Exchange Traded Funds in India

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This article analyses the role and performance of Exchange Traded Funds (ETF). Beginning with a brief introduction to ETFs, the article presents the mechanism of trading of ETFs, the number of ETFs operating at the global level as well as those operating in India. Finally the article highlights the performance of ETFs in India.

Section I

Exchange Traded Funds, popularly known as ETFs, are a hybrid of open-ended mutual funds and individual stocks. Like a mutual fund, an ETF behaves like a diversified portfolio and like a stock, it is traded on a stock exchange (as presented in Table 1)

Table 1: ETF – Combination of Index Mutual Fund and Individual Stock

Attribute	ETF	Index Mutual Fund	Individual Stock
Diversification	Yes	Yes	No
Traded throughout the day	Yes	No	Yes
Can be bought on margin	Yes	No	Yes
Can be sold short	Yes	No	Yes
Tracks on index or sector	Yes	Yes	No
Tax efficient as turnover is low	Yes	Possible	No
Low expense ratio	Yes	Sometimes	Not a factor
Trades at any brokerage firm	Yes	No	Yes

Source: Nasdaq (web site)

Types of ETFs

Broadly ETFs are classified into three types. These are as follows:

a) **Sector Based**: Sector based ETFs are generally based on the companies of one particular industry.

b) **Broad Based**:Broad based ETFs are generally based on a broad group of stock from different industries.

c) **International:** An ETF, which tracks a group of stocks from a specific country.

Features of ETFs

(i) Buying and Selling Flexibility

ETFs are traded throughout the day because the prices of ETFs are readily available throughout the day and in real time basis. Further, ETFs can be purchased on margin, sold short and can be traded using stop orders and limit orders. By this, the investor are allowed to specify the price point at which they are willing to trade.

(ii) Diversification

As we know that ETFs are created on the indices, resulting investors are protected from the risk arising from the price volatility in one particular security.

(iii) Low Cost

Just like an index fund, and ETF does not

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have to incur any cost on account of active fund management because the fund is passively managed. Further more, exchange trade mechanism reduces minimal collection, disbursement and other processing charges.

(iv) Tax Efficiency

Unlike mutual funds, ETFs are considered to be more tax efficient instruments because :

- ETFs generally generate lower capital gains due to lower turnover of securities.
- Most of trading in ETFs takes place between the large investors resulting ETFs are not required to sell securities to meet investor's cash redemption. This generates potential capital gains tax liability for remaining investors. Further more, redemptions made by large investors are held in kind, again protecting the shareholders from taxable events.

(v) Low Tracking Error

The tracking error on an ETF is usually lower than index funds. The reason for this is that funds allot unit for consideration in kind and this money has to be invested in index stocks at a later date.

(vi) Transparency

There is complete transparency while dealing with ETF because all the participants are aware regarding the stocks. Therefore, there is no need to worry about change in the stock being traded in.

Section II

This text present the mechanism of trading of exchange traded funds.

An ETF is created through an Initial Public Offering (IPO) by the Asset Management Company (AMC) in which only Authorized Participants (Aps) i.e. institutional investors, mutual funds, insurance companies, etc are allowed to participate. These APs exchange their portfolio of stock and cash components for ETFs, also known as creation units. Thus, these creation units are made up of two components, namely, Portfolio Deposits (PDs) and cash components. Portfolio Deposits consist of basket of shares that make an index where as the cash component is the difference between the applicable NAV and the market value of the portfolio deposits. The ETF units that the APs buy from the sponsor or AMC are then traced on the stock exchange. The APs can held these units as investment or sold in the market to the retail investors. Thus, a retail investor can buy an ETF unit in two ways i.e. one is through the market (sold by APs) and another is through the fund house or AMC that has issued the ETFs. But generally, the lot size of creation unit is so high that only APs are entitled to buy these units from the sponsor or AMC. In such a case, a retail investor has to go to market himself (i.e. to APs) to buy the units of ETFs. The decision in turn depending upon the expectations of the future price movements of the ETF. On the other hand, if the retail investor wants to sell the ETF, he can sell them in the secondary market only through APs because only the APs are entitled to sell the units of ETFs to the sponsor (ET, 2004).

As far as price mechanism is concerned, ETFs do not necessarily traded on the NAV of their underlying holdings. Instead, the forces of the demand and supply in the market determine the market price of an ETF unit. If the demand for the ETF in the market increases, then ETF would start trading at premium from its intrinsic value, which should be equal in proportion to the index that it is charting. In such a case, an AP will deliver the shares and buy ETF units from the sponsor. On the other hand, if an ETF is traded at discount to NAV, an AP will immediately deliver the units to the sponsor and get back the shares.

In nutshell, we can say that the price at which an ETF trades is subject to the same market rules of supply demand as in case of ordinary shares but the creation and redemption process described above ensures that the price traded very close to the NAV.

Section III

This section presents the ETFs operating at global level as well as ETFs operating in India.

(a) ETFs Operating at Global Level

The first ETF was launched in 1989 on Toronto Stock Exchange known as TIPS 35 (Toronto Index Participation Fund), since it follows the largest 35 stocks on the Toronto Stock Exchange. In USA, ETFs came into existence in 1993 when State Street Global Advisor together with American Stock Exchange developed and launched the ETF market. The name of

the ETF was SPDR (Standard and Poor's Depository Receipts) based on the S & P 500 Index. It was followed by QQQ (Cubes) based on NASDAQ 100 Index, ISWARES based on the MSCI indices, TRAHK based on the Dow Jones Industrial Average, Vipers (VTI) based on the Vanguard's Total Stock Market Index, EUREX launched on the European stock market, etc. Presently, 200 ETFs are listed on various stock exchanges globally. Since its inception, ETFs assets have grown by 350 times i.e. just from 465 US$ million to US$ 167 billion in July 2003 (Nasdaq web site).

(b) ETFs in India

In India, the first ETF was launched by BMAM (Bench Mark Asset Management) company in December 2001 known as Nifty BeES followed by Junion BeES, UTI Sunder, Liquid BeES and SPICE. For the convenience sake, these ETFs are divided into three categories based on the stock exchange indices. These are as follows:

(I) ETFs based on S & P CNX Nifty Index

At present, only two ETFs are created on S & P CNX Nifty Index, i.e. BeES and UTI Sunder.

Nifty BeES was launched by BMAM company in December 2001, based on the S & P CNX Nifty. It was listed on the capital market segment of the NSE on January 8, 2002. With this listing, India has become the first emerging economy in Asia to launch an ETF.

Another ETF, which was introduced on S & P CNX Nifty, is UTI Sunder. It was introduced on July 11, 2003, and listed and traded on the capital market segment of the NSF. The creation unit size is 10000 units plus multiples of 2000 units in case of authorized participants and 50000 units plus 2000 units for other investors. The NAV of Sunder is declared on a monthly basis and the asset management company can also declare the dividend on the scheme.

The basic objective for introducing Nifty, BeES and UTI Sunder is to provide investment return that closely corresponds to the performance and returns of the securities represented by the S & P, CNX Nifty Index Value. Each Unit of Nifty BeES and UTI Sunder is 1/10 of the S & P CNX Nifty Index Value.

(II) ETF Created on S & P CNX Nifty Junior Index

Junior BeES was introduced on February 14, 2003 based on the S & P CNX Nifty Junior Index. It is traded on the capital market segment of the NSE and settled in dematerialized form like any other share in the rolling settlement. The objective of the Junior BeES is to provide return that closely corresponds to the returns of the stock as represented by the Nifty Junior Index(BS, 2004).

(III) ETF Created on BSE Sensex

The only ETF, which reflects the Sensex, is SPICE. Prudential ICICI introduced it on January 9, 2003 with the objective to provide returns corresponding with that of Sensex. The price of the SPICE is linked to the sensex which is approximately 1/10 of the Sensex value. It is traded like any other equity share on the cash **segment** of the Bombay Stock Exchange.

The minimum lot size of SPICE is one unit. Initially, SPICE units were created out of IPO proceeds. Substantially, SPICE units are being created and redeemed on an ongoing basis through a creation and redemtion process between the authorized participants and sponsor.

(IV) ETF not based on any Index

Liquid BeES(Liquid Benchmark Exchange Traded Scheme) is the first money market ETF in the world. Unlike other ETFs, liquid BeES is not based on any index but the scheme invests in floating rate debt and short dated debt securities. The minimum lot size is one unit. The units of the liquid BeES are listed and traded on the capital market segment of the NSE. As far as clearing and settlement are concerned, it is subject to the same T + 2 rolling settlement cycle, that governs the delivery of regular shares. The investment objective of the liquid BeES is to provide money market returns. Thus, the scheme is suitable to those investors who trade actively in stocks and want to invest their short term surplus.

The summarized details of various ETFs operating in India are presented in Table 2.

Table 2: Summarized Detail of ETFs Operating in India

Name of the ETF	Launch Date	Underlying Index	Valuation of units	Minimum lot size	Corpus/fund size (Rs. Crores)
Nifty BeES	18th December 2001	Nifty	1/10 of Nifty	One unit	8.95
SPICE	9th January, 2003	Sensex	1/100 of Sensex	One unit	21.32
Junior BeES	14th February 2003	Nifty Junior	1/10 of Junior Nifty	One unit	1.24
UTI Sunder	11th July, 2003	Nifty	1/10 of Nifty	One unit	39.0
Liquid BeES	16th July,2003	None	—	One unit	10.0

Section IV

An Attempt has been made in the following text to analyze the performance of ETFs in India since their inception. The task has been accomplished by analyzing the following variables.

(i) Average Daily Turnover
(ii) Returns
(iii) Net Asset Value(NAV)

(i) **Average Daily Turnover:**

Table 3 presents the average daily turnover of ETFs operating in India. Average daily turnover is calculated by dividing the monthly turnover by the number of trading days.

Table 3: Average Daily Turnover of ETFs (As on August 2003)

Name of the ETF	Average Daily Turnover (Rs. Lakh)
UTI Sunder	84.02
Nifty BeEs	18.06
SPICE	4.90
Junior BeES	0.31
Liquid BeES	0.29

Source: Compiled from the information available on nse.co.in

Table 3 reflects that the only ETF which is performing very well in terms of trading volume as compared to other ETFs is UTI Sunder which has recorded average daily turnover as high as Rs. 84.2 lakh with in two months of its inception. The reasons for such performance are as follows:

- Fund is based on the Nifty, which represents approximately 23 sectors.
- UTI has approximately 27 authorized participants such as LIC, Bank of Baroda, Punjab National Bank, IDBI, Union Bank of India, etc who are acting as market makers in order to make the fund more liquid.
- All authorized participants have to trade at least 200 units a day as per the condition laid down by UTI.
- Fund is flexible which can be used arbitraging with cash and future markets.

It is also observed from the Table 3 that the other ETFs have recorded a low average daily trade volume such as Nifty BeES Rs.18.06 Lakh, followed by SPICE Rs. 4.90 lakh and Junior BeES Rs. 0.31 lakh. In this context, it is said that the asset management companies mostly appoint a dedicated team of authorized participants to explain the product to retail investors and also to provide liquidity support on a daily basis.

(ii) **Returns**

Table 4 gives comparative figures of return realized on the various ETF since their inception:

Table 4 Returns on the ETFs (as on September 2003)

Name of the ETF	Return (%)				
	14 Day	One month	3 months	One year	As on September 2003, since their inception
Nifty BeES	8.32	16.20	38.46	34.42	16.85
SPICE	8.10	14.03	36.51	-	32.08
Junior BeES	8.29	13.52	43.59	-	68.94
UTI Sunder	-	16.53	-	-	39.60
Liquid BeES	0.17	0.40	-	-	4.89

Source: Compiled from the information available on nse.co.in

Following deductions can be made from Table 4:

(a) The ETFs, which have recorded high return since their inception, are Junior BeES 68.49 percent followed by UTI Sunder 39.60 percent and SPICE 32.08 percent. One possible explanation can be given in this context, as these ETFs were introduced during the year 2003, when the stock market was in a bullish phase. As a result, these ETFs have generated very good returns.

(b) The return generated by Nifty BeES was 16.85 percent since its inception, which is again a very good return in spite of the depressing stock market conditions during the year 2002.

(c) The return recorded on liquid BeES was 4.89 percent with in three months of its inception. As we know that liquid BeES is not based on any index instead the scheme invests the idle funds of investors in money market instruments. Generally, the money market instruments give return in the range of 4-4.5 percent. Thus, the return generated on liquid BeES is quite satisfactory.

(iii) **Net Asset Value (NAV):**

The net asset value of an ETF, is expressed on a per unit basis. It is the value of the underlying component of the benchmark index held by the ETF, plus the accrued dividend and less the accrued management expenses. Unlike the traditional mutual fund, investors are not required to purchase/sell the ETF at the closing price of the NAV, as they trade in a small range i.e. either discount or premium around the value of NAV held by them. However, the investors can access the worth of their investment (held in the form of ETF) from the NAV, which is continuously increasing during the period under study as presented in Table 5. It is also very important to mention here that the best way to access the efficiency of an ETF is to take a close look at the intra day spread, but unfortunately this information is currently not provided by the stock exchanges.

Conclusion

In India, ETFs are being a new instrument possessing the attributes of both index mutual fund and an individual stock. They are traded subject to the same market rules of demand and supply and investors can buy/sell ETFs units at intra day prices, not just as day's closing values. As far as their performance is concerned, they have provided return to a minimum of 16.85 percent to a maximum of 68.94 percent in a very short duration of their inception. The NAV of ETFs operating in India is also increasing during the period under study. However, regarding the traded volume, ETFs have recorded low average daily turnover except UTI Sunder. Thus, there is need to popularize this excellent cash management tool among the retail investors such as

- to appoint a dedicated team of AP/Market makers.
- to reduce the size of creation unit for e.g. in case of Nifty BeES, the creation unit size is so heavy (as explained earlier) that only institutional investors can buy/sell the ETF units.
- to uniform the expenses ratio for e.g. the expense ratio of Nifty BeES, Junior BeES and SPICE are 0.8 percent, 1.0 percent and 1.60 percent respectively.

Table 5: NAV of ETFs Operating in India

Name of the ETF	NAV (Rs)			
	As on August 2003	As on September	As on 31st March, 2004	As on April 30, 2004
Nifty BeES	122.00	138.33	175.54	181.0
UTI Sunder	118.81	139.59	177.83	182.61
Junior BeES	204.00	231.89	33.70*	36.73*
SPICE	38.29	43.49	55.60	57.55
Liquid BeES	1000	1000	1000	1000

*face value of Junior BeES has been reduced
Source:Compiled from the various issues of Economic Times

Reference:

(i) www.nasdaq.co.in

(ii) www.nse.co.in

(iii) "Mutual Funds; Times of Money," Economic Times, January 17, 2004.

(iv) "Exchange Traded Funds; for Efficiency Gains", Business Standard, March 1, 2004 ■