An Empirical Study on Emotional Influence over Gold Portfolio Investment in Indian Market

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Abstract

The behavioral finance is an area in where study made on emotional influence of an individual over the investment and financial related activity. This study has been focused on the fusion of modern theory of emotional behavior in the age old investment Gold how the buying behavior of an investor reacts to the term portfolio gold which is digital mode of gold. The research study has been performed to identify the apprehension on the investment of gold portfolio and what are the components inhibiting the individual to take over the digital era of gold which is modern format or transfiguration of material gold. The study has been conducted with the sample of 105 individuals with the help of statistical tool "factor analysis" performed. The study conclude the emotional influence on the lack of literacy create a delusion over the performance of the gold followed by the hesitation on the new format which is lack strong past records was the major consideration of the investors over the portfolio gold.

Keywords: Behavior Apprehension, Emotional Influence, Inhibits Gold Investment, Gold Portfolio, Material Gold

Introduction

The material gold has always been one of the prior investment markets in India and the globe over multiple centuries. Over the decades many new theories emerged resulting in the modification of investment practices in gold**.** The transfigured version of gold investment is "portfolio gold" which is nothing but a digital certificate or paper containing value of gold based on price fixed globally but doesn't possess any physical form. Though the portfolio gold format exist the acceptance and move towards the new aspect is not highly in practice, the literacy knowledge over e-gold existence is not widely aware as the other product development in the share market. The individual emotion is not as promising over the digital gold as it supports the material

gold even in the current scenario. The traditional theories insist on rationality on buying behavior and unbiased forecast which is not accurately possible when emotions are involved in it. The restriction framed due to the lack of knowledge creates sort of inefficiency to trust over the right proportion. Till 1971 gold standard was used by United States was eventually stopped after the declaration of fiat money which was backed up by equal gold reserve in countries (Kalen Smith, 2019). In the current decade gold turned in to one of investment market with various mode of transfiguration such as gold bar, gold material, gold coins, bullions and electronic forms of the gold as per global rate namely sovereign bonds, gold exchange traded fund, E-Gold, Mutual funds and gold Monetization scheme launched by government of India recently (article from fin cash- "Gold Investment Options in India".

Table 1: DIGITAL GOLD PORTFOLIO IN MARKET					
Options	**Gold Exchange Traded Fund**	**E-Gold (Electronic Gold)**	**Gold Mutual Funds**	**Gold Sovereign Bond**	**Gold Monetization Scheme**
Minimum Investment Limit	1 unit, no upper limit.	1 gram of gold	Indian rupee 1000	denomination of 5 grams	30 grams of gold
Liquidity	Can be sold on exchange.	can be sold at any point	can be redeemed at any point	can be sold on exchange	Can be sold before maturity at penalty interest.
Interest Earned	Nil	Nil	Nil	2.75% p.a. interest on initial value of purchase, payable semiannually.	2.25% on mid-tenure & 2.5% on long-term deposit.
Medium Holding Period	Nil	Nil	Nil	8th year with exit option from 5th year.	Short Term- 3 Year, Mid Term- 7 Year, Long Term- 12 Year
Source: Gold Investment Options in India on 3-May -2020 https://www.fincash.com/l/gold-investment-options-india					

Table 1 consists of the various available options on digital gold investments in Indian market with the features such as limit of investment, interest rate, holding period and liquidity of such investments.

Review of Literature

Anli Suresh, Keerthika.R (2019) has stated in the work gold exchange traded fund has predicted as highly suggested investment for the individual irrespective of age the factor of urge to portfolio investment is highly common, the sector they working have deep impact over their behavioral structure, irrespective of interest the clarity over the portfolio is still has to be more transparent in the order to earn more trust over the investors. **Mustafa Yurttadura, HavvaOzcelikb (2019) in** their work briefed on how traditional theories are too rational to understand the investor psychology of decision. The preference of investment was more favorable to material gold and deposit due to lack of knowledge in the remaining sector this reveals the requirement of training on investment literacy. The requirement and investment pattern highly differ based on social status and knowledge was supported through different forms of media. **Garling, Fang, and Holmen (2019)** has revealed in theory the overconfidence on the performance list is based on the rank of risk taking ability of the investment, this gives biased structure of the investment is better than the competitor with assumption of yield high profit in market. **Samantha Lamas Nov 13, 2017** have explained the need of behavioral understanding of an investor before making an decision as the emotion of individual differ from human to human and their capacity of acceptance speaks lot as someone make choice of living today not worrying about next whereas some crowd depend more about future leaving them to be careful more than required. These emotional imbalances in individuals decide their investing strategy. Behavioral finance involves balancing that emotional indifference and traces their investing requirement with much scientific realm. **Mojtaba, Shabgou**and **Abolfazl Mousavi (2016)** gone through a study with behavioral finance which has given brief of how decision making of an individual influenced by the series of emotional distribution which directly reflect the market performance with various processing level, the emotional imbalance can be further narrow down in to specific terms of over confidence, following the crowd, limited awareness and goes on. **Miguel Herschberg (2012)** has discussed the irrationality of individuals breaking the stereotypes framed by the traditional theory (which involved Bayes theorem and subjectivity utility theorem). The researcher explains the share price

cannot forecast the return of investment as suggested by expected market theory. The lack of complete information to execute the traditional theories leads to the various market risks such as basic risks, on short term loss leading to withdrawing of investment immediately, implementation cost, resale risk. The process with the limited knowledge has made it difficult to predict the actual value of an asset and leads to accepting the mismatch price stated in the market by investors.

Research gap

The previous studies have been featured over the behavioral difference of investors over the rational thinking of the individual behavior. In this study it is focused on the emotional imbalances and components other than traditional theory has influenced the investor which restricts them to invest on the gold investment with the full potential being focused.

Table 2- Course of Action	
Research Design	Descriptive, qualitative, investigative and expressive research design
Sampling Process	Convenience Sampling
Sampling Unit	Behavioral characteristic, Portfolio Gold
Respondents	105
Research Instrument	Electronic format of questionnaire with scored using a five-point Likert scale
Response Collected	Digital approach to through mail, phone call and texting to the respondents
Analytical Study	Explanatory statistics, factor analysis with screen plot representation

Table 2 consists brief of the course of action taken in the research study conducted which include design of the research, method of sampling and units taken for sample along with quantity of respondents, instruments used to collect sample, tools and technique used in the study.

Research Objective

The study highly focused on the detail where rationality of traditional theory losing the focus. The emotional behavior in terms of investment have restricted the investor to use the full potential in adaptation of the next generation gold investment "digital gold" and apprehension over such investment. The research analysis induces features where the emotion binds up with the behavior and hampers the investment over the next level.

Objective for the Study

The research study performed to identify the behavioral component which inhibits the individual to take over the next leap in gold investment through portfolio version and apprehension over the acceptance of digital gold.

Results and Discussion

Table 3 : Demographic Profile			
Particular		**Frequency**	**Percent**
Gender	Female	61	58.7
	Male	43	41.3
	Total	104	100.0
Age	18-25	57	54.8
	26-33	37	35.6
	33-40	6	5.8
	48-55	2	1.9
	above 55	2	1.9
	Total	104	100.0
Qualification	below graduation	2	1.9
	graduate	29	27.9
	post graduate	67	64.4
	others	6	5.8
	Total	104	100.0
Annual Income	less than 1 lakh	34	32.7
	1 lakh - 5 lakhs	51	49.0
	5 lakhs-10 lakhs	11	10.6
	more than 10 lakhs	8	7.6
	Total	104	100.0
Source: Primary Data Analysis			

Interpretation: Above Table 3 demographic profile briefing the study which consists of 58.7% female respondents and 41.3% of male respondents. The age group has classified into four age classification on which first in group of 18-25 consists of highest respondents of 54.8% followed by 26-33 with 35.6%, 33-40 with 5.8%, 48-55 with 1.9% and above 55 with 1.9%. The profile of qualification has highest respondents from post graduated individuals with 64.4% response followed by graduation 27.9%, others 5.8% and below graduation 1.9%. the profile in respective of annual income with earning less than 1 lakhs 32.7%, 1 lakhs to 5 lakhs 49%, 5 lakhs to 10 lakhs 10.6% and more than 10 lakhs 7.6%. The total respondents have been taken for the study is 104.

Factor Analysis

Table 4- Kaiser-Meyer-Olkin and Bartlett's Test		
KMO Measure of Sampling Adeq.		.822
Bartlett's Test of Sphericity	Approximate χ^2 **test**	641.436
	Degree of freedom	66
	Sig.	.000
Source: Primary Data Analysis		

Interpretation: The Table 4 explains the Kaiser-Meyer-Olkin test has been more than 0.8 which is a meritorious count for the study. The KMO measures 82% of data adequacy which is highly recommendable for the study.

Table 4.1- Total Variance Explained						
Compone nt	Initial Eigen values			Rotation Sums of Squared Loadings		
	Total	percentage of Variance	Cumulative percentage	Total	percentage of Variance	Cumulative percentage
F1	5.641	47.008	47.008	4.242	35.346	35.346
F2	1.252	10.434	57.441	2.607	21.726	57.072
F3	1.104	9.202	66.644	1.149	9.572	66.644
Extraction Method: Principal Component Analysis.						
Source: Primary Data Analysis						
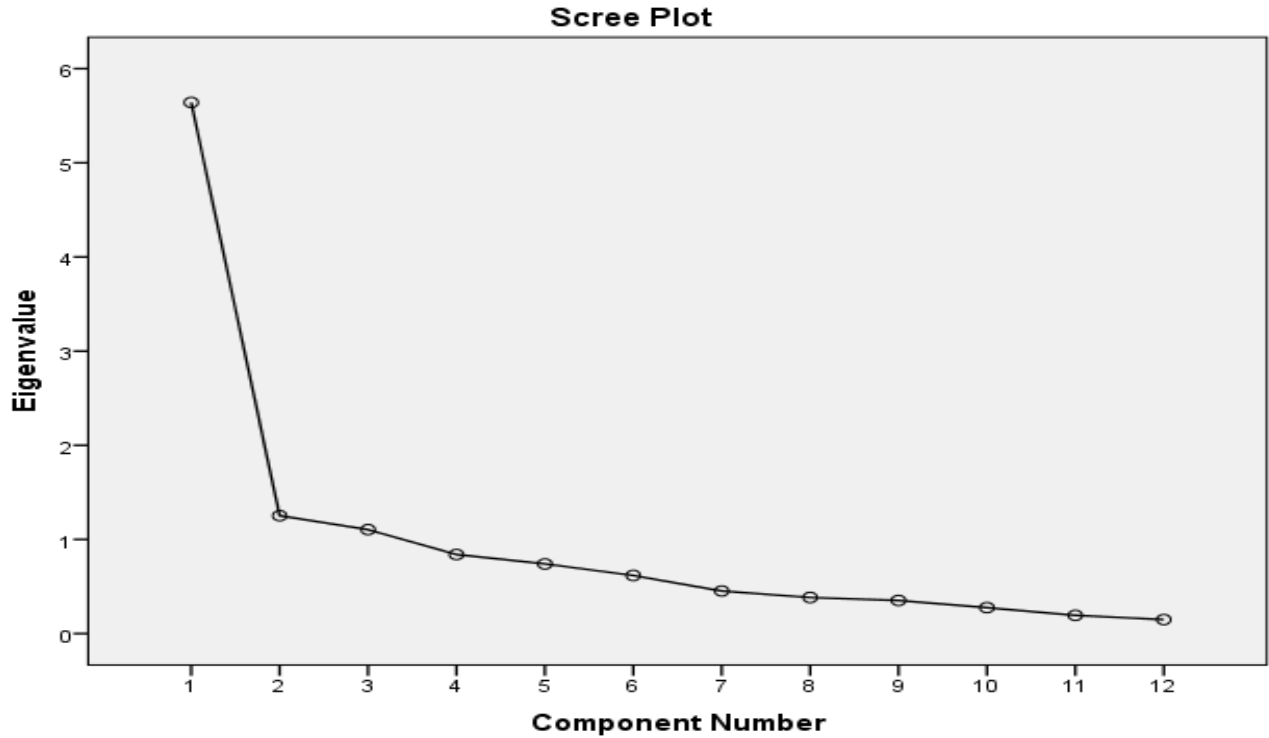
Figure 4.1

Source: Primary Data Analysis

Figure 4.1 has given graphical representation of the table 4.1 through screen plot graph with component of Eigen value greater than 1.

Interpretation: From the table 4.1 it is revealed that the percentage of variance explained in each derived factor of elements towards the behavioral obstacles in investment of gold portfolio. The emotional misbalance of investors has been classified as three components **F1** component labeled as **Apprehension of expertise**, **F2** component labeled as **Apprehension of herding**, and **F3** component labeled as **Apprehension of deprivation.**

Table 4.2 -Rotated Component Matrix			
Factors	**Component**		
	Apprehension of expertise	**Apprehension of herding**	**Apprehension of deprivation**
Restrict percentage of investing due to fear of risk	**.819**		
Performance will be better if investment literacy was part of curriculum in university or college	.801		
Less regret on universal loss	.798		
Sell the investment on the buyer price over loss prediction	.792		
Hesitation due to previous failures	.713		
Highly depend on agent as one have not time or literacy to understand the market	.604		
Hesitate to buy new offer until someone who already purchased give assurance		**.925**	
Prefer common invested fund in market		.731	
If price of gold decrease buy more quantity of the same and don't care about the drop of gold price in global market		.577	
Fear of left out in crowd		.560	
Safety and security of investment as prior objective			**.822**
Preference of material gold jewelry rather than gold bonds or shares as material gold which represent ones reputation and safety showpiece			.465
Extraction Method: Principal Component Analysis ||**Rotation Method**: Varimax with Kaiser Normalization.			
a. Rotation converged in 4 iterations.			
Source: Primary Data Analysis			

Interpretation: The above table 4.2 titled rotated component matrix briefs the explanatory variables dominance in the three elements of factors labeled. The factors are in bold signify its

greater percentage of satisfaction towards each factor element and all the dominant three factors are **highly positively correlated** to their respective elements. The component labeled **Apprehension of expertise** has significant over fear of risk among the investor with value of .819 followed by the next component **Apprehension of herding** explain how investors hesitate to be innovators as the component hesitate to buy new offer until someone who already purchased give assurance was highly positive with value of .925 followed by third group **Apprehension of deprivation** the variable Safety and security of investment as prior objective was high with value of .822.

Table 4.3 factor component overall performance		
Factor Label	**Statements**	**% of Variance**
I Apprehension of expertise	Restrict percentage of investing due to fear of risk	**47.008**
	Performance will be better if investment literacy was part of curriculum in university or college	
	Less regret on universal loss	
	Sell the investment on the buyer price over loss prediction	
	Hesitation due to previous failures	
	Highly depend on agent as one don't have time or literacy to understand the market	
II Apprehension of herding	Hesitate to buy new offer until someone who already purchased give assurance	**10.434**
	Prefer common invested fund in market	
	If price of gold decrease buy more quantity of the same don't care about the drop of gold price in global market	
	Fear of left out in crowd	
III Apprehension of deprivation	Safety and security of investment as prior objective	**9.202**
	Preference of material gold jewelry rather than gold bonds or shares as material gold which represent my reputation and safety showpiece	
TOTAL		**66.644**
Source: Primary Data Analysis		

Interpretation: The table 4.3 reveals that the factor analysis consist of three factors which has been labeled as Apprehension of expertise, Apprehension of herding and Apprehension of deprivation on which the first component Apprehension of expertise six explanatory variables and

it explains 47.008% of variation and the second component Apprehension of herding four variable and it explains 10.434% of variation and the third and final component Apprehension of deprivation contain two variable and it explains 9.202% variable, the variation on investors over the investment emotional imbalance.

Findings from the study

Demographic profile: The majority of the respondents are female with postgraduate degrees consisting of annual income between Rs.1 lakh – Rs.5 lakhs.

Factor analysis: The major twelve components listed out in the study which reflected the emotional struggles of individuals over the shift over to the next era of gold investment. The group has been dividend in to three major sectors as per the emotional struggles of an investor's. The group labeled Apprehension of expertise reveals that an individual has fear of incompetent on the literacy of digital gold that restrict the investor to take over the transformation version digital gold instead prefer to stick on the investment traditional method of material gold. The Apprehension of herding labeled group has revealed the individual have emotional fear to be left out of crowd which explains the hesitation on taking the new path in investment market where there is no previous footpath. The Apprehension of deprivation is fear of loss or presumption of loss on principle make the choice of safety over profit.

Conclusion

The research study conducted to analyze how the emotional struggles of an individual lead to the fluctuation in the gold portfolio market. The investors over the decades have accepted and moved to the new era of investment such as the share market which is the lead of the global performance and economy. The struggle arises when the partiality over the investment arises which leads to the question what is the performance table lacking in new mode. The portfolio gold is not as successful as its ancestor platform material gold, lead to the study of behavioral of individual and what agitate to analyze the emotional disturbance factor analysis test has been performed revealed the self-accusation of incompetent made to step back as they don't want to go out of the safe zone which has been created over the period of comfortable in material gold, and taking new path leaving the crowd behind as making the self-question to be lost alone in the vast market which is wild for the experienced players many time, over the other factor is material gold

assures the principle safety as no record has formed over negative line in gold price. The situation leads to emotional disturbance and the pattern of behavior is not as much as supportive in digital gold as it provides guidance to other portfolios in the global market.

Suggestion

The stereotypes have such thick shield of culture in India regarding the relationship of material gold which is hard to lose, as the gold is directly attached with the emotions of an individual who is also investors. The digital gold performance has to get root in the investment market, literacy should be highly encouraged over the youngsters as part of syllabus in academics to win over the confidence among the individual. The government can reduce the period of holding in bonds helps to be the active trial period for investors to make this shift over of pattern as the assurance of government raises the confidence in the mind helps to have fewer struggles with self-question on the skills. The gold market is a global platform which is not under the support of corporate performance that can be tracked and finalized, so it is a highly encouraging move from the side of the government to guide the citizens to induce enough knowledge on the investment of digital gold over the old version on gold.

Scope for future study

The study has limited to the portfolio gold can be extended to other portfolios in the primary and secondary market. The study may performed on analyze the awareness of public in gold investment and how the market will be in future and The research can extended over the prediction performance of the gold industry in the future after the economic break down over the globe.

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