AN ANALYSIS OF THE CO-MOVEMENT BETWEEN GOLD EXCHANGE TRADED FUNDS (ETFS) AND EQUITY ETFS

Dr. M. Swathy*

Abstract :

Exchange Traded Funds (ETFs) represent an Index or a basket of securities which can be traded like individual stocks throughout the trading day on a stock exchange unlike traditional mutual funds which are traded on Net Asset Value (NAV) at the end of the day..Investors who had invested only in equities over the past few years have realized theaffects of downside risk. But investors who were well-diversified right from the beginning are aware that when equity fails to deliver, other asset like gold rescues them from losses. Six Equity ETFs, One Gold ETF listed on National Stock Exchange [NSE]were selected to perform an empirical study on correlation between gold and equity. For calculating the returns daily trading prices during one financial year [1/04/2015 to 31/03/2016] were considered. Coefficient of correlation using daily returns over the study period, was the research tool or methodology applied.

Keywords: *Exchange Traded Funds (ETFs), Six Equity ETFs, One Gold ETF.*

Introduction

Exchange Traded Fund (ETF) is a security that tracks an index, a commodity or a sector like an index fund or a sector specific fund but trades like a stock on an exchange. It is similar to a close-ended mutual fund listed on stock exchanges ETF's experience price changes throughout the day as they are bought and sold. Each ETFs "basket" of underlying securities is transparent and is published every day. An ETF either replicates its target index entirely or it invests in a representative sample of the stocks in the underlying index. Like stocks, ETFs trade throughout the day and their prices fluctuate accordingly. The pricing of an ETF closely tracks the price changes in its underlying securities. In India ETFs are traded on the NSE are broadly classified into Equity ETFs and Gold ETFs. An Equity ETF tracks benchmark stock indices whereas a Gold ETF tracks the price of real gold commodity.Those who had invested only in equities over the past few years have probably realized that investing only in stock markets could lead them to high value at risk. But investors who were well-diversified right from the beginning are aware that when equity fails to deliver positive returns, other asset classes can come to their rescue. And gold is the most prominent among this asset classes. It is a fact that equity and gold do not go together. Hence, when equity goes up, gold comes down and vice-versa. And this gives investors enough opportunity to gain from either asset class, especially when the other is making a loss. While the inverse relationship between

***Dr. M. Swathy,** Principal and Associate Professor, Princeton Degree and PG College, Sharadanagar, Ramanthapur, Hyderabad, Email:swathy_reddy@yahoo.com

these two asset classes has been in existence for long the present study analyzes the returns generated by these two categories, it encapsulates one financial year to prove the inverse relation between gold stock and equity stock.

Literature Review

According to JayanthiMalathyandRadhulya (2013),the Gold ETF offers very high security to the investor and also offers a high degree of liquidity in times of emergency. In this paper an attempt has been made to find out the major factor that influences the investment in Gold ETF by taking into consideration 11 factors and Factor Analysis technique has been applied to find the underlying dimensions (factors) that exist in these variables.

Nawaz and Sudindra's (2013) study "A study on various forms of gold investment" tries to study forms of gold investment available to investors. The objectives of this study was to understand the various investment options for investors, pros and cons of various forms of investments and to assist investors in creating awareness about various gold investment options.. Based on this research it was found that many investors still prefer jewellery, gold coins and gold bullion bars forms of investment and prefer to invest in ETF and Futures and options which gives more profit and easy form of investment.

Vidhyapriya and Mohanasundari (2014) observed thatthe Gold ETF and Gold FoF provide a convenient way to the investors to intervene in the gold market. This paper attempts to compare the performance of Gold Exchange Traded Funds and Gold Fund of Funds. Return and risk of Gold ETFs has been compared with the return and risk of Gold FoFs. Monthly Net Asset Values (NAVs) for the period from March 2011 to March 2014 were used for both the schemes. The study concluded that the Gold ETFs recorded lesser variability as compared to the Gold FoFs and therefore, the performance of Gold ETFs was better than the performance of Gold FoFs.

Kumara's (2016)study had been carried out to analyze the points of distinction between the two very popular forms of ETFs namely Gold ETFs and Equity ETFs. These fundsare similar in their functioning however it is necessary to understand the difference in their performance so as to be able to choose the right market instrument for investing money. This research project aims at understanding this difference because performance is one of the major factors affecting the popularity of any investment option.

Singh and Singh's (2016)paper analyzes the impact of fluctuation in crude oil prices, gold prices and exchange rate on the stock market indices in the context of Brazil, Russia, India, China and South Africa (BRICS) using daily data and time series method for the period of January of 2003 to December of 2013. To achieve this objective unit root test, Johansen's co-integration test and granger causality test has been applied to examine the interrelationship between these variables and find out that price of oil, price of gold, exchanges rates and stock markets are interrelated among each other.

Research Objectives

This study extends the findings of the above mentioned studies through the following two objectives:

1. To compare the average returns ofEquity ETFs with that of Gold ETFs.
2. To evaluate the correlation between daily returns of Equity ETFs with that of Gold ETFs

Research Methodology

Data: For this study the Daily Trading Values of ETFs and their Benchmark Indices listed on NSE were collected for a period of one financial year from[1/04/2015 to 31/03/2016] for the analysis. The Daily Trading Values were collected from the NSE website. Daily Trading Values were used to calculate the Daily Returns of ETFs. The ETFs have been selected for the study on the basis of theirinception;Six Equity ETFs and One Gold ETF listed on NSE were selected as sample for this study. The details of the sample are given below in Table 1.

Hypotheses:

H_0: *Returns onEquity ETFs are positively related to returns on Gold ETFs.*

H_A: *Returns on Equity ETF's are negatively related to returns on Gold ETFs.*

Research Tool:

Correlation Coefficient is calculated for each of the six Equity ETFs with that of Gold ETF and using line charts the correlation between the daily returns of each Equity ETF with that of Gold ETF is depicted.

Table 1:Sample ETFs Selected for the Study listed on NSE

Issuer Name	Name	Symbol	Underlying	Launch Date
Reliance Nippon Life Asset Management Limited	Reliance ETF Gold BeES	GOLDBEES	Gold	Mar 07
Reliance Nippon Life Asset Management Limited	Reliance ETF Hang SengBeES	HNGSNGBEES	HangSeng	Mar 10
MotilalOswal AMC	MOSt Shares M100	M100	NIFTY Midcap 100	31-Jan-2011
Reliance Nippon Life Asset Management Limited	Reliance ETF NIFTY BeES	NIFTYBEES	NIFTY 50 Index	28-Dec-2001
Reliance Nippon Life Asset Management Limited	Reliance ETF Bank BeES	BANKBEES	NIFTY Bank	27-May-04
Reliance Nippon Life Asset Management Limited	Reliance ETF Infra BeES	INFRABEES	NIFTY Infrastructure	29-Sep-10
Reliance Nippon Life Asset Management Limited	Reliance ETF PSU Bank BeES	PSUBNKBEES	NIFTY PSU BANK	25-Oct-07

ANALYSIS AND INTERPRETATION

Table 2: Returns on ETFs

SL.NO.	ETF	AVERAGE RETURN
1	GOLDBEES	0.028304
2	M100	-0.00573
3	NIFTYBEES	-0.03219
4	BANKBEES	-0.046251975
5	PSUBANKBEES	-0.11676
6	INFRABEES	-0.09658
7	HNGSNGBEES	0.03436

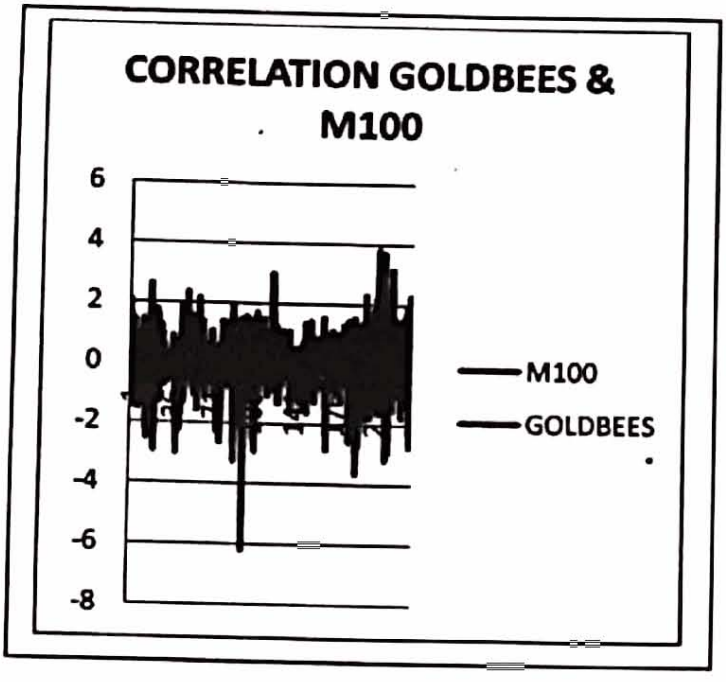
Table 3: Correlation between Gold ETF with that of selected Equity ETFs

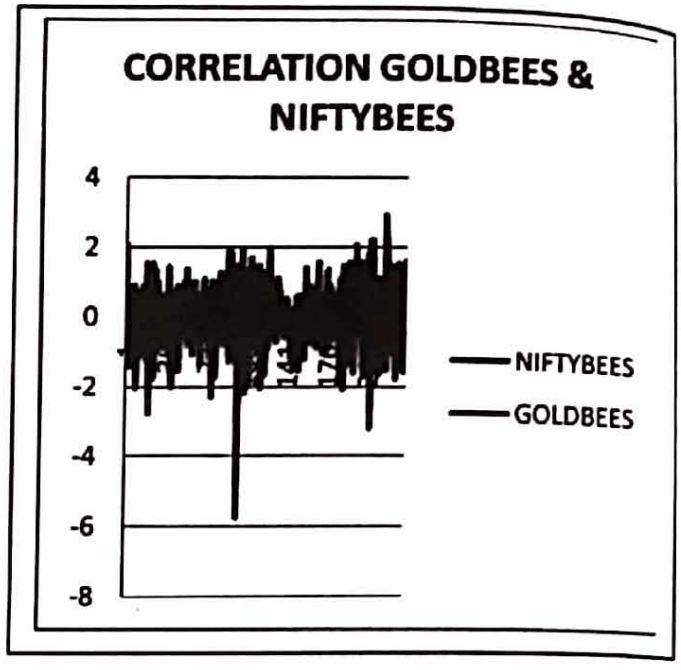
SL.NO	EQUITY ETF	GOLD ETF	CORRELATION COEFFICIENT
1	M100	GOLDBEES	-0.23874
2	NIFTYBEES	GOLDBEES	-0.26437
3	BANKBEES	GOLDBEES	-0.26437303
4	PSUBANKBEES	GOLDBEES	-0.23042
5	INFRABEES	GOLDBEES	-0.09658
6	HNGSNGBEES	GOLDBEES	-0.04671

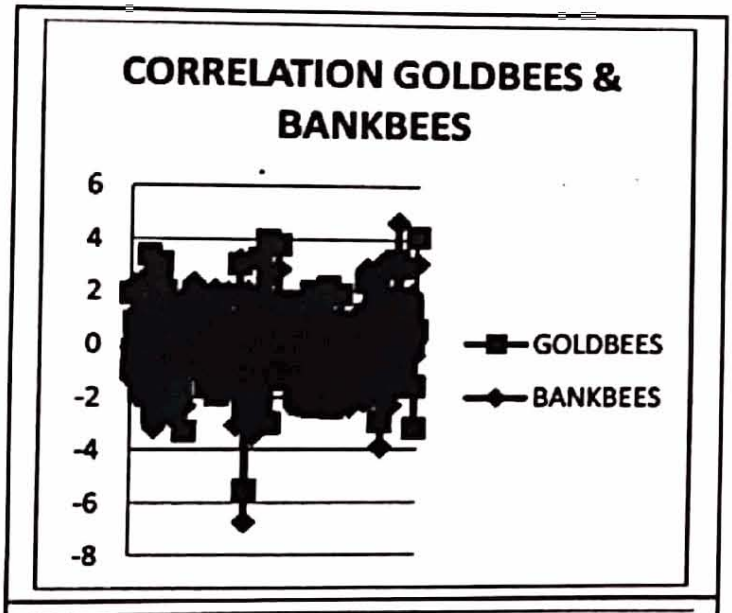
From Table2 we observe that out of the 6 Equity ETFs "M100", "NIFTYBEES", "INFRABEES", "BANKBEES", "PSUBANKBEES", had recorded negative returns during the study period whereas only **"HNGSNGBEES"** had recorded positive returns AND "GOLDBEES" had recorded positive returns, implying that the equity returns move inversely with that of the gold returns.

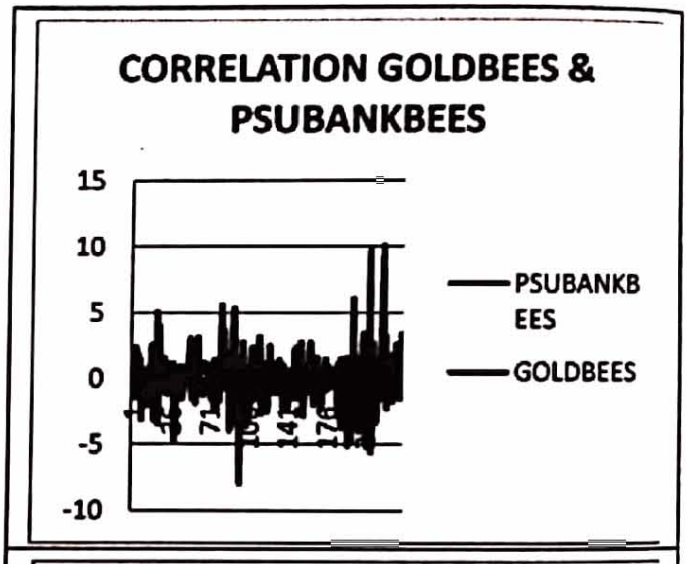
From Table 3 we observe that all the 6 Equity ETFs "M100", "NIFTYBEES", "INFRABEES", "BANKBEES", "PSUBANKBEES", **"HNGSNGBEES"** have recorded negative correlation with "GOLDBEES" proving that gold and equity move in an inverse direction. Based on the above values the null hypothesis is rejected.

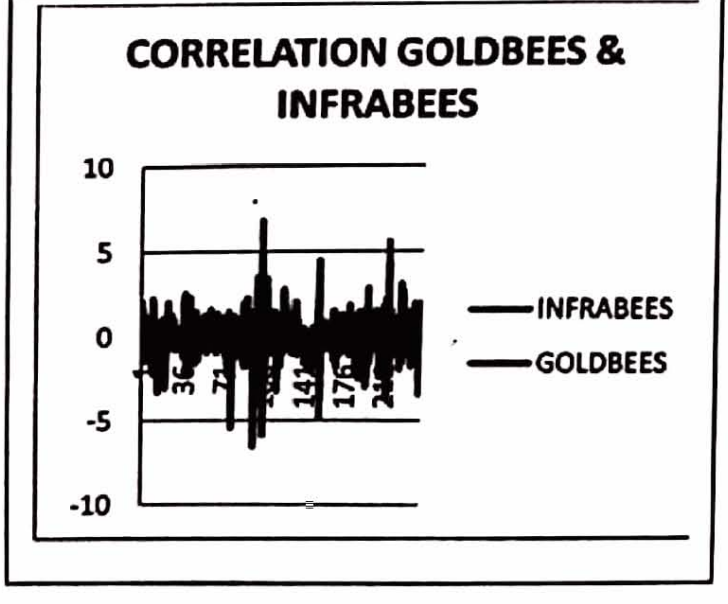
Comparison of Daily Returns Movement of Gold ETFagainst Equity ETF

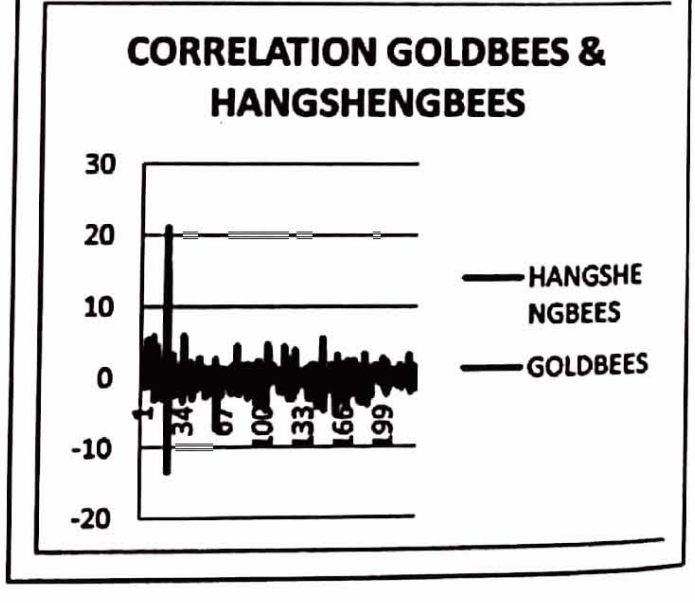












CONCLUSION

Exchange Traded Funds (ETFs) are innovative financial instruments bearing the twin features of stocks and mutual fund units tracking equity indices or commodities like gold. This study emphasized on the co-movement of the returns from Equity ETF and Gold ETF over one financial year. It was observed that when the Gold ETF had produces positive average return Equity ETFs had delivered negative returns and all the Six Equity ETFs returns had recorded negative correlation with that of Gold ETF returns. Based on the study values we conclude that there is an inverse relation between equity and gold.

References

- Jayanthi M., Malathy S, Radhulya T (2013), A Study on Performance of Gold ETF Companies in India, *International Research Journal of Business and Management* 6, 97- 102.
- Nawaz M. N., Sudindra V. R. (2013), A Study on Various Forms of Gold Investments, *Asia Pacific Journal of Research*, 2(4), 1-16.
- Vidhyapriya, Mohanasundari M. (2014),AStudy on Performance of Gold ETFS In India, 4(8).
- N. Kumara R (2016), Gold EtfsVersus Equity ETFS: Comparative Analysis of Their Performance. *International Journal of Social Sciences and Management, 3*(3), 222-227.
- RohitSingh, Harendra Singh(2016), Causal Relationship between Stock Market Indices,Gold Prices, Crude Oil Prices and Exchange Rates, IJER© Serials Publications 13(1), 2016: 53-65 Issn: 0972-9380.