REPORT

On

Mutual Funds and ETFs

Project Kaleidoscope

By,

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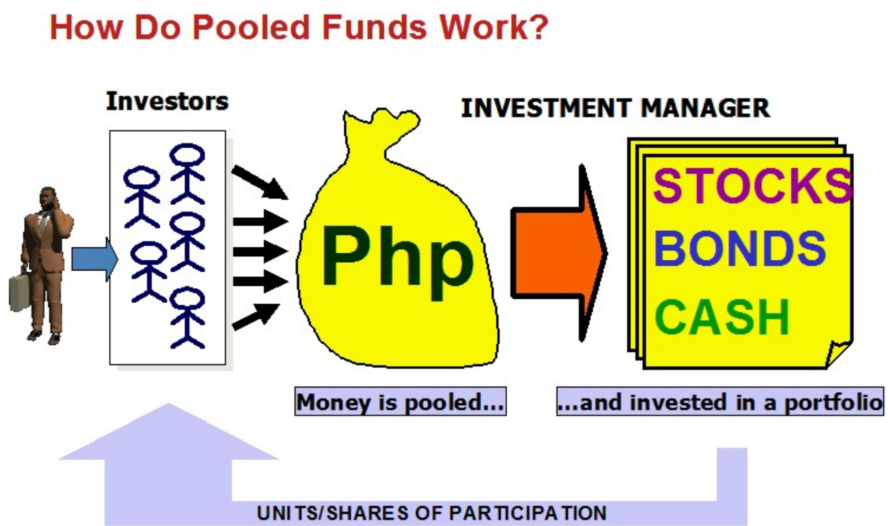
Contents

Terminology:

Portfolio: Group of different assets (financial, commodities, stocks, bonds, tangible assets, intangible assets etc.)

Net asset value (NAV): It is defined as fund's or company's total assets less its liabilities divided by number of shares outstanding. Trading for more than NAV is referred to trading at *premium* and for less than NAV is referred to as trading at *discount.*

Pooled Investment Funds: It collects money from multiple investors and put it in one managed portfolio for the purpose of investments.



There are various types of pooled investments funds. Some of them are

- Mutual Funds
- Exchange Traded funds
- Separately managed accounts
- Hedge funds
- Private equity funds

This work is focussed towards first two pooled investment funds mentioned above.

Arbitrage: The simultaneous buying and selling of securities, currency, or commodities in different markets or in derivative forms in order to take advantage of differing prices for the same asset.

Indexation: Indexation is adjustment for inflation. Inflation figure is provided by index called CII(Cost Inflation Index).CII numbers are published by Income Tax Department.Link to watch CII : https://www.incometaxindia.gov.in/charts%20%20tables/cost-inflation-index.htm

FSB: The Financial Stability Board (FSB) is an international body that monitors and makes recommendations about the global financial system.

BIS:The Bank for international settlements is an international financial institution that aims to promote global monetary and financial stability through the coordination of global central banks and their monetary policy efforts

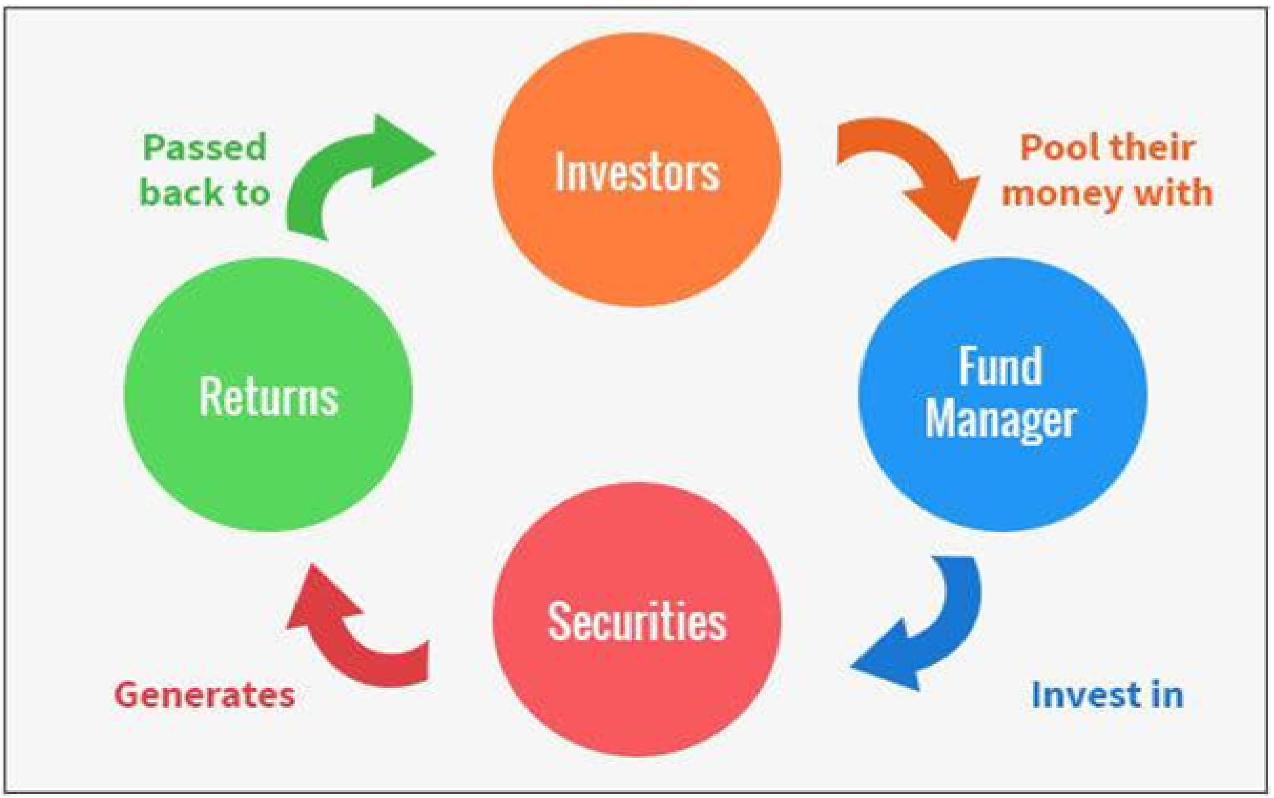
IMF: The International Monetary Fund (IMF) is an organization of 189 countries, working to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world.

Short Selling: is the act of borrowing and selling an asset, in the hope that it will decrease in value and you can close the trade for a profit.

Holding Period: The period over which investors stay invested in investment scheme is known as holding period.

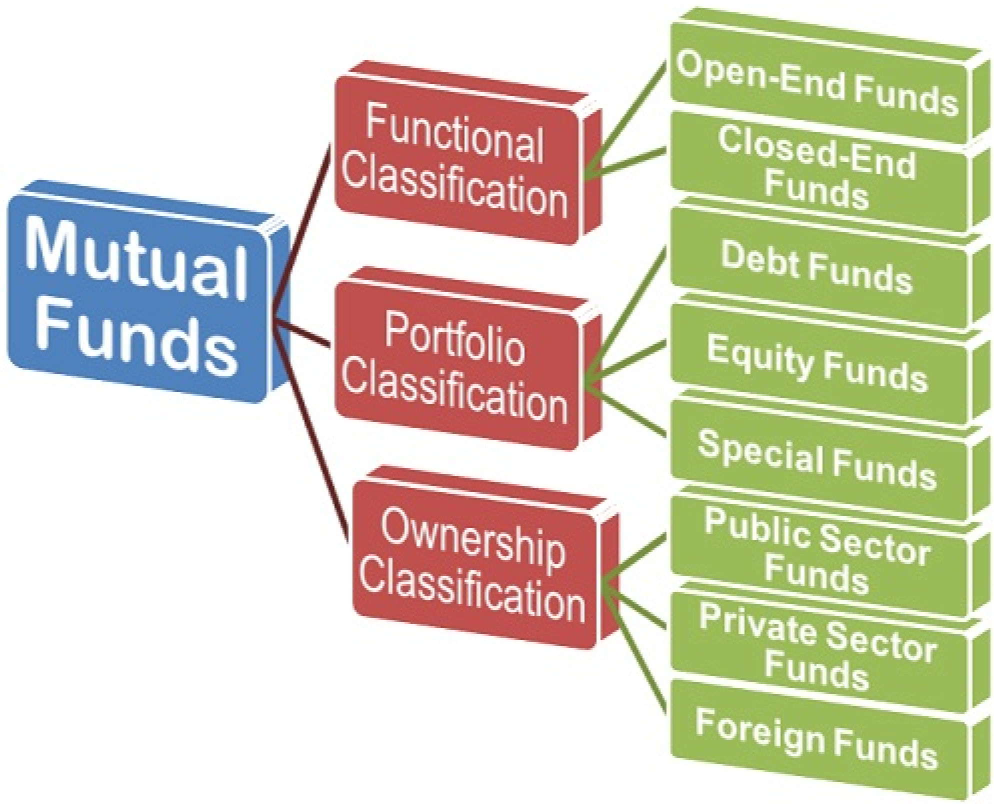
Mutual Funds

It is a type of financial vehicle which works by pooled investments. It consists of money pooled by large number of investors with one common objective and it is managed by professional fund manager who invest this money in equities, bonds, money market instruments and securities thus giving benefit of diversification. The income generated is then distributed proportionately among investors. Mutual funds charge annual fees (management fee, incentive fee, load fee) and taxes which can affect overall return. Price of mutual fund is referred to as Net Asset Value per share and is calculated at the end of the business day. First mutual fund launched in India was UTI (Unit Trust of India) (Year-1963). Functioning of mutual funds can be summarised by the following figure



Types of Mutual Funds:

Broadly speaking funds can be classified into three categories:



By Functional Classification

Based on the type of structure mutual funds are classified into two parts:

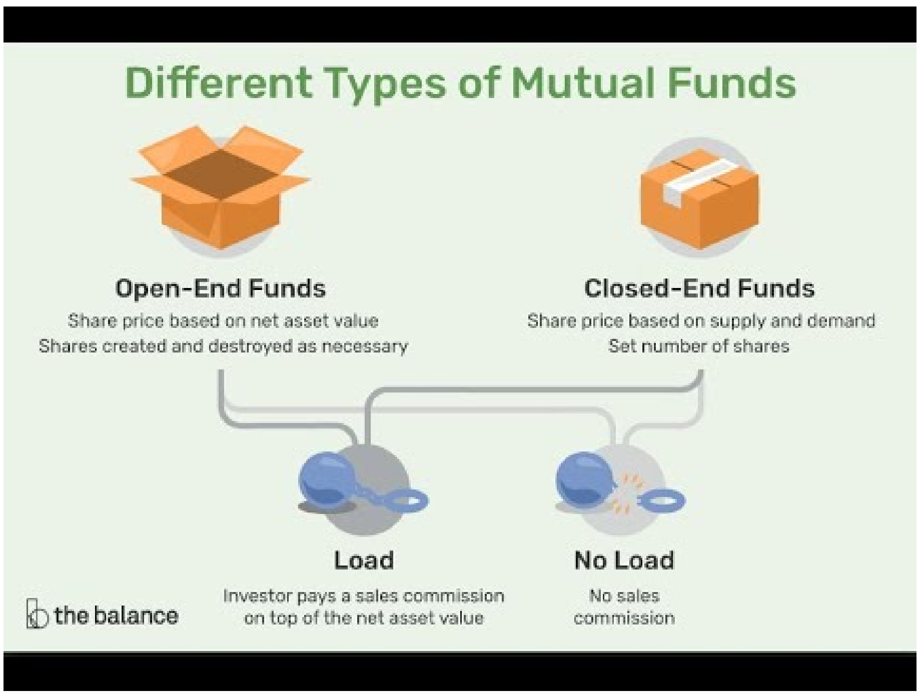
1. Open End Funds

   It is offered through a fund company that sells shares directly to investors. They don't have limit as to how many units they can issue. They also don't have a fixed maturity period. New investors can come and existing investors can withdraw their money. They are bought and sold at their NAV which is calculated at the end of trading day.

   Their biggest advantage is that of *Liquidity* i.e. one can withdraw his money at his convenience. Other advantage is it can be *judged by previous track record* and disadvantage on other hand is it is *subject to market risk* and front load and back load is charged when money is withdrawn from the funds thus giving lower overall return

2. Closed End Funds

   It has fixed number of fund units. No new unit or amount can be deposited in the fund. They are more like ETFs (to be discussed) rather than mutual funds. These funds have a fixed maturity period. No new investor can enter nor an existing investor can exit till maturity period but if existing investor needs to exit then trade house can trade his funds on stock exchange at premium or discount to NAV depending on the demand. The biggest advantage of closed end funds is that it gives fund manager a stable asset base to frame investment strategy. Disadvantage of closed ended fund is that they have poor performance in comparison to open ended funds and they don't have any previous track record.



By Portfolio Classification

1. Equity funds

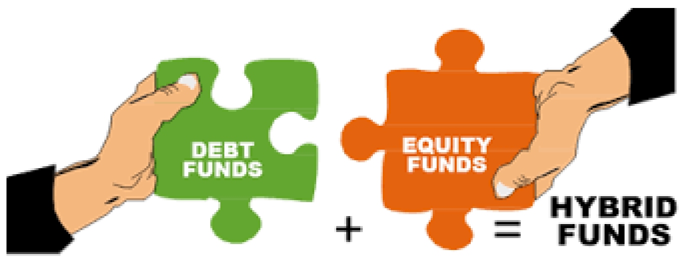
   These invest predominantly in equities i.e. share of companies. They have potential to generate higher returns and are best for long term investments. Examples would be large cap funds, Mid cap funds, Small Cap funds, Sector funds, Thematic funds, Tax-Saving funds.

2. Debt funds

   These invest in fixed income securities like Government securities, bonds and treasury bills. They are relatively safer investments and are suitable for income generation. It is a great option for passive investors looking for regular income with minimum risks. Examples would be liquid funds, short term plans, Floating rates funds, Corporate Debt funds, Gilt funds,Fixed maturity plans.

3. Hybrid or Special funds

   They invest in both equity and debt funds thus offering the best of both.



By Ownership Classification

1. Public sector mutual funds

   It include popular funds like UTI, IND-Bank MF, CAN-BANK MF, BOI-MF, PNB-MF, GIC-MF, LIC-MF.

2. Private sector mutual funds

   Seeing the success of mutual funds in Indian Capital Market, Govt. of India allowed the private sector corporate to join mutual fund industry

3. Foreign funds

   Funds that invest in companies outside the investor country of residence.

   Example: Kotak Global Emerging Market **Fund** Direct-Growth.

Ways to earn money from Mutual Funds:

- Dividend Payments: MF give a choice to fund owners either to take all the income from dividends in the form of distributions or to reinvest the earning and get more shares
- Capital Gains Distributions: If the fund sells securities that has increased in price,fund has a capital gain

- Increased NAV: Higher the NAV, higher is the value of our investment.

Pros and Cons of Mutual Funds:

Pros:

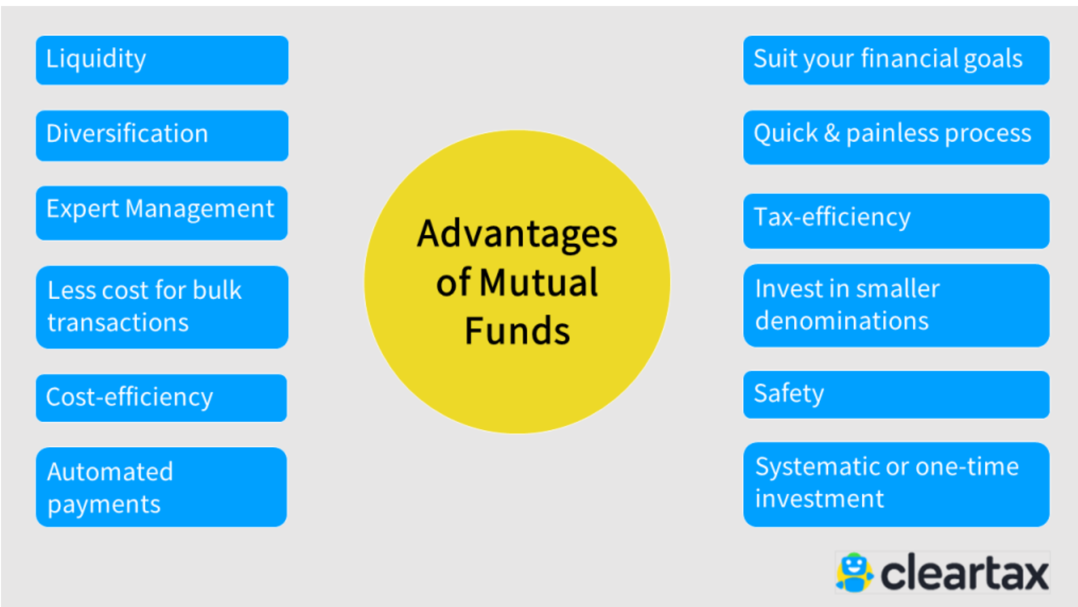
Low Investment Minimums: A mutual fund can be an easy entry to investing as you don't need a large amount of money to start.

Liquidity: You can get in and out of the investment with reliable ease.

Diversification: Risk is spread out to a large number of industries and asset categories to help minimise loss.

Professional Money management: Professional money managers research, select and monitor performance of the fund purchases

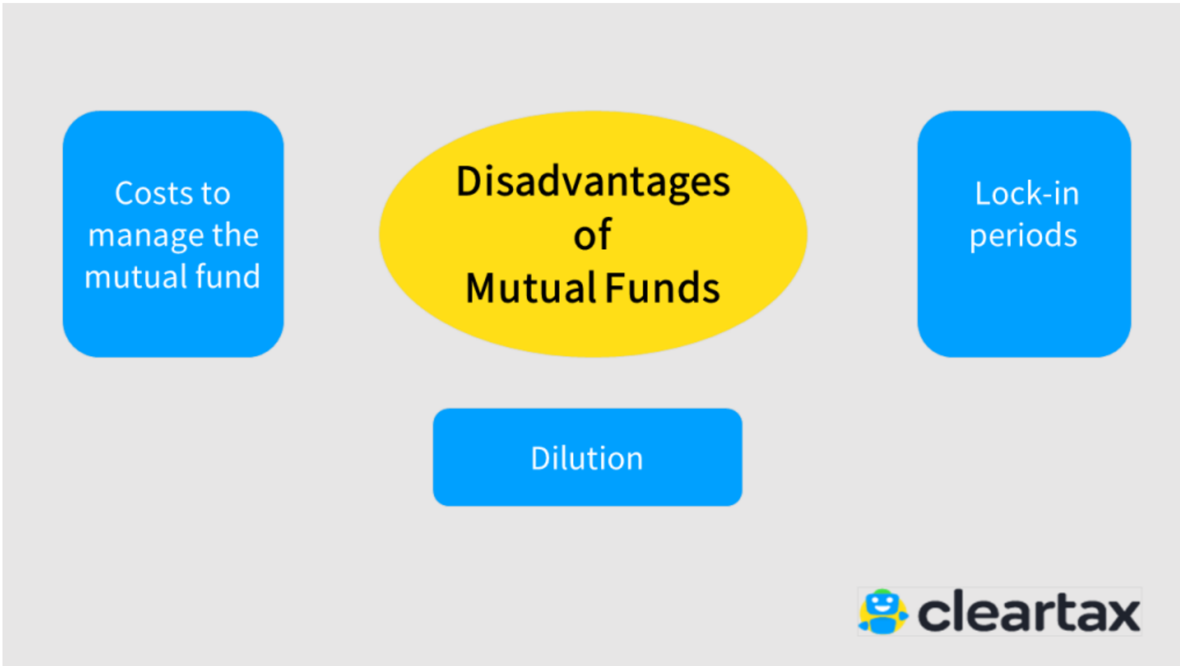
Other advantages are depicted below:



Cons:

Costs to manage mutual fund: Salary of fund managers and market analysts comes from investors. So, investors have to pay management fee, incentive fee which leads to reduction in overall gain

Lock-in Periods: Many funds have lock in period ranging from five to eight years and exiting such funds can lead to an expense.



So, before investing in mutual funds one must do proper research of all the varieties available in the market and then wisely invest his money according to his investment objective.

Taxation

Long-term and short-term holding period in three types of funds:

Funds	Short-term	Long-term
Equity funds	Less than 12 months	12 months and more
Hybrid funds (Equity oriented)	Less than 12 months	12 months and more
Hybrid funds (Debt oriented)	Less than 36 months	36 months and more
Debt funds	Less than 36 months	36 months and more

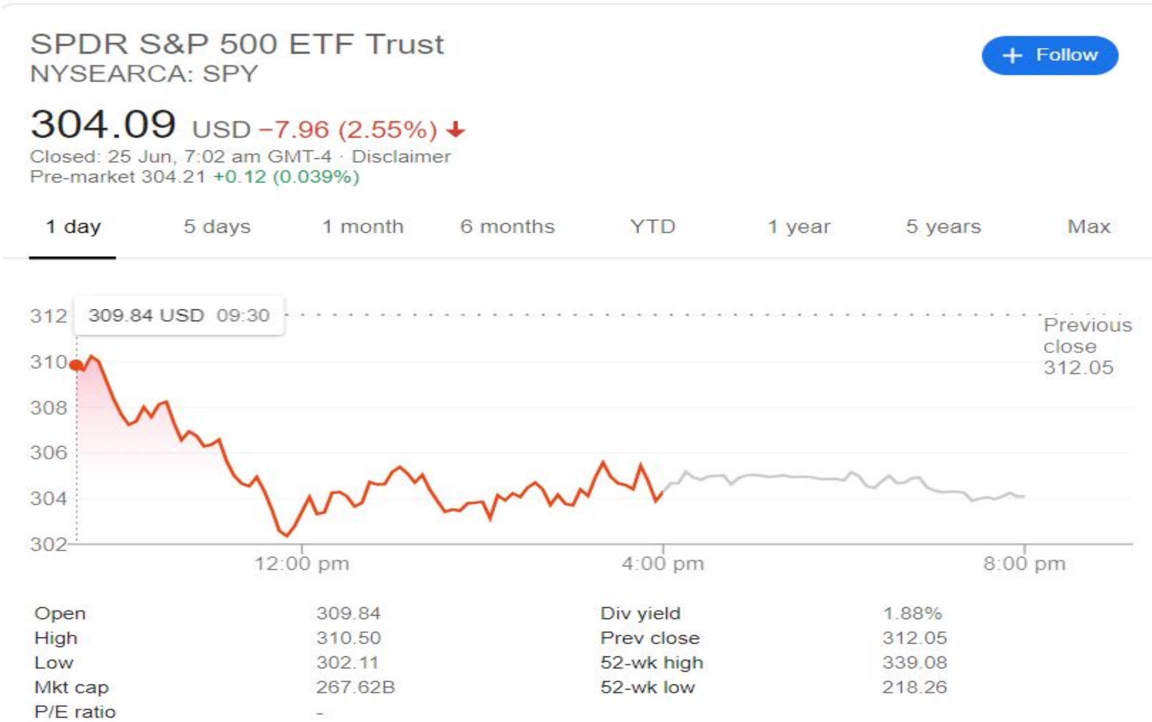
Hybrid equity-oriented funds (equity exposure of more than 65%) are considered as equity funds for taxation. If the equity exposure in a hybrid fund is less than 65% or is equally exposed to equity and debt instruments, i.e. 50% equity and 50% debt, then it is considered as a debt fund for taxation.

1. Equity Funds: LTCG tax is applicable on equity funds at the rate of 10% if the capital gains exceed Rs 1 lakh a year, and there is no benefit of indexation. The limit of 1 lakh is cumulative of capital gains on all equity instruments such as stocks and equity mutual funds

2. Debt Funds: Long-term capital gains on debt fund are taxable at the rate of 20% after indexation. You are required to add STCG from debt funds to your overall income and is taxable as per income tax slab you fall under
3. Hybrid Funds: It depends on their equity exposure.
4. SIP: The taxation of SIP investment is done on a pro-rata basis. Each SIP, treated as a new investment, attracts taxes on its gains separately. For instance, you initiate a SIP of Rs 10,000 a month in an equity fund for 12 months. Each SIP is considered to be new investment. Hence, after 12 months, if you decide to redeem your entire accumulated corpus (investments plus gains), all your gains will not be tax-free. Only the gains earned on the first SIP would be tax-free because only that investment would have completed one year. The rest of the gains would be subject to short-term capital gains tax.
5. Securities Transaction Tax (STT): A STT of 0.001% is levied by government when you sell your units of an equity fund or a hybrid equity-oriented fund. There is no STT on debt fund

Exchange Traded Funds:

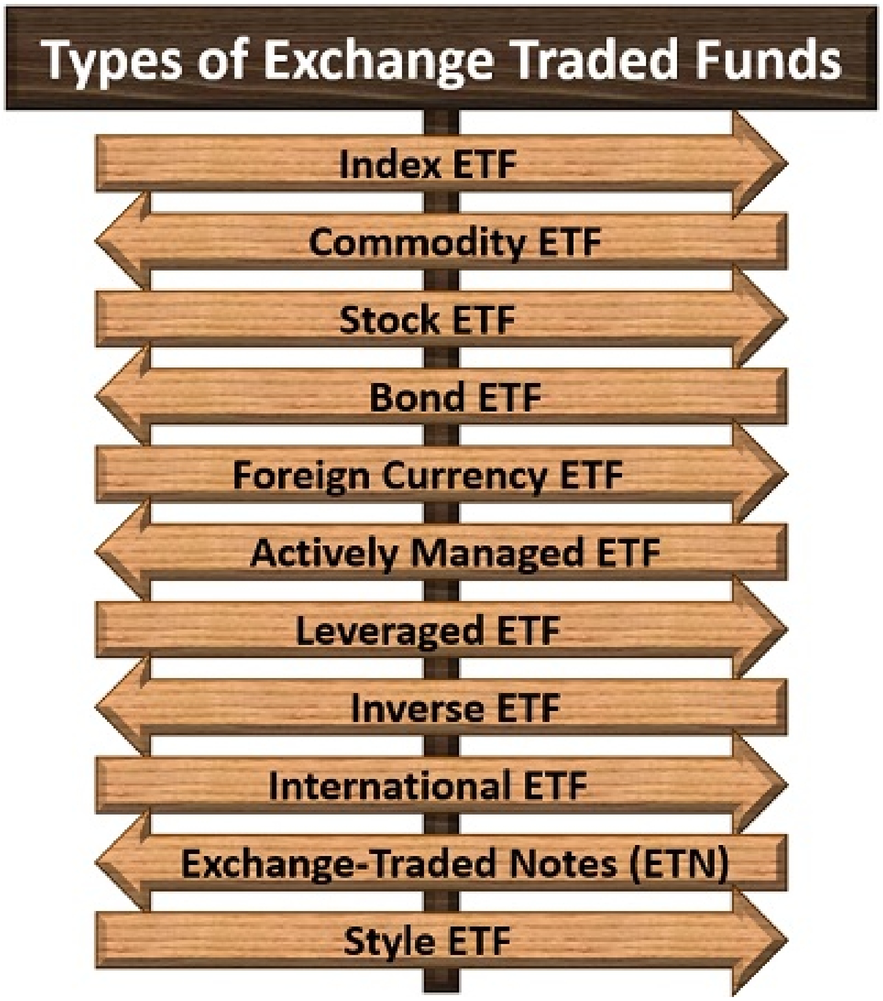
Funds which trade on exchange are referred to as Exchange Traded funds. They are more like closed-end funds. They will be listed on exchange. It often tracks an underlying index. ETF shares trade throughout the day just like ordinary stock therefore their ETF price keeps on changing. Well known example is the SPDR S&P 500 ETF (SPY) which tracks S&P 500 Index.



ETFs are most cost effective and more liquid when compared to mutual funds.

ETFs can be summarised as below:

Types of ETFs:



1. Index fund: Most ETFs are index funds that attempts to replicate the performance of a Specific index
2. Bond ETFs: ETFs that invest in bond are known as bond ETFs
3. Commodity ETFs: Invest in commodities such as precious metal, agricultural product, crude oil
4. Inverse ETFs: attempts to earn gains from stocks by shorting stocks
5. Industry ETFs: they track a particular industry like technology, banking or consumer discretionary sector
6. Stock ETFs: They are also known as equity ETFs. It track a particular set of equities, similar to an Index

7. Foreign Currency ETFs: It is one of the most crucial ETFs. It track a particular foreign currency or a combination of foreign currencies and returns are made from currency fluctuations.

8. Actively managed ETFs: An actively managed ETFs has a manager or a team making decisions on the underlying portfolio allocation therefore they have higher expense ratios than traditional ETFs, which puts pressure on the fund manager. The shares of an actively managed ETFs are listed in National Security Exchange(NSE).

9. Leveraged ETFs: It uses derivatives and debt to increase the return on the underlying index. It is a double-edged sword meaning it can lead to significant gains but can also lead to significant losses.

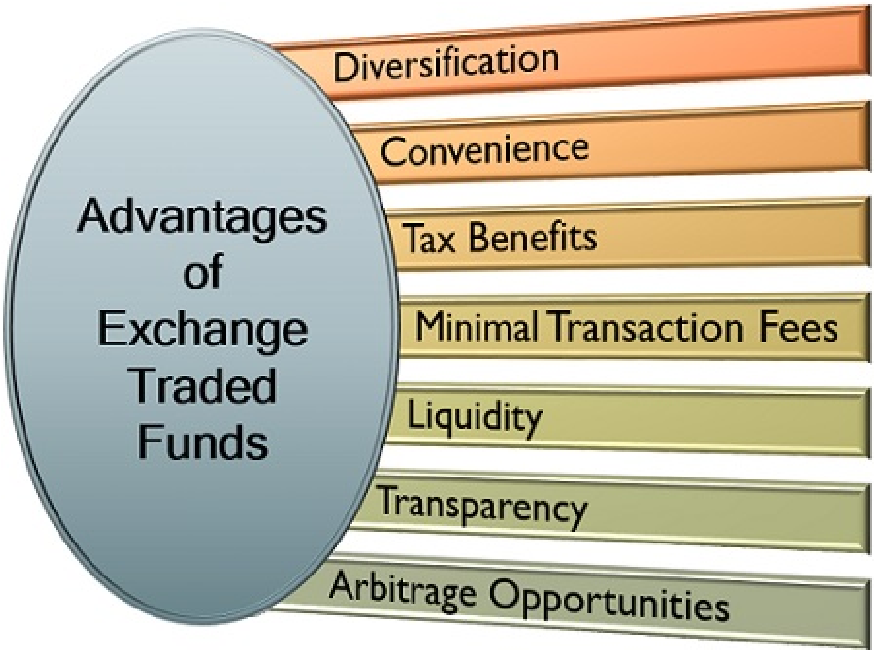
10. International ETFs: It provide the investors with a chance to invest in economies across the globe. It tracks the index of some other country to make profit out of economic growth of some other company. ETFs that invest in less developed country stocks or bonds are known as emerging ETFs or frontier markets ETFs. Investors can use it to diversify the geographic or political risks associated with the portfolio.

11. Exchange Traded Notes: are a type of unsecured debt security that tracks an underlying index of securities. They are similar to bond but they do not pay interest periodic payments. They are issued by banks as a senior debt note which promises to pay the investors a sum equivalent to index value after deducting the management fees.

12. Style ETFs: Style ETFs are designed to track a particular investment style. Asset class ETFs include small-cap, medium-cap and large-cap stocks. Mixing style in an individual portfolio is often recommended to achieve diversification.

Pros and Cons of ETFs

Pros:



Pros of ETFs are mentioned below:

1. **Diversification (Asset Allocation):** ETF provides an opportunity for the investor to allocate his capital to a wide range of securities, eliminating the risk of loss from a particular stock.

2. **Convenience:** The listing of ETFs on exchange have made tracking of ETFs easier therefore giving convenience to new investors.

3. **Tax Benefits:** The investors need not pay capital gain-tax through the life of investment which is the case with the mutual funds. Capital gains tax is incurred only on the sale of ETFs by the investor and it on STCG it will be taxed at same rate as income tax and on LTCG it will still depend on income tax bracket but more favourable than your income tax rate.

4. **Minimal Transaction Fees**: The cost involved in ETFs is low compared to mutual funds because client service-related expenses are passed on to brokerage firms. Fund administrative cost can go down for ETFs when the firm does not have to staff a call centre to answer questions from thousands of individual investors. ETFs also have lower expenses in the area of monthly statements, notifications, and transfers. Traditional open-end fund companies are required to send statements and reports to shareholders on a regular basis. Not so with ETFs. The brokerage firm has those responsibility not ETFs companies. Another cost savings for ETF shares is the absence of mutual fund

redemption fees. Shareholders in ETFs avoid the short-term redemption fees that are charged on some open-end funds.

5. **Liquidity:** Liquidity of ETFs can also be maintained since ETFs are open ended. An ETF’s liquidity is determined by the liquidity of the underlying securities and not by daily volume traded.

6. **Transparency:** The performance of ETFs can be traced with the help of index and trading portals providing clear data and figures.

7. **Arbitrage Opportunities:** The investors can also make a profit out of the price variation between the ETF and other investment options indexed for an exchange like futures. This is possible because of the index tracking facility and can be seen as a hedging strategy of the investor. ETFs can be used to arbitrage between Cash and Futures Market, as it is very easy to trade.

8. **Hedging Risk:** Strategically diversifying a portfolio to reduce certain risks can also be considered a hedge and in ETFs we are making use of diversification therefore hedging risk. ETFs are an excellent hedging vehicle because they can be borrowed and sold short. The smaller denominations in which ETFs trade relative to most derivative contracts provides a more accurate risk exposure match, particularly for small investment portfolios.

   Arbitrage (Cash Vs Futures) and Covered Option Strategies: ETFs can be used to arbitrage between Cash and Futures Market, as it is very easy to trade. ETFs can also be used for cover Option strategies on the Index. (There are two types of options Call and Put.)

9. **Cash Equitization:** Investors typically seek exposure to equity markets, but often need time to make investment decisions. ETFs provide a "Parking Place" for cash that is designated for equity investment. Because ETFs are liquid, investors can participate in the market while deciding where to invest the funds for the longer-term, thus avoiding potential opportunity costs. Thus, serving main purpose of cash equitization. Historically, investors have relied heavily on derivatives to achieve temporary exposure. However, derivatives are not always a practical solution.

Cons:

Market Risk: It is linked to supply and demand in various marketplaces. In the recession, the ETF manager sometimes fails to secure a defensive position, even if he uses various strategies of exchange traded funds.

Regulatory Risk: The ETFs lack compliance with regulations of FSB, BIS and IMF due to its complex structure and inadequate disclosure.

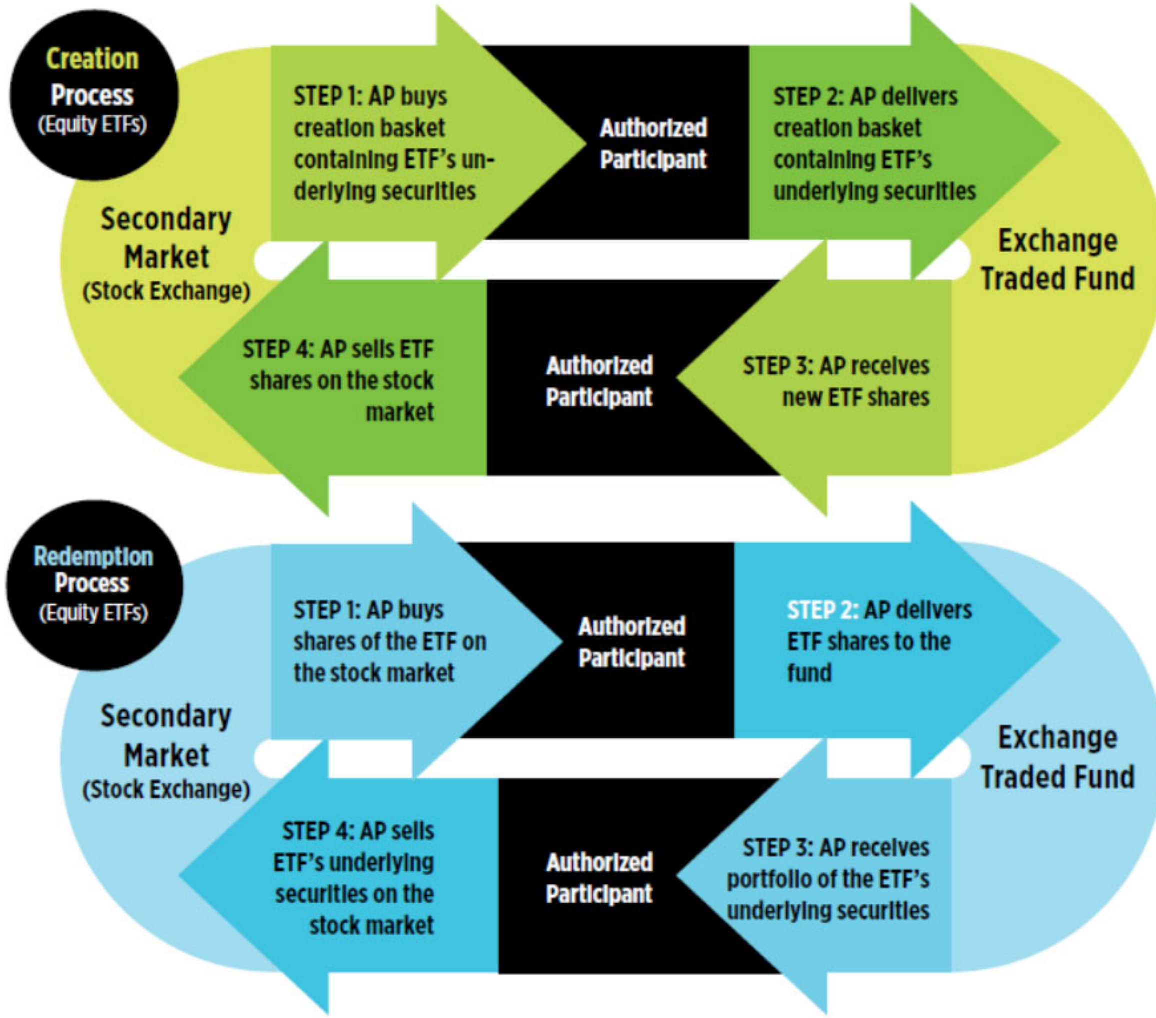
Liquidity Risk: The risk of not being able to buy or sell a security when needed is referred to as liquidity risk. The trading of ETFs is backed by some of the market creators who lack active trading in the market, making it irregular.

Counterparty Risk: Risk that one party could be in position of paying the counterparty while the counterparty is declaring bankruptcy. The parties involved in the trading have to meet the obligation of the contract and deal is based on the monetary deposit of the exchanging parties, which involves risk.

Risk of Error: The errors related to the valuation after the deductions like transaction fees and other expenses on ETF may arise.

Cash Subscription Route and Creation/Redemption Mechanism

The key to understanding how ETFs work is "creation/redemption" mechanism



Authorised Participant

Person responsible to make and get rid of new shares of ETF. It is an AP's job to acquire the securities that ETF wants to hold.There are multiple AP's watching most ETFs

AP goes out with shopping list buys everything in the basket, hands the basket to ETF provider and the provider gives the AP a block of equally valued ETF shares, called a creation unit. These unit are usually formed in blocks of 50,000 shares. The AP then delivers a certain amount of underlying securities and receives the exact same value in ETF shares, priced based on their net asset value (NAV), not the market value at which the ETF happens to be trading. This complete process is called **creation.**

The process can also work in reverse. APs can remove ETF shares from the market by purchasing enough of those shares to form a creation unit and then delivering those shares to the ETF issuer. In exchange, APs receive the same value in the underlying securities of the fund. This process is referred to as **redemption.**

ETFs price keeps on changing throughout the day when the ETFs starts trading at premium to the securities it holds, AP can jump to intervene. the AP might buy up the underlying shares that compose the ETF and then sell ETF shares on the open market. This should help drive the ETF's share price back toward fair value, while the AP earns a basically risk-free arbitrage profit**.**

If the ETF starts trading at a discount to the securities it holds, the AP can snap up 50,000 shares of that ETF on the cheap and redeem them for the underlying securities, which can be resold. By buying up the undervalued ETF shares, the AP drives the price of the ETF back toward fair value while once again making a nice profit.

This arbitrage process helps to keep an ETFs price in line with the value of underlying portfolio

Alternatively, investors can follow the "Cash Subscription" route in which they can pay cash directly to the Fund for purchasing the underlying portfolio.

Route followed by investors to invest

Points to be kept in mind while investing in ETFs:

- Investment Strategy
- Select ETFs with low expense ratio and tracking errors(deviation from market benchmark returns)
- Take liquidity into account. Some ETFs have high trading volume but not all have ETFs have high liquidity
- Demat and trading account is required for investing in ETFs

You can invest in ETFs by:

1. Buying or selling ETFs units through broker by telephonic mode or by placing orders on the online trading terminal provided by the broker.
2. You can also place your order through online trading terminal like Kite by Zerodha.

Major class of investors investing in ETFs

1. Exchange traded funds (ETFs) have a number of features that can make these investment vehicles ideal for young investors with small amounts of capital to invest. Young investors who are not altogether familiar with the intricacies of the financial markets would be well-served by using a passive management approach initially and gradually moving to a more active style as their investing knowledge increases. People

who have knowledge of stocks also prefer ETFs as mode of investment since it offers ample liquidity, diversification benefits, tradability, transparency, lower expense ratio.

2. It is preferred by Retail or Wholesale Investors for long term investment enhancing net returns because of lower cost, it allows diversification of portfolio with one single investment. It insulates them from short term trading activity of other investors in the Fund as ETFs have a unique in-kind creation / redemption mechanism.

3. For investors preferring short term investment it provides access to liquidity because it can be traded throughout the working day close to NAV

4. For Arbitrageurs, it provides ease with low Impact Cost to carry out arbitrage between the Cash and the Futures market.

5. For FIIs (Foreign Institutional Investors have been one of the biggest drivers for India's financial markets), Institutions and Mutual Funds, it allows easy Asset Allocation, Hedging and Equitizing Cash at a low cost.

Taxation of ETFs in India

Exchange Traded Funds (ETFs) are extremely popular instruments abroad. In India they are more or less restricted to gold, though we have a few that track the index. Like all other instruments ETFs also attract a tax in India. We need to first separately study how Gold ETFs and Index ETFs are taxed in India.

ETF TYPE	Duration to be qualified as Long term	Short term Capital Gains Tax	Long Term Capital Gains Tax	STT
Gold ETF	3 years	As per income tax slab	10% without indexation and 20% with indexation	0
Index ETF	1 year	15%	0	0.125%
Other ETF	2 year	As per income tax slab	10% without indexation and 20% with indexation	

Mutual funds vs ETFs

Description	Mutual Funds	ETFs
Trading	Purchased through Mutual Fund Company or dealer at daily NAV	Purchased on stock exchange on prevailing market price
Transparency	No	Yes
Expense Ratio	Generally higher	Generally lower
Management style	Typically, active	Typically, Passive
Investment Minimums	High	Low
Performance Objective	Attempts to beat the benchmark	Attempts to match the benchmark
Exit Load	Has exit load	No exit load
Tax burden	Higher Capital gains tax	Fewer Capital gains tax
Liquidity	End of the day	Intra day
Short Selling	No	Yes

Conclusion

By now, it is known that ETFs are traded on exchange and mutual funds are offered by fund houses at NAV price (calculated at closing of each day).If you are a know nothing investor then one should go for mutual funds and by doing this one can save demat account charges and Brokerage charges which one might have to pay in case of ETFs. Some of mutual funds have a comparative expense ratio with ETFs and moreover ETFs are traded as a whole and mutual funds can be traded in fractions. The advantage of ETFs which attracts customer towards it is that of tradability i.e. can be traded throughout working day and people dealing in stocks, having demat account find it suitable provided overall expense ratio of ETFs is lower than mutual funds

The decision of choosing ETFs or Mutual Funds need to be chosen wisely by considering various options ease to liquidate the investment, your risk appetite, your financial goals. ETFs offer you more flexibility and higher returns in the short-run while mutual funds require you to stay invested for a comparatively extended period but help create a corpus for the future. The decision has to be entirely yours.

Reference

- investopedia.com
- Project Kaleidoscope reference videos
- Cleartax.in
- theinvestorsbook.com
- Wikipedia etc.
- Quora
- Fidelity.com
- Moneycontrol.com
- Etf.com