Gold Investment Pattern Analysis during the Pandemic : An Overhaul

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Abstract

The perception of Gold in an Indian Investor is different from that of a foreign investor. If there is any one investment that runs through all throughout the year for an Indian, it is definitely gold. This paper examines the pattern of Gold investment during the pandemic – Covid 19 by individual investors. The paper is based on the primary data analyzed through the questionnaire prepared for the purpose of studying the shift in priorities of individual Investors during the pandemic and with the new normal. This paper highlights the brighter side of investing in gold at different periods with different income groups is observed. It examines the relative performance of the gold investment in the portfolio carried by the investor during the lockdown period. The factors affecting the investment of every individual with varied income is analyzed and tested with descriptive Statistics. The study proceeds to acquire the resultant estimation of whether there is a significant change in the investment of Gold or has gold sustained the wave of this economic crisis during the Covid period.

Keywords – Investment Patterns in India, Gold Investments, Pandemic period.

1 Introduction

The outbreak of the pandemic Covid 19 has influenced the entire globe and has its impact on the ground level of income affecting the investment pattern. The negative impact of this pandemic has damaged numerous businesses and resulted in the shift of many investment decisions. The priorities of investment seems to be drafting its tendency and the new normal conditions motivates a new trend in investment pattern. In India, number of investment avenues is available for the investors. To ease ourselves we classify these avenues into groups that make the study on investment very simple. People choose their avenues depending upon specific needs, risk and return preference. Today, in India, the various avenues include Bank Deposits, Government Securities, Insurance, Public Provident Funds, Real Estates, Commodities, Mutual Funds, Debt and Equity. People choose their avenues

depending upon specific needs, risk and return preference. With this wide range of Investment Alternatives available, it can be classified as financial assets and real assets. The Investor in India is always inclined towards one type of avenue among the different types of investment avenues that makes his basket of portfolio strong and risk free. It is attached to many investors as an emotional/sentimental asset and sometimes as a psychological asset too. This asset is extracted from the mines as a natural resource and is studied under the history of our country to be in abundance. The most appreciated investment avenue is none other than the yellow metal - gold.

1.1 Gold as an Investment

Investment is based on savings and these investment portfolios take their shape as per the Investor's attitude. The Investment avenues include both real assets and financial assets. The priority on which to invest at what percentage lies with the investor's need and desire. One of such desirable, attractive and emotional investment every Indian seeks in his portfolio is GOLD. Gold as an investment avenue allows you to choose among the investor's risk appetite and financial goals well-aligned. The Investments on Gold has always been advantageous to the Investor form a very long time. Gold has a history, like that of no asset class, has a unique influence on its own demand and supply today. Gold bugs still cling to a past when gold was king. But gold's past includes a fall, which must be understood to properly assess its future. Gold has always influenced the Investment basket carried by an individual investor from the times even before paper money was introduced. Gold is often measured in a traditional troy ounce. The different ways an Investor can invest in Gold are:

Gold Jewels - The golden ornaments embedded with precious stones and other metals are easy to purchase and liquid in nature.

Gold Coins and Bars - Purchase intervals and flexibility provided in terms of investment.

Gold ETFs - High Liquidity, Easy storage, and quality assurance.

Gold Mutrual Funds - Active Portfolio Management and problem free process.

Gold Accumulation Plan - Flexibility of physical formats and Systematic Investment Opportunity.

2 Review of Literature:

Andrew C. Worthington and Mosayab Pahlavani, (2007), "Gold investment as an inflationary hedge: co-integration evidence with allowance for endogenous structural breaks". This article brings out a modified co-integration approach that provides strong evidence of a co-integrating relationship between gold and inflation in the postwar period. The result lends support to the direct and indirect gold investment which can serve as an effective inflationary hedge.

Wilbur G. Lewellen, Ronald C. Lease and Gray G. Schlarbaum (1977) "Patterns of Investment Strategy and behavior among individual investors". A substantial amount of attention directed in the literature of economics and finance regarding investment behavior and portfolio performance of institutional investors. The sample study drawn from the clientele of a large national retail brokerage comprised specifically of individuals who had accounts open with the firm over full period from January 1964

through December 1970. The approximate selection of the random sample was 10% stratified geographically to match the composition of the total population of Andrew C. Worthington and Mosayab Pahlavani, (2007), "Gold investment as an inflationary hedge: co-integration evidence with allowance for endogenous structural breaks". This article brings out a modified co-integration approach that provides strong evidence of a co-integrating relationship between gold and inflation in the post-war period. The result lends support to the direct and indirect gold investment which can serve as an effective inflationary hedge.

Aghila Sasidharan, (2015), "Gold as an Investment Option – A study on Investment Pattern of Investors in Kerala". The research methodology applied for this paper was both descriptive and analytical in nature. The fourteen districts of Kerala is divided into three different regions as North Kerala region, south Kerala region and central Kerala region. The findings of this research through a questionnaire revealed that compared to other metals investors prefer to invest in gold and the investor's decision is influenced by family and friends.

Brain Hurst, Yao Huo Ooi and Lasse Heje Prdersen (2017) "A Century of Evidence on Trend – Following Investing". The study is on the performance of trend following investing across global markets since 1880, extending the existing evidence by more than 100 years. The study elaborates on a strong positive return and further studies the trend which realized a low correlation to traditional asset classes for more than a century. The study analyses the benefits the strategy has historically provided in equity markets for long term results.

Nelson Areal, Benilde Oliveira & Raquel Sampaio (2013) "When times get tough, gold is golden" Pages 507-526. The dynamic behavior of conditional correlations between the gold and two gold financial proxies using a multivariate dynamic conditional correlation model over different market regimes is analyzed in this study. It is a comprehensive study covering 37 years of Daily Data using volatility regimes from a three-state Markov-switching variance model.

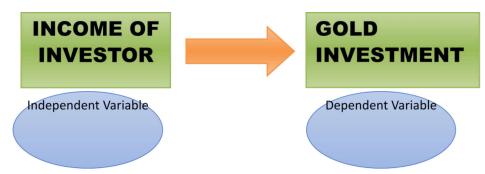
2.1 Purpose of the Study

The aim of this paper is to study the variations brought in by the pandemic in the investors' decisions. To analyze if there is a magnificent change in investments and to study the shift in these patterns due to this pandemic situation and post period.

2.2 Research Objective

- 1. To identify the change created by the pandemic in the investment pattern.
- 2. To analyze the level of importance of gold investment correlated to the investor's income level.
- 3. To verify the pre and post decisions of investing in gold by individual investors based on marital status.

2.3 Conceptual Model based on the research study



2.4 Research Design/Methodology/Approach

Primary data collected from the Individual Investors across India. To validate the research objectives with a series of statistical tests were performed using SPSS v.26. They were Regression Results and Normality Histogram with Gold Investment as a Dependent Variable, Standard deviation, descriptive statistics, and Paired Sample tests. The Kaiser - Meyer - Olkin Measure of Sampling Adequacy resulted 0.788 and Bartlett's Test of Sphericity were tested.

2.5 Research Framework

The paper is based on measuring dimension of gold investment passing through the pandemic at different income levels and at different stages of life. A literature survey was done for identifying various possible dimensions for gold investment.

2.6 Hypothesis

Based on Investment Pattern -

 H_{01} : There is no significant difference between pre and post covid 19 on Gold Investment

2. Based on Investment in gold correlated to investor's income -

H₀₂: There is no significant impact of Income Level on Gold Investment

3. Based on Marital Status -

H₀₃: There is no significant association between Marital Status on Gold Investment

3.2 Research Design

Sample Size

A sample of 215 people have taken as per their convenience. The population size for this study is Infinite Population.

Taro Yamane Method for sample size calculation:

$$n = N/(1+N(e)^2)$$

Where:

n signifies the sample size.

N signifies Population = 465

e signifies Error = 0.05

 $n = 465/(1+465(0.05)^2)$

n = Sample Size = 215

3.3 Research Instrument

The work was carried out through self-administered questionnaires. The questions included five point likert scale on Gold Investment and other investment avenues with different income levels, gender, occupation and marital status.

3.4 Research Period

From April 2021 to October 2021 (6 months)

3.5 Data Collection

Primary Source

The data was collected from the respondents who answered the structured questionnaires

Secondary Source

The secondary data was collected from interest and references such as magazines, journals, articles, etc.

3.6 Data Analysis

The research involved demographic variables like gender, marital status, income level and occupation. The male respondents constitute the sample size with 53% (114) while the female respondents with 47% (101). The total 22.8% (49) of the respondents had income in the ranging between Rs. 25,000 to 50,000 and 29.8% (64) respondents were above Rs. 2,00,000. The table below represents the frequency and percentage of each variable as responded in the pattern of investment scale ranging from (1) Never, (2) Rarely, (3) Sometimes, (4) Often and (5) Always.

The data collected comprised of more Male than female and Married couples are more. The investors with income level between Rs. 25001 to Rs. 50000 were on the higher numbers who were investing in Gold.

The pre and post covid period was analyzed with the primary data collected and paired sample tests were conducted.

Demographic Value

	8-	apine value
Gender	Frequency	Percentage
Female	101	47
Male	114	53
Total	215	100
Marital Status	Frequency	Percentage
Single	70	32.6
Married	140	65.1
Widow	2	0.9
Divorced	3	1.4
Total	215	100
Monthly Income	Frequency	Percentage
Below 25,000	30	14
Between 25,001 - 50,000	49	22.8

Between 50,001 - 1,00,000	37	17.2
Between 1,00,001 - 1,50,000	17	7.9
Between 1,50,001 - 2,00,000	18	8.4
Above 2,00,001	64	29.8
Total	215	100

Table 1: Paired Samples Statistics

	Paired Samples Statistics						
	Std. Std. Error						
		Mean	N	Deviation	Mean		
Pair 1	Before_Covid19_G old	3.2605	215	1.21404	.08280		
	After_Covid19_Gol d	3.3163	215	1.29430	.08827		

	Paired Samples Test								
Paired Differences									
					95% (Confidence			
			Ctd	C+4		val of the			C: ~
			Std.	Std.	Difference				Sig. (2-
		Mea	Deviat	Error					
		n	ion	Mean	Lower	Lower Upper		df	tailed)
Pair	Before_	-	.9504	.0648	-	.07196	-	214	.390
1	Covid1	.055	8	2	.1835		.861		
	9_Gold	81			9				
	-								
	After_C								
	ovid19								
	Gold								

Source: Primary Data

The Gold Investment was tested for before (mean = 3.2605) and after Covid 19 (mean = 3.3163) which shows that there is no difference among the variables. Based on the Hypothesis, there is significant difference between pre and post covid 19 on Gold Investment and hence we reject the Null Hypothesis: H_{01} .

Table 2: Pre and Post Covid Period - Oneway Anova

	ANOVA						
		Sum of		Mean			
		Squares	df	Square	F	Sig.	
Before_Covid19_	Between	17.670	5	3.534	2.481	.033	
Gold	Groups						
	Within	297.744	209	1.425			
	Groups						
	Total	315.414	214				
After_Covid19_G	Between	22.908	5	4.582	2.853	.016	
old	Groups						
	Within	335.585	209	1.606			
	Groups						
	Total	358.493	214				

Source: Primary Data

One way Anova was performed for the income level and pre and post Covid 19. The Test Variables were selected as pre and post Covid 19 and group variable selected was income level. The result reflects that pre Covid 19 (p value = 0.033) which indicates that there is statistically significant among the income group of investors. The output indicates that post Covid 19 (p value = 0.016) which indicates that there is statistically significant among the income group of investors. Based on the Hypothesis, there is significant difference between Income Level and Gold Investment and hence we reject the Null Hypothesis: H_{02} .

Table 3: Investment Level compared with Monthly Income

	Table 5. Investment Devel compared with Monthly Income							
Investment_level and Monthly_Income								
			Cros	s tabula	tion			
				Monthly	/_Income			
				Betwe	Betwee	Betwe		
			Betwe	en	n	en		
		Belo	en	50,001	1,00,00	1,50,0		
		w	25,001	_	1 -	01 -	Above	
		25,00	-	1,00,0	2,00,00	2,00,0	2,00,0	
		0	50,000	00	0	00	00	Total
Investm	0-5%	5	17	12	3	5	14	56
ent_leve								
1	5-10%	11	9	9	5	2	17	53
	10-20%	10	13	10	5	4	16	58

	20-40%	3	6	4	4	2	13	32
	40-60%	1	2	2	0	0	2	7
	more than 60%	0	2	0	0	5	2	9
Total		30	49	37	17	18	64	215

Table 4: Chi-Square Tests Investment Level compared with Monthly Income

Chi-Square Tests						
	Value	df	Asymptotic Significance (2- sided)			
Pearson Chi-Square	31.954 ^a	15	.007			
Likelihood Ratio	27.922	15	.022			
Linear-by-Linear Association	2.062	1	.151			
N of Valid Cases	215					

a. 15 cells (62.5%) have expected count less than 5. The minimum expected count is .07.

Source: Primary Data

Table 5: Gold Investment Level compared with Martial Status

Gold Investment_level and Martial_status						
		Cross tab	ulation			
		Single Married Widow Divorced				Total
Investment_leve	0-5%	14	39	1	2	56
	5-10%	23	30	0	0	53
	10-20%	14	44	0	0	58
	20-40%	10	21	0	1	32

40-60%	2	5	0	0	7
more than 60%	7	1	1	0	9
Total	70	140	2	3	215

Table 6: Chi-Square Tests - Gold Investment Level compared with Martial Status

Chi-Square Tests							
	Value	df	Asymptotic Significance (2- sided)				
Pearson Chi-Square	41.584 ^a	25	.020				
Likelihood Ratio	32.758	25	.137				
Linear-by-Linear Association	2.219	1	.136				
N of Valid Cases	215						

a. 21 cells (58.3%) have expected count less than 5. The minimum expected count is .55.

Source: Primary Data

The data on which Chi-square is performed belongs to Marital Status and gold investment. Based on the above Table 6, it is found that Chi-square value = 41.584 and p value is 0.020, which reflects there is an association between marital status and gold investment. Based on the Hypothesis, there is significant association between Marital Status on Gold Investment and hence we reject the Null Hypothesis: H_{03} .

Research Findings:

The mean of paired sample tests reflect (Table 1) 3.2605 before covid 19 and 3.3163 after covid 19 and hence projects that investors have invested more during Post Pandemic Period.

The One way Anova (Table 2) reflects the significant value is 0.033 before the pandemic and 0.016 after the pandemic period, which is below 0.05 and there fore, there is a statistically significant difference in the mean length.

There were (Table 3) 30 respondents who earn below Rs.25000/- income out of total 215 respondents. Among these 30 respondents, the study found that 86.67% (26 out of 30) fall below 20% of their investments in Gold and 13.33% (4 out of 30) investors grow beyond 20% of their income level for Gold. From the above findings the research data reveals that only 3.33% (1 out of 30) invest between 40 to 60% of their income and no investors plans beyond 60%.

The Chi-square Test value is 0.007 (Table 4) which indicates that there is an association between the portfolio proportions of Gold Investment and income level of the investors. The Chi-square Test value is 0.020 which reflects that there is an association among the marital status of the investors and their portfolio proportions of Gold Investment.

Scope of Further Study:

The Study can be further conducted by research scholars in various geographies. It can be applied for various time intervals and analyzed.

Implications

The investor has a unique attraction towards Gold and they are not either depending on price of the asset. An important line of research is based on the idea that asset prices contain a bubble component in addition to the fundamental component.

Conclusion

The investment pattern of shift in gold as an investment avenue due to the pandemic period is studied and analyzed as conclusion. Investor's attitude for gold has traditions and sentiments attached which make it very easy for the investor to put gold in their basket of portfolio as one of the compulsory asset which has to be present for most of the auspicious occasions like wedding, house warming ceremony, festivals, etc.

Reference:

A. Bhunia, and S. Mukhuti, (2013) "The impact of domestic gold price on stock price indices: An empirical study of Indian stock exchanges", Universal Journal of Marketing and Business Research, Vol. 2, No. 2, Pg. 35-43.

An Empirical Analysis of Factors Affecting Gold Prices by Rahul Bishnoi http://www.ijhpdindia.com/upload/article/PDF000012.pdf

Causal Relationship between Gold Price and Sensex: A Study in Indian Context by SP Narang and Dr. Raman Preet Singh

https://www.researchgate.net/publication/287196336_Causal_Relationship_between_Gold_Price_and_Sensex_A_Study_in_Indian_Context

Dev, S. M., & Sengupta, R. (2020). COVID-19: Impact on the Indian economy. Indira Gandhi Institute of Development Research, Working paper.

Retrieved from http://www.igidr.ac.in/pdf/publication/WP-2020-013.pdf Fernandes, N. (2020). Economic effects of coronavirus outbreak (COVID-19) on the world economy. Working paper. Retrieved from https://ssrn.com/abstract=3557504 Geetha, S. N., & Vimala, K. (2014). Perception of household individual investors towards selected financial investment avenues (with reference to investors in Chennai city). Procedia Economics and Finance, 11, 360–374.

Gupta, S., Mathew, M., Syal, G., & Jain, J. (2020). A hybrid MCDM approach for evaluating the financial performance of public sector banks in India. International Journal of Business Excellence, 1, 1. https://doi.org/10.1504/IJBEX.2020.10025809 Gupta, L. C., Gupta, C. P., & Jain, N. (2001). Indian households' investment preferences. The ICFAI Journal of Applied Finance, 7(2), 118–121.

Hema, S. (2007). A study on investment behaviour of women investors in Palani (M.Phil. dissertation). Mother Teresa Women's University, Kodaikanal, Tamil Nadu, India.

Journal of Contemporary Issues in Business and Government Vol. 28, No. 03, 2022 https://cibgp.com/

P-ISSN: 2204-1990; E-ISSN: 1323-6903 DOI: 10.47750/cibg.2022.28.03.024

Jain, D., & Kothari, R. (2012). Investors' attitude towards post office deposits schemes-empirical study in Udaipur district, Rajasthan. International Journals of Marketing and Technology, 2(7), 255–273.

Kanika Marwaha and Sangeeta Arora (2015) A comparative study of variables influencing preferences of Individual Investors for Gold (Safer Investment) Vis-a Vis Stocks (Risky Investment)

P K Mishra, J R Das and S K Mishra, (2010) "Gold Price Volatility and Stock Market Returns in India"

R Kannan and Sarat Dhal, (2008) "India's demand for gold: some issues for economic development and macroeconomic policy"

G.S. Khan, and S.M.A.E Sarker, (2014) "Dynamic Interactions between Commodity Market and Capital Market – Evidence from India", ASA University Review, Vol. 8, No. 1, Pg 29- 45

Nangolo, and C. Musingwini, (2011) 'Empirical correlation of mineral commodity prices with exchange-traded mining stock prices', Journal of the Southern African Institute of Mining and Metallurgy, Vol. 111, No. 7, Pg. 459-468

N. A. Al-Fayoumi, (2009) "Oil prices and stock market returns in oil importing countries: The case of Turkey, Tunisia and Jordan', European Journal of Economics", Finance and Administration Science Vol. 16, Pg. 87–98

Manikandan, A., &Muthumeenakshi, M. (2017). Perception of investors towards the investment pattern on different investment avenues-a review. The Journal of Internet Banking and Commerce, 22, 1–15.

Markowitz, H. (1959). Portfolio selection: Efficient diversification of invest ments. New Haven: Yale University Press.

Massa, M., & Simonov, A. (2005). Behavioral biases and investment. Review of Finance, 9(4), 483–507.

Murithi, S. S., Narayanan, B., & Arivazhagan, M. (2012). Investors behaviour in various investment avenues—A study. International Journals of Marketing and Technology, 2(7), 164–189.

Mathew, M., Chakrabortty, R. K., & Ryan, M. J. (2020). Selection of an optimal maintenance strategy under uncertain conditions: An interval type-2 fuzzy AHP-TOPSIS method. IEEE Transactions on Engineering Management., 1–14. https://doi.org/10.1109/TEM.2020.2977141

Mazur, M., Dang, M., & Vega, M. (2020). COVID-19 and the march 2020 stock market crash. Evidence from S&P1500. Finance Research Letters, 38, 101690. https://doi.org/10.1016/j.frl.2020.101690

Mittal, M., & Dhade, A. (2007). Gender difference in investment risk-taking: An empirical study. ICFAI Journal of Behavioral Finance, 4(2), 32–42.

Mittal, P. (2018). Investment avenues in India and their evaluation. IME Journal, 12(1–2), 51–60.

Nagpal, S., & Bodla, B. S. (2007). Psychology of investments and investor's preferences. New Delhi: Regal Publications.

NCAER. (1964). Attitude towards and motivations for saving. All India rural household saving survey, New Delhi.

Journal of Contemporary Issues in Business and Government Vol. 28, No. 03, 2022 https://cibgp.com/

P-ISSN: 2204-1990; E-ISSN: 1323-6903 DOI: 10.47750/cibg.2022.28.03.024

Narendra Punati & Raghavender Raju. G. (2017). Determinants of Crude Oil Prices in India. SSRG International Journal of Economics and Management Studies (SSRG-IJEMS) –4(10):1-9

Nigam, R. M., Srivastava, S., & Banwet, D. K. (2018). Behavioral mediators of financial decision making—A state-of-art literature review. Review of Behavioral Finance, 10(1), 2–41.

Ozili, P. K., & Arun, T. (2020). Spillover of COVID-19: Impact on the global economy. Working paper. Retrieved from https://ssrn.com/abstract=3562570
Palanivelu, V. R., & Chandrakumar, K. (2013). A study on preferred investment avenues among salaried peoples with reference to Namakkal Taluk, Tamil Nadu, India. Paper presented at the IBEA International Conference on Business, Economics and Accounting, Bangkok, Thailand.

Retrieved from http://www.caal-inteduorg.com/ibea2013/ejournal/089 Pandian, V. A., & Thangadurai, G. (2013). A study of investors preference towards various investments avenues in Dehradun district. International Journal of Management and Social Sciences Research, 2 (4), 22–31.

Pedro Matos and Richard B. Evans (2017) "Gold s a portfolio diversifier: The World Gold Council and Investing in Gold" University of Virginia Darden School Foundation.

R. D. Huang, R. W. Masulis and H. R. Stoll, (1996) "Energy shocks and financial markets", Journal of Futures Markets, Vol. 16, No.1, Pg. 1-27.

Zaei, S.M., 2012. Effects of Gold Price on Equity, Bond and Domestic Credit: Evidence from ASEAN +3 countries, Procedia- Social and Behavioral Sciences, 40, 341-346. http://dx.doi.org/10.1016/j.sbspro.2012.03.197.