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Gold vs Gold ETFs: Evidences from India

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Abstract: Among all the investment alternatives available in the world, gold has shown better performance over years. In spite of its mediocre short term performance, Gold has constantly outperformed other conventional asset classes such as currencies, debt, equity and other commodities regardless of most of economic and market cycles with a CAGR of 17.1% in INR term and 14.5% in USD term for the past ten year period. However, there are a number of ways by which investment in gold can be made like gold ETFs and fund of funds, E-gold, stocks of gold mining companies, gold futures, gold bars, coins and biscuits, gold jewellery, etc. Out of these, ETFs are amongst the most popular investment tools. This paper attempts to compare the performance of gold ETFs and physical gold. For this purpose, risk and return of physical gold has been compared with the risk and return of gold ETFs. Monthly closing prices from March 31, 2011 to March 31, 2014 have been taken. The empirical evidence concluded that the gold ETFs have lesser variability as compared to the physical gold and hence the performance of gold ETFs is better than the performance of physical gold.

Keywords: Physical gold, gold ETFs, risk, return, critical appraisal

1. INTRODUCTION

Precious metals have received considerable attention post the financial crisis of 2008 as alternative investments. Gold has historically been treated as a store of value and a medium of exchange until the collapse of the Bretton Woods system. Even in the post Bretton Woods world, gold has been held as an investment by investors and by governments as part of their reserves. Among all the precious metals, the most popular metal as an investment is gold. Investors generally purchase gold as a harbor or hedge against political, economic, or social fiat currency crises (which includes declines in investment market, currency failure, burgeoning national debt, inflation, social unrest and war). During these difficult times, many investors tried to safeguard their assets by making an investment in precious metals, most remarkably silver and gold.

Among all the investment alternatives available in the world, gold has shown better performance over years. In spite of its mediocre short term performance, Gold has constantly outperformed other conventional asset classes such as currencies, debt, equity and other commodities regardless of most of economic and market cycles with a CAGR[1] of 17.1% in INR term and 14.5% in USD term for the past ten year period. However, there are numerous ways by which we can invest in bullions. Some of the ways to invest in gold are gold ETFs and fund of funds, E-gold, Stocks of gold mining companies, Gold futures, gold bars, coins and biscuits, gold jewellery, etc. A GETF or gold exchange-traded fund is primarily an exchange-traded fund (ETF) whose main aim is to track the gold prices. Gold ETFs are units that represent

[1]Compounded annual growth rate

physical gold which may be in dematerialised or paper form. Just like a single stock of a corporation, these ETF units are bartered on the stock exchange. Objective of Gold ETF's are to offer investors a medium of participation in the gold market without the obligation of taking physical gold delivery, and to sell and buy that participation by the transacting a security on a stock exchange.

Although Gold exchange-traded funds might be new for India, yet they are gaining popularity as investors are becoming aware of the benefits of investing in dematerialized form of gold rather than holding it as jewellery. At present, there are fourteen gold ETFs which are traded on NSE.

2. OBJECTIVES OF THE STUDY

The objectives of this study are as follows:

- To compare the performance of Gold ETFs and physical gold.
- To review the studies conducted and results suggested in the area of Gold ETFs.
- To critically appraise the merits and demerits of investment in Gold ETFs.
- To suggest recommendations and suggestions drawn there from.

3. DATA AND METHODOLOGY

This study is an empirical study based on secondary data. The data has been collected from various published sources and websites. In this study, risk and return of physical gold has been compared with the risk and return of gold ETFs. Monthly closing prices from March 31, 2011 to March 31, 2014 have been taken. Spot market price of physical gold has been taken from the website of MCX whereas the data for Gold ETFs (Axis Gold ETFs) has been taken from the website of NSE . Thereafter, monthly return is calculated, using following formula:

Return for n^{th} month = $\frac{(Price\ at\ the\ end\ of\ nth\ month - Price\ at\ the\ end\ of\ (n-1)th\ month) \times 100}{Price\ at\ the\ end\ of\ (n-1)th\ month}$

Then these monthly returns are averaged using arithmetic mean to find out the mean monthly returns.

Then, to measure the risk, variance and standard deviation for both gold and gold ETF is calculated. Variance is calculated using the following formula:

Variance, $\sigma^2 = \Sigma(X-\bar{X})^2 / n$

Where, Y shows the monthly returns and

n is the no. of observations i.e., 12

Standard deviation is calculated using the following formula:

Standard deviation, $\sigma = \sqrt{variance}$

It is to be noted that these standard deviations and variances are on monthly basis.

But these two parameters (mean and standard deviation) alone cannot give the true results and therefore, one more parameter called coefficient of variation is also calculated. Coefficient of variation or C.V. is used to compare the variability of two or more series. That series(or group) for which coefficient of variation is greater is said to be more variable or less consistent, less uniform, less stable or less homogeneous, and vice-versa.[2] Coefficient of variation is obtained as follows:

$$C.V. = (\sigma/\bar{X}) \times 100$$

4. REVIEW OF LITERATURE

This section reviews the studies conducted and results suggested in the area of gold ETFs.

Nedeljkovic (2005) observed that the potential of gold ETFs was far from fulfilled and that they could become a significant factor fuelling demand for gold and pushing the price of gold

[2] 2 Rustagi, R.P., (2007), "Investment Management Theory and Practice", Sultan chand and sons, 1st edition- Revised Reprint, pp-54-55

upward. Naylor, Wongchoti and Gianotti (2011) examined fundamental behavior applicable to physical gold and silver returns also applies to the prices/returns of gold and silver exchange traded fund. It was found that, their price movements did not follow a random walk. They showed that such inefficiency which was not exploitable on physical gold and silver in the past now provided an opportunity for abnormal returns through a simple filter trading rule. Pullen, Benson and Faff (2011) examined the safe haven, hedging and diversifying properties of gold stocks, gold bullion, gold ETFs and gold mutual funds. They found that all of these tend to be diversifiers. Both gold bullion and gold ETFs showed support for the property of safe haven but there was very little evidence of the safe haven characteristics in case of gold mutual funds and gold stocks and thus, the investors who were keen on securing safe haven features of gold, could not generally trust on gold mutual funds or gold stocks. Instead, they needed to take direct exposures in gold ETFs or bullion. Goyal and Joshi (2011) observed that the trading of Gold ETFs is quite different from the trading at NSE. The trading in Gold ETFs is increasing over the time as the gold prices are regularly touching new high and the investors are investing in these ETFs for earning fair and sure profits in future, without taxes and without fear of theft. It is also evident from the study that the prices of ETFs have less variation than the index of NSE. Mukul, Kumar and Ray (2012) asserted that investment in gold provided a better monthly return relative to a diversified equity fund. They found that investors should invest a certain proportion of their funds in gold. A gold mutual fund or gold ETF, therefore, became an ideal instrument for investment. The investor also need not be concerned about the gold being stolen or damaged by whatever reason. Features like transactional ease and high liquidity further made the case for gold ETF investment stronger. Baur (2013) showed that gold ETFs were more liquid than its underlying physical bars and coins and that this liquidity varied through time and depended on the structure of the ETFs, i.e. whether the ETF was physically-backed or synthetic. They observed that the introduction of ETFs was at least partially responsible for the strong increase of the price of gold between 2002 and 2011. They also claimed that the the volatility of gold had been increased because of the ease of trading facilitated by gold ETFs.

5. CRITICAL APPRAISAL OF GOLD ETFs

The traditional way of investing in gold is in the form of jewellery. However, it is a sort of dead investment because when a lady purchases any jewellery she never wants to sale it, no matter how old the jewellery becomes. Females are emotionally attached to the jewellery. Therefore, it is better to invest in Gold ETFs. Gold ETFs offer a number of other benefits also over physical gold. These are: 1.) Gold ETFs are highly liquid. One can purchase and sell these very fast just by a phone call to the broker or the click of a mouse. Units of gold ETF are traded freely on stock exchanges and investor can execute the deal at any time during trading hours. 2.) The price of Gold ETF is fully transparent since its price is linked with 1 gram gold price. It involves neither any making charges nor any premium. Investor needs only to pay a small brokerage of 0.5%. 3.) It is tax efficient. In case of gold ETFs, profits are regarded as long-term capital gains if the holding period is more than one year and thus, taxed at a lower rate. In case of physical gold, before the profits are regarded as long-term gains, the holding period must be three years. Gold ETFs also do not attract wealth tax. 4.) Gold ETF is affordable and is appropriate for investment purposes because it can be purchased in meagre denominations of 1 gram. Even 500 mg units are offered by some companies. It is impossible to purchase gold jewellery in such meagre denominations. 5.) Gold ETFs are safe and convenient since they are held electronically in the dematerialised form. Physical gold is required to be stored in a locker because of the concern of being stolen. 6.) Gold ETFs are regarded as holding equivalent quantity of 99.5% pure gold bullion. Therefore, purity of gold is not a concern while buying ETFs. However, in physical gold, the buyer has to assure that he gets the purity for which he has paid. 7.) By rematerialisation, gold ETFs can be easily converted into physical gold.

However, in the case of gold ETFs, most of these above-mentioned benefits come at a cost. Fund house charges a small asset management fee, which results in slightly lesser return as compared to the actual increase in the prices of gold. Not only this, some additional costs are involved in the form of commission or brokerage at the time of buying and selling gold ETFs. Another drawback is that some ETFs are illiquid, which impacts the buying and selling flexibility of these ETFs. Hence, investors should take care of this factor at the time of investing in gold ETFs and should stick to liquid funds.

6. EMPIRICAL RESULTS

The performance of both physical gold as well as gold ETF is deteriorating year by year. However, it is difficult to compare these two by risk and return. Therefore, coefficient of variation has been used to compare the performance of gold with the ETF since higher the coefficient of variation higher is the variability and vice-versa.

The results of the analysis are presented in the following table.

Table: Comparison of Physical Gold and Gold ETFs (Figures in %)

Year	Physical Gold			Gold ETFs		
	Risk	Return	C.V.	Risk	Return	C.V,
2011-12	5.74	2.71	211.8	5.33	2.59	205.79
2012-13	1.96	0.41	478.05	1.96	0.46	426.09
2013-14	6.25	-0.04	-15625	6.024	-0.18	-3346.9

Source: Compiled by the researcher

The above table makes it clear that the coefficient of variation of gold ETFs is less than the coefficient of variation of physical gold. It signifies that the gold ETFs have lesser variability as compared to the physical gold and hence the performance of gold ETFs is better than the performance of physical gold.

7. CONCLUSION

As an investment class, gold seems to have lost its lustre among the mind of investors as appeared from the significant correction traced in the gold prices. During the year ended on Dec31, 2013, gold lost 14.74% in INR terms while it lost 27.33% in USD term.

All over the world, gold faced its toughest phase in 2013, and suffered the highest annual loss in the last thirty years because of US Fed tapering concerns, high interest rates, strengthening dollar, huge selling by Gold ETF and bullishness in the stock market. In the domestic front, the loss suffered by gold in INR term was lesser than the loss in USD term because of the sharp depreciation in the value of rupee and growing demand in spite of the regularity restrictions.

Going forward, the gold prices are likely to move upward slightly in the short term in the domestic territory given the increasing demand for jewelry and gold bars in India and China. Aside from seasonal demand, further depreciation in the value of rupee (offset by the regulatory relaxation– cut in the import duty from the current 10%-encouraged by domestically improving trade deficit) will support the gold prices to some extent. A pick-up in gold buying by central bank may also contribute to a positive demand trend.

However, strong dollar, stronger global economy, no sign of inflation, a continued tapering in the bond buying by Federal Reserve, declines in US equity risk premium, rising US real interest rates, and lack of interest of buyers would effect the global appeal for gold. Further, recovery in Europe, a positive GDP growth forecast of China, and an above average risk of disruptions in supply would be devastating factors for the gold.

This paper compared the performance of physical gold and gold ETFs as investment tools. The empirical evidence concluded that the gold ETFs have lesser variability as compared to the physical gold and hence the performance of gold ETFs is better than the performance of physical gold.

8. REFERENCES:

Baur, D. (2013, July 24). http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1928591.

Retrieved March 24, 2014, from Social Science Research Network: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2297756##

Goyal, A., & and Joshi, A. (2011). Performance appraisal of gold ETFS in India. Finance Management , 32, 2057-2060.

Mukul, M. K., Kumar, V., & and Ray, S. (2012). Gold ETF Performance: A Comparative Analysis of Monthly Returns. The IUP Journal of Financial Risk Management , IX (2), 59-63.

Naylor, M., Wongchoti, U., & and Gianotti, C. (2011). Abnormal Returns in Gold and Silver Exchange Traded Funds. Journal of Index Investing , 2 (2).

Nedeljkovic, V. (2005). The Impact of ETFs on the Gold Market. Retrieved March 20, 2014, from lbma: http://www.lbma.org.uk/assets/6c_nedeljkovic_lbma2005.pdf

Pullen, T., Benson, K., & and Faff, R. (2011, September 16). A Comparative Analysis of the Investment Characteristics of Alternative Gold Assets. Retrieved March 20, 2014, from Social Science Research Network: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1928591