

# Exchange Traded Funds Vis-Á-Vis Index Funds in India – A Comparative Study

*Abhijit Mitra*

Faculty, Department of Commerce  
Bhairab Ganguly College, Kolkata  
e-mail: mitraabhi2007@gmail.com

**Abstract:** Exchange Traded Funds (ETFs) are baskets of securities that are traded like individual stocks on an exchange. Most ETFs charge lower annual expenses than Index Mutual Funds. However, as with stock, one must pay brokerage to buy and sell ETF units, which can be a significant drawback for those who trade frequently or invest regular sums of money. An index fund is a mutual fund which invests in securities in the index on which it is based such as BSE Sensex or S&P CNX Nifty in India. It invests only in those shares which comprise the market index and in exactly the same proportion as the companies/weightage in the index so that the value of such index funds varies with the market index.

The present study has been undertaken to evaluate the performance of ETFs and Index Funds in India and compare ETFs with Index Funds in India. The performance evaluation parameters which have been used in this study are Net Asset Value (NAV), Risk, Return, Expense Ratio, Tracking Error, Reward to Variability and Differential Return. The statistical tools like Standard Deviation, Beta, Alpha, R-squared and Sharpe Ratio are used for data analysis.

It is found that ETFs have given better opportunity for the small investors in terms of diversified portfolio with a small amount of money, low expense ratio, reduced tracking error, lower risk and volatility as compared to Index Funds. The ETFs can become a better alternative, provided awareness is created among investors.

**Key-words:** Mutual funds, exchange traded funds, index funds, net asset value.

## 1. Introduction

Exchange traded funds (ETFs) are a hybrid of open-ended mutual funds and listed individual stocks. They are Index Funds listed on the stock exchanges and traded like individual stocks on the stock exchange. However, trading at the stock exchanges does not affect their portfolio. ETFs do not sell their shares directly to investors for cash. The shares are offered to investors over the stock exchange. ETFs are passively managed funds that track a particular index such as S&P CNX Nifty (Standard & Poor's CRISIL NSE Index 50). Since they are open-ended

and listed on stock exchanges, it is possible to buy and sell them throughout the day and their price is determined by the demand-supply forces in the market. In practice, they trade in a small range around the value of the assets (NAV) held by them.

An Index Fund is a mutual fund which invests in securities in the index on which it is based such as BSE (Bombay Stock Exchange) Sensex or S&P CNX Nifty in India. An index fund/portfolio consisting of all shares comprised in the index in the same proportion is known as a Fully Replicated Index Fund. An Index Fund, in contrast, invests only in shares included in the index. An Index Fund closely replicates the composition as well as the return on the index and follows the swings of the stock market.

In India, Index Fund mirrors the major market index like Nifty or Sensex as closely as possible by investing in all the stocks that comprise in proportions equal to the weightage of those stocks in the index. A few Index Funds were launched in the recent past to reduce the bias of fund managers in stock selection and to provide a return at par with the index. Some of the Index Funds based on S&P CNX Nifty are UTI Nifty Fund, Franklin India Index Fund and IDBI Principal Index Fund, etc.

The present study looks into the matter of these two passively managed index based funds-ETFs and Index Funds. Section 2 discusses the review of literature for justifying the present study. Section 3 describes objectives of the study. Section 4 deals with the database and research methodology. Trends and progress of ETFs and Index Funds are discussed in section 5 while section 6 provides performance evaluation of ETFs and Index Funds. Section 7 outlines the findings of the study. Finally, section 8 concludes the present study.

## **2. Review of Literature**

Academicians, analysts and other stakeholders have analyzed mutual funds in different aspects. A few of such literature are discussed below.

Sadhak (2003) has made a detailed study on mutual fund industry in India as well as abroad and examined the domestic mutual funds industry, the changes with respect to products, distribution and delivery system, the spheres of investment management and regulations, corporate governance, investor protection, and SEBI guidelines etc. Sahadevan and Thiripalraju (1997) have made a detailed evaluation of income generated and expenses incurred by mutual funds in India and summarized the performance of various funds vis-à-vis the market. Gupta (2002) has examined the issue of market timing abilities of Indian mutual fund manager and examined the structural changes that have taken place in the Indian mutual

fund industry. Singh (2006) has showed the enormous growth of mutual fund industry in India since its inception in 1963 compartmentalizing it into pre-liberalization and post liberalization era. He attempted to analyze the important issues confronting the investor like preference for different investment avenues. He also showed the performance of a sample of equity diversified and sector specific mutual fund.

Jaydev (1996) has evaluated the performance of two growth oriented mutual funds (Mastergain and Magnum Express) on the basis of monthly returns compared to benchmark returns. He found that Mastergain has performed better according to Jensen and Treynor measures but on the basis of Sharpe Ratio its performance was not upto the benchmark. Richard A. Ferri (2007) has explained market index and mutual funds. He also categorized the broad spectrum of index funds based on type and style worldwide. Richard A. Ferri (2008) has provided a detailed information about different types of ETPs (Exchange Traded Products), including ETFs, exchange-traded notes (ETNs), grantor trusts, and unit investment trusts (UITs). He also explored the latest ETF strategies from buy, hold and rebalance to market timing and sector rotation. Scott P. Frush (2011) has discussed the important basics of ETFs, followed by a detailed description of the different types of ETFs available in the marketplace worldwide. He concentrated on how best to employ ETFs in managing portfolio in addition to presenting peripheral topics relating to ETFs such as investing risk and return and asset allocation principles.

Hill and Muller (2001) have summarized that tracking errors and returns based on fund NAV relative to the index reflect some factors characteristic of the product structure. In addition, price-to-index returns and tracking error reflect ETF prices that are captured at different time from the underlying index and short supply and demand factors relevant to the ETF, as well as the hedging instruments used by marketers. NAV tracking error is much lower than price-to-index tracking error and is the most useful measure in assessing the long-term characteristics of an ETF relative to its underlying index. Chakraborty (2003) has examined various aspects of exchange-traded ADRs (American Depositary Receipts) from India, considering the ten ADRs of Indian origin that currently trade on the American Stock Exchanges and also have the underlying stocks trading on Indian houses, and studied the extent to which the usual predictions about ADR returns hold for this important type of cross-border securities. Philip (2003) has explained the risk and return relationship of active portfolios in terms of value at risk on tracking error volatility (TEV), which can also be interpreted in terms of value at risk. Such a constrained portfolio is the typical setup for active managers who are given the task of beating a benchmark. The study reflected that TEV-constrained portfolios are described by an ellipse on the traditional mean-variance plan.

However, no such documented work is available on the comparative study of ETFs and Index Funds.

### **3. Objectives of the Study**

The present study has been undertaken to:

- (i) analyze the trends and progress of ETFs and Index Funds in India;
- (ii) evaluate the performance of ETFs and Index Funds in India, and
- (iii) compare ETFs with Index Funds in India.

### **4. Database and Research Methodology**

The study is purely based on secondary data and in research methodology various statistical tools, models etc., are used. These are discussed below:-

#### ***4.1 Database***

In order to make a comparative evaluation of the performance of ETFs and Index Funds, the study considers the top 5 Equity ETFs and Index Funds respectively for the last 5 years (2006-2010) from [www.mutualfund.com](http://www.mutualfund.com). However, for the purpose of analyzing the trends and progress of Index Funds and ETFs in India, the data are collected since their inception respectively and considers Gold ETFs to some extent.

The secondary data sources include Fact Sheets of Mutual Funds, articles, SEBI manuals, AMFI reports and websites. The study has used the Government Bond yields issued by Government of India as the proxy risk free return which is computed to be 8.01% p.a. and the data has been collected from [www.tradingeconomics.com](http://www.tradingeconomics.com). Annual returns and market return of respective funds have been collected from [www.valueresearchonline.com](http://www.valueresearchonline.com) and other data are collected from the following websites: - [www.mutualfundindia.com](http://www.mutualfundindia.com), [www.monycontrol.com](http://www.monycontrol.com), [www.nse-india.com](http://www.nse-india.com).

#### ***4.2 Research Methodology***

The data are analyzed with the help of statistical measures like Standard Deviation, R-square, Beta and the parameters used for evaluating the performance are Net Asset Value, Risk, Return, Reward to Variability (Sharpe), and Differential Return (Alpha), Expense Ratio, Tracking Error.

### **5. Trends and Progress of ETFs and Index Funds**

The Mutual Funds are a fast growing sector of the Indian financial markets. They have become a major vehicle for mobilization of savings, especially from the small and household savers for investment in the capital market. Mutual Funds entered the Indian capital market in 1964 with a view to providing the retail investors the benefit of diversification of risk, assured

returns and professional management. Since then, they have grown phenomenally in terms of number of funds, size of operation, investor base and scope. With the ushering in of economic reforms in the early 1990s, the Government of India opened the way for the entry of private sector and foreign players into this industry. In India, the Mutual Fund Industry came into being with the establishment of Unit Trust of India in 1964. Public sector and foreign institutions were allowed to set up Mutual Funds in 1993. Mutual Funds have come forward with varying schemes suitable to the needs of the saving populace. By March 2010, there were 42 Mutual Fund Houses in India with Average Assets Under Management (AAUM) of Rs.7,47,33,862.61 lakhs.

### ***5.1 Exchange Traded Funds in India***

ETFs are the new products from the Mutual Fund Houses and are also slowly gaining popularity. They have huge potentiality to grow in India because of their technical advantages over traditional Mutual Funds. Gold ETFs are also gaining popularity from the last one year. Once the equity market stabilizes, the Fund Houses are ready to start new kind of product in this area. By March 2010, the total AAUM of ETFs approximately was Rs. 2,39,689.34 lakhs. The Gold Benchmark Exchange Traded Scheme (Gold BeES) was having the highest average AUM of Rs.76092.63 lakhs followed by Nifty Benchmark Exchange Traded Scheme-Nifty BeES with a sum of Rs.40776.19 lakhs. The total proportion of ETFs in the total sum of Mutual Fund sector was very low i.e. 0.32%.

### ***5.2 Index Funds in India***

An Index Fund is a Mutual Fund scheme that invests in the securities of the target index in the same proportion weightage. By March 2010, the total AAUM of Index Funds was Rs.1,19,027.23 lakh. The UTI- Nifty Index Fund- Growth Option was having the highest AAUM i.e. Rs. 17906.96 lakh followed by the other Index Funds. The LIC Mutual Fund Company is offering various types of Index Mutual Funds. The proportion of Index Funds in total AAUM of all funds was very low i.e. 0.16%.

It can be observed that the funds mobilized by ETFs (Rs.2,39,689.34 lakhs) is much higher than the funds mobilized by Index Funds (Rs. 1,19,027.23 lakhs). The total amount mobilized by these two funds represents 0.32% and 0.16% respectively of the total AAUM of Mutual Funds as on 31.12.2010.

### ***5.3 Trends in ETFs and Index Funds in India***

The recent explosion of investors' interest in ETFs and Index Funds in the developed market can be explained in part by the retail investors' increased understanding of inherent

advantages relative to the traditional Mutual Funds and growing popularity of indexation as a core investment strategy. Table-1 shows the trends of ETFs and Index Funds in India.

**Table-1: Trends in ETFs and Index Funds in India**

Year	Equity ETF	Gold ETF	Index Funds	Total
1998	--	--	1	1
1999	--	--	1	1
2000	--	--	3	3
2001	1	--	--	1
2002	--	--	7	7
2003	1	--	5	6
2004	1	--	1	2
2005	--	--	--	--
2006	--	--	--	--
2007	2	4	--	6
2008	2	1	2	5
2009	1	1	--	2
2010	3	2	4	9
<b>Gr. Total:</b>	<b>11</b>	<b>8</b>	<b>24</b>	<b>43</b>

Source: AMFI

From Table-1, it is found that the first Index Fund was launched on 1<sup>st</sup> July 1998 (UTI Master Index Fund) and the first Equity ETF was launched in 2001 (Nifty BeES). More Index Funds have been issued in the years 2002 and 2003. The Gold ETFs are introduced in the year 2007 (Gold BeES) and the recession in the capital market and the growth rate in the prices of Gold led to the introduction of more Gold ETFs in India. There are at present 641 mutual funds schemes operating in India and the share of both the Index Funds and ETFs is very small i.e. 43 schemes accounting for 6.71% of the total.

## 6. Performance Evaluation of ETFs and Index Funds

The performance evaluation of ETFs and Index Funds is made with the help of select parameters viz., Return, Risk and Expense Ratio.

### 6.1 Returns of ETFs and Index Funds in India

ETFs have been gaining investors' interest. ETFs are essentially Index Funds that are listed and traded on exchanges like stocks. They enable the investors to get broad exposure to the stock markets in different countries and specific sectors, with relative ease, on a real-time basis. This also comes at a lower cost than many other forms of investments. Tables-2 and 3 give details relating to the returns of the selected ETFs and Index Funds (top 5 funds respectively for last 5 years as per [www.mutualfundindia.com](http://www.mutualfundindia.com)) during the period 2006-2010.

**Table-2: Annual Returns of Exchange Traded Funds as on 31<sup>st</sup> December (Figures in %)**

Sl. No.	Name of Fund	2006	2007	2008	2009	2010	Average
1.	Bank BeES	33.62	65.34	-48.63	77.78	31.37	31.90
2.	Junior BeES	28.63	75.12	-63.26	122.70	17.83	36.20
3.	S&P CNX Nifty BeES	41.18	55.83	-50.73	75.45	19.36	28.21
4.	Nifty BeES	41.49	55.97	-51.28	74.57	18.78	27.91
5.	ICICI SENSEX Pru. ETF	47.69	46.78	-51.12	78.41	18.77	28.11
Average		38.52	59.81	-53.00	85.72	21.22	

Source: Value Research

**Table-3: Annual Returns of Index Funds as on 31<sup>st</sup> December (Figures in %)**

Sl. No.	Name of Fund	2006	2007	2008	2009	2010	Average
1.	HDFC Index Fund-Sensex Plus Plan	44.83	41.69	-53.91	75.06	17.56	25.05
2.	ICICI Pru. Index Fund	41.94	46.46	-50.36	75.57	18.73	26.47
3.	Franklin India Index Fund-NSE Nifty Plan	40.19	54.00	-52.07	75.32	17.98	27.08
4.	UTI Nifty Fund- Growth	40.72	53.58	-51.96	73.80	17.73	26.77
5.	Franklin India Index Fund- BSE Sensex	43.74	46.61	-51.46	79.83	17.79	27.30
Average		42.28	48.47	-51.95	75.92	17.96	

Source: Value Research

It is observed from Table- 2 that all the ETFs are generating positive returns during the year 2010, though these are comparatively lower than the immediately preceding year 2009. Bank BeES generated the highest return i.e., 31.37 percent among all the ETFs in the year 2010 followed by S&P CNX Nifty BeES. The returns of all the ETFs are positive in all the years except in 2008 due to financial crisis during that period.

From Table-3 it is found that all the Index Funds are generating positive returns in the year 2010, though these are comparatively much lower than the immediately preceding year 2009. ICICI Pru. Index Fund generated the highest return i.e., 18.73 percent among all the Index Funds in the year 2010 followed by Franklin India Index Fund- NSE Nifty Plan. It is observed that all the Index Funds generated negative returns in the year 2008 due to financial crisis during that period.

A comparison of returns of both the Index Funds and ETFs reveals that the ETFs are performing better than the Index Funds. The average returns of all selected ETFs during the last five years is, by and large, 30.46 percent whereas the average returns of all Index Funds is, by and large, 26.53 percent. Junior BeES (ETF) on an average generated the highest return during the last five years among the ETFs and Index Funds and Bank BeES generated the highest return among all the schemes of ETFs and Index Funds during the year 2010 (Table-2 & Table -3).

### 6.2 Risk Analysis of ETFs and Index Funds

The risk is analyzed with the help of Standard Deviation, Beta and R-squared. Standard Deviation is a measure of the deviation of returns of the portfolio. A volatile stock would have a high standard deviation. It indicates how much the return on a fund is deviating from the expected returns based on its historical performance. Table- 4 and Table- 5 give the details relating to Standard Deviation, Sharpe Ratio, Beta, R-squared value and Jensen Alpha for ETFs and Index Funds respectively.

**Table-4: Risk Analysis of Exchange Traded Funds**

Sl. No.	Name of the Fund	Standard Deviation (%)	Sharpe Ratio	Beta	R-squared	Alpha (%)
1.	Bank BeES	49.27	.4847	.95	.99	2.3
2.	Junior BeES	69.43	.4061	1.38	.94	1.6
3.	S&P CNX Nifty BeES	48.66	.4153	.99	1	1.04
4.	Nifty BeES	48.74	.4082	.99	1	0.7
5.	ICICI SENSEX Pru. ETF	49.06	.4096	.98	.99	0.62

Source: The performance evaluation tools in the above table are calculated taking the annual returns of 5 years (2006-2010)



Table-5: Risk Analysis of Index Funds

Sl. No.	Name of the Fund	Standard Deviation (%)	Sharpe Ratio	Beta	R-squared	Alpha (%)
1.	HDFC Index Fund-Sensex Plus Plan	48.63	.3503	.97	.98	-2.25
2.	ICICI Pru. Index Fund	48.72	.4199	.99	1	1.27
3.	Franklin India Index Fund-NSE Nifty Plan	48.92	.3899	1	1	-0.18
4.	UTI Nifty Fund- Growth	48.49	.3871	.98	1	-0.31
5.	Franklin India Index Fund- BSE Sensex	49.23	.3918	.98	.99	-0.24

Source: The performance evaluation tools in the above table are calculated taking the annual returns of 5 years (2006-2010)

#### Standard Deviation

It is found that among ETFs, Junior BeES has the highest risk i.e., 69.43 percent and S&P CNX Nifty BeES has the lowest risk i.e., 48.66 percent. In the case of Index Funds, Franklin India Index Fund- BSE Sensex has the highest risk i.e., 49.23 percent and UTI Nifty Fund-Growth has the lowest risk i.e., 48.49 percent. The standard deviations of the ETFs are higher than the Index Funds. It means that the deviation of expected return is more in ETFs than Index Funds. ETFs are riskier compared to Index Funds; as a result, its returns are higher as compared to Index Funds as seen earlier.

#### Sharpe Ratio

It shows the return to variability. Higher the ratio, better is the performance, in terms of the return for the risk taken. It is found that all ETFs and Index Funds are showing a positive Sharpe Ratio. When compared to Index Funds, ETFs have the higher average ratio i.e., 0.42 percent approximately than Index Funds' average ratio i.e., 0.39 percent. According to Sharpe Ratio, ETFs are giving better performance of extra risk taken by investors.

#### Alpha

Alpha measures the excess returns over market return of the scheme. Here, all the ETFs having positive returns, which means that all the schemes are generating the excess returns than market returns. In case of Index Funds, only ICICI Pru. Index Fund has positive return and rest of the funds have negative return i.e., these schemes are generating lower returns than market returns.

*R- Square*

All the ETFs have the R-Squared values ranging from 0.99 to 1.00 except Junior BeES having slight deviation i.e. 0.94 which means that all the ETFs have exact correlation with the underlying Index and are moving in the same direction as that of the market returns except Junior BeES. In case of Index Funds, all the Index Funds have the R-Squared values ranging from 0.98 to 1.00. It means that, they have exact correlation with the underlying Index and are moving in the same direction as that of the market returns.

*Beta Value*

Beta measures the systematic risk and explains the nature of the volatility of the security return with that of the market return. If beta values are less than one, it means that the Fund's risk is less than the market risk; if it is one, it means the Fund's risk is the same as that of the market risk and if the beta is more than one, the risk of the Funds is greater than that of the market. All the ETFs have the beta values on an average approximately equal to 0.97 except Junior BeES having beta value 1.38, implying lower volatility in the returns of the ETFs than the underlying index volatility except for Junior BeES. In case of Index funds, all the funds have the beta values on an average approximately equal to 0.98, implying lower volatility in returns of the Index funds than the underlying index volatility. The risk of Junior BeES is greater than that of the market among all ETFs and Index Funds.

**6.3 Tracking Error of ETFs and Index Funds**

Tracking error is defined as the annualized standard deviation of the difference in returns between the index based funds and its index. It is a very important metric for index tracker. In simple terms, it is the difference between returns from the index based funds to that of the index. It indicates how close the weightages of the stocks in the portfolio are to the weightages of the stocks in the index. Closer the weightage of the stocks in the portfolio to the index, lower will be the tracking error. Tables- 6 and 7 show the tracking error of various selected schemes:-

**Table- 6: Tracking Error of ETFs as on December'2010**

S. No	Name of the Fund	( % )
1.	Bank BeES	0.24
2.	Junior BeES	0.52
3.	S&P CNX Nifty BeES	0.80
4.	Nifty BeES	0.14
5.	ICICI SENSEX Pru. ETF	1.82

Source: Fact Sheets of Selected Mutual Funds

**Table- 7: Tracking Error of Index Funds as on December'2010**

Sl. No	Name of the Fund	( % )
1.	HDFC Index Fund-Sensex Plus Plan	2.53
2.	ICICI Pru. Index Fund	2.28
3.	Franklin India Index Fund-NSE Nifty Plan	1.75
4.	UTI Nifty Fund- Growth	2.03
5.	Franklin India Index Fund- BSE Sensex	1.84

Source: Fact Sheets of Selected Mutual Funds

It is found that the tracking error is very high in HDFC Index Fund-Sensex Plus Plan i.e., 2.53% and is low in Franklin India Index Fund-NSE Nifty Plan i.e., 1.75%. In case of ETFs, tracking error is high in ICICI SENSEX Pru. ETF i.e., 1.82% and is very low in Nifty BeES i.e., 0.14% only. It shows that tracking error is very high in Index Funds compared to ETFs.

#### 6.4 Expense Ratio of ETFs and Index Funds in India

An expense ratio tells how much a fund costs. The amount is skimmed from the investors' account and goes towards paying a fund's total annual expenses. It is expressed as a percentage of a Fund's Net Assets. If an investor invests in an ETF with an expenses ratio of 0.10 percent and has invested Rs.3000 in that Fund, the investor has to pay Rs.3 a year in expenses. Tables-8 and 9 give the details of expense ratio of the selected schemes of ETFs and Index Funds during the period 2006-2010.

**Table-8: Expense Ratio of ETFs (in %)**

Sl. No.	Name of Fund	2006	2007	2008	2009	2010	Average
1.	Bank BeES	0.45	0.48	0.50	0.50	0.50	0.48
2.	Junior BeES	1.00	1.00	1.00	1.00	1.00	1.00
3.	S&P CNX Nifty BeES	0.50	0.50	0.50	0.50	0.50	0.50
4.	Nifty BeES	0.45	0.48	0.50	0.50	0.50	0.49
5.	ICICI SENSEX Pru. ETF	0.86	0.80	0.80	0.80	0.80	0.80

Source: AMFI

**Table- 9: Expense Ratio of Index Funds (in %)**

Sl. No.	Name of Fund	2006	2007	2008	2009	2010	Average
1.	HDFC Index Fund-Sensex Plus Plan	1.50	1.50	1.50	1.50	1.00	1.40
2.	ICICI Pru. Index Fund	1.25	1.25	1.25	1.25	1.50	1.30
3.	Franklin India Index Fund-NSE Nifty Plan	1.00	1.00	1.00	1.00	1.00	1.00
4.	UTI Nifty Fund- Growth	0.62	0.75	1.21	1.50	1.50	1.12
5.	Franklin India Index Fund- BSE Sensex	1.00	1.00	1.00	0.96	1.00	.99

Source: AMFI

In case of ETFs, it is found that the Nifty Junior BeES has the highest expense ratio i.e., 1.00 percent on an average during the years and Bank BeES has the lowest ratio i.e., 0.48 percent during the years. The average expense ratio of ETFs is approximately 0.65 percent.

In case of Index fund, it is found that HDFC Index Fund-Sensex Plus Plan has the highest expense ratio i.e., 1.40 percent on an average during the years and Franklin India Index Fund-BSE Sensex has the lowest expense ratio i.e., 0.99 percent on an average during the years. The average expense ratio of Index funds is approximately 1.16 percent.

ETFs have the lower expense ratio as compared to the Index Funds.

### 7. Findings of the Study

ETFs have given better opportunity to the small investors in terms of diversified portfolio with a small amount of money. ETFs investment has given better performance over Index Funds. Expense Ratios of ETFs are much less compared to the Index Funds. Therefore, investing in ETFs is less costly; Bank BeES, S&P CNX Nifty BeES and Nifty BeES have achieved 0.50 percent of expense ratio each in 2010. More than 1 percent of expenses can be saved in ETFs compared to Index Funds. Here, though the underlying asset is same, tracking error is less in ETFs; thus, automatically ETFs give better returns than Index Funds. ETFs are better than Index Funds in terms of Risk and Volatility. According to Sharpe Ratio, ETFs give better performance for extra risk taken by the investors. All the ETFs and Index Funds have the R-Squared values approximately ranging from 0.97 to 1.00 except Junior BeES (0.94). It means that they have exact correlation with the underlying Index and are moving in the same direction as that of the market returns except Junior BeES.

## 8. Conclusion

In the last fifteen years, since 1993 the popularity of ETFs has increased manifold. This has attracted a lot of attention from both the investors and the market participants, resulting in the introduction of a variety of ETFs and continuous innovations in the ETF industry. As the variety of financial indices has increased, there has been a corresponding increase in the spectrum of ETF varieties available in the market.

ETFs have technical advantages over Mutual Funds and have shown the ability to capture investors' money. The advantages are low cost, less tracking error and more liquidity. They are a good investment suitable for individual investors and professionals.

However, now the Indian economic conditions are gradually stabilizing and equity markets are performing well because of political stability and positive signs about the economy. Investors always look for better returns and it is the equity markets which can give better returns and therefore, there is a huge potentiality for the introduction of more equity ETF products in India. However, the ETFs can become the best investment alternative, provided awareness is created among the investors.

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