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PERFORMANCE EVALUATION OF EXCHANGE TRADED FUNDS (ETFs) IN INDIA: A REVIEW OF SELECTED LITERATURE

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ABSTRACT

The panorama of investment options provided to investors by Exchange Traded Funds (ETFs) and their remarkable rise since their introduction in the nation have made an assessment of existing literature on ETFs in India necessary. In the light of these developments, the present study focuses on previous research conducted by different researchers to comprehend the performance of equity based mutual funds in India. The aim of this paper is to examine the corpus of work that may be found in both national and international peer-reviewed journals, seminars and conference proceedings. It look at abroad range of research on topics such as risk return relationship, investment goals, investment time horizon, investment kind and market volatility that support investing in equity based mutual fund schemes. It has been found that most of the exchange traded funds (ETFs) fared better than their underlying indices.

***KEYWORDS**: Exchange Traded Funds (ETFs), Benchmark Index, Tools and Performance Evaluation of Funds.*

Introduction

Exchange-Traded Fund (ETF) is a collection of securities that are traded similarly to individual stocks. ETFs have the ability to track indices for a number of asset types, including commodities, fixed income, and equity. Mutual fund schemes, of which units may only be purchased or sold on stock exchanges, are the basis for exchange-traded funds (ETFs). Equity ETFs, World Indices ETFs, Debt ETFs, and Gold ETFs are among the ETFs traded in India. ETF's have low expense ratio's compared to mutual funds as they follow a passive investment strategy and investment in ETF's substantially mitigate or completely eliminate tax burden on realized capital gains due to their special feature of 'redemption in kind'(Poterba & Shoven, 2002). ETF investors can also benefit from intra-day trading facilities, undertake short selling of ETF units and write options on ETF's (Aggarwal & Schofield, 2014).

The strong expansion and widespread appeal of Indian exchange-traded funds (ETFs) has created a curiosity in the theoretical advancements around this particular financial instrument, which served as the inspiration for this study.

Objective of Study

The aim of this study is to review the existing literature on exchange traded funds (ETFs).

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Review of Literature

Saini, C., Sharma, I., Verma, B., & Bhawana. (2023) analysed "Performance of Equity ETFs during COVID-19 Pandemic Crisis: Evidence from India". Utilizing disintegration hypotheses and tracking mistakes, the research piece analysed the performance of the top five equities ETFs traded. The new COVID-19 crisis is used in the study to evaluate the disintegration hypothesis. The disintegration theories in the context of Indian ETFs are not supported by the study. Before, during, and after the COVID-19 financial crisis, three of the five ETFs are found to be continuously co-integrated with their underlying index. Furthermore, two out of the five were found to not be co-integrated with their underlying index prior to the financial crisis. Nonetheless, just one ETF did not co-integrate with its benchmark index throughout the financial crisis. That being said, all ETFs are co-integrated with the benchmark index subsequent to the pandemic crisis period. Moreover, during the financial crisis, the tracking error of these five exchange-traded funds increased and became more volatile compared to the pre-crisis and post-crisis periods.

Scholar, R. H. (2023) has conducted "A Study Exchange Traditional Fund (ETF) as an Investment Avenue for Passive Wealth Growth in India with Reference to Nifty50". According to research findings, exchange-traded funds (ETFs) are expected to grow at a rapid pace and are deemed superior than index funds and other types of passive investment financial instruments. It was also disclosed that Nifty ETFs can be a viable investment choice for those seeking an easy and affordable method of getting exposure to the Indian stock market.

Alamelu, L., & Goyal, N. (2023) has analysed the "Investment Performance and Tracking Efficiency of Indian Equity Exchange Traded Funds". Using a sample of 27 equities ETFs traded on the National Stock Exchange of India during the pre-pandemic period from January 1, 2015, to December 21, 2019, the study's goal was to evaluate how well Indian ETFs replicated the performance of their benchmark indices. The majority of the sample ETFs outperformed their tracking indices during the study period, but there was noticeable tracking error. This was determined by evaluating the performance of the sample ETFs using risk-return analysis, risk-adjusted performance measures, tracking error analysis, and multi-factor regression. Additionally, the analysis showed that while risk and management fees are inversely correlated with the returns of the sample ETFs, they do have a significant and positive association with the index's return.

Tripathi, V., & Sethi, A. (2022) analysed an evaluation of the tracking performance of exchange traded funds (ETFs): The case of Indian index ETFs. This study has examined the variables influencing tracking performance and looked into how well exchange-traded funds (ETFs) with an Indian domicile replicate the returns of their underlying indices. To measure tracking efficiency, they employed three methods: cointegration-Vector Error Correction Model technique, Capital Asset Pricing Model (CAPM) regression, and Tracking Errors (TEs). To assess how fund-specific factors affect tracking ability, random-effects panel regression is used. They discovered that ETFs have a far smaller exposure to their indices than would be expected given their stated goal. The majority of ETFs have long-term relationships with benchmarks, but price differences from the indexes are generally stable. Large and non-trivial TEs apply to the majority of the funds. The main elements influencing tracking success include bid-ask spreads, price-net asset value discrepancies, the age of the sfund, and, to some extent, its size. High-performing ETFs have been observed to outperform benchmarks in developed markets like the USA and Europe. This study helped fund companies raise the caliber of their products and help clients build more effective ETF portfolios.

Lakshmi, V. D. M. V. (2022) has examined "Do exchange traded funds in India have tracking and pricing efficiency? ". In this study, specific exchange-traded funds (ETFs) in India are tracked and their price efficiencies are examined. Nine ETFs are taken into account in the study of which five are large cap diversified equity ETFs that are quoted on the Bombay Stock Exchange (BSE) and use the S&P BSE Sensex Total Return Index (TRI) as their benchmark index as a benchmark. Three of the four ETFs are large cap diversified equity, with NIFTY 50 TRI serving as the benchmark index, and one is a banking sector ETF, with NIFTY Bank TRI serving as the benchmark. The remaining four are from the National Stock Exchange (NSE). The time frame of the sample is January 1, 2010, through February 28, 2019. The tracking error is greatest for the ICICI Prudential Sensex ETF and lowest for the Aditya Birla Sun Life Nifty ETF. NAVs are ahead of their corresponding market prices, giving approved participants a tonne of room to arbitrage. Longer periods of time with persistent differences between NAVs and market prices point to an ineffective price discovery process in the Indian ETF market. The analysis validates the

Indian ETF market's inefficiencies. The results were used by traders and arbitragers to create profitable trading plans, stock exchanges to improve trading procedures, and market regulators to create regulations that guarantee market efficiency. The analysis only looks at equity exchange-traded funds (ETFs); additional research can look into other markets, like gold, debt, leveraged, currency, etc.

Tandon, D., Garg, Y., & Tandon, N. (2022) analysed Sustainability of the Exchange Traded Funds (ETFs) in Indian Bourses on their Performance. The present study tracks the historical price movements of ETFs to evaluate the performance of equity ETFs with the performance of their benchmark Index, which is the NIFTY 50 Total Return Index. The study also looked at how well ETFs replicate the underlying index and analysed the reasons for any variations in the post-pandemic returns of the ETFs from their benchmark index. Based on the monthly closing prices of ETFs and the benchmark index from January 2018 to January 2023, the study presented an analysis. Risk-adjusted return ratios, information ratio, tracking error, and volatility of individual ETFs relative to the benchmark index were computed in order to assess the performance of ETFs. According to the study, all seven ETFs had tracking errors that are noticeably low. This means that there is little variation in return variations between the ETFs and the benchmark index, indicating that the ETFs' performance was comparable to the benchmark's. The analysis also showed that every ETF included in the analysis trades at a premium. The results of the regression demonstrated that the price movement of all the examined ETFs follows the price movement of the underlying index, and that the movement in the NIFTY 50 TRI accounts for over 99.7% of the variation in price.

Kaur, P., Singh, J., & Seth, S. (2021) Investigating the dynamics of exchange traded funds across the bear and bull markets: Evidence from Indian equity ETFs. The study looked at Indian equities exchange-traded funds' (ETFs) tracking performance during bull and bear market regimes. In order to understand the variations in risk exposure under the two regimes using DBM, it is also necessary to analyze the sensitivity of ETFs to their respective underlying indices under the two market situations. According to the data, there were differences in the tracking error (TE) of ETFs across the two market regimes, with the TE being higher during the bullish regime. Moreover, it was discovered that ETFs are more responsive to the underlying indices when the market is in a bearish state, which supports the reason for the lower TE during this period. The top three performers in terms of tracking efficiency were found to be NIFTYBEES, KOTAKNIFTY, and BANKBEES. Additionally, it was said that throughout the bullish period, NIFTYBEES, BANKBEES, and JUNIORBEES will generate noticeably favourable excess returns. Thus, those who are thinking about investing in equities exchange-traded funds (ETFs) can choose the best-performing funds, which also provide the possibility of earning excess return (in rare instances). Additionally, it was noted that ETFs' beta coefficients differed noticeably from unity. It implies that there is no comparable systematic risk between the ETFs and their corresponding underlying indices.

Goel, G., & Ahluwalia, E. (2021) explores Do pricing efficiencies in Indian equity ETF market impact its performance? This research looked at how well domestic exchange-traded funds (ETFs) priced in the Indian equities market, where operating inefficiencies coexist with growth. For a synchronously traded market, the ETFs perform better than their fund benchmarks on average, but the tracking error and premium (discount) magnitudes are much larger. ETFs that are categorized according to fund benchmarks exhibit greater tracking mistakes and discounts in comparison to sectoral and strategy ETFs. These include broad market and theme ETFs. Additionally, a non-significant negative association was discovered between the discount and redemption units, suggesting that the process of creation and redemption is not impacted by the current market discount. The current tracking inaccuracy and discount are not reduced by market players, even in the presence of modest arbitrage constraints. The limitations that arbitrageurs face in their operations in the Indian ETF market.

Rambabu, U., & Rao, S. S. Investigated" Performance Evaluation of Select Index Exchange Traded Funds in India: An Empirical Study". The study investigated exchange-traded funds (ETFs) that monitor benchmark indices like the BSE in order to maintain their returns in line with market performance. The researchers computed descriptive statistics including mean, standard deviation, range, skewness, kurtosis, t-test, alpha, and beta values in order to ascertain the correlation between each fund's performance and that of its benchmark. To evaluate and rank the funds, Treynor ratios were also computed in accordance with performance models like the Sharpe index. Out of the nine exchange-traded funds that were chosen, ICICI Prudential Sensex ETF and Kotak Sensex ETF Funds fared the best, according to the analysis. Investors can use this study to choose the finest exchange-traded funds for their portfolios.

Kurian, B. C. (2020) evaluated "Performance of nifty 50 ETFs in India". In the study, the performance of the funds was compared to the return generated by their respective benchmark indices, and the returns obtained by a subset of equity index ETFs based on the Nifty 50 listed on the NSE India were assessed. The study's time frame was April 2009 through March 2019. It was discovered that, when compared to their benchmark return, the funds' return variations are extremely small. According to the study, a number of performance metrics, including the Treynor and Sharpe ratios, show superior performance in terms of giving investors a strong return.

Anchalia, H. K. (2020) analysed Performance evaluation of select exchange traded funds and its benchmark in India. This study examined the risk and return characteristics of the four exchange-traded funds (ETFs) and assessed how well the chosen ETFs performed in comparison to the Nifty 50 index, which served as their benchmark. The investigation was conducted between April 1, 2015, and March 31, 2020. The analysis showed that, when compared to the Nifty 50, all of the funds performed better and had greater total average returns over a five-year period. Every one of the chosen schemes is less risky than the market in terms of standard deviation.

Rambabu, U., & Rao, S. S. (2020) inspected Performance evaluation of gold-ETFs in India.

The study evaluated the performance of gold ETFs in India during the covid -19 pandemic.

The financial ratios such as Treynor performance index, Sharpe performance index and Jensen performance index used to measure alpha, beta and standard deviation of the selected ETFs traded in NSE. Time period of the study was Dec. 1, 2018 to Nov. 30, 2020. The study revealed that quantum gold funds (ETFs) performed reasonably well during the study period.

Observations

The popularity of Indian equities exchange-traded funds (ETFs) is increasing rapidly across various segments of the investment community. Therefore, it is crucial to assess their performance in comparison to the benchmark index. The degree of variation between the sample's profits and the index is used to gauge how well the sample is tracking the benchmark index. The study then went on to examine how the majority of common characteristics of ETFs affected the returns that they produced. For this reason, a comprehensive analysis of a broad spectrum of studies from the already available literature was carried out. Given that exchange-traded funds (ETFs) are essentially passive investments, the results show a substantial positive correlation between the returns of the fund and the index.

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