



A QUANTITATIVE ANALYSIS OF FACTORS INFLUENCING THE WORKING AND GROWTH OF EXCHANGE TRADED FUNDS IN INDIA

Sarika Jaiswal*

School of Management, CT University, Ludhiana, Punjab.

Corresponding Author Email: sarika20j@gmail.com

Kawal Nain Singh

School of Management, CT University, Ludhiana, Punjab.

Email: kawal17395@ctuniversity.in

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ABSTRACT

In today's financial markets, exchange-traded funds (ETFs) are often regarded as an appealing investment vehicle. The present study is an attempt to explain the factors influencing the working and growth of Exchange Traded Funds in the Indian Financial Market and their suggestive measures for future growth. There are a number of different underlying index components that are used to evaluate the performance of ETFs, "Benchmark, Lower Tracking Error, Liquidity, Soft Impact Cost, Low Impact Ratio". Purposive sampling was used to acquire data from primary sources and then analyse the results. A standardised questionnaire was used to obtain answers from workers. A total of 175 financial services sector funds' advisers were included in the research. The researchers applied reliability tests like Cronbach Alpha and descriptive statistics like Correlation and Regression Analysis, as well as ANOVA and the t test to analyse hypothesis of data. Despite their lower costs, low effect, and lower benchmark influence than indexes, ETFs have been proven to underperform. ETFs, on the other hand, seem to have a positive correlation with tracking inaccuracy. The ETFs, however, are unaffected by benchmark.

KEYWORDS: Benchmark, Exchange Traded Funds (ETFs), Liquidity, Lower Tracking Error, Low Impact Ratio, Soft Impact Cost.

INTRODUCTION

A growing number of foreign institutional investors (FIIs) are adopting exchange-traded funds (ETFs) to obtain exposure to developing economies, particularly in Asia. Slowly but surely, ETFs are gaining traction in India. An ETF is a suggested

disinvestment mechanism for Indian public sector companies (PSUs)[11]. Since the Indian stock market was liberalised in 1991, FIIs have had a considerable impact. Onshore and India-focused stock funds and ETFs are thought to account for a large portion of FII inflows. In the United States, there are many India-specific exchange

traded funds (ETFs), including WisdomTree India Earnings Funds, the iShares MSCI India ETF, and the Power Shares India Portfolio. Offshore equity funds and India-focused exchange-traded funds (ETFs) had a combined asset value of USD 55.84 billion in 2010, but had decreased to USD 37 billion in 2012[5].

While retail participation remains a tiny portion of the pie, it has consistently expanded over time, as has the volume of trading on the exchanges themselves. Total global ETF transaction volume is expected to reach \$7.74 trillion by 2020. This year, the AUM of Exchange Traded Funds (ETFs) in the United States is expected to exceed \$5 trillion.

GROWTH OF ETF AUM IN GLOBAL

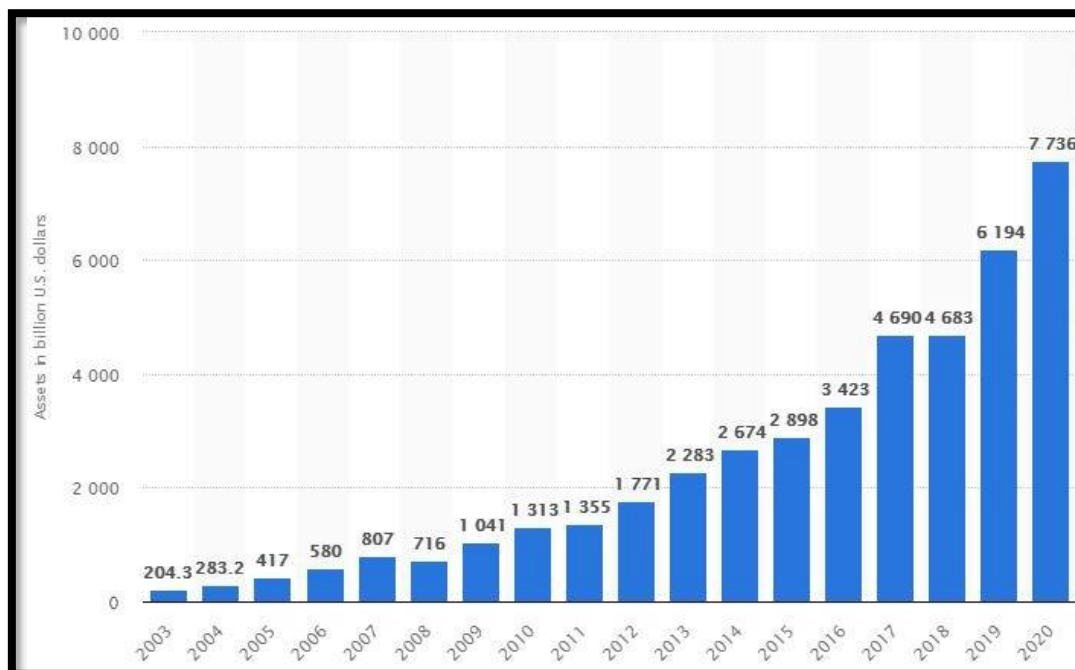


Figure 1. Growth of ETF AUM in Global

In recent financial history, exchange-traded funds (ETFs) have become a household name. An ETF's net asset value (NAV) fluctuates during the trading day since it holds a range of assets, including stocks, commodities, and bonds. Investors in ETFs may choose to invest in funds that track various indices, sectors within an industry, or even the stock markets of certain countries. Investors who want passively managed funds need go no further than traditional exchange-traded funds (ETFs). Closed-end and open-ended mutual funds are combined into one handy bundle by ETFS. Over traditional mutual funds, ETFs provide many advantages, including lower costs, more trading flexibility, tax

efficiency, greater transparency, and exposure to a wider variety of asset classes than is possible with traditional mutual funds. Mutual funds' cost ratios are higher than those of ETFs because of the entry and exit fees they impose. Consider the fact that while the Indian government has banned enrolment fees for mutual funds, exit fees remain. While open-ended mutual funds may only be accessed at the end of the business day, exchange-traded funds (ETFs) can be exchanged at any time of the day like stocks. With their in-kind creation and redemption, ETFs are more tax efficient since they offer arbitrage and efficiency. When it comes to ETFs, the profits accrue to all owners, not just the one

who made the transaction. All unit holders are subject to tax repercussions when a mutual fund transaction is completed. This makes ETFs a better choice for investors since they are more transparent than mutual funds, which disclose their holdings at the end of the quarter. With ETFs, investors may have access to a wide range of asset types, from commodities to livestock. As a result of the rapid rise of ETFs throughout the world, experts and investors alike have paid close attention to ETFs in the established markets of the United States and Europe. At the outset, the majority of ETFs throughout the world were considered passive. There are, however, a number of actively managed ETFs on the market today. Stocks like Standard & Poor's Depository Receipts were among the first U.S. ETFs to be issued (SPDRs). It was first slow going, but ETFs have since grown at an astronomical rate. As of 2013, there were over 5090 ETFs and ETPs in the United States, with 10,172 listings and assets totalling approximately USD 2.4 trillion, at the end of the calendar year 2013. In 2001, India's first ETF, the Nifty Benchmark Exchange Traded Scheme (Nifty Bees), debuted and tracks the Nifty 50 index. Investments were then made in Nifty Bees by Goldman Sachs Asset Management Company [9]. Over 40 ETFs are now available in India, and the great majority of these ETFs are still passively managed, which means that they follow the underlying benchmark indexes. At the end of the third quarter of 2013, the global AUM of mutual funds was USD 28.87 trillion. The Unit Trust of India (UTI) was India's first mutual fund, formed by the

government in 1963. Until the SBI Mutual Fund came into being in 1987, there was just one mutual fund. Mutual funds surged in India in the late 1990s and early 2000s. At the conclusion of the year in December 2020, there will be 1430 mutual fund schemes totalling more than INR 8,50,000 crore under management. The major investments of SBI Mutual, ICICI Mutual, and Reliance Mutual are benchmark indices. With a total AUM of INR 10,273 crores as of the end of December 2020, gold ETFs accounted for INR 8784 crores .

GROWTH OF ETF AUM IN INDIA

However, even though ETFs have been there for some time in India, regular investors haven't really taken to them. Many high-net-worth individuals and financial organisations utilise ETFs. The biggest mutual fund in India, for example, is the SBI Nifty 50 ETF, which has a market capitalization of Rs 89,441.55 cr (Figure 1). Most of this is attributable to the fact that the Employees' Provident Fund Organization (EPFO) owns shares in this ETF.

The expansion of ETF AUM is mostly a result of the increased use of ETFs and reasons are as follows:

- Investments in Nifty and Sensex ETFs by the EPFO.
- Divestment of the government's investments in CPSE and Bharat 22 ETFs.
- The introduction of the Bharat Bond Debt ETF and the government's push for it. In these ETFs, non-retail investors own the bulk of the AUM.

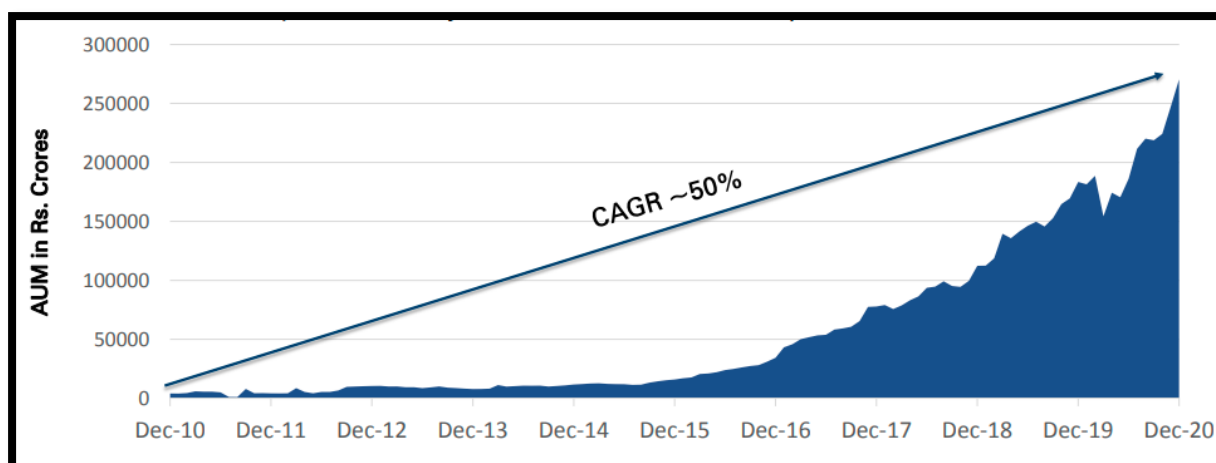


Figure 2. Growth of ETF AUM in India(Source: Statista, 2022)

A rise of Rs 66,000 crore (or 43.22 percent) over the same period previous year was recorded by India's ETF assets as of September 30, 2020, when AUM stood at Rs 2.18 lakh crore.

REVIEW OF LITERATURE

According to the literature on ETFs, there are mixed outcomes. More than a few research studies have revealed that exchange-traded funds (ETFs) underperformed; yet, other investigations showed the polar opposite to be true[5].ETFs and the S&P 500 index were found to be indistinguishable in their performance. Findings from six-month to year-long timeframes provided no indication of long-term success (Deshmukh, 2019). Over time, they discovered tracking errors when comparing overseas ETF returns to their local index. Saji, (2021)the performance of index funds and ETFs registered on European stock exchanges According to research, "European index funds and ETFs underperform their benchmarks by as much as 150 basis points annually[9].foreign exchange-traded funds (ETFs) and the index used to monitor them were found to have tracking errors."

According to the findings of one research, "ETFs that provide passive exposure to

companies in global emerging markets (GEM) have a higher tracking error than other ETFs that do the same.The results reveal that Treasury ETFs are able to equal their benchmarks, but investment grade and high yield corporate bond ETFs underperform their benchmark."In one of the studies, it was determined Assessed "the performance of ETFs with leverage, noting that price variances between leverage ETFs are small and that price volatility increases as a result of rebalancing the portfolio.According to the findings, the size of the ETF has a negative correlation with the number of tracking errors made in India, but the cost-to-performance ratio has a positive correlation."As a result, he said, the danger of replicating the performance of underlying assets is higher in countries where tracking inaccuracies are greater. Some research has shown that ETFs and funds recognised by the Organization for Economic Cooperation and Development (OECD) performed well from 2002 to 2011. Even though ETFs are less expensive than conventional mutual funds, their statistical performance is inferior to that of closed-end funds. In contrast, ETFs showed no symptoms of deterioration. "The Taiwan ETF and the Taiwan Top 50 Tracker (TTT) have been shown to produce almost identical returns to the Taiwan stock market(Deshmukh, 2019).An assessment

of the risk and return of foreign ETFs compared to closed-end country funds. The researchers found that passive investing using ETFs was superior than active investing with country-specific funds. Open-ended mutual funds (OEMFs) and exchange-traded funds (ETFs) were compared in one study, and the results showed that the ETFs were superior indexing vehicles (OEF). According to these analysts, exchange-traded funds (ETFs) are better suited for investors with long investing time horizons and smaller, less liquid underlying indexes. Exchange-traded funds (ETFs) in the United States have a tendency to fluctuate widely in price each day, whether at a premium or a discount. According to the results of one of the studies, ETFs trade above their Net Asset Value (NAV) and their return pattern may be predicted [13]. "India's stock market suffered through its worst bear market between October 9, 2007 and March 9, 2009, losing around 56% of its value. Using Sharpe and Treynor portfolio performance indicators, they looked at 38 sector index funds during the bear market that ran from October 9, 2007, to March 9, 2009." These index funds excelled in the healthcare and consumer staples sectors but underperformed when it came to the financials and home building sectors, according to their findings. There were 15 Indian ETFs studied between 1999 and 2007 that had positive and negative returns during that time period. When the market is positive, exchange-traded funds (ETF) tend to outperform when the market is negative. A study based on Sharpe ratios has shown that "ETF returns aren't positive and aren't proportional to market volatility. SSE 50 ETF, China's first exchange-traded fund, was examined for pricing efficiency in this article. SSE 50 ETF. They found that the market prices of ETFs and their Net Asset Values (NAV) are inextricably linked, and that the market prices of ETFs cause their NAV in a single direction alone. So, they found that the fund prices did not closely reflect the NAV in China's second half of

2007, when the stock market suffered high volatility; this was due to abrupt spikes in market risks as well as possible arbitrage possibilities amid financial turbulences, they concluded. "ETFs' short-term performance was shown to be predictable, and the advantage in return was found to be maintained. The present examination of the performance of ETFs in India was necessitated and driven by the wide range of data on ETF performance in established and growing markets.

RESEARCH GAP

According to a review of recent research, many earlier studies solely looked at ETFs' pricing efficiency, focusing on the gap between ETF prices and NAVs. There is a large void in the literature because just a few studies have addressed the importance of liquidity, Lower tracking error, soft impact cost, low expense ratio, and benchmark in the Indian financial market. To fill up this knowledge vacuum, the current study looked at the many elements that influence how ETFs (Exchange Traded Funds) operate and flourish in the Indian financial sector.

OBJECTIVES

- To analyse the factors influencing the working and growth of Exchange Traded Funds in the Indian Financial Market.
- To provide various suggestive measures to improve growth of Exchange Traded Funds in the Indian Financial Market.

HYPOTHESIS OF THE STUDY

- H01: There are no significant factors influencing the working and growth of Exchange Traded Funds in the Indian Financial Market.
- Ha1: There are significant factors influencing the working and growth of Exchange Traded Funds in the Indian Financial Market.

RESEARCH METHODOLOGY

Purposive sampling was used to acquire data from primary sources and then analyse the results. A standardised questionnaire was used to obtain answers from workers. A total of 175 financial services sector

funds' advisers were included in the research. We employed reliability tests like Cronbach Alpha and descriptive statistics like Correlation and Regression Analysis, as well as ANOVA and the t test to analyse hypothesis of our data.

TABLE 1. Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.813	5

Table 1 was analysed using reliability analysis to establish the internal consistency of the variables under consideration. There were just 5 items in the study, however the Cronbach alpha was found to be around.813 which is over the

acceptable level of 0.6. As a consequence, all of the variables are in agreement with each other. As a consequence, it will be feasible to conduct a more in-depth investigation of the factors.

TABLE 2. Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Liquidity	175	3	5	3.02	.169
Lower Tracking Error	175	3	5	4.00	.107
Soft Impact Cost	175	1	5	2.63	1.186
Low Impact Ratio	175	1	5	2.48	.946
Benchmark	175	1	5	2.46	.945
Valid N (listwise)	175				

In table 2, the descriptive statistics of the study to identify which important factors influencing the Exchange Traded Funds in Indian financial market. The descriptive analysis of the study stated that Majority of the respondents consider "Lower Tracking Error" (Mean=4.00, Standard deviation=.107) followed by "Liquidity" (Mean=3.02, Standard

deviation=.169). The descriptive output found least in "Benchmark" (Mean=2.46, Standard deviation=.945). Therefore, descriptive statistics indicated the most preferred important factors in influencing the Exchange Traded Funds in Indian financial market is Lower Tracking Error.

TABLE 3. Correlations Analysis

Correlations						
		Liquidity	Lower Tracking Error	Soft Impact Cost	Low Impact Ratio	Benchmark
Liquidity	Pearson Correlation	1	.636**	.175*	.236**	.238**
	Sig. (2-tailed)		.000	.020	.002	.001
	N	175	175	175	175	175
Lower Tracking Error	Pearson Correlation	.636*	1	.090	.113	.113
	Sig. (2-tailed)	.000		.234	.135	.135
	N	175	175	175	175	175
Soft Impact Cost	Pearson Correlation	.175*	.090	1	.870**	.880**
	Sig. (2-tailed)	.020	.234		.000	.000
	N	175	175	175	175	175
Low Impact Ratio	Pearson Correlation	.236*	.113	.870**	1	.991**
	Sig. (2-tailed)	.002	.135	.000		.000
	N	175	175	175	175	175
Benchmark	Pearson Correlation	.238*	.113	.880**	.991**	1
	Sig. (2-tailed)	.001	.135	.000	.000	
	N	175	175	175	175	175
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

In table 3, Benchmark is positively correlated with Lower Tracking Error, Liquidity, Soft Impact Cost, Low Impact Ratio. Lower Tracking Error is positively correlated with Benchmark, Liquidity, Soft Impact Cost and Low Impact Ratio. Liquidity is positively correlated with Benchmark, Lower Tracking Error, Soft Impact Cost, Low Impact Ratio. Soft

Impact Cost is positively correlated with Benchmark, Lower Tracking Error, Liquidity and Low Impact Ratio. Low Impact Ratio is positively correlated with Benchmark, Lower Tracking Error, Liquidity, Soft Impact Cost. Therefore, all the variables under study positively correlated with each other.

TABLE 4. Model Summary

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.871 ^a	.759	.752	.435	.759	106.598	5	169	.000

a. Predictors: (Constant), Benchmark, Lower Tracking Error, Liquidity, Soft Impact Cost, Low Impact Ratio

As a result of a regression study, Table 4 indicates how variables impacting Indian financial markets affect Exchange Traded Funds (ETF). R square and adjusted R square values of .759 and .752 are used to estimate the value of R's discoveries, respectively, at approximately .871. Consequently, more than 30% of the R squared value is more than 30%; this suggests that it accounts for 76% of the total value. R and R squared estimates are also similar, and the significance of F statistics is .000, which is below the permissible

threshold of 0.05 and should be avoided. The dependent variable (Impact on ETFs of Indian financial market) as well as the independent variables (Benchmark, Lower Tracking Error, Liquidity, Soft Impact Cost, Low Impact Ratio) have an impact or influence on one another as a result. One way that financial advisers want to have a say in the main elements that impact their choice to buy ETFs from the Indian financial markets is using regression analysis.

TABLE 5. ANOVA Analysis

ANOVA ^a						
Model		Sum Squares	Df	Mean Square	F	Sig.
1	Regression	100.638	5	20.128	106.598	.000 ^b
	Residual	31.910	169	.189		
	Total	132.549	174			

a. Dependent Variable: Impact on ETFs of Indian financial market

b. Predictors: (Constant), Benchmark, Lower Tracking Error, Liquidity, Soft Impact Cost, Low Impact Ratio

The ANOVA results are shown in Table 5. The Sum of squares was 100.638, the degrees of freedom were 5, the mean square was 20.128, the F statistic was 106.598, and the significance level was around .000^b. (which is 0.05 below the allowed level). This is the Residual sum of squares: 31.910,

df = 169, mean square = .189, F statistic = 106.598, and p < .000^b. (And that is below the standard cutoff level of 0.05). The ANOVA indicates that the dependent and independent variables influence each other. As a result, there is an impact or influence between the dependent variable (Impact on

ETFs of Indian financial market) and the independent variables (Benchmark, Lower Tracking Error, Liquidity, Soft Impact Cost, Low Impact Ratio). Through the use

of an ANOVA, it was shown that all factors positively influence the Exchange Traded Funds in Indian financial market.

TABLE 6. One-Sample Statistics

One-Sample Statistics					
	N	Mean	Std. Deviation	Std. Error Mean	
Liquidity	175	3.02	.169	.013	
Lower Tracking Error	175	4.00	.107	.008	
Soft Impact Cost	175	2.63	1.186	.090	
Low Impact Ratio	175	2.48	.946	.072	
Benchmark	175	2.46	.945	.071	

In table 6, the one sample statistics of the study to identify which important factors influencing the Exchange Traded Funds in Indian financial market. The descriptive analysis of the study stated that Majority of the respondents consider “Lower Tracking Error” (Mean=4.00, Standard deviation=.107 and Standard Error= .008) followed by “Liquidity” (Mean=3.02, Standard deviation=.169and

Standard Error= .013). The descriptive output found least in “Benchmark” (Mean=2.46, Standard deviation= .945 and Standard Error= .071). Therefore, descriptive statistics indicated the most preferred important factors in influencing the Exchange Traded Funds in Indian financial market is Lower Tracking Error.

TABLE 7. One-Sample Test

One-Sample Test						
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Interval of the Difference	
					Lower	Upper
Liquidity	236.673	174	.000	3.017	2.99	3.04
Lower Tracking Error	493.559	174	.000	4.000	3.98	4.02
Soft Impact Cost	29.392	174	.000	2.634	2.46	2.81
Low Impact Ratio	34.684	174	.000	2.480	2.34	2.62

Benchmark	34.463	174	.000	2.463	2.32	2.60
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Table 7, conducted test study to identify which important factors influencing the Exchange Traded Funds in Indian financial market. The descriptive analysis of the study stated that Majority of the respondents consider “Lower Tracking Error” (t= 493.559) followed by “Liquidity” (Mean=3.02, Standard deviation=.169 and Standard Error=(t=236.673). The descriptive output found least in “Benchmark” (34.463). Therefore, t test indicated the most preferred important factors in influencing the Exchange Traded Funds in Indian financial market is Lower Tracking Error.

HYPOTHESIS TESTING OF THE STUDY

After applying ANOVA and T test, the findings of the study stated that null hypothesis which is “there are no significant factors influencing the working and growth of Exchange Traded Funds in the Indian Financial Market” is rejected and alternative hypothesis which is “there are significant factors influencing the working and growth of Exchange Traded Funds in the Indian Financial Market is accepted.”

SUGGESTIVE MEASURES

- Investors with a 10- to 15-year time horizon may not profit from intraday price fluctuations. These hourly price changes are causing some investors to trade more than usual. In the event of a large swing over a short period of time, a transaction might be initiated where the closing price prevents irrational worries from distorting an investment goal.
- Contrary to popular belief, investing in an ETF is more expensive than investing directly in an individual stock because of the additional fees associated with ETF trading. The broker's real commission may be the same, but there is no management

charge for a stock. Since niche ETFs are more likely to follow low-volume indexes, they are more likely to follow niche ETFs. As a consequence, the bid/ask spread might be rather large. To get a better deal, you may choose to buy the real stock.

- Dividend-paying ETFs may be found here, although the yields may not be comparable to holding a high-yielding stock. The dividend yields of stocks might be significantly greater if an investor is willing to take on the risk of holding ETFs. The dividend yield of an ETF will be lower than that of a single company since ETFs follow a larger market.

CONCLUSION

Only a few studies have looked at Indian-listed exchange-traded funds (ETFs), most of which concentrate on US and Canadian-listed ETFs. Overall, ETF turnover has been growing, indicating that investors' interest in ETFs has grown significantly over time. According to the report, ETFs fail to outperform their underlying benchmarks and burden investors with more risk than they would if they invested in an index fund. An analysis of ETFs in India shows that they aren't able to completely mimic their benchmarks. During downturns, their betas that are smaller than unity prevent them from fully replicating the underlying indexes. A large 7.47 percent of ETF tracking error is estimated by the research to represent the inadequate replication of underlying indexes in the ETFs. Furthermore, tracking inaccuracy has been proven to have a positive correlation with ETF expenditures and risk. In addition, ETF performance has been proven to be adversely affected by costs. In terms of ETF volume, the research reveals that liquidity has a beneficial effect. It is interesting to note that the average number of transactions and the previous day's lagged return have no impact on the

volume of shares. Contrary to popular perception, this study shows that investors aren't influenced by prior success, at least in the near term.

REFERENCES

1. Bano, Y., & Vasantha, S. (2017). An analysis on the performance of ETF funds. *Journal of Advanced Research in Dynamical and Control Systems*, 9(Special Issue 14), 2182–2191.
2. Bikramaditya, G. (2012). Exchange Traded Fund- Are they popular enough among Indian Investors. *International Journal of Research in Management, Economics and Commerce*, (November 2012), 8.
3. Bollapragada, R., Savin, I., & Kerbache, L. (2013). Price Forecasting and Analysis of Exchange Traded Fund. *Journal of Mathematical Finance*, 03(01), 181–191. <https://doi.org/10.4236/jmf.2013.31a017>
4. Deshmukh, S. (2019). Advance and Innovative Research (Seminar Special). *International Journal of Advance and Innovative Research*, 6(1), 78–85.
5. DR.P.VIDHYAPRIYA, D. P. V., & DR.M.MOHANASUNDARI, D. M. M. (2011). A Study on The Performance of Gold ETF in India. *Indian Journal of Applied Research*, 4(8), 414–417. <https://doi.org/10.15373/2249555x/august2014/105>
6. Hassine, M., & Roncalli, T. (2013). Measuring Performance of Exchange Traded Funds. *SSRN Electronic Journal*, (February). <https://doi.org/10.2139/ssrn.2212596>
7. 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. *Vision*, 25(3), 350–360. <https://doi.org/10.1177/09722629211007581>
8. Khan, A. P., Bacha, O. I., & Masih, A. M. M. (2015). Performance and Trading Characteristics of Exchange Traded Funds: Developed vs Emerging Markets. *Capital Markets Review*, 23, 40–64.
9. Kumar, S. (2019). Gold vs Gold Exchange Traded Funds: An Empirical Study in India. *Economic Affairs*, 64(4). <https://doi.org/10.30954/0424-2513.4.2019.4>
10. Kurian, B. C. (2017). Performance of Equity Exchange Traded Funds in India: An Analysis. *International Journal of Scientific Engineering and Research (IJSER)*, 2347–5(6), 24–31.
11. Riyazahmedk, & Dr.MG.Saravananaraj. (2016). A Study on Factors Influencing Buying Behaviour in Indian Stock Markets. *SNS Journal of Marketing*, 7(1), 22–28.
12. Saji, T. G. (2021). Weak Form Efficiency of Gold ETF Markets: An Empirical Note from India. *Journal of Economic Policy and Research*, 10(1).
13. SETHI, N. (2016). Examining the Performance of Indian Exchange Traded Funds (ETFs). *Eurasian Journal of Business and Economics*, 9(18), 61–79. <https://doi.org/10.17015/ejbe.2016.018.04>
14. Tsalikis, G., & Papadopoulos, S. (2019). ETFS – performance, tracking errors and their determinants in Europe and the USA. *Risk Governance and Control: Financial Markets and Institutions*, 9(4), 67–76. <https://doi.org/10.22495/rgcv9i4p6>