

A Comparative Analysis Between Gold Etf's And Nifty50-A Selected Gold Etf's In India

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ABSTRACT

Over the years, investment in gold ETFs as an alternative investment to physical gold has increased. Generally, gold, gold ETF and gold mutual funds are considered as alternative investments to the stocks and shares and hence the returns on these investments should closely follow the returns on the stocks. In other words, it is usually expected that there should not be any major difference in returns on the investment avenues. The current study is undertaken to analyse the risk and returns of five selected Gold ETF's and compare with Nifty50 during 2015-19. In overall, the correlation coefficient is found to be negative for three Gold ETF's (i.e. AxisGold, HDFCMFGETF and GoldShare) which is 60 percent and positive for the remaining two Gold ETF's (i.e. IDBIGold and KotakGold) which is 40 percent. Hence, it is concluded that though returns of some of the gold ETFs fall in line with the returns on the stocks but returns on majority of the gold ETFs do not closely follow the returns on the stocks. The investors are advised to include gold ETFs in the portfolio of the stocks to diversify

Keywords

Gold ETF, Nifty50, Return, Risk, Variance

Article Received: 10 August 2020, Revised: 25 October 2020, Accepted: 18 November 2020

Introduction

One of the valuable metals being bought and sold is gold. The gold is considered as an investment avenue by many of the investors; because originally, it was the base for gold standard which helped to set value for all the money across the globe. It is also used as a hedging tool, as a security during financial crises and a direct investment for the purpose of savings in the future. Over the period of time, an alternative investment to the physical gold was emerged which is known as Gold Exchange Traded Fund (Gold ETF).

The gold ETFs are basically mutual funds that are listed and traded in the stock exchange just like shares. The Gold ETFs are sub divided into units representing physical gold. They are based on the Net Asset value (NAV) of the underlying asset of gold. These can be bought and sold throughout the trading day like any other shares in an exchange and held in the dematerialized form or paper form. It is a reflexive investment whose price is based on gold price and one can find complete transparency on the holdings. The investors can purchase a single ETF just like any other share. Due to its exclusive structure and creation mechanism, the gold ETFs are less expensive as compared to physical gold investments. Thus gold ETF offers an opportunity to the investors to take part in the gold bullion market without necessarily taking physical delivery of gold.

The concept of ETF emerged originally in Canada by commencing "Central Fund of Canada", a closed-end fund founded in 1961 and listed on "Toronto Stock Exchange" in 1966. It was later on in 1983 modified into exchange traded product with underlying asset of gold and silver. There are a

variety of types of ETFs which are traded on the stock exchanges like Equity Index ETFs, Gold ETFs, Liquid ETFs and International Index ETFs. The ETF enables the investors to invest in the entire market with just one security. Thus it offers the benefit of flexibility as well as diversification. In current financial markets ETF is considered as highly valuable instrument of investment and witnessed a rapid growth in the last decade.

Review Of Literature

The researchers reviewed the following literature to find the research gap.

Goyal & Joshi conducted a study in the year 2011. In their study, they examined the performance of 5 Gold ETFs those of which are listed in NSE by using different assessment techniques by measuring Alpha, Beta, and Standard deviation of preferred ETFs from March 2008 to November 2010. They finalized by saying that ETFs price very less compared to NSE Index. Jaffe, 1989 says that Gold plays a significant role in numerous portfolios. Since Gold is a risky asset and its return does not rely on others. The author tested 4 hypothetical portfolios with distinct risk and states that extension of Gold in each of the portfolios increases the return and decreases the risk as well as if the Gold stocks are added to the hypothetical portfolios results in an increase in the reruns and the risk also increases. Therefore, high return than high risk. Sunkara, 2017 quotes the performance of Gold and Gold ETFs are correlated with Gold bonds and deposits on the ground of total return, standard deviation, and Compounded Annual Growth Rate (CAGR) by taking the closing price from April 1st, 2013 to March 31st, 2017.

They finalize that the CAGR of Material Gold is higher than compared to Gold ETF. Thus, Material Gold functions better than Gold ETF. In opposition to Aggarwal, 2014 finalized by quoting that Gold ETF performance is better than Material Gold since Gold ETF have less volatility. S Wagle & Naik, 2014 tackled to examine the performance of listed Gold ETFs on NSE. These Gold ETFs were evaluated clearly from their launch to December 2012. They finalized by saying that Gold ETF handled to accomplish its purpose of developing return in reference with the returns. But no specific Gold ETF is performed exceptionally. They attained the objective by taking up a strategy passive in nature and the funds and basic assets tracking errors were reduced. Eswara conducted a study in the year 2009 that Examined the relationship between Gold ETFs and spot Gold price and also evaluate the performance of Gold ETFs as well as evaluate Gold ETFs to Nifty by using Regression and Correlation. The study concluded that out of 5 selected Gold ETFs Gold share has more correlation compared to spot Gold price. The evaluation of Gold ETFs to Nifty shows that Gold ETF performed well whereas Nifty reduced. Athma & Mamtha in the year 2017 throws light on the development of ETFs from the time of its launch on the ground of secondary data by using tools such as Net Asset Value, Return, Risk to Sharpe, and Treynor's Performance evaluation ratio. Their study finalized by saying that there is a gradual increase in the price of the Gold that contributed to the exchange-traded funds. Swain & Samal in the year 2017 conducted a study on Gold price volatility on the ground of day-to-day prices from 1st January 2009 to 30th September 2011. They used two Models as standard deviation and Generalized Auto-Regressive Conditional Heteroskedasticity. The study detected that Gold price volatility exists. Narang & Singh studied the relationship between the gold price and the returns of Sensex in India from 2002 to 2012. According to their study, there is no relationship between the price of gold and the returns of Sensex in India. Najaf & Najaf in the year 2016 investigated the impact of oil and gold price on BSE by using Granger causality, correlation, variance decomposition analysis, and co-integration test. According to the investigation in a long run, there is no relationship existing between the stock market of India and the oil and Gold market. On the other hand, Mishra, Das, & Mishra conducted a study to analyze the relationship between Stock market returns and gold price on the basis of Bombay Stock Exchanges by using different models and techniques and finalized that Gold price and stock market returns in India are linked. Samantha & Zadeh, 2012 in his article he explained the co-movements of different macroeconomics variables by analyzing the co-integration, spill over-index over these variables, and also common trend factors and the results show that stock price and Gold price do not move in a similar direction and the oil price are affected by these variables.

Research Gap Need For The Study

Over the years, investment in gold ETFs as an alternative investment to physical gold has increased. Generally, gold, gold ETF and gold mutual funds are considered as alternative investments to the stocks and shares and hence the returns on these investments should closely follow the

returns on the stocks. Though, many studies have been undertaken on this issue, the results differ widely. This necessitated to empirically prove whether or not the returns on gold ETFs closely follow the returns on the stocks. Hence, the topic entitled 'A Comparative analysis between Gold ETF's and Nifty50-A Selected Gold ETF's in India' chosen for the current study.

Objectives Of The Study

- To investigate the risk and returns of selected Gold ETF's and Nifty50 during 2015-19
- To examine the relation between the risk and returns of Gold ETF's and Nifty50

Hypotheses

H0: There is no significant relation between the returns of Gold ETF and Nifty50

H1: There is a significant relation between the returns of Gold ETF and Nifty50

Limitations Of The Study

- Though many gold ETFs are available for investment in India, the current study considers only five gold ETFs. Viz. AxisGold, HDFCFMGETF, IDBIGold, KotakGold and GoldShare
- The financial performance of gold ETFs is compared with only one benchmark i.e. Nifty50
- The financial data collected for the analysis belongs to time frame of 2015-19.

Results And Discussions

The current study is considered to be analytical research as it undertakes analysis of financial performance and its comparison with benchmark Nifty50. The current study is based on secondary data of market prices of gold ETFs obtained from NSE website during 2015-19. The following five Gold ETFs are chosen. These are: Viz. 1) AxisGold of Axis mutual fund, 2) HDFCFMGETF of HGFC mutual fund, 3) IDBIGold of IDBI mutual fund, 4) KotakGold of Kotak mutual fund and 5) GoldShare of UTI mutual fund.

Table-I: Descriptive Statistics of selected ETF's and Nifty50 during the year 2015

Gold ETF	Mean	Std. Deviation	Variance	Skewness	Kurtosis
AXISGOLD	-0.040149	0.7254828	0.526	-0.281	1.784
HDFCFMGETF	-0.027155	0.6562848	0.431	0.571	1.208
IDBIGOLD	-0.030302	1.0511740	1.105	0.344	1.084
KOTAKGOLD	-0.412163	5.7432506	32.985	-15.302	238.348
GOLDSHARE	-0.027120	0.7973817	0.636	1.152	7.501
NSE50	-0.011608	1.0220117	1.045	-.974	4.139

Source: Author's calculation using SPSS

Table-1 reflects descriptive statistics of the selected ETF's and Nifty50 during the year 2015. Both the returns of the selected ETF's and NSE50 are found to be negative during 2015. The returns of most of the Gold ETF's are near to the returns of NSE50 and there is no significant difference. The

Skewness of returns is found to be negative for NSE50 during the period. However, it is negative only in two ETF's (i.e. AXISGOLD and KOTAKGOLD) and other three have positive.

Table-II: Descriptive Statistics of selected ETF's and Nifty50 during the year 2016

GoldETF	Mean	Std. Deviation	Variance	Skewness	Kurtosis
AXISGOLD	0.050336	1.2021130	1.445	1.188	3.159
HDFCMFGETF	0.042879	0.7747814	0.600	0.028	0.195
IDBIGOLD	0.037858	1.1358072	1.290	0.967	2.265
KOTAKGOLD	0.044651	0.8423000	0.709	0.318	2.875
GOLDSHARE	0.040350	0.7151871	0.511	0.295	0.971
NSE50	0.015764	0.9564704	0.915	-0.028	1.010

Source: Author's calculation using SPSS

Table-2 shows descriptive statistics of the selected ETF's and Nifty50 during the year 2016. Both the returns of the selected ETF's and NSE50 are found to be positive during 2016. The returns of most of the Gold ETF's are near to the returns of NSE50 and there is no significant difference. The Skewness of returns is found to be negative for NSE50 during the period. However, it is positive for all the selected ETF's.

Table-III: Descriptive Statistics of selected ETF's and Nifty50 during the year 2017

GoldETF	Mean	Std. Deviation	Variance	Skewness	Kurtosis
AXISGOLD	0.006840	0.6014485	0.362	0.524	0.830
HDFCMFGETF	0.015390	0.5967141	0.356	0.358	0.371
IDBIGOLD	0.037164	1.4811556	2.194	0.770	3.602
KOTAKGOLD	0.012632	0.6770713	0.458	0.217	1.318
GOLDSHARE	0.018448	0.5668545	0.321	1.191	4.895
NSE50	0.103961	0.5698074	0.325	-0.046	0.289

Source: Author's calculation using SPSS

Table-3 depicts descriptive statistics of the selected ETF's and Nifty50 during the year 2017. Both the returns of the selected ETF's and NSE50 are found to be positive during 2017. The returns of most of the Gold ETF's are near to the returns of NSE50 and there is no significant difference. The skewness of returns is found to be negative for NSE50 during the period. However, it is positive for all the five ETF's.

Table-IV: Descriptive Statistics of selected ETF's and Nifty50 during the year 2018

GoldETF	Mean	Std. Deviation	Variance	Skewness	Kurtosis
AXISGOLD	0.035892	0.7836649	0.614	0.192	1.676
HDFCMFGETF	0.026050	0.5277780	0.279	0.424	1.096
IDBIGOLD	0.038812	1.1007312	1.212	1.046	12.669
KOTAKGOLD	0.029223	0.6189474	0.383	0.084	-0.059
GOLDSHARE	0.031800	0.6509226	0.424	-0.115	1.655
NSE50	0.019620	0.8114111	0.658	-0.296	0.673

Source: Author's calculation using SPSS

Table-4 exhibits the descriptive statistics of the selected ETF's and Nifty50 during the year 2018. Both the returns of the selected ETF's and NSE50 are found to be positive during 2018. The returns of most of the Gold ETF's are near to the returns of NSE50 and there is no significant

difference. The Skewness of returns is found to be negative for NSE50 during the period. However, it is negative only in one ETF (i.e. GoldShare) and other four have positive skewness.

Table-V: Descriptive Statistics of selected ETF's and Nifty50 during the year 2019

GoldETF	Mean	Std. Deviation	Variance	Skewness	Kurtosis
AXISGOLD	0.09	0.822	0.676	0.957	5.327
HDFCMFGETF	0.085224	0.7607218	0.579	0.280	2.086
IDBIGOLD	0.089831	0.9633724	0.928	0.434	3.841
KOTAKGOLD	0.095391	0.8674706	0.753	1.181	7.634
GOLDSHARE	0.088773	0.8712533	0.759	0.832	11.257
NSE50	0.051629	0.8710424	0.759	1.196	6.019

Source: Author's calculation using SPSS

Table-5 shows the descriptive statistics of the selected ETF's and Nifty50 during the year 2019. Both the returns of the selected ETF's and NSE50 are found to be positive during 2019. The returns of most of the Gold ETF's are near to the returns of NSE50 and there is no significant difference. The Skewness of returns is found to be positive for all 5 ETF's and NSE50 during the period.

Table-VI: Correlation values of Gold ETF's with NSE50 during 2015-19

Year	AXISGOLD	HDFCMFGETF	IDBIGOLD	KOTAKGOLD	GOLDSHARE	Mean values
2015	-0.024	-0.155	0.097	-0.054	-0.079	-0.043
2016	-0.73	-0.215	0.27	-0.127	-0.229	-0.2062
2017	-0.170	-0.158	0.125	-0.226	-0.144	-0.1146
2018	0.108	0.090	-0.046	0.051	0.052	0.051
2019	-0.017	0.040	-0.121	0.39	0.027	0.0638
Mean values	-0.1666	-0.0796	0.065	0.0068	-0.0746	

Source: Author's calculation using SPSS

Table-6 shows correlation values of Gold ETF's with NSE50 during 2015-19. The correlation coefficient is found to be negative for most of the Gold ETF's (i.e. four out of five Gold ETF's which are -0.024, -0.155, -0.054 and -0.079) during 2015. It implies that the returns of Gold ETF's have no relation with the returns of the market index.

Again during 2016 and 2017 the correlation coefficient is found to be negative for four out of five Gold ETF's which implies that the returns of Gold ETF's have no relation with the returns of the market index. However, only during two years out of five years, (i.e. 2018 and 2019) the correlation coefficient is found to be positive for most of the Gold ETF's. During 2018, four (i.e. AxisGold, HDFCMFGETF, KotakGold and GoldShare) and during 2019 three gold ETF's (i.e. HDFCMFGETF, KotakGold and GoldShare) are found to be having positive correction.

In overall, the correlation coefficient is found to be negative for three Gold ETF's (i.e. AxisGold, HDFCMFGETF and GoldShare) and positive for the remaining two Gold ETF's (i.e. IDBIGold and KotakGold) during the period 2015-19. It is also learnt that out of five years study period, in three years (i.e. 2015-17) the correlation coefficient is found to be negative and only for two years (i.e. 2018 and 2019) it is positive. Hence it is inferred from the analysis that there is a significant difference between the return of Gold ETF and market index NSE50 and also it is negatively correlated.

Scope For Further Study

Since the current study is conducted only for five gold ETF's, the study can be extended to all other gold ETF's in India. It can also be extended to gold ETF's of other countries. The current study considers Nifty50 as bench mark and hence the researcher feels that it can be extended to BSE Sensex as bench mark.

Research Implications

The results of current study help the common investors to take right decision of investment-whether to invest in physical gold, gold ETF or stocks. It also helps the mutual fund managers in diversifying the portfolio into gold ETF in addition to common stocks.

Conclusion

In overall, the correlation coefficient is found to be negative for three Gold ETF's (i.e. AxisGold, HDFCMFGETF and GoldShare) which is 60 percent and positive for the remaining two Gold ETF's (i.e. IDBIGold and KotakGold) which is 40 percent. Hence, it is concluded that though returns of some of the gold ETFs fall in line with the returns on the stocks but returns on majority of the gold ETFs do not closely follow the returns on the stocks. The investors are advised to include gold ETFs in the portfolio of the stocks to diversify.

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