



# RELEVANCE OF SOCIAL ATTRIBUTES AS A CONTRIBUTING FACTOR TOWARDS GOLD ETF INVESTMENTS IN INDIAN INVESTORS

**Mrs. Sheeba K.H, Asst Professor,**

Dept. of Business Administration, MES College, Marampally

**Abstract:** In India, gold ETFs were launched mainly with objective to increase the liquidity for the better market efficiency. But, though, traditionally, Indians love to buy gold and they want to possess it, even after assuring the benefits of Gold ETF Investments over the other Investment avenues, there is the lack of pooling of funds towards this sector. In fact, they hardly go for ETFs which is just a piece of paper for them. Conventional Economic theories and its survey reports do not clearly explain the reasons behind this phenomenon. The proposal hence is made to explain the social attributes that influences Gold ETF Investments in Indian Investors. The researcher made an attempt to find out the demographical composition of the samples and to analyze their quantum of investment towards Gold exchange Traded Funds Investment and the data were analyzed using Exploratory Factor Analysis with the help of SPSS.

**Keywords:** *Exchange Traded Funds, Gold, Investments, E-gold, Social, Equity.*

## I. INTRODUCTION

Gold ETFs, also known as paper gold, are open ended mutual funds that help investors invest their money in gold which is 99.5% pure. These are listed on the stock exchanges and investors are assigned units of the mutual fund where each unit often represents one gram of gold. There are ETFs where each unit can represent less than one gram of gold as well. Being passively managed funds, they simply follow the price of gold in the market and so their returns match the returns of gold investor would buy off-line. An investor can buy and sell them on the stock exchange. A gold exchange traded fund is commodity ETF that consists of only one principle asset, Gold. However, the fund itself consists of gold derivative contracts that are backed by gold. Investor does not actually own any gold. Even when the investor redeems gold ETF, they do not receive the precious metal in any form. Instead, an investor



receives the cash equivalent. Gold ETFs provided investors a means of participating in the gold bullion market without the necessity of taking physical delivery of gold, and to buy and sell that participation through the trading of units on stock exchange. Gold ETF would be a passive investment; so, when gold prices move up, the ETF appreciates and when gold prices move down, the ETF loses value. Gold ETF tracks the performance of Gold Bullion. But Indian Investors make considerable investments in equity derivatives or physical Gold rather than Gold ETF's even under the current technologically changing scenario. In fact, in spite of sky-rocketing prices of the yellow metal, from Rs. 4,395 per 10 gram in 2000 to more than Rs. 24,000 in 2018, its demand has not been seriously affected in Kerala. This shows that people in Kerala are opting for gold even when the prices are high considering it as a good investment option. It seems that the trend will continue in future too. Hence it is found that, even after assuring the benefits of Gold ETF Investments over the other investment avenues, there is the lack of pooling of funds towards this sector. Conventional Economic theories and their survey reports do not clearly explain the reasons behind this phenomenon. Under these circumstances a project study taking Kerala as the Population and its districts from north, central and southern region as the sample to perform a detailed analysis of the Social attributes that influences Gold ETF Investments in Indian Investors would be justified.

## **II. STATEMENT OF THE PROBLEM**

In India, Gold ETFs were launched mainly with the objective of increasing the liquidity for the better market efficiency. But, though, traditionally, Indians love to buy gold and they want to possess it, even after assuring the benefits of Gold ETF Investments over the other Investment avenues, there is the lack of pooling of funds towards this sector. In fact, they hardly go for ETFs which is just a piece of paper for them. Conventional Economic theories and its survey reports do not clearly explain the reasons behind this phenomenon. The proposal hence is made to explain the Social attributes that influences Gold ETF Investments in Indian Investors.

## **III. OBJECTIVES OF THE STUDY**

To explore the Social factors influencing Gold Exchange Traded Funds Investment decisions in Kerala.



#### IV. RESEARCH DESIGN

According to the population enumeration of the census of India, the population of investors in each state stood at a measureable percentage. In this connection, it may be mentioned that the upcoming toll towards digital era and online banking has given impetus for the growth of investors, even in the commodity derivatives market including Gold ETF. Hence, the scope of the present study has been confined to these Gold ETF investors alone. A descriptive research design were structured and implemented during research. The research samples were further confined to micro-level by the researcher's concentration on only individual Gold ETF investors in Kerala. Therefore, it comprises 395 samples (estimated) of individual Gold ETF investors which are distributed over the three zones of Kerala. The method of sampling adopted here is Snowball Sampling and the sample size is determined on the basis of a Pilot Survey (taking 100 Gold ETF investors).

#### V. EXPLORATORY FACTOR ANALYSIS- SOCIAL FACTORS

Here, the researcher tries to fulfill the research objective in exploring the Social factors influencing Gold Exchange Traded Funds Investments in Kerala using Exploratory Factor Analysis method for reducing data. Reliability/Validity/Consistency checks are also conducted as a prelude to Factor Analysis for ensuring the sufficiency and strength of data.

##### 5.1 Reliability Check

As a prelude to Factor Analysis, Reliability Check was conducted. A value equal to or higher than 0.8 is acceptable. In this study, a Cronbach's value of 0.897 was obtained. Table 5.1 generated below implies the value of Cronbach's Alpha if any of the item gets deleted from scale.

Reliability Statistics

Cronbach's Alpha	N of Items
.897	20



**Table 5.1- Reliability Statistics**

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Family Needs	94.332	5.105	.531	.893
Emergency Needs	94.337	5.046	.556	.892
Safe Life	94.337	5.102	.474	.894
Secure Life	94.344	5.028	.504	.893
Capital Growth	94.349	4.994	.506	.893
Risk free	94.347	4.994	.527	.892
Protection from Inflation	94.352	4.939	.515	.892
Tax benefits	94.352	4.939	.515	.892
Risk Coverage	94.344	4.957	.508	.893
Leverage	94.349	4.817	.632	.889
Trade avlue	94.342	4.946	.583	.891
Retirement Savings	94.347	4.953	.497	.893
Social Obligations	94.342	5.007	.467	.894
Festival	94.339	5.088	.425	.895
Marriage of Children	94.342	5.012	.500	.893
Sense of Pride/Prestige/Status Symbol	94.357	4.824	.575	.891
Unaware of Mutual Fund	94.354	4.783	.635	.889
Unaware of Gold ETF	94.362	4.709	.579	.891
Gold Price	94.362	4.688	.624	.889
Increase in income level	94.327	5.220	.301	.897

**Table 5.2- Item-Total Statistics**

**5.2 Factor Analysis and Reduction of Data**

Factor analysis is based on the correlation matrix of the variables involved, and correlations usually need a large sample size before they stabilize. Here, a total of 395 samples were used for analysis. There are also many different types of rotations that can be done after the initial extraction of factors, including orthogonal rotations, such as varimax and equimax, which impose the restriction that the factors cannot be correlated, and oblique rotations, such as promax, which allow the factors to be correlated with one another. Here, the extraction method used is Principal Component Analysis and Rotation used is Varimax with Kaiser Normalization.



### 5.2.1 KMO and Bartlett's Test

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.591
Approx. Chi-Square		7546.283
Bartlett's Test of Sphericity	df	190
	Sig.	.000

**Table 5.3- Kaiser Meyer Olkin Measure and Bartlett's Test of Sphericity**

**Kaiser-Meyer – Olkin Measure of Sampling Adequacy-** This measure varies between 0 and 1, and values closer to 1 are better. A value of 0.591 were obtained.

**Bartlett's Test of Sphericity-** This tests the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is a matrix in which all of the diagonal elements are one and all off diagonal elements are zero. Taken together, these tests provide a minimum standard which should be passed before a factor analysis should be conducted.

### 5.2.2 Communalities of each variable's variance

**Communalities**

	Initial	Extraction
Family Needs	1.000	.793
Emergency Needs	1.000	.799
Safe Life	1.000	.674
Secure Life	1.000	.844
Capital Growth	1.000	.830
Risk free	1.000	.803
Protection from Inflation	1.000	.841
Tax benefits	1.000	.770
Risk Coverage	1.000	.709
Leverage	1.000	.883
Trade value	1.000	.826
Retirement Savings	1.000	.780
Social Obligations	1.000	.857
Festival	1.000	.771
Marriage of Children	1.000	.687
Sense of Pride/Prestige/Status Symbol	1.000	.650
Unaware of Mutual Fund	1.000	.733
Unaware of Gold ETF	1.000	.809



Gold Price	1.000	.532
Increase in income level	1.000	.488

Extraction Method: Principal Component Analysis.

**Table 5.4- Communalities of each variable's variance**

**Communalities:** This is the proportion of each variable's variance that can be explained by the factors and can be defined as the sum of squared factor loadings for the variables.

**Initial:** With Principal Component Analysis, the initial values on the diagonal of the correlation matrix are determined by the squared multiple correlation of the variable with the other variables. For example: On regressing items "Emergency Needs" through "Increase in Income level" on "Family Needs", the squared multiple correlation coefficient would be 1.00

**Extraction:** The values in this column indicate the proportion of each variable's variance that can be explained by the retained factors. Here all the variables are with high values and are well represented in the common factor space.

### 5.2.3 Total variance extracted under Principal Component Analysis

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.899	34.497	34.497	6.899	34.497	34.497	3.836	19.182	19.182
2	2.964	14.821	49.318	2.964	14.821	49.318	3.532	17.661	36.843
3	2.223	11.116	60.433	2.223	11.116	60.433	2.790	13.949	50.792
4	1.824	9.119	69.552	1.824	9.119	69.552	2.683	13.415	64.207
5	1.168	5.841	75.393	1.168	5.841	75.393	2.237	11.186	75.393
6	1.096	5.482	80.876						
7	.815	4.076	84.951						
8	.644	3.218	88.169						
9	.501	2.503	90.672						
10	.433	2.166	92.838						
11	.286	1.432	94.270						
12	.263	1.313	95.582						



13	.242	1.209	96.791					
14	.162	.810	97.601					
15	.132	.658	98.260					
16	.116	.578	98.837					
17	.085	.427	99.264					
18	.079	.393	99.657					
19	.051	.253	99.910					
20	.018	.090	100.000					

Extraction Method: Principal Component Analysis.

**Table 5.5- Total variance extracted under Principal Component Analysis**

**Component:** The initial number of components is the same as the number of variables used in the Factor Analysis. But not all 20 components will be retained and only first five components are retained.

**Initial Eigen Values:** Eigen values are the variances of the components. Since Factor Analysis were conducted on the correlation matrix, standardized variables are obtained giving each variable, a variance equal to one, and total variance equal to the twenty variables used in the analysis.

**Total:** This column enunciates Eigen values. First component has most variance and hence highest Eigen value. Accordingly, the next component will account for as much as of the left over variance as it can, and so on. Hence each successive component will account for less and less variance.

**Percentage of Variance:** This column contains the percent of total variance accounted for by each component.

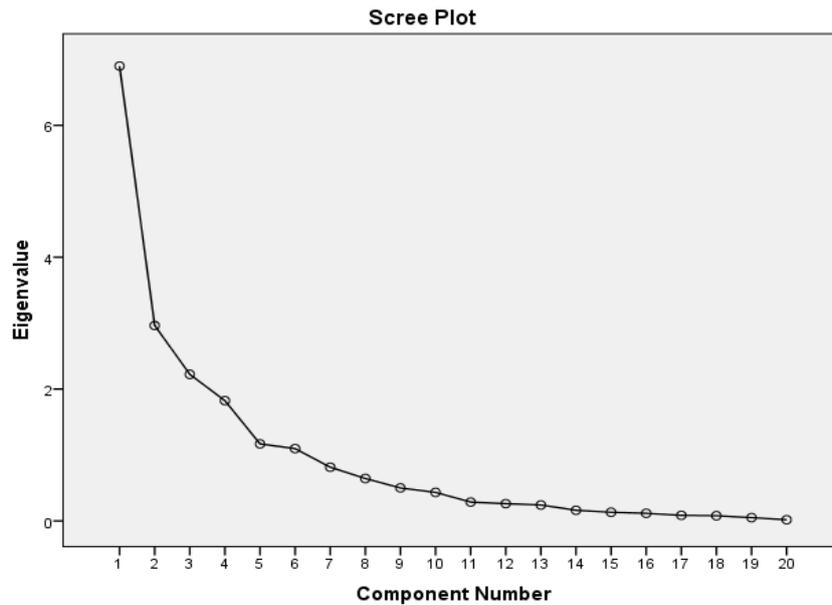
**Cumulative Percentage:** This column contains the cumulative percentage of variance accounted for by the current and preceding components. Here, the fifth row shows a value of 75.393. This means that the first five components together account for 75.393% of the total variance.

**Extraction Sums of Squared Loadings:** The number of rows in this panel of Table 7.5 correspond to the number of components retained. Hence five rows for five retained components are obtained.



*Rotation Sums of Squared Loadings:* Variance distribution after Varimax rotation is represented in this panel

### 5.2.4 Scree Plot



**Chart 5.1- Scree Plot**

*Scree Plot:*The Scree Plot graphs the Eigen value against the Component Number. These values are seen in the first four columns of the table immediately above. From fifth component on, the line is almost flat, meaning the each successive component is accounting for smaller and smaller amounts of total variance.

### 5.2.5 Rotated Component Matrix

**Rotated Component Matrix<sup>a</sup>**

	Component				
	1	2	3	4	5
Emergency Needs	.867				
Family Needs	.865				
Marriage of Children	.778				



Sense of Pride/Prestige/Status Symbol	.692			
Secure Life		.908		
Unaware of Gold ETF		.846		
Unaware of Mutual Fund		.690		
Safe Life		.655		
Social Obligations			.870	
Retirement Savings			.821	
Festival			.653	
Protection from Inflation				.826
Risk free				.785
Tax benefits				.726
Capital Growth				
Gold Price				
Leverage				.764
Increase in income level				.675
Trade avlue				.623
Risk Coverage				

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 7 iterations.

**Table 5.6- Rotated Component Matrix**

**Rotated Component Matrix:** This table contains the rotated factor loadings (factor pattern matrix), which represent both how the variables are weighted for each component but also the correlation between the variables and the component. Correlations less than 5.0 or below (which probably are not meaningful anyway) are not printed.

**Component:** The columns under this heading are the rotated components that have been extracted. Evidently, five components were extracted and named according to the items highly loaded into each component.



### 5.3 Naming of the variable

All the items are labeled and named under the assumption that all the items contribute to maintaining the social status of an investor, thereby placing all the factors under the common head “Social Factors”

**Factor 1:**The items Emergency needs, Family Needs, Sense of Pride/Prestige/Status Symbol and Marriage of Children all contribute to the prime influential attributes to an investor while deciding to make the investment and fixing the quantum of investment to be made in each investment avenue. Hence these items can be named as under “Motive for Investment”.

**Factor 2:**Secure Life and Safe Life are the two basic needs of an individual based on Maslow’s Need Hierarchy theory. Unaware of Gold ETF and Unaware of Mutual Fund shows the awareness level of an investor regarding stock market and investment options on an average. Hence these two items could be labeled as “Awareness and Basic needs”.

**Factor 3:**Social Obligations, Festival and Retirement Savings shows what an investor expects to meet from his expected returns in future. An investor might have to meet his social obligations, save up to shop for or conduct a festival, to meet his needs post retirement thus relying on one’s own fund and not wanting to depend on others for his needs and wants. Therefore these items could highly load to be named as “Provisions of Investment”.

**Factor 4:**Tax benefits, Protection from Inflation and Risk free all implies to an investors decision in deciding over the quantum of investment. An investor always expects his money to be safely guarded and do not want to spend more money on ensuring its safety. To exploit tax benefits by making investments in Government (SEBI) approved tax saving schemes, to protect the corpus of investment from reaping the ill effects of inflation and ensuring a smooth pay back without having to suffer innumerable risks to this regard are all what an investor states as objective while making an investment decision. Hence these items could be undoubtedly named as “Investment Expectation”.



**Factor 5:** Leverage, Increase in income level and Trade value all implies to the effectiveness of an investment scheme to efficiently utilize the market and economic conditions of a society and arbitraging on stock market conditions. Hence these items could be labeled as “Economic growth”

## VI .FINDINGS, DISCUSSION AND CONCLUSION

### 6.1 Findings

The social factors such as Motive for investment, Awareness and basic needs, Provisions of investment, Investment expectation, and Economic growth were found to influence Gold Exchange Traded Funds Investment decisions in Kerala

### 6.2 Discussion:

*Based on socio economic/ demographic profile and study results*

**Barber and Odean (2001)** show that young men are more confident in their investing abilities than are older women. But in my study, investors within the age group 40-60 tend to make more investments than the relative smaller age groups. Though my study perfectly aligns with the fact male investors are more prone to make investments rather than their female counterparts. **The results of Hallahan, Faff and McKenzie (2003)** shows that education, marital status and dependents, were not found to be significant determinants of an individual's attitude towards risk. But in my study, to a great extent, Marital status and education play a dominant role while measuring their risk taking attitude towards Gold ETF Investment. **Grable (2000)** states that risk tolerance was associated with being male, older, married, professionally employed with higher incomes, more education, more financial knowledge, and increased economic expectations. My study findings corroborates with the phenomena pertaining to sex, age, marital status, profession, education and monthly income. **Murphy and Soutar (2003)** has proved that majority of individual investors have less interest in Speculation and are long-term investors, allegedly pointing to the fact they may be conservational investors rather than bold investors. But in my study, the investors were found to identify their source of investment from both own funds and borrowed funds, clearly depicting their willingness to take risks. Moreover they were confident and strong players in the Derivatives Market. The findings of my study corroborates with the study



conducted by **Lewellen, Lease and Schlarbaum (1977)** in stating the family size and dependents plays a major decisive role in investing in securities market.

### **6.3 Conclusion**

In India, gold ETFs were launched mainly with objective to increase the liquidity for the better market efficiency. Now it is widely acknowledged that the launch of gold [exchange-traded products] has had a very significant impact on the gold market and is now a key part of it. But Indian Investors make considerable investments in equity derivatives rather than Gold ETF's even under the current technologically changing scenario. Hence an evaluative record of the behavioral finance attributes that influences their decision making while making investments would be used as a reference to deciding the applicability of conventional financial and economic theories governing investment decisions. A detailed analysis of the Social attributes that influences Gold ETF Investments in Indian Investors by amassing firsthand information from individual and institutional investors engaged in security trading would result in filling the gaps where surety is not established in determining how far the technology has influenced in the above said phenomenon. The study will be first of its kind in making a thorough analysis of this trend in the context of an emerging economy.

### **REFERENCES**

- [1.]Brad M. Barber & Terrence Odean (2001) Boys will be boys: Gender, Overconfidence And Common Stock Investment, Quarterly Journal of Economics, February 2001, pp. 261-292
- [2.]John Grapple (2000) Financial Risk Tolerance and Additional factors that affect risk taking in everyday money matters, Journal of Business and Psychology , Vol.14, No. 4, Summer 2000, pp: 626-633
- [3.]Marilyn Clark Murphy & Geoffrey N. Soutar (2003) What Individual Investors Value:Some Australian Evidence, Journal of Economic Psychology 25(2004) pp: 539-555
- [4.]Shlomo Benartzi & Richard H. Thaler (1993) Myopic Loss Aversion and the Equity Premium Puzzle, NBER Working Paper # 4369



- [5.] Wilbur G. Lewellen, Ronald C. Lease & Gary G. Schlarbaum (1977) Patterns of Investment strategy and Behaviour among Individual investors, Journal of Business, Vol. 50, No. 3, pp:296-333
- [6.] Terrence Hallahan, Robert Faff & Michael McKenzie (2003) An exploratory investigation of the relation between risk tolerance and demographic characteristics, Journal of Multinational Financial Management, Vol.13, Issue 4, pp:483-502
- [7.] [irjbm.org/irjbm2013/December/Paper12.pdf](http://irjbm.org/irjbm2013/December/Paper12.pdf)
- [8.] RBI/2015-16/211 Master Direction No.DBR.IBD.No.45/23.67.003/2015-16, October 22, 2015
- [9.] RBI/2015-16/211 Master Direction No.DBR.IBD.No.45/23.67.003/2015-16, Gold Monetization Scheme, 2015, October 22, 2015
- [10.] <http://indiatoday.intoday.in/story/kerala-and-gold-in-the-state/1/130234.html>
- [11.] [http://www.investopedia.com/university/behavioral\\_finance](http://www.investopedia.com/university/behavioral_finance)
- [12.] [http://www.jstor.org/stable/2352539?seq=1&cid=pdf-reference#references\\_tab\\_contents](http://www.jstor.org/stable/2352539?seq=1&cid=pdf-reference#references_tab_contents)