

# A STUDY ON INDEX MUTUAL FUNDS AND EQUITY EXCHANGE TRADED FUNDS

*P. Wilfred Isaac Newton*<sup>1</sup>

*Dr. S. Madhavan*<sup>2</sup>

## ABSTRACT

*There are different types in mutual funds like Equity Fund, Money Market or Liquid Fund, Hybrid Fund, Debt or Income Fund, Gilt Fund, Index Fund, Exchange Traded Fund etc., But this study is focused on ETF and Index Funds. The present paper studies the growth trend of ETFs and Index Fund in India. In the dynamic financial world where investors are often rethinking asset allocation and reevaluating the merits of various investment products, Exchange Traded Funds (ETFs) have opened up a whole new range of investment opportunities and appear to be a creative solution to many investing queries. An alternative to index mutual funds, ETFs offer investors a low cost, tax efficient way to track their favorite market segments. This paper attempts to provide a conceptual framework of ETFs, so as to build awareness among investors about this relatively new financial product available to them.*

**Keywords:** *Index Fund, Equity ETFs, Mutual fund*

## INTRODUCTION

An ETF is an investment company, typically a mutual fund or unit investment trust, whose shares are traded intraday on stock exchanges at market-determined prices. In the past few decades many performance evaluation studies indicated that actively managed mutual funds, which seek to obtain excess returns than the market by actively forecasting returns on individual stocks, do not actually obtain statistically significant excess returns (Jensen, 1968; Grinblatt and Titman, 1989; Malkiel, 1995; Gruber, 1996). This was consistent with the 'Efficient Market Hypothesis' which suggests that due to the availability of all kinds of information, obtaining excess returns should be difficult in a competitive market. These researches suggested a superior investment strategy: the index fund. Instead of actively engaging in stock picking, an index fund passively replicates the risks and returns of an underlying market index by investing in the securities constituting the index in the same weightage as represented in the index.

<sup>1</sup>Asst. Professor, Department of Business Administration, Pope's College, Sawyerpuram

<sup>2</sup>Assistant Professor, Department of Management Studies, M.S.University, Tirunelveli

Since the first index fund launched in early 1970s, investors all over the world have discovered that there are substantial benefits from utilizing index funds as an alternative to actively managed funds. Some such benefits of indexing includes lower management expense ratio (due to passive management of fund), lower turnover and its related expenses due to buy and hold nature of most index funds and tax efficiency when compared to actively managed funds.

An Index Fund is a Mutual Fund that aims to replicate the movements of an index of a specific financial market. An Index Fund follows a passive investing strategy called Indexing. It involves tracking an index say for example, the Sensex or the Nifty and builds a portfolio with the same stocks in the same proportions as the index. The Fund makes no effort to beat the index and in fact it merely tries to earn the same return.

Like any other mutual fund, index funds may be structured as either open-ended funds or close-ended funds. Open-ended funds, as the name suggests, are open for subscription and redemption for all the investors throughout the year. However, one of the limitations of such funds is that they are priced only once a day, after the close of business. Since all the trades in such funds during the business day are executed at the closing Net Asset Value (NAV), investors are unable to react expeditiously to dramatic changes in a market during the business day. Close-ended funds on the other hand, are open for subscription only once, and can be redeemed only on the fixed date of redemption. Recognizing both the appeals of open-ended index funds (continuous creation and redemption of fund units) as well as of close ended index funds (continuous trading on exchange like a stock), an innovative financial product named Exchange Traded Fund(ETF) was designed in the early 1990s, which combines the beneficial features of both these types of funds. This paper attempts to provide a conceptual framework of ETFs, so as to build awareness among investors about this relatively new financial product available to them.

## **REVIEW OF LITERATURE**

Jonne M. Hill and Barbara Mueller (2001) made a research on ETFs and they concluded that Tracking errors and returns based on fund NAV relative to the index reflect characteristics of the product structure. In addition, price-to-index returns and tracking error reflect ETF prices that are captured at a different time from the underlying index and the short-supply and demand factors relevant to the ETF, as well as the hedging instruments used by the market makers.

RoshniJayam's (2002) "Debt Be Not Proud, Equity's Back", study brought out that equities had a good chance of appreciation in future. The researcher was of the view that, investors should correctly judge their investment objective and risk appetite before picking schemes, diversified equity funds were typically safer than others and index funds were the best when market movements were not certain.

Kostovetsky (2003) studied relative performance of the ETFs and Index mutual funds from the investors' point of view. He reported key areas of differences between the two to lie in management fees, shareholders transaction fees, taxation efficiency, and the qualitative factors transaction convenience, short selling, and ability to margin. His core finding was that Index mutual funds are better suited for small investors and ETFs are preferable by large investors.

Saha, Tapas Rajan (2003) "Indian Mutual Fund Management", identified that Prudential ICICI Balanced Fund, Zurich(I) Equity Fund were the best among the equity funds while Pioneer ITI Treasury scheme was the best among debt schemes. He concluded that, the efficiency of the fund managers was the key in the success of mutual funds and so the AMCs had to ensure more professional outlook for better results.

SharathJutur (2004) "Evaluating Indian Mutual Funds", studied 58 schemes during the bear period (September 1998 to April 2002). He identified that the risk was low for 37 schemes, below average risk for 11 and of average risk for 10 schemes. Risk-return analysis revealed that, average mutual funds were found to be with low unsystematic and high total risk. The return was positive in the case of 46 schemes, with 30 schemes yielding above 5 percent. 32 schemes had positive Treynor ratio, 30 schemes had positive Sharpe ratio, 35 schemes had positive Jensen measure due to the bearish market with low CAPM returns.

### **NEED FOR THE STUDY**

Exchange-Traded Funds constitute the most recent innovation in the global capital markets. These funds aim at enhancing investors' participation by providing considerable benefits like cost-effectiveness and risk-diversification. ETFs are the hybrid product of both Mutual Funds and normal stocks so that these funds will have the qualities of both. ETFs gained rapid popularity in the US and Canada during the 1990s. Growth of ETFs in India was very less than USA, Canada. But there is a huge scope for growth in India because of its advantages over Index Funds. Therefore, the present study aims at making a performance evaluation of ETFs vis-à-vis Index funds in order to know the barriers for the growth of the ETFs in India.

## OBJECTIVES OF THE STUDY

The objectives of the study are

- To study the concept of ETFs and Index Mutual Funds in India
- To present the trends and progress of ETFs and Index Funds in India
- To evaluate the performance of ETFs vis-à-vis Index Funds in India.

## PERIOD OF THE STUDY

The study covers a period of five years from 2010 to 2014 for the purpose of evaluating the performance of Exchange Traded Funds and Index Funds.

## SAMPLE SIZE

There are 29 Equity ETF, 14 Gold ETF and 24 Index Fund schemes in India. The study is made only for these funds.

## RESEARCH METHODOLOGY

The data for the study has been derived basically from secondary sources. The secondary sources include fact sheets of mutual funds, journals, Newspapers and publications of various research bodies like, SEBI, NSE, AMFI reports and websites. The data has been properly analyzed and interpreted to draw conclusion and inferences.

## THE GROWTH TRENDS OF MUTUAL 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 provide the retail investors the benefit of diversification of risk with professional management. Since then, they have grown phenomenally in terms of number of funds, size of operations and investor base. In India, the Mutual Fund Industry came into being with the establishment of Unit Trust of India in 1964. Public sector banks and Financial Institutions began to establish Mutual Funds in 1987. In the early 1990s, the Government of India opened the way for the entry of private sector and foreign players into this industry.

The private 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 saving populace. By December 2014, there were 45 mutual fund houses in India with Average Assets Under Management of Rs.110627919.68lakhs (approx.).

**EXCHANGE TRADED FUNDS**

ETFs can be referred to as open-ended index funds with the tradability of stocks. They enable investors to trade 'the market' with a single investment as easily as if they were buying an individual stock. The main features of index mutual funds and stock combined by an ETF are summarized in Table 1.

**Table 1: ETF - A Combination of Index Mutual Fund and Individual Stock**

Attribute	Index mutual fund	Individual stock	ETF
Diversification of investment	Yes	No	Yes
Priced continuously throughout the day	No	Yes	Yes
Can be short sold, bought on margin or limit order	No	Yes	Yes
Tracks an index	Yes	No	Yes
Tax efficient as turnover is low	Possible	No	Yes
Low expense ratio	Yes	Not a factor	Yes

**Types of ETFs**

On the basis of their underlying benchmark indices, ETFs can be broadly classified as follows:

1. **Equity Index ETF:** Such an ETF represent ownership of a basket of shares, which attempts to replicate closely the performance and risk levels of a specific equity index. Such index could be a broad based market index like nifty, a sector specific index like bank index or an index based on the securities of some other country or region. Most ETFs today fall in this category.
2. **Commodity ETFs:** Commodity ETFs enables investors to gain exposure to a variety of commodities such as gold, silver, oil or broad based commodities index. Among the first commodity ETFs were gold ETFs, which have been offered in a number of countries and are gaining popularity in India as well. These gold ETFs attempt to replicate the returns of gold without requiring the physical trade of gold on the part of investors. Broad based commodity index include commodities from sectors as diverse as energy, metals, agriculture and livestock.

- Other ETFs: With the growth of the ETF market, many new categories of ETFs are coming into existence. Some of these include fixed income ETFs, currency ETFs, real-estate ETFs, actively managed ETFs, and leveraged ETF etc.

### ETF Trading Mechanism

The ETF trading process is characterized by a dual structure, with a primary market open to institutional investors for the creation and redemption of ETF shares in lots directly from the fund, and a secondary market where ETF shares can be traded with no limitation on order size. This structure has been illustrated in figure 1.

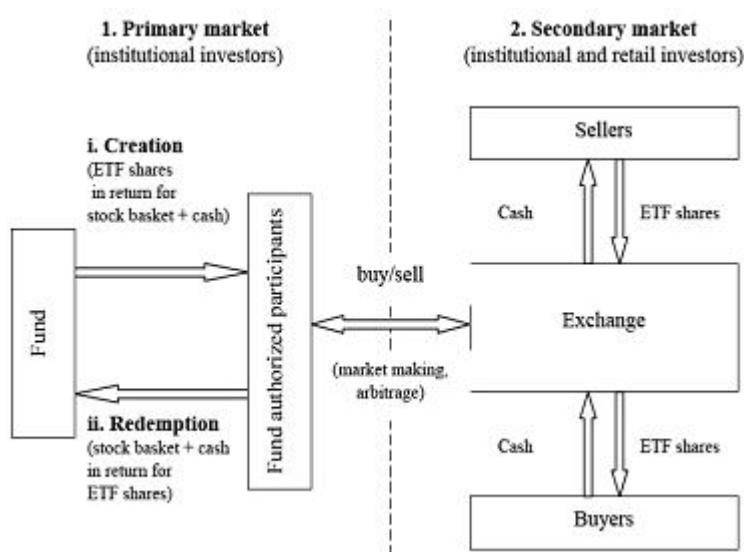


Figure 1: Primary and Secondary ETF Market Structure Source: Deville L (2008)

In the primary market, only Authorized Participants (APs), typically large institutional investors who have an agreement with the fund sponsor, are allowed to create new shares, in blocks of specified minimal amounts called creation units. Creation units vary in size from one fund to another, ranging from 25,000 up to 300,000 ETF shares. The creation of these new shares is done “in-kind” by requiring the AP to deposit a portfolio of shares that closely approximates the proportion of the stocks in the underlying index at that time, together with a specified amount of cash component to make up for the difference between the applicable NAV of the fund and the market value of the portfolio deposits. A similar “in-kind” process is followed in case of redemption of outstanding ETF shares whereby the redeemers (APs) are offered the portfolio of stocks that make up the underlying index plus a cash amount in return for creation units. The number of outstanding shares tradable on the secondary market varies over time according to creation and redemption operations carried out on the primary market.

Since an ETF may be negotiated on two markets, it has two prices: the NAV of the shares and their market price. The first price is the value per share of the fund's holdings computed at the end of each trading day. The second depends on the supply and demand for shares on the exchange. If selling or buying pressure is high, these two prices may deviate one from the other. However, the possibility of "in-kind" creation and redemption ensures that departures are not too large. For instance, if the value of the underlying index is higher than the price of the ETF, the authorized participants may redeem the units to the Sponsor in exchange for the higher priced securities. Conversely, if the price of the underlying securities is lower than the ETF, the APs may create ETF units by depositing the lower-priced securities. This arbitrage mechanism eliminates the problem associated with closed-end mutual funds viz. the premium or discount to the NAV.

### **Growth and Development of ETFs**

These innovative financial products were first introduced on the U.S. and Canadian exchanges in the early 90s. Officially, the Standard and Poor's Depository Receipts (SPDRs) is considered to be the first ETF which was created in 1993 in order to replicate the performance of S&P 500 Index. In the first several years, ETFs represented a small fraction of the assets under management in index funds. However the launching of an ETF named cubes (or QQQ) in 1999 which follows the return of NASDAQ 100 Index was accompanied by a spectacular growth in trading volume, making ETFs the most actively traded equity securities on the U.S. stock exchanges. Since then, ETF markets have continued to grow, not only in the number and variety of products, but also in terms of assets and market value. Initially, they aimed at replicating broad-based stock indices; however, new ETFs extended their fields to sectors, international markets, fixed-income instruments and lately commodities. Today ETFs have proliferated across global financial markets both in terms of their number and the market value of total assets under management.

In India, the first ETF was launched on National Stock Exchange in January 2002 by Benchmark Mutual Funds under the name Nifty Benchmark Exchange-traded Scheme (Nifty BeES) which tracks the S&P CNX Nifty index. Since then the ETF segment has grown slowly but steadily in India. The ETFs that are gaining popularity among the Indian investors recently are the gold ETFs which attempt to replicate the returns of gold without requiring the physical trade of gold on the part of investors. Despite such a short history of ETFs in India, they have performed quite well over these years. As per the findings of a study conducted by Singh and Gupta (2011) to analyze the performance of ETFs in India, most of the ETFs have

been able to achieve their stated objective of nearly replicating the underlying index composition. Though they have been found to experience statistically significant daily tracking errors, there is no significant under or out performance over long term investment horizon of half year or more. When compared against their index funds counterparts, ETFs were found to perform better than index funds in all respects, namely portfolio replication strategy, tracking ability and effectiveness over long term.

### COMPARISON OF ETFS AND INDEX MUTUAL FUNDS

The most significant similarity of ETFs and index funds is the *passive character* of their investing strategy. Both of them track specific and known indexes; broad market, sector or international, offering a considerably great degree of *diversification* of portfolio non-systematic risk. Passive strategy reflects *low managerial costs* both for ETFs and index mutual funds, since the managers simply follow the index and they are not obliged to develop costly and complicated investing policies. However, ETFs are charged with transaction costs and broker house commissions, while the index funds are not. On the other side, index mutual funds are loaded with redemption and purchase fees, except if they are no load funds. They both bestow investors with easy and direct access to professional and specialized portfolio management, with a complete *transparency* of portfolio under management. Besides the principal similarities of ETFs and index funds, basic differences among them also exist. The main difference is that ETFs are *purchased and shelled at the exchange* markets for prices, which closely fit their net asset value any time during the trading day. The initial and the secondary markets of ETFs are connected, giving the ability to institutional investors for *arbitrage*, which reduce the premium or the discount of their net asset value. On the contrary, index funds can be purchased or redeemed only at the end of the day at the value of their net assets. Even though the close-ended fund structure facilitates continuous pricing, they are not characterized of arbitrage possibility. Also, index fund shares can be *purchased from the fund* directly by the shareholder or through a financial intermediary. In contrast, shares of an ETF cannot be purchased from, or redeemed by the issuing fund, except in large denominations by an authorized participant for an in-kind basket of securities. Moreover, ETFs, like stocks, are permitted to be shelled or purchased in margin or be short sold while index funds don't have this *flexibility*. Another significant disparity is the *tax efficiency* of ETFs, which derives of their in-kind creation and, especially, redemption mechanism. Index funds on the other hand are redeemed in money and this is a taxable event.

The following table further classifies index funds into close-ended and open-ended funds and summarizes the basic distinctions between these funds and the ETFs.

**Table 2: ETFs vs. Open-Ended Index Funds vs. Close-Ended Index Funds**

Parameter	OpenEndedFund	ClosedEndedFund	ETF
Fund Size	Flexible	Fixed	Flexible
NAV	Daily	Daily	RealTime
Sale Price	At NAV plus load, if Any	Significant Premium / Discount to NAV	Very close to actual NAV of Scheme
Availability	Fund itself	Through Exchange where listed	Through Exchange where listed/Fund itself.
Portfolio Disclosure	Monthly	Monthly	Daily/Real-time
Intra-Day Trading	Not possible	Expensive	Possible at low cost

Source: NSE website

### **ETFs AND INDEX FUNDS IN INDIA**

ETFs are the products from the Mutual Fund Houses and slowly gaining popularity. They have huge potentiality to grow in India because of its technical advantages over traditional Mutual Funds. Gold ETFs are also gaining popularity over the year. Once an equity market stabilizes, the Fund Houses are ready to start new kind of product in this area. It is found that the total AUM of other ETFs approximately is Rs.6,702 Crores and Gold ETFs is Rs. 7,188 Crores as on December 31, 2014.

An Index Fund is a Mutual Fund scheme that invests in the securities of the target Index in the same proportion or weightage. Since the first Index Fund launched, the Index Funds market in India has been growing steadily. The total AUM of Index Funds are Rs.5,105.21 Crores as on September 2013.

### **TRENDS IN ETFs AND INDEX FUNDS IN INDIA**

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

advantages relative to the traditional Mutual Funds and growing popularity of indexation as core investment strategy. The table.3.below shows the trends of ETFs and Index Funds in India.

**Table 3 - Trends in ETFs and Index Funds in India**

Year	Other ETFs	Gold ETFs	Index Funds	Total
1999	--	--	1	1
2000	--	--	2	2
2001	1	--	--	1
2002	--	--	9	9
2003	2	--	2	4
2004	1	--	--	1
2005	--	--	--	--
2006	--	--	--	--
2007	2	4	--	6
2008	3	1	--	4
2009	1	1	1	3
2010	4	4	7	15
2011	5	2	--	7
2012	--	2	1	3
2013	5	--	--	5
2014	5		1	6
<b>Grand Total</b>	<b>29</b>	<b>14</b>	<b>24</b>	<b>67</b>

Source: AMFI

The first Index Fund was launched by UTI Master Index Fund on 1st July 1998. More number of Index Funds are issued in the years 2002 and 2010. The Gold ETFs are introduced in the year 2007 and the recession in the capital market and the growth rate in the prices of Gold rates led to the introduction of more number of Gold ETFs in India. It is found that there are 1826 mutual fund schemes operating in India and the proportion of both the Index Funds and ETFs are very small i.e. 67 schemes accounting to 3.67 per cent.

### **PERFORMANCE EVALUATION OF ETFs AND INDEX FUNDS**

The performance evaluation of ETFs and Index Funds is made with the help of select parameters namely, Return.

### 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 a 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. The table below gives details relating to the Returns of the ETFs and Index Funds during the period 2010 to 2014.

**Table 4- Annual Returns of Exchange Traded Funds**

(Figures in %)

Sl. No	Name of the Fund	2010	2011	2012	2013	2014
1	Birla Sun Life Nifty ETF	N.A	N.A	28.81	7.78	31.89
2	Goldman Sachs Banking BeES	31.37	-31.89	57.06	-9.12	64.11
3	Goldman Sachs CNX Nifty ShariahBeES	12	-19.65	12.35	18.37	22.39
4	Goldman Sachs Infra BeES	N.A	-38.55	21.81	-3.75	23
5	Goldman Sachs Nifty ETS	18.78	-23.87	26.98	6.62	31.22
6	Goldman Sachs Nifty Junior BeES	17.83	-31.62	48.8	5.13	43.53
7	Goldman Sachs PSU Bank BeES	35.56	-41.07	44.2	-28.56	<b>69.47</b>
8	ICICI Prudential SPIcE Fund	18.77	-23.77	29	10.50	30.92
9	ICICI Prudential CNX 100 ETF	N.A	N.A	N.A	N.A	34.12
10	ICICI Prudential Nifty ETF	N.A	N.A	N.A	N.A	32.36
11	IIFL Nifty ETF Fund	N.A	N.A	29.46	8.11	32.83
12	Kotak Sensex ETF Fund	18.32	-23.94	27.24	10.34	31.12

13	Kotak Nifty ETF	N.A	-23.99	29.16	7.91	31.22
14	Kotak PSU Bank ETF	35.77	-41.11	42.87	-28.67	<b>69.24</b>
15	MotilalOswalMOST Shares M100 ETF	N.A	N.A	40.32	-4	56.81
16	MotilalOswalMOST Shares M50 ETF	N.A	-29.36	34.09	7.06	26.62
17	Quantum Index Fund	18.36	-23.91	29.15	7.84	32.68
18	Religare Invesco Nifty Exchange Traded Fund	N.A	N.A	28.64	7.34	32.03
19	R*Shares Banking ETF	31.13	-31.21	57.48	-7.5	66.34
20	R*Shares Nifty ETF	N.A	N.A	N.A	N.A	32.93
21	R*Shares CNX 100	N.A	N.A	N.A	N.A	34.48
22	SBI Sensex ETF	N.A	N.A	N.A	N.A	31.11
23	Goldman Sachs Hang SengBeES Fund	N.A	-2.6	30.33	18.36	6.25
24	MotilalOswalMOST Shares NASDAQ - 100 ETF Fund	N.A	N.A	17.44	54.86	22.59

Source: Value Research

It is observed that all the ETFs are generating positive returns during the year 2010, 2012 and 2014. The Goldman Sachs PSU Bank BeES generated the highest return i.e. 69.47 per cent among the entire ETFs in the year 2014, followed by Kotak PSU Bank ETF. The returns of all the ETFs are positive in all the years except in 2011 and 2013.

**Table 5- Annual Returns of Index Funds**

(Figures in %)

Sl.No	Name of the Fund	2010	2011	2012	2013	2014
1.	Birla Sun Life Index	17.57	-25.4	26.98	7.21	30.71
2.	Franklin India Index NSE Nifty	17.98	-24.4	27.65	6.87	31.17
3.	Goldman Sachs CNX 500	13.98	-27.26	31.71	3.36	37.05
4.	HDFC Index Nifty	16.87	-24.84	27.59	7.44	32.18
5.	HDFC Index - Sensex Plan	17.56	-25.17	26.53	10.06	30.63
6.	HDFC Index Fund - Sensex Plus Plan	19.13	-20.63	28.53	6.04	35.58
7.	ICICI Prudential Index Reg	18.73	-23.62	26.5	7.95	32.47
8.	ICICI Prudential Nifty Junior Index	N.A	-30.8	<b>44.86</b>	5.44	43.62
9.	IDBI Nifty Index	N.A	-24.9	27.71	7.16	30.8
10.	IDBI Nifty Junior Index	N.A	-32.03	<b>47.62</b>	4.78	42.78
11.	IDFC Nifty Fund Regular	N.A	-23.76	29.91	7.53	32.51
12.	IIFL Dividend Opportunities Index	N.A	N.A	N.A	-6.09	34.31
13.	LIC Nomura MF Index Nifty	18.23	-23.85	27.65	6.54	31.07
14.	LIC Nomura MF Index-Sensex Plan	18.02	-24.39	26.26	9.22	29.3
15.	LIC Nomura MF Index-Sensex Advantage Plan	15.98	-24.18	26.36	9.42	31.18
16.	Principal Index Fund-Nifty	17.61	-24.31	27.24	7.71	31.15
17.	Reliance Index Nifty	N.A	-24.04	29.05	7.12	31.89
18.	Reliance Index Fund - Sensex Plan	N.A	-25	27.29	9.83	28.68
19.	SBI Nifty Index	17.99	-24.61	28.36	6.19	30.48
20.	Tata Index Nifty Plan A	17.52	-24.61	28.36	6.39	30.77
21.	Tata Index Fund Sensex Plan A	17.13	-24.8	26.09	8.67	29.42
22.	Taurus Nifty Index	N.A	-26.31	28.53	6.36	31.17
23.	UTI Nifty Index Fund	17.73	-24.83	28.32	6.86	31.77

Source: Value Research

The above table reveals that all the Index Funds are generating positive return in the year 2010, 2012 and 2014. IDBI Nifty Junior Index and ICICI Prudential Nifty Junior Index are

giving the highest annual return i.e. 47.62% and 44.86% respectively among all the Index Funds. It is observed that all the Index Funds generated negative returns in the year 2011 due to the financial crisis during that period. A comparison of the returns of both, the Index Funds and ETFs reveals that the ETFs are better performing than the Index Funds.

### **FINDINGS OF THE STUDY**

- ETFs investment has given better performance over Index Funds.
- ETFs have given better opportunity for the small investors in terms of diversified portfolio with a small amount of money. Goldman Sachs AMC issued more number of ETFs than other AMCs.

### **CONCLUSION**

In the last twenty years, the popularity of ETFs has increased manifold. This has attracted a lot of attention from both the investors as well as the market participants, resulting in the introduction of a variety of ETFs (Gold ETF, CPSE ETF etc.) and continuous innovations in the ETF industry. As the variety of financial indices is increasing, 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 an ability to capture investors' money. They are low cost and more liquid. Besides, Index funds also gives the better performance to the Investors in the long run. So both Index fund and ETFs are a good investment alternative which is suitable to small individual investors and professionals.

### **REFERENCES**

1. Deville, L. (2008). "Exchange Traded Funds: History, trading and research. Handbook of Financial Engineering", C. Zopounidis, M. Doumpos, P. Pardalos (Ed.) (2008):1-37. (2008)
2. Grinblatt, M., & Titman, S. (1989). "Mutual fund performance: an analysis of quarterly portfolio holdings", *Journal of Business*, 62(3), 393-416. (1989).
3. Gruber, M. J. (1996). "Another puzzle: The growth in actively managed mutual funds", *Journal of Finance*, 55(3), 783-810. (1996).
4. Jensen, M. (1968). "The performance of mutual funds in the period 1945-1964", *Journal of Finance*, 23(2), 389-416. (1968).
5. Jonne M. Hill and Barbara Mueller, —"The Appeal of ETFs (2001), Benchmark Mutual Fund". (2001).
6. Kostovetsky, L. (2003). "Index mutual funds and Exchange-traded funds: A comparison of two methods of passive investment". *The Journal of Portfolio Management*. (2003).

7. Malkiel, B. G. (1995). "Returns from investing in equity mutual funds 1971 to 1991. *Journal of Finance*", 50(2), 549–572. (1995).
8. RoshniJayam, "Debt Be Not Proud, Equity's Back", *Business Today*, (April 2002) pp. 42-45. (2002).
9. Saha, Tapas Rajan "Indian Mutual Fund Management", *Management Accountant*, (October 2003), Vol. 38(10), pp.765-771. (2003).
10. Sharath Jutur, "Evaluating Indian Mutual Funds", *Chartered Financial Analyst*, (July 2004). p.83. (2004).
11. Singh, Y.P. and Gupta, S. (2011). "An Empirical Study of the Performance and Trading Characteristics of Exchange Traded Funds (ETFs) in India". Dissertation submitted to the University of Delhi. (2011).