COMMUNICATIONS

Vanishing Retail Equity Investors in Indian Stock Market, A State of Melancholy and Gold Rush - An Empirical Study

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India has an atrocious retail participation in equity markets. There is an explicit commotion to bring the retail investor back into the stock markets. This situation strikes a chord of 2007, when the stock markets bang all time highs and there was jubilation across the nation. Although Indian stock market has expanded in the post liberalization era, with regard to volatility the market has not demonstrated any momentous transform. This long-lasting volatility in the stock market since the global financial crisis has been a dispiriting issue for the retail investors to invest in equity markets. Due to high volatility, new clients are afraid to burn their fingers and existing investors are uncomfortable in roiling their portfolios. The cost of trading in India remains relatively high. More pressure is levied on the overall brokerage revenue pool due to low retail equity participation. On the other hand, Indian's obsession towards gold is an icon of opulence and appeals uniformly to youths and older generations across social sections within the country. It has a distinctive position in the psyche of Indians and is deemed to be a source of social security for a large segment of the Indian society. The study aims to study the trends in the retail participation in the Indian equity market and examines the collective influence of gold jewellery demand, gold investment demand and retail participation in Indian equity markets using the secondary data acquired from Money life foundation official website and World gold council website. Various statistical techniques such as trend analysis, Regression analysis is employed in the study. The trend projection highlights that the average daily turnover in cash market can increase three times in future more than the current state. Results reveal that most of the individuals prefer to invest in various gold financial products such as Gold ETFs, paper gold etc., in India and individual investors are indecisive to buy equity shares and participate in Indian equity markets. The researcher also finds that there is insatiable demand for gold jewellery in India that has been largely immune to retail participation in the Indian equity market. In addition, the researcher highlights that investors need to be financially knowledgeable in order to manage their finances especially

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in the stock market. Intensive financial education and enlightenment will persuade retail investors to revisit the Indian stock market. The researcher concludes that with increasingly complex financial products in the marketplace, investor's financial literacy has become more important.

Key Wo7rds: Gold investment demand, Regression analysis, retail participation, Gold jewellery demand, equity shares

1. Introduction

In India, capital markets have been playing a progressively more imperative role, in shaping the pace and pattern of economic growth and the stock exchange are a central institution of the capital market as it provides an organized market platform for transparent price discovery. In the year 2013-14, Indian equity markets pitched to a novel high resulting from an enhanced scenario of global financial markets, exchange rate adjustments, and anticipation of electoral outcomes. The inception of 2014 has seen the ever-increasing flow of capital, new zenith for benchmark indices and market capitalization which has engraved out an investor's encouraging climate for investment. India has an atrocious retail participation in equity markets. There is an explicit commotion to bring the retail investor back into the stock markets. This situation strikes a chord of 2007, when the stock markets bang all time highs and there was jubilation across the nation. Although Indian stock market has expanded in the post liberalization era, with regard to volatility the market does not demonstrated any momentous transform. This long-lasting volatility in the stock market since the global financial crisis has been dispiriting issue for the retail investors to invest in equity markets. Due to high volatility, new clients are afraid to burn their fingers and existing investors are uncomfortable in roiling their portfolios. The initiative of long term investment is hitherto to be embedded in the retail investor's mind set. Retail investors are often coaxing into inappropriate investment decisions allured by the vested interest. In the era of high frequency trading, pathetic internet penetration, interruption in internet connectivity, frequent power failures which hinder the retail investor's efficiency to harvest the paramount price movements. Costs of trading in an exchange have a significant bearing on the capital market efficiency. The three important constituent of cost of trading are user charges which includes brokerage fees, DP chargers, exchange transaction charges, impact cost, statutory levies such as service tax on brokerage and stamp duty. The cost of trading in India remains relatively high. More pressure is levied on the overall brokerage revenue pool due to low retail equity participation.

Gold is an icon of opulence and appeals uniformly to youths and older generations across social sections within the country. It has a distinctive position in the psyche of Indians and is deemed to be a source of social security for a large segment of the Indian society. Indians also affix a high emotional significance to gold. It is often considered to be an essential part of a social requirement for ceremonies and weddings and bequeaths a sagacity of pride and social status to its owners. Gold demand is segmented as consumption demand in the form of jewellery and investment demand. Jewellery has a unique attraction in Indian culture. It has been an essential part of Indian way of life and ethnicity for centuries. Today, India has a huge home jewellery market. It is also the principal punter of gold jewellery in the world. The investment demand for gold is also contented through financial products. There are diverse ranges of products available in the market. Retail investors may take pose in gold through financial instruments such as gold ETF, e-gold, and gold-based mutual funds. The avid appetite and importance of gold among Indian women cut across caste and economic boundaries.

2. Review of literature

Patil R H (2006) argues that the stockbrokers were the kingpins of the major fraud that shook the financial system and the capital markets. Computer literacy was quite poor, especially among the stock market fraternity. A large number of investors who buy/sell on the basis of half-baked reports/studies tend to be big losers. Investors who do not have the stomach to digest losses from market collapses or do not have the expertise to tread carefully to protect themselves from the furies of bulls and bears should not enter the wonderland of equity markets.

JoydeepBiswas (2006) evaluates the impact of financial liberalization on the augmentation, progress and efficiency of the Indian stock market vis-à-vis other selected Asian markets such as Indonesia, Malaysia, South Korea, Taiwan and Thailand. The author emphasizes that In India, there exist a higher volatility in the market, without a corresponding higher return, signify greater risk and more instability for investors. The author concludes that the excessive share price fluctuations in the Indian equity market would evidently not persuade retail investors to enter the fray.

Gupta L C (1998) remarks that an imperative factor leading to the withdrawal of retail investors from the capital market is the erosion of investor's confidence in Corporate India. The author emphasizes that the investor has often felt skeptical due to manipulated valuations. Market's mispricing due to hooligan's activities has caused extensive losses to small investors who were often misled, or taken for ride, by artificial price signals given by the market. The author highlights that the corporate governance crisis should instantly engage severe attention of governmental authorities.

AvainshPranjape (2005) argues that unfortunate Indians who have no access to any other asset market can conveniently park their savings in the form of gold. This asset holds a unique position in that in good times it can be used as an ornament whereas in bad times it can be converted into cash.

Rohna O' Connell (2006) emphasizes that gold has an emotional feeling in Indian context, as it is known as 'Streedhan'. Gold is considered as Indian bride wealth which she takes with her when she marries and which remains hers. This helps to give gold a significant role in women empowerment.

NilikaMehrotra (2004) focuses on the cultural significance of gold. The author highlights that despite the economic recession, fluctuating prices of gold and other secularizing forces of globalization, the cultural value associated with gold would continue to sustain the relationship between gender and gold thereby making it possible for the women to continue having control over this form of property. The author concludes that gold is being seen as a good investment option and find that the gold prices have spiraled up again conforming to the traditional Indian logic.

JaanaLisetteLutter (2008) emphasized that the major rationale behind gold investment occurs from excess income over expenses and one wants to preserve its worth for the future in the scearnio where inflation is augmenting.

3. Statement of Problem

Indian stock markets mobilize a very small fraction of household financial savings in India. Indian Stock market is beleaguered with severe price volatility and suffers from menace of over speculation and excessive price fluctuation. Many households shy away from stock markets, because of lack of adequate financial knowledge on stocks, the stock market working and asset pricing. This leads to stumpy retail participation putting the Indian stock markets in "dilemma". Gold is an inoperative asset in the hands of individuals and there is a massive unlocked economic value of the Indian economy. India is recognized to be among the largest importers of gold in the world. Massive gold demand leads to deterioration in current account deficit.

4. Objective of the study

- To study the trends in the retail participation in the Indian equity market
- To identify the relationship between India's gold investment and retail participation in India equity market
- To measure the collective influence of consumption of gold in the form of jewellery, gold investment and the retail participation in the Indian equity market

5. Hypothesis of the study

Hypothesis 1

Ho: There is no relationship between India's gold investment and retail participation in India equity market

H1: There exist the significant relationship between India's gold investment and retail participation in India equity market

Hypothesis 2

Ho: There is no relationship between consumption of gold in the form of jewellery, gold investment andthe retail participation in the Indian equity market

H1: There exist the significant relationship between consumption of gold in the form of jewellery, gold investment and the retail participation in the Indian equity market

6. Source of Data

The study is based on secondary data acquired from various appropriate data sources such as, Database of World Gold Council website and Money life foundation official websites etc.

7. Research Design

The study is empirical in nature. We have measured the data encompassing annual averages of gold prices (Unit per troy ounce) expressed in terms of Indian Rupee, Quantified annual data of India's Jewellery demand, Investment demand for gold , and the Average annual daily turnover in cash market expressed in terms of Indian Rupees. The sample period taken for the study extends from 2005 to 2013. SPSS V 17 (Statistical Package for Social Sciences) computer packages have been used for coordinating the data and undertaking statistical analysis. Excel office package is also used additionally.

8. Data Analysis

a. Linear trend analysis is used to describe the retail participation in the Indian equity market

b. Linear regression analysis has been applied to examine the relationship between India's gold investment and retail participation in Indian equity market

c. Multiple regression analysis has been employed to establish the influence of consumption of gold in the form of jewellery, gold investment and the retail participation in the Indian equity market.

9. Empirical Results and Discussion

In this section, the researcher attempts to present the empirical results obtained from statistical analysis such as trend analysis, linear regression analysis and multiple regression analysis.

Objective 1: To study the trends in the retail participation in the Indian equity market

The researcher employs linear trend analysis to forecast the Average daily turnover in cash market (Rs. in Crores) for a period of 3 years, in order to study the trends in the retail participation in the Indian stock exchanges using Excel Microsoft office package. The line is described by the equation

$$Y=a+bX$$

Where b is the slope of the line and a is the intercept, x is termed as independent variable and y is dependant variable on x. The R squared value equals to 0.057, which is a good fit as it lies between 0 and 1, where better the line fits the data. The linear equation obtained by employing the linear trend analysis is

$$y=249.5x+9803.$$

In the span of 3 years period,

249.5*12+9803= Rs12797 crore (approximate estimate)

In 2013, the average daily turnover in cash market is Rs. 4613 crore, after a period of 3 years, the trend projection highlights that the average daily turnover in cash market can increase three times more than the current state.

Table 1 (appendix) exhibits the fall in the retail investor's participation in Indian stock market. Retail investors are individual investors who buy and sell stocks on their own account. In India, retail equity investor's participation in capital market is relatively squat. The percentage of retail investors to the total was as high as 73.83% in 2005. This percentage was waning since then. In the year 2013, the retail participation in Indian stock market has diminished to 34.31%, which is stumpy before the better days since 2005. In 2009 the average daily turnover in cash market was Rs. 10882 crore which was reduced to Rs. 4615 crore in 2013. Retail investors seem to be selling their shares rather than buying them. The question that hits our mind is what has ignited panic to the retail investors?.

Objective 2: To identify the relationship between India's gold investment and retail participation in Indian equity market

The researcher employs linear regression analysis to explore the relationship between India's gold investment and retail participation in Indian equity market. India's gold investment is derived from the quantifiable gold investment demand and annual average gold price in terms of unit per troy ounce expressed in national currency which is exhibited in Table 2 (appendix). The retail participation in Indian equity market is expressed as the annual average daily turnover in cash market expressed in national currency. Linear Regression analysis estimates the coefficients of the linear equation, involving one or more independent variables that best predict the value of the dependent variable (Draper, N.R.; Smith, H. (1998)).

Dependent Variable: Gold Investment

Table 3. **Model summary**

Model	R	R square	Adjusted R square	Standard error of the estimate
1	.072 (a)	.005	.137	.68760

Source: Computed data

From Table 3, it is found that R2 value is 0.072, adjusted R2 value is 0.137. This shows that the variance ranges from 7.20% to 13.7%. That is the independent variable average annual turnover in cash market in Indian stock market is able to create very negligible variance on the gold investment in India. This leads to the resultant confirmation of regression model fit in the following ANOVA table.

Table 4. **ANOVA**

Model	Sum of squares	df	Mean square	F	Sig.
Regression	.017	1	.017	.037	.085(a)
Residual	3.310	7	.473		
	Total	**3.327**	**8**		

Source: Computed data

From Table 4, it is found that the regression fit coefficient F=.037, p=.085 are statistically significant at 10% level. Therefore, it can be concluded that the independent variable annual average cash turnover in Indian equity market which is considered to demonstrate the regression model is negatively related to Gold investment in India. The following correlation table clearly explains the negative impact of dependant variable on the independent variable.

Table 5. **Coefficient table**

Model I	**Unstandardised Coefficient**		**Standardised coefficient**	**T**	**Sig.**
	B	**Standard error**	**Beta**	**B**	**Standard error**
Constant	8.164	6.406		1.275	0.015
Average daily cash turnover	-.313	1.637	-.072	-.191	0.085

Source: Computed data

From Table 5, it is found that (t=-.191, p=.0.085) most of the individuals prefer to invest in various gold financial products such as Gold EFTs, papergold etc., in India and individual investors hesitates to buy equity shares and participate in Indian equity markets. This is consistent with the prior studies undertaken on individual investors in different countries. Takashi Miyazaki and Shigeyuki

Hamori (2013) elucidate the character tics of gold as an investment asset by testing for casual relationship between gold return and stock market performance over last 10 years. This study claims that investors are driven to flight-to-quality by the fear of financial collapse, and consequently, rush into purchasing gold-linked assets, such as ETFs, ,as a hedge or a safe haven. Similarly, David Hiller, Paul Draper, and Robert Faff (2006) investigate the investment role of precious metals in financial markets by analyzing the daily data for gold, platinum and silver from 1976 to 2004. The authors point out all three precious metals have low correlations with stock index returns and suggest that these metals may provide diversification within broad investment portfolios. Besides, the data disclosed that three precious metals have some hedging capability, particularly during periods of "abnormal" stock market volatility.

Objective 3: To measure the collective influence of consumption of gold in the form of jewellery, gold investment and the retail participation in the Indian equity market

The researcher employs multiple regression analysis to examine the collective influence of gold demand and retail participation in Indian equity market. Multiple regression analysis is used to predict the variance between the dependent variable and independent variables (Warne, R. T. (2011)). The multiple regression analysis explores the interrelationship among variables and the contribution of each predictor to explain the variance in the dependent variable (Cohen, J.,(2003)). This method is used to determine how much variance in India's gold demand in the form of jewellery and investment can be explained by retail participation in the Indian equity market. In this regression approach India's jewellery demand and gold investment demand are considered as independent variables and average daily cash turnover in Indian equity market is expressed as dependant variable. Gold demand is categorized as the consumption demand in the form of jewellery and investment demand. This is derived from the quantifiable gold jewellery demand, gold investment demand and annual average gold price in terms of unit per troy ounce expressed in national currency. The retail participation in Indian equity market is expressed as the annual average daily turnover in cash market expressed in national currency.

Dependent Variable: Average daily cash turnover

Table 6. **Model summary**

Model	R	R square	Adjusted R square	Standard error of the estimate
I	.493 (a)	.243	.010	.14926

Source: Computed data0

From Table 6 , it is found that R2 value is 0.243, adjusted R2 value is 0.10. This shows that the variance ranges from 2.43% to 10%. That is the independent variable demand for gold in the form of jewellery and investment is able to create very diminutive variance on the average daily cash turnover in Indian equity market. This leads to the resultant confirmation of regression model fit in the following ANOVA table.

Table 7. **ANOVA**

Model	Sum of squares	Df	Mean square	F	Sig.
Regression	0.043	2	.021	**.961**	**.043(a)**
Residual	.134	6	0.022		
Total	**176**	**8**			

Source: Computed data

From Table 7, it is found that the regression fit coefficient F=.961, p=.043 are statistically significant at 5% level. Therefore, it can be concluded that the independent variables gold demand in the form of jewellery and investment which is considered to exhibit the regression model is critically related to annual average cash turnover in Indian equity market. The following correlation table obviously elucidates the restrained impact of dependant variable on the independent variable.

Table 8. **Coefficient table**

Model I	Unstandardised Coefficient		Standardised coefficient	T	Sig.
	B	Standard error	Beta	B	Standard error
Constant	6.441	1.851		3.480	0.013
Gold investment	.140	.141	.608	.997	0.035
Gold Jewellery	-.470	.342	-.837	-1.371	0.021

Source: Computed data

From Table 8, with regard to gold investment demand, it is found that (t=.608, p=0.035) This reveals that most of the individuals prefer to invest in various gold financial products such as Gold EFTs, papergold etc., in India and individual investors are indecisive to buy equity shares and participate in Indian equity markets. In addition, when we observe gold jewellery demand it is exhibited that ($t=-1.371$, $p=0.021$). This highlights that the insatiable demand for gold jewellery in India that has been largely immune to retail participation in the Indian equity market. This is reliable with the prior studies undertaken on individual investors in different countries. Chen, An-Sing, Lin, James Wuh (2014) emphasizes that small-cap stocks are the riskiest and most volatile investmenteven during economic good times, and gold is found to offer a risk-hedging power for this segment of the stock market. Glover and Baur (2012) explains that gold showed an inverse relationship with the stock market at times of crisis.Mayya M R (1977) showed that equity investment has failed to act as a reliable hedge against inflation. Furthermore, gold investment known as traditional "frozen investment" has been a better hedge than investment in securities.

10. Conclusion

Retail investors have not made money since crisis. Retail investors seem to be opting for attractive asset classes such as gold, real estate to park their funds. Dominance of Foreign Institutional investors paved the great way for the stock market development despite low retail participation. Retail investors unearth the stock market activities to be excessively complicated and complex to grasp. The individual investor's participation cascades down due to failure to restore the investor's confidence. Since the 2008 market recession, which led to losses by many investors, retail investors have been staying away. The market is presently subjugated by institutional, high networth and foreign investors. Many retail investors got their fingers burnt in 2008. Thus investors need to be financially knowledgeable in order to manage their finances especially in the stock market (Worthington, 2006). There is a high demand for physical gold for investment purposes due to the attractiveness of gold as an investment option, lower availability of alternate savings. Gold has always mesmerized the mankind's imagination and inclined their urge to acquire the same. Gold occupies a crucial role in the social and economic life of poor and rich alike. In India, besides the fiscal and strong social considerations, individuals are extremely sentimental about the possession of gold. Intensive financial education and enlightenment will persuade retail investors to revisit the Indian stock market. With increasingly complex financial products in the marketplace, investor's financial literacy has become more important. Retail investors are considered as the backbone to the equity market. There is zilch superior way of empowering the investor than taming their financial literacy. Government support and media must play an effective role in promoting the equity culture. Effective participation in the investor education programmes boost the investor's confidence which enables them to get best insights of various equity oriented securities. While the market rudiments reinforced as the year progressed, dedicated policy measures encircling all specialty of market activity further vitalized the regulatory infrastructure and reposed the investor confidence. SEBI is looking forward to explore effective ways to employ modern technology and social media to make learning of stock markets and financial education easy and entertainment based. SEBI would persistently endeavor to make Indian stock market world class by focusing on "Protection of investor's interests and promote regulation for market development".

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Appendix

Table 1. **Data showing the plummet of Retail investor Average daily turnover in cash market (Rs. in Crores)**

Year	Retail	% of Retail to total
2005	6145	73.83
2006	7745	67.20
2007	10102	55.51
2008	10255	55.66
2009	13709	65.30
2010	10882	56.21
2011	6690	47.75
2012	6859	47.29
2013	4,615	34.31

Source: Moneylife Foundation

Table 2. **India's Jewellery and Investment Demand and Average annual gold price**

Year	Jewellery demand (in tonnes)	Investment demand (in tonnes)	Total Consumer demand (in tonnes)	Annual Average gold price (Unit per troy ounce)
2005	587.1	134.5	721.6	23,090.1
2006	526.2	195.7	721.9	27,972.3
2007	558.2	215.4	773.6	32,862.3
2008	501.6	211	712.6	42,374.2
2009	442.4	136.1	578.5	50,606.8
2010	745.7	217.4	963.1	62,846.9
2011	618.3	368	986.3	81,303.7
2012	552	312.2	864.2	90,814.4
2013	612.7	362.1	974.8	102,397.8

Source: World Gold Council