
Convertibility	1.508	0.825	Not Significant
Investment	4.567	0.335	Not Significant
Safety	1.309	0.860	Not Significant
Security	1.768	0.778	Not Significant
Hedging	5.769	0.217	Not Significant

 H_{02} : There is no significant difference between the education levels of the respondents on factors affecting the purchase of gold.

Table 1.10: Kruskal Wallis Test Results - Education Level and Purchase of Gold

14010	HIGH IN ADRAI WAIND FOR ICON	Laucation Dever	
Factor	Chi-Square Value	Asymp. Sig.	Remarks
Value	1.792	0.774	Not Significant
Emotion	2.648	0.618	Not Significant
Convertibility	3.067	0.547	Not Significant
Investment	5.940	0.204	Not Significant
Safety	3.775	0.437	Not Significant
Security	1.978	0.740	Not Significant
Hedging	6.101	0.192	Not Significant

 H_{03} : There is no significant difference between the regions of the respondents on factors affecting the purchase of gold.

Table 1.11: Kruskal Wallis Test Results -regions and Purchase of Gold

Factor	Chi-Square Value	Asymp. Sig.	Remarks
Value	1.221	0.748	Not Significant
Emotion	2.968	0.397	Not Significant
Convertibility	3.664	0.300	Not Significant
Investment	0.468	0.926	Not Significant
Safety	5.251	0.154	Not Significant
Security	3.560	0.313	Not Significant
Hedging	7.055	0.070	Not Significant

Name of Conference: International Conference on "Paradigm Shift in Taxation, Accounting, Finance and Insurance"

H_{04} : There is no significant difference between the religions of the respondents on factors affecting the	
purchase of gold.	

Table 1.11. Riuskar wants Test Results – Tengion and Tutenase of Gold			
Factor	Chi-Square Value	Asymp. Sig.	Remarks
Value	0.580	0.748	Not Significant
Emotion	0.209	0.901	Not Significant
Convertibility	0.377	0.828	Not Significant
Investment	0.075	0.963	Not Significant
Safety	4.605	0.100	Not Significant
Security	1.117	0.572	Not Significant
Hedging	1.191	0.551	Not Significant

Table 1.11: Kruskal Wallis Test Results - religion and Purchase of Gold

H_{05} : There is no significant difference between the gender of the respondents on factors affecting the	
purchase of gold.	

Т	able 1.12: Kruskal Wallis Te	est Results –Gender and I	Purchase of Gold
Factor	Chi-Square Value	Asymp. Sig.	Remarks
Value	0.968	0.325	Not Significant
Emotion	0.013	0.910	Not Significant
Convertibility	1.424	0.233	Not Significant
Investment	.005	0.944	Not Significant
Safety	0.046	0.830	Not Significant
Security	0.150	0.699	Not Significant
Hedging	1.529	0.216	Not Significant

IV. Findings and Conclusions:

From factor analysis, we were able to identify seven factors which are affecting the Indians' appetite for gold they are Value, Emotion, Convertibility, Investment, Safety, Security and Hedging. The Kruskal Wallis test results show that there is no significant difference between the age group, educational qualifications, region, gender and religion in terms of their factors affecting the purchase of gold.

References:

- [1]. Shanti M, A Study on Perception of Investors Towards Gold as an Investment Avenue in Madurai City PRIMA: Practices & Research in Marketing, Volume 4, Issue 1, October 2013.
- [2]. Swathi S Godbole, Kirti A Arekar, "Retail Investors and Gold Buying Behaviour A Perceptual Study of Indian Retail Investors" Accounting & Finance Research, Volume 3, November 2014, Pg 99-104.
- [3]. Drik Baur & Thomas Mc. Dermott, "Is Gold a Safe Haven? International Evidences" Journal of Banking & Finance 2010, Volume 34, Issue 8, Pg 1886-1898.
- [4]. Janna Lisette Lutter, "Consumer Behaviour during Investment Gold Purchase in Comparison to other investment Instruments", Bachelor's Thesis.
- [5]. Farook, L. (2005). Dubai Gold Market: 'City of Gold' retains its glitter, GulfNews.
- [6]. The Economic Times: Business News, Personal Finance, Financial News, India Stock Market Investing