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# Analysis of Gold Exchange Traded Funds With reference to Net worth Stock Broking LTD

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**Abstract**
This paper is a study of the performance of Gold ETFs in India. An exchange traded fund ("ETF") is a form of securities that tracks an index, sector, commodity, or other asset and may be bought and sold on a stock exchange much like a regular stock. An ETF can be set up to track anything from a single commodity's price to a huge and diverse group of securities. ETFs can even be built to follow certain investment strategies. The need and scope of the study is India is the world's largest gold-consuming country. China, on the other side, has the world's fastest-growing economy. The need and scope of the Both India and China are in the process of liberalizing restrictions governing the import and selling of gold in order to facilitate massive gold purchases. In India, online commodity trading is relatively new compared to the stock market. Online commodities trading is dominated by four exchanges: Multi Commodity Exchange of India Limited ("MCX"), National Commodity & Derivatives Exchange Limited ("NCDEX"), National Board of Trade ("NBOT"), and National Multi-Commodity Exchange of India Limited ("NMCE"). As a result, the study scope of the commodities market is relatively broad in the market, which is mostly focused on gold. An analysis is carried out using performance evaluation techniques such as Standard Deviation ("STDV"), Variance, Covariance, Correlation and BETA value. Data for this study have been collected from 2017 to 2021. This research enable market analysts and investors who find the best outlook in the Gold ETF's.

**Keywords:** Gold Exchange Traded Funds ("ETF's"), Multi Commodity Exchange of India Limited ("MCX"), National Commodity & Derivatives Exchange Limited ("NCDEX"), Covariance, Correlation.

## I. Introduction

An exchange traded fund (ETF) is a type of security that tracks an index, sector, commodity, or other asset, but which can be purchased or sold on a stock exchange the same way a regular stock can. An ETF can be structured to track anything from the price of an individual commodity to a large and diverse collection of securities. ETFs can even be structured to track specific investment strategies.

A well-known example is the Standard & Poor's Depository receipt ("SPDR") S&P 500 ETF, which tracks the S&P 500 Index. ETFs can contain many types of investments, including stocks, commodities, bonds, or a mixture of investment types. An exchange traded fund is a marketable security, meaning it has an associated price that allows it to be easily bought and sold. The main focus of this research is to know the fluctuation in Indian commodity market with reference to gold.

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An ETF is called an exchange traded fund because it's traded on an exchange just like stocks are. The price of an ETF's shares will change throughout the trading day as the shares are bought and sold on the market. This is unlike mutual funds, which are not traded on an exchange, and trade only once per day after the markets close. Additionally, ETFs tend to be more cost-effective and more liquid when compared to mutual funds.

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## II. Review of literature:

**Samuel AnbuSelvan (2021)** this paper is a study of the Performance Evaluation of Gold ETFs in India during the Covid-19 Pandemic Situation. An analysis is carried out using performance evaluation techniques such as the Treynor Performance Index, the Sharpe Performance Index, and the Jensen Performance Index by measuring the alpha, beta, and standard deviations of the selected ETFs traded in National Stock Exchange ("NSE"). Data for this study have been collected for two years from the NSE website from 1st Dec 2018 to 30th Nov 2020. The study shows that the Quantum Gold Fund (ETF) performs reasonably well in accordance with Sharpe's Model, Treynor's Model, and Jensen's Model. According to the Fema model, the Industrial Development Bank of India ("IDBI") Gold Exchange Traded Fund is better off. Industrial Credit and Investment Corporation of India ("ICICI") Prudential Gold Exchange Traded Fund shall perform well by the use of the Sortino Ratio. The Quantum Gold Fund has performed the best of the Gold ETFs chosen for the analysis. This research will enable market analysts and investors who find the best outlook in the Gold ETFs.

**DR.P. VIDHYAPRIYA (2014)** In India, gold ETFs were launched mainly with objective to increase the liquidity for the better market efficiency. The drawback with gold ETFs is liquidity; some ETFs are illiquid, which impacts their buying and selling flexibility. Hence, investors should consider this as a factor while investing in gold ETFs and should stick to funds that are liquid. Traditionally, Indians love to buy gold and they want to possess it. In fact, they hardly go for ETFs which is just a piece of paper for them. But in India, during the last one year, investment in gold ETFs has risen by Rs. 303 crores. Hence, the study on returns, using sharpe ratio and jenson ratio have been undertaken to identify the growth of gold ETFs in India.

**G. Ram Raj (2019)** this research article was intended to estimate the volatility and connection between real Gold and Gold Exchange Traded Fund (ETF) in India by using various statistical models. The data for the study period for three years' period 2015-2018 acquired from the National Stock Exchange of India's historical statistics and others. The outcome of this study was found that there are a strong positive short-run relationship and long-run equilibrium relation between gold and Gold ETFs. It is unidirectional, and few bidirectional causes and relationship existed in this study. This Study is fit to be analyzed GARCH model to estimate volatility in the Gold price returns; it shows there persist the volatility effect. This study will be helpful to investors in the selection of better investment options.

**Naveen Kumara (2016)** Exchange-traded funds (henceforth, ETFs) are passive investment vehicles which have become increasingly popular in a relatively short period of time due the benefits they provide when compared to Mutual Funds and other similar investment avenues. This study has been carried out to analyze the points of distinction between the two very popular forms of ETFs namely Gold ETFs and Equity ETFs. These funds are similar in their functioning however it is necessary to understand the difference in their performance so as to be able to choose the right

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market instrument for investing our money. Our research project aims at understanding this difference because performance is one of the major factors affecting the popularity of any investment option.

**B. Aarthi (2015)** Gold products are considered a highly valuable means of investment in the present scenario of financial markets. There are many alternatives to invest in gold like Gold Exchange Traded Funds ("GETFS"), Gold Fund of Funds ("GFoF's"), e-gold, stocks of gold mining companies, gold futures, gold bars, gold coins, gold jewellery, etc. Amongst these, the Gold Exchange Traded Funds ("ETF") and Gold Fund of Funds ("FoFs") have emerged as the most successful source for investment and ETFs industry has witnessed rapid growth in the last decade. The Gold ETFand Gold FoFprovide 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.

**P. Baba Gnanakumar (2020)** Gold ETF, which has been introduced in 2007, in the Indian market as an alternative to investment in physical gold witnessed a heavy outflow of investment during the period 2017-18; whereas, investment in Gold has increased. This research aims to find out the reason for this phenomenon and to create investment analytics between Gold and Gold ETF. We apply K-means of clustering for identifying the bullish/bearish trend in returns and ROC analysis to diagnose the goodness of predictability. The investment analytics is based on short-term gains during the sporadic trends. We found that the decrease in Gold ETF investments is due to less intra-day returns in Gold ETF as compared with Gold. We conclude that the returns from Gold ETF and physical Gold will have an equilibrium effect during the bullish period only. The bearish trend in Gold ETF may be hedged through Gold but not vice-versa. The reason for the negative effect has been portrayed in the Rate of Change ("ROC") curve. During bearish trend, the mutual fund organizations of Gold ETFs are unable to market the product; where as in case of physical Gold, investors are not having negative perception. However, during bullish trend, the investment in both physical Gold and Gold ETFs are yielding same returns. This research enables the mutual fund managers to decide the investment analytics among Gold ETFs.

**Dr. Raghu Anand (2017)** Investment decisions are a difficult task for retail investors, considering the diverse instruments available for investing. Under any condition of the economy, Gold has been considered a safe haven for investors. However, having knowledge of only the correlated movement between gold and the markets is insufficient for a private investor. A thorough analysis of the difference in investing in gold and gold ETF's is critical alongside the knowledge of Gold ETF funds for Indian Retail investors. This research primarily helps in understanding gold as an investment tool, gold ETF's as a new method of investing in gold. The research has been confined to retail investors in India, and Gold Exchange Traded Funds (ETF's) as a new investment option in the Indian Securities Market, apart from investment in physical gold and gold jewellery.

## III. Need for the study:

- ✓ Create awareness among investors about the different factors that effected in gold prices.
- ✓ To understand the price behaviour of the gold futures and gold bees traded in India bulls.
- ✓ This project give basic knowledge to investors regarding risk and return commodities specially focus on gold.
- ✓ To understand the volatility of gold commodity prices.

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## IV. Scope of the study

- To study the Gold Exchange Trading Funds the data is confined to five years (i.e.) 2017-2021
- The study conducted at Net worth Stock Broking Ltd located in Hyderabad.
- The Data analysis tools used include, Standard deviation, Variance, Covariance, Correlation and BETA value.
- The sample data comprises of four exchanges trading online in the segment of gold.
- The exchanges considered are Mutual Commodity Exchange ("MCX"), National Commodity & Derivatives Exchange ("NCDEX"), National Board of Trade ("NBOT") and National Multi-Commodity Exchange of Limited ("NMCE").

## V. Objectives of the study

❖ To examine the gold trading value in Mutual Commodity Exchange ("MCX") gold Futures and Gold BEES
❖ To analyse the factors effecting on the Mutual Commodity Exchange ("MCX") gold Futures and Gold BEES
❖ To perform risk -return analysis of Mutual Commodity Exchange ("MCX") gold Futures and Nippon India ETF Gold BEES.
❖ To study trends in metal commodity market with focus on Gold BEES.

## VI. Research methodology

### RESEARCH DESIGN

This is a systematic way to solve the research problem and it is important component for the study without which researches may not be able to obtain the format. A research design is the arrangement of conditions for collection and analysis of data in a manager that aims to combine for collection and analysis of data relevance to the research purpose with economy in procedure.

a. **SOURCES OF DATA:** The study used only secondary data.

- **Secondary Data:**
- The Secondary data are those which have already been collected by some other agency and which have already been processed. The sources of Secondary data are Annual Reports, browsing Internet, through magazines.
- In secondary data collection, different journals, magazines and internet sites are used in collecting the data relating to the commodity market and gold future trading.

## VII. Limitations Of the Study

- The analysis was purely based on the secondary data. So, any error in the secondary data might also affect the study undertaken.
- This study has been conducted purely to understand Gold analysis for investors.
- The study is restricted to only gold commodity.
- Detailed study of the topic was not possible due to limited size of the project.
- Suggestions and conclusions are based on the limited data of five Quarters only.

## VIII. Empirical Results

A representative analysis carried out is presented in table 1.1 and figure 1.1(a).

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| Date | Open | High | Low | Close Price | Rate of returns |
|---|---|---|---|---|---|
| Jan-21 | 4,624.95 | 4,709.00 | 4,452.00 | 4,509.35 | -2.50 |
| Feb-21 | 4,488.95 | 4,582.60 | 4,272.25 | 4,324.50 | -3.66 |
| Mar-21 | 4,305.80 | 4,734.00 | 4,080.00 | 4,107.85 | -4.60 |
| Apr-21 | 4,199.95 | 4,545.00 | 4,115.10 | 4,366.85 | 3.97 |
| May-21 | 4,380.85 | 4,499.00 | 4,317.05 | 4,460.00 | 1.81 |
| Jun-21 | 4,455.00 | 5,364.05 | 4,288.95 | 4,309.75 | -3.26 |
| Jul-21 | 4,359.95 | 4,497.45 | 4,252.25 | 4,451.10 | 2.09 |
| Aug-21 | 4,457.30 | 4,474.00 | 4,236.50 | 4,341.15 | -2.61 |
| Sep-21 | 4,369.85 | 4,421.00 | 4,200.10 | 4,216.90 | -3.50 |
| Oct-21 | 4,239.00 | 4,984.00 | 4,239.00 | 4,388.00 | 3.51 |
| Nov-21 | 4,392.70 | 4,889.45 | 4,351.00 | 4,415.15 | 0.51 |
| Dec-21 | 4,389.00 | 4,500.00 | 4,349.95 | 4,439.00 | 1.14 |
| | | | | SUM | -7.09 |
| | | | | AVG | -0.59 |
| | | | | Var | 10.99 |
| | | | | SD | 3.31 |

**Table No: 1.1 From the IDBI Gold ETF for the period of 2021 the average of -0.59, the risk is 3.31.**

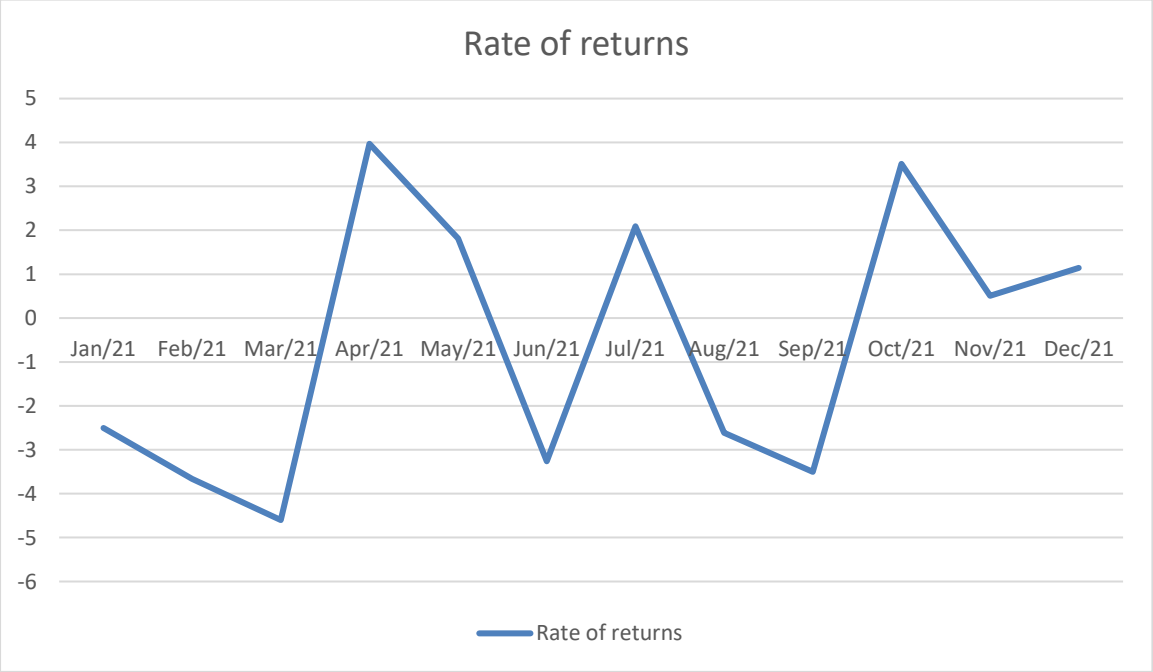


**Figure: 1.1(a) From the IDBI Gold ETF for the period of 2021 the average of -0.59, the risk is 3.31.**

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As from the above it can be seen that the standard deviation (i.e., total risk associated with stock) of IDBI Gold ETF is 3.31, whereas the variance is 10.99. The average stock return is -0.59. The analysis from the year 2017 the average of 0.14, the risk is 1.82. The analysis from the year 2018 the average of 0.42, the risk is 3.14. The analysis from the year 2019 the average of 1.16, the risk is 6.09. The analysis for the year 2020 the average of 1.34, the risk is 6.21. The analysis from the year 2021 the average of -0.45, the risk is 3.68.

## IX. Findings, Suggestions and Conclusion

### Findings

- Half of the respondents are investing in different schemes of Exchange Traded funds
- The investors prefer investing more in banks and post office, which shows that investors want security, and assured returns.
- Others than Banks and post office the next preference of investors who go for risky preposition in shares and Mutual Funds. That is basically due to misconception that Mutual Fund Companies usually invest in equity market, which shakes trust of people in Mutual Fund.
- Majority of investors invested in open-ended schemes.
- The awareness level about DBFS assets Management Company is moderate but still the awareness should be created because 44% peoples still not invest in DBFS assets Management Company.
- As the investor prefers safe investment and want consistent return, they invest in debt schemes (22.69%).
- The investors prefer DBFS assets Management Company more because of the tax benefit and consistent return.
- Exchange Traded Fund are also preferred because of the cost effectiveness and higher income by investing in equity schemes.
- The banks mostly make the investments through the agent's followed.
- Professional and Business class, which is considered to be the most knowledgeable class of the region prefers Mutual Funds less compare to service class.
- The time frame of the investment by majority of the investors is open-ended schemes in which their money is not locked for 3 to 5 years.

### Suggestions

- Gold has been hovering in the range of 51000 - 55000. Though economic recovery is well underway, there is a lack of clear direction for the market. In such a milieu, we advise investors to play it safe. Hence, we recommend investing in Gold ETF's. The scheme is characterized with Good returns exposure, sector-diversification and steady returns.
- Gold has proven to be a good defensive play and has weathered the market volatility well in the past.
- The fund's proven track record along with the strong credentials of its investment team makes it a good bet for long-term equity investors and for relatively risk-averse, investors who seek to invest in a well-blended equity fund with a degree of downside protection. We recommend investing in Gold ETF's.

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## Conclusion

The Gold ETF's is the part of Mutual funds industry. The ETF markets are experiencing tremendous growth in the recent past. This can be emphasized by the fact that the trading volume of most ETF is increasing. Price of ETF's mostly follows a cyclical pattern, unlike stocks. Therefore, the prices are expected to fall at some point of time, and do not attract investors. There are many types of risks involved in ETF's trading but commodity ETF's are less risky than equity futures but it is highly volatile. Various risk management techniques can be used to minimize the risk, and henceforth from the different price movements. ETF's trading included the intermediary and trading participants likes brokers who make use of the various tools in order to make predictions of the price movement's they also take into consideration the expert analysis. Thus, with the help of the various analysis tools, efficient price predictions can be made, where the investors in commodity futures can benefit from the price movements.

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