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# A REVIEW OF RELATED LITERATURE ON GOLD ETFs

## (GOLD EXCHANGE TRADED FUNDS)

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## *ABSTRACT*

*For centuries, Indians have had a strong affinity for gold. However, it was only in the year 2007 when India launched its first Gold ETF (Gold BeES), there was a tremendous boost in investment demand for gold. The underlying asset of Gold ETF is gold. Also, Gold ETFs gives investor an exposure to Indian gold market. Gold has always been a popular investment destination for various types of investors, standing out as a tried and true safe haven that generally performs well in times of equity market turbulence as well as an alternative to fiat currencies that have occasionally come under pressure. But the development of Exchange Traded Funds has given gold a significant tremendous boost in the investing world, and the combination of precious metals exposure and the exchange-traded structure has proven to be an extremely efficient financial security that is appealing to all types of investors. Gold ETFs are an excellent choice of investment for investors looking to beat inflation in the long-run. Moreover, gold as an asset is less volatile when compared to equities. This research paper explores into the earlier research done on Exchange Traded Funds (ETFs) focussing primarily on Gold Exchange Traded Funds (Gold ETFs). The purpose of this study is to review the existing related literature specifically on Gold ETFs.*

*Keywords: Gold ETFs, Diversification, Risk-Return,*

*JEL Codes: G10, G14, G15*

### INTRODUCTION

Exchange Traded Fund (ETF) is a basket of securities traded like individual stocks on an exchange. ETFs can track indices of various asset classes such as equity, fixed income and commodities. ETFs are a variant of mutual funds schemes the units of which may be bought or sold only on a stock exchange. ETFs traded in India are Equity ETFs, World Indices ETFs, Debt ETFs and Gold ETFs.

Gold ETFs are mutual funds listed on National Stock Exchange (NSE) and Bombay Stock Exchange (BSE). The investment objective of Gold ETFs is to provide returns that, before expenses, closely correspond to the returns provided by domestic physical gold price. Buying Gold ETF is purchasing gold in electronic form. Investor can buy/sell them just like buy/sell stocks of any company through broker on exchange (National Stock Exchange). A Gold ETF aims to track the price of gold. Gold ETFs are units representing physical gold which may be in paper or dematerialized form. These units are traded on the Exchange like a single stock of any company. Gold ETFs offer investors a means of participating in the gold bullion market without the necessity of taking physical delivery of gold. The objective of gold ETF is to track the unit price closely with that of gold. Gold ETF lets investor own gold in DEMAT account. Each unit of the ETF lets the investor own 1gm or ½ gm of gold without physically owning it (PersonalFN).

### OBJECTIVE OF THE STUDY

- The objective of this study is to review the existing related literature on Gold ETFs.

### RESEARCH METHODOLGY

This research paper is descriptive in nature based on secondary data. Data sources referred are research articles, news papers, relevant websites and other sources. This research paper explores into the earlier research done on Exchange Traded Funds (ETFs) focussing primarily on Gold Exchange Traded Funds (Gold ETFs).

## REVIEW OF RELATED LITERATURE

Beyers Bosman (2011) argues that the advent of gold ETFs does take away some of the unique appeal that gold stocks previously held. The gold ETFs are a different type of investment from gold stocks, whereas gold ETFs appear to have more investment appeal. The findings suggest that the impact of gold ETFs on analysts' recommendations is substantial and investing in gold ETFs can be an attractive alternative way of participating in gold price movements with lower risk than gold stocks.

Lixia Wang et al (2010) explores the developments of gold exchange traded funds and future prospects, specifically in China. They found that the circumstances in China are favourable for Gold ETFs. If only one ounce purchased by each of the 80 million middle-class Chinese would equate to 2,500 tonnes of gold. This will lead an increase in Chinese gold reserves as well as more opportunities for investors. They concluded that the investments in Gold ETFs in China were significant. The launch of Gold ETFs would improve the China's ability to deal with problems such as diversification, inflation protection, currency hedging.

Rabi N. Mishra and G. Jagan Mohan (2012) concluded that domestic gold prices and international gold prices were closely interlinked. Variations in the international gold prices find almost similar echo in the domestic gold prices. Empirical analysis of the study also suggests that the factors affecting data generating process of the international gold prices has undergone a structural shift in 2003. In the pre-2003 period, macro fundamental such as international commodity prices, US exchange rate and equity prices used to be the most dominating factors affecting the international gold prices and their impact used to be identical both in the long-run and short-run. In the post 2003 period, however, this relationship has weakened in terms of its statistical and first and second order econometric properties.

World Gold Council (2013) studied how gold can reduce portfolio drawdown for investors with emerging-market allocations relative to a foreign-exchange hedge. The research found gold as a discrete allocation increases risk-adjusted returns by lowering volatility, not merely because gold has been in a rising price environment, but because global crises have garnered a greater response from gold than before. The study concludes that gold's proven tail-risk hedging properties make it a powerful complement to a foreign-exchange hedge for emerging markets.

Michael, J. Naylor et al (2011) has examined the series of three gold-backed and three silver-backed ETFs and tested their return performance against existing knowledge of physical gold and silver behaviour. The tests evidenced a remarkable consistency between the return properties of the ETFs and the physical assets of gold and silver identified in prior studies. It was found that an investor using a trading strategy has a small opportunity to outperform a passive investor.
The study stated that the same fundamental behaviour applicable to physical gold and silver returns also applies to gold and silver exchange traded fund prices/returns. Specifically, their price movements do not follow a random walk. However, they show that such inefficiency which was not exploitable on physical gold and silver in the past now provides an opportunity for abnormal returns through a simple filter trading rule. The research concludes that gold and silver ETFs may serve as the other asset class which is particularly worthwhile in the portfolio as they are inefficient (and thus profitable) and liquid, the best of both worlds.

Tim Pullen et al (2011) explored the diversifying, hedging and safe haven properties of gold bullion, gold stocks, gold mutual funds and gold ETFs. The study found gold bullion to have a strong hedging role over a mere diversifying capability. The gold stocks, gold mutual funds and gold ETFs tend to be diversifiers. Another finding was that both gold bullion and gold ETFs show support for the safe haven property. However, gold stocks and gold mutual funds display very little evidence of the safe haven characteristic. They concluded that investors, who are keen on securing safe haven features of gold investment, cannot generally

rely on gold stocks or mutual funds. Instead, they need to take positions directly in bullion or gold ETFs.

Mishra P.K. et al (2010) examined the gold price volatility and the causality between domestic gold prices and stock prices returns in India for the 1991 to 2009. They conclude that there exists long run equilibrium relation between gold prices and stock market returns in India.

Fons Bok (2012) explored to find if there is a better risk-return trade-off than a physical backed gold ETF compared to other precious metal ETFs and if there is another precious metal than gold that could be considered as a safe haven. Other metals that are considered precious are silver, palladium and platinum.
The finding was that although sometimes there is a better risk-return trade-off of other precious metal ETFs compared to gold ETFs there is no better overall risk-return trade-off of other precious metal ETFs. The results suggested that there is no better other precious metal ETFs that performs consistently better than gold ETFs and also only gold could be viewed as a safe haven in times when indices drop in value. As long as the other precious metals much depend on the industrial demand these metals will never be considered as a valuable investment in times of financial distress. So the precious metals silver, platinum and palladium can't be used by investors as a safe haven, whereas gold can.

Prashanta Athma and Mamatha B. (2012) found that the introduction of Gold ETFs and growth in the prices of gold has led to the increased performance of the ETFs compared to Index Funds. ETFs can become best investment alternative if awareness is created among the investors.

Jalpa Thakkar et al (2013) explored into the better understanding of investor's attitude and awareness regarding gold investment decisions and also where currently physical gold's position among the other gold investment instruments is. The study was limited to Pune region. Findings were that investors go through an information search and market analysis before making the gold investment decision. Research showed that gold is already known and valued by the people for its return and long tradition and all the respondents mostly have investment in gold or plan to buy more gold. Research also throws light on the lack of awareness about the new trends in gold investment alternatives i.e. Gold ETF, E-Gold and Gold Funds.

Owain AP Gwilym et al (2010) have investigated the relationship between gold producing equities and physical gold prices and found consistent with the evidence of Tufano (1998), that the sensitivity of gold equities to the gold price is not constant. In addition, it was observed that both the substantial increases in gold prices during the period of study from 1975-1980 and from 2001-2007 began during periods of negative real rates, whilst the decline in gold from its 1980 peak was accompanied by a period of tight monetary policy. Finally, the market timing decisions of investors in gold exchange-traded funds was examined. The finding was that, in aggregate, investment timing decisions have diminished returns by over 1.5% annually. These observations were supported by both monthly and daily timing methods and are consistent across instruments traded in both the United States and the United Kingdom.

The authors concluded, if real rates stay low, or indeed negative, driven by central bank policies then investors can expect continued strength in gold prices. However, tactical market beating strategies are not necessarily robust and investors should consider the passive (ETF) alternative.

Barinder Singh & Nabba J.B., 2013, People's preference for investment in Gold yield them fruitful result in terms of positive returns over a long period. On the other hand risk involved in the Gold is less than 1/3rd of the risk involved in the investment in stock market. Further to invest in the Gold investors need not to time the market, understand the complex business environment or know about the various investment tools which

are otherwise required in case if he invest in the stock market. The only thing an investor need to take care of is that rather than buying jewellery one can go for buying Gold Mutual Fund of Exchange Traded Fund. The returns of ETF are directly correlated with the returns of Gold returns.

Martin Surya Mulyadi and Yunita Anwar, 2012, infers that the gold investment is quite safe for the investors and could be categorized as safe haven. This is also supported by the previous research that identified gold as a good portfolio diversifier and a hedge against stocks as well as a safe haven in extreme stock market conditions. When stock investors are in loss, gold return tends to increase. While gold return increases, it gives linear impact to the stock return.

Priti Aggarwal, 2014, concluded that gold has served as a hedge against inflation and the erosion of major currencies, and thus is an investment well worth considering. Indian investors due to its highest demand for gold have always made it a point to include gold in their investment portfolio to diversify the risk. The paper attempted to review the investment motives and options available in India for the same. Out of all the options available in gold-backed investment, Gold ETFs has been more popular among the Indians.

Goyal M.M., 2014, concluded that Gold ETF is the only investment with a higher and a positive alpha implying that investment in Gold provide higher abnormal returns. Investment in Gold is one of the best ways to diversify the portfolio and to protect the wealth of the investors. No asset other than gold has a universal appeal in the world.

Lujia Wang, 2011, exhibited that the return of gold is proven to have a positive correlation with the change of inflation rates, but not related to the change of interest rate and the return of stocks. The return of oil to some extent is positively related to the return on gold. An investor should add gold to the investment portfolio, as gold can diversify the risks of stocks and bonds, and therefore, enhance the portfolio‘s ability of bearing risks in the crisis.

Rhona O'connell, 2007, concluded that Gold is a small market by comparison with equities and bonds, but it is a liquid market, with best estimates putting global trading volume above $40 billion per day. Gold ETFs were created to grant all investors access to gold with the ease of trading an equity share on an exchange, and are a low-cost option for gaining exposure to the market through the use of a standard brokerage account. Because of gold's qualities as a hedge against the dollar, inflation, and geopolitical tensions, it is considered a safe haven and preserves its value over time. Gold is also a portfolio diversifier and risk management tool because it has no significant correlation with any other asset class.

Vipin Kumar Aggarwal et al., 2013, demonstrated that the gold ETFs have lesser variability as compared to the physical gold and concluded that the performance of gold ETFs is better than the performance of physical gold.

Prabhdeep Kaur and Jaspal Singh, 2019, concluded that gold ETFs and spot gold as well as gold ETFs and gold futures converge together in the long run. Also, movements in spot prices and futures prices are found to lead those in ETF prices, thus, providing scope for executing profitable trading strategies in ETFs. The study further explores the probable reasons that might account for the relative inefficiency observed in ETF prices.Gold ETFs can help investors relish all the advantages of investing in gold while simultaneously addressing the issues of unreasonably higher prices, purity and costs of storage and insurance associated with retaining physical gold.

Madhavi Eswara, 2015, evaluated the performance of Gold ETF’s post-crash period and observed that their performance is better and superior to many other mutual funds, funds of funds and other ETF’s in this period. This study concludes by asserting that investing in gold in Indian scenario is a better investment option comparatively. It is felt that Gold should be a part of one’s portfolio investment management in order to hedge or mitigate risks that arise due to fluctuations of any kind in the market or economy.

Naveen Kumara R , 2016, revealed that Gold and Equity ETFs, both have failed to produce overwhelming returns, however, a lot of Equity ETFs have managed to provide extremely high returns for at least a couple of quarters contrary to that of their benchmark indices. On the other hand, most of the Gold ETFs have remained in the negative returns (loss) category for maximum of entire part of the three years period. There is no superiority of one ETF category over the other. Performance evaluation of both the ETF markets have exhibited tremendously low ratios showing that none of ETFs, barring a few exceptions in each market have a return which is higher than the risk free rate of return to compensate for the risk involved in such investment.

Mukesh Kumar Mukul et al, 2012, demonstrated that gold investment gave a better monthly return as compared to a diversified equity fund. In terms of portfolio performance measure, we find that gold investment has performed better. However, the most interesting aspect of the analysis is that gold investment has negative correlation with equity investment, and therefore, can act as a perfect instrument for hedging equity investment risk.

## CONCLUSION

This study has reviewed the existing literature on Gold ETFs. Earlier research articles published by different researches were studied and examined. This review concludes that:

- **Portfolio Diversification, Inflation Protection and Hedging** Gold ETFs improve the investors' ability to deal with diversification, inflation protection and currency hedging. Gold's proven tail-risk hedging properties make it a powerful complement to a foreign-exchange hedge for emerging markets. Gold and silver ETFs may serve as the other asset class which is particularly worthwhile in the portfolio as they are inefficient (and thus profitable) and liquid, the best of both worlds. Investors, who are keen on securing safe haven features of gold investment, cannot generally rely on gold stocks or mutual funds. Instead, they need to take positions directly in bullion or gold ETFs. The results suggested that there is no better other precious metal ETFs that performs consistently better than gold ETFs and also only gold could be viewed as a safe haven in times when indices drop in value. The introduction of Gold ETFs and growth in the prices of gold has led to the increased performance of the Gold ETFs compared to Index Funds. Investing in gold ETFs can be an attractive alternative way of participating in gold price movements with lower risk than gold stocks.
- **Lack of Awareness among Investors about Gold Investment Alternatives** This literature review also found that there is lack of awareness about the new trends in gold investment alternatives i.e. Gold ETF, E-Gold and Gold Funds. Out of all the options available in gold-backed investment, Gold ETFs has been more popular among the Indians.
- **Higher Abnormal Returns** It also concluded that Gold ETF is the only investment with a higher and a positive alpha implying that investment in Gold provide higher abnormal returns. Investment in Gold is one of the best ways to diversify the portfolio and to protect the wealth of the investors. No asset other than gold has a universal appeal in the world**.** An investor should add gold to the investment portfolio, as gold can diversify the risks of stocks and bonds, and therefore, enhance the portfolio's ability of bearing risks in the crisis.
- **Lesser Variability Compared to Physical Gold** The Gold ETFs have lesser variability as compared to the physical gold and concluded that the performance of Gold ETFs is better than the performance of physical gold. Gold ETFs and spot gold as well as gold ETFs and gold futures converge together in the long run. Also, movements in spot prices and futures prices are found to lead those in ETF prices, thus, providing scope for executing profitable trading strategies in ETFs.
- **Negative Correlation with Equity ETFs** It is also revealed that Gold and Equity ETFs, both have failed to produce overwhelming returns, however, a lot of Equity ETFs have managed to provide extremely high returns for at least a couple of quarters contrary to that of their benchmark indices. Gold investment gave a better monthly return as compared to a diversified equity fund. In terms of portfolio performance measure, it is found that gold investment has performed better. However, the

most interesting aspect of the analysis is that gold investment has negative correlation with equity investment, and therefore, can act as a perfect instrument for hedging equity investment risk.

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