Investment Management
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Lecture - 31
Exchange Traded Funds (ETFs)

Hello there. We are discussing about Investment Management in this MOOC course. And so far we have discussed about different investment alternatives such as stocks, bonds, mutual funds. Now, we are moving towards alternative investments, but before that in this session we will discuss about Exchange Traded Funds.

We know that mutual funds are indirect way of investing in stock market and many retail and small investors would like to go through the mutual fund route, but exchange traded fund is an advanced approach of indirect investing, but with a benefit of trading like a share.

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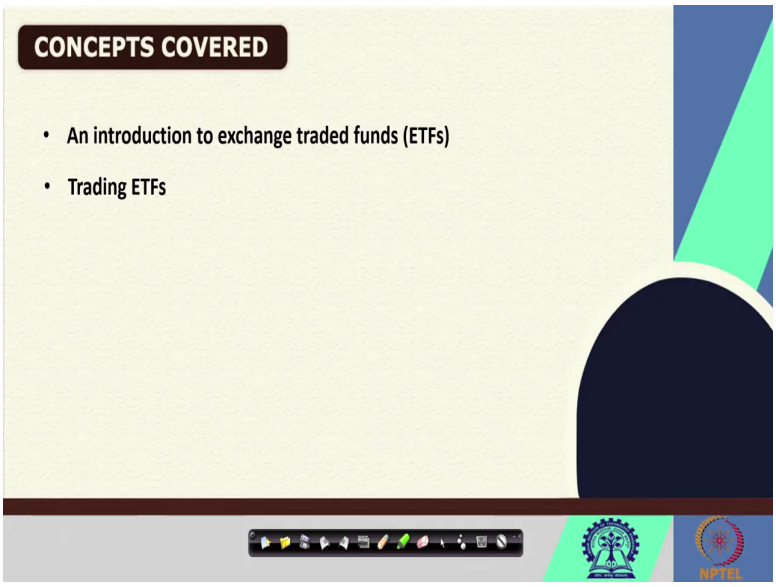

In this session particularly we are going to discuss about exchange traded funds, their features and advantages and also we will see how exchange traded funds are traded just like share of a company.

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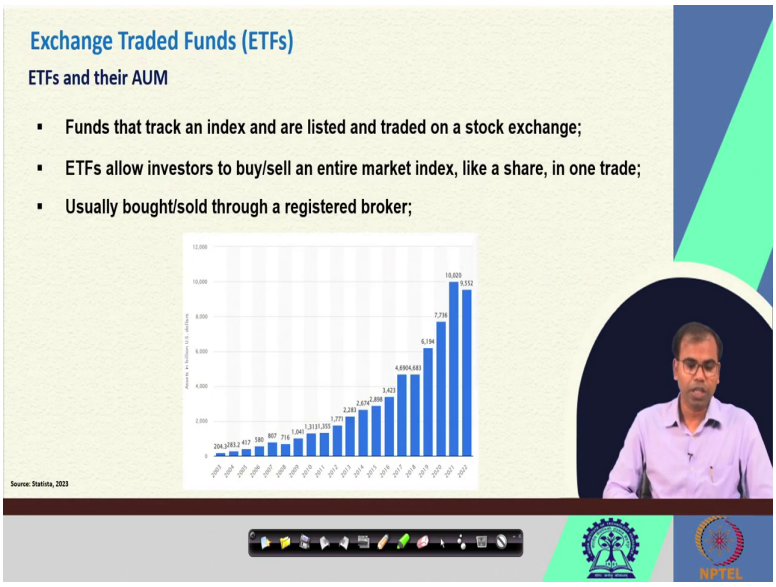

When we talk about exchange traded funds as we know this is another type of funds just like any mutual fund that tracks an index and are listed and traded on stock exchange. Unlike mutual funds exchange traded funds or ETFs are listed and traded on stock exchange exchanges just like the share of any company. In mutual funds we know that money is pooled and a professional money manager manages money on the behalf of the investors who have pooled their money.

And they decide about investment in any instrument that is part of mutual fund portfolio. But once the money is accumulated and every investor has received a unit of share of the mutual fund it is not traded anymore in the secondary market. Whereas, in exchange traded funds the money the instrument or the unit of share is listed on the exchange and it is traded just like a share of a company.

And because of this feature only ETFs allow investors to buy or sell an entire market index such as Nifty 50 or Sensex or Nifty 100. For example, just like a share in one trade which means if I buy a unit of share of an exchange traded fund which is tracking Nifty 50 index in one share of that exchange traded fund I can buy or sell the entire Nifty 50 index as a single instrument or single asset.

Typically, ETFs are bought and sold through a registered broker recognized by the regulators and in recent year as we can see the growth in exchange traded fund has been phenomenal. Starting if we take consider last 20 years data, we can see that across the globe the volume or rather I would say asset under management in exchange traded fund or the assets, which are managed by professional money managers under exchange traded funds have grown significantly in 2003 it was 204 million and now it is 9552 billion US dollars.

With this growth we know that this is an emerging asset class where investors can take advantage of investing index as such and hold the unit of a share just like a mutual fund where indirect approach of investing is appreciated.

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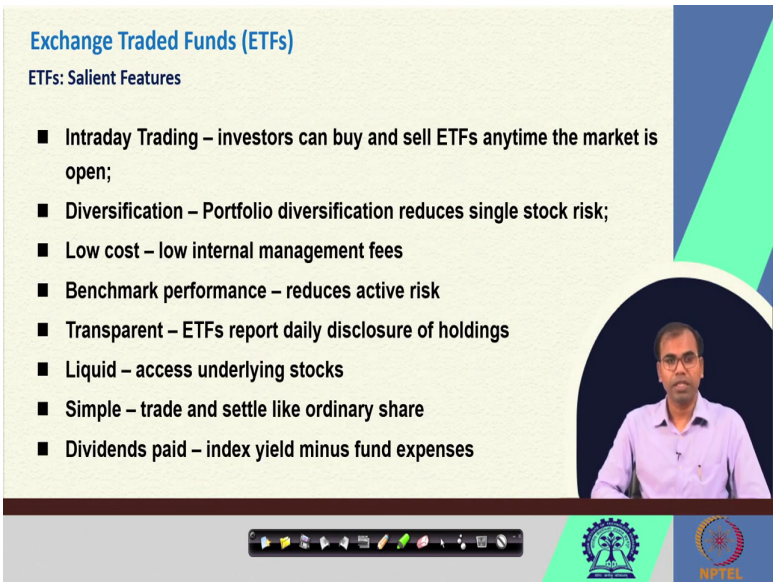

The advantages of investing in ETFs are as following: The first and biggest advantage of investing in ETF is its ability to get into intraday trading which implies that investors can buy and sell at any point of time during the trading hours the unit of ETFs at in the market when it is open.

So, investors do not have to wait for a particular time window when she can buy or sell the unit of the fund rather it is listed on the exchange and hence it can be traded just like any other share of a company. Another advantage here is the diversification we all know that a small investor cannot go for diversification at large because of limited availability of funds limited skill sets and other constraints.

So, they go through mutual fund route for the purpose of achieving diversification advantages. In a similar fashion ETFs also offer portfolio diversification advantages that

reduces single stock risk, which means if an investor invests in a single stock of a company, then the risk that she is taking is much more than if the investor is investing in a unit of or a share of exchange traded fund that is tracking an index such as Nifty 50 or Sensex or any other index.

Just like mutual funds this also carries very low internal management fees and this low cost advantage of trading in ETF ensures that investor receives highest part of the profit at the end of the day. Similarly, when we compare the performance of exchange traded funds, we compare this the performance of ETFs with benchmark indices or benchmark performance.

This reduces active risk and it helps investor to achieve higher return for a given level of risk. Similarly, that reports are published or made available daily as a in terms of disclosure of holdings of the fund and that transparency helps investors to take informed decisions.

If all the data all the information related to any exchange traded fund or any instrument related to exchange traded fund are publicly available and frequently made available for the investors just like ETFs does, report daily disclosure of holdings then this transparency ensures that investors take informed decision about buying or selling of a unit of ETFs.

Another major advantage of investing in ETF is the liquidity. We all know that small investors cannot ignore the advantages of having a liquid asset in her portfolio. It implies that if an investor is having liquid asset in the portfolio, then investor can sell this asset at any point of time in the need of money and then having liquid assets in portfolio makes it easy for an investor to convert it into cash and vice versa.

So, this liquidity of ETF also helps in ensuring that the stocks or the unit of stocks of the companies that are included in the index are easily tradable or the liquidity aspect of those stocks as part of the index is always monitored through index maintenance and that liquidity is offered to the investor of ETFs as well.

It goes without saying that investors find it very simple because it ETFs units trade and settle like any ordinary share, which means that investors can put their money in ETF units and this unit can be traded in secondary market just like any other share of a company.

And finally, the outcome of trade or outcome of investment that is the return or dividends that are paid to the holders of the unit of ETFs. It is index yield minus fund expenses just like any other indirect approach of investing such as mutual fund where whatever earnings mutual fund has made will be used for paying of the expenses of managing the fund and after that remaining profit will be given back to the holders of the unit of mutual fund.

In a similar fashion in case of ETF also all the fund expenses are met from the profit that are met during the period and the remaining part of the index yield is given back to the shareholders or the holders of the unit of ETFs as dividends.

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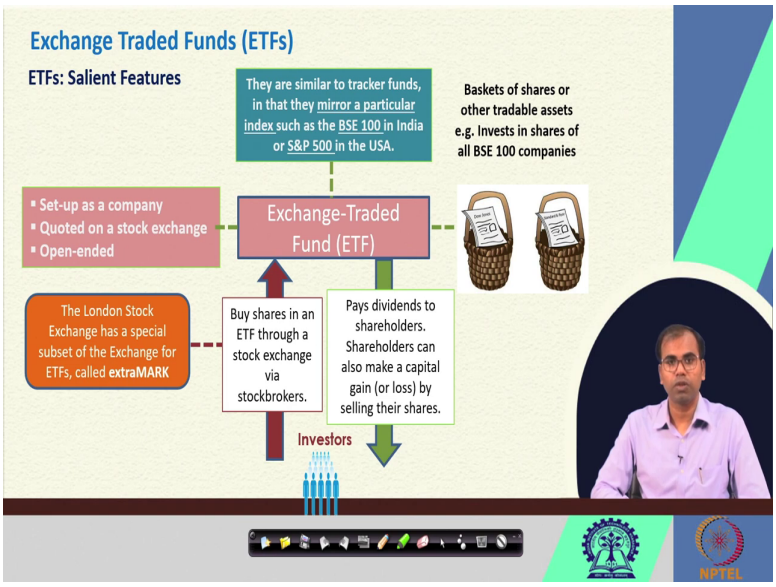

If you look at the structure of mutual fund or the operations of mutual fund, we know that it is managed by Asset Management Company and there is professional money manager recruited for specific purpose of managing the fund. In a similar fashion ETFs are also typically set up as a company and this company is quoted on a stock exchange, which means it is listed on the stock exchange and the units of ETFs are offered as open ended instrument.

When investors come, they typically buy shares in an ETF through a stock exchange via registered stock brokers and this for example, if the investor is buying an ETF that is listed or being traded in London Stock Exchange, they have a special exchange for ETFs called extra mark and these can be these ETFs can be traded on that particular exchange for ETF that is extra mark.

And once it is traded the money is given to the ETF the fund manager or money manager for that ETF uses that money to invest in basket of shares or other tradable assets such as money manager, fund manager can invest all the money in the shares of all BAC 100 companies just like it is BAC 100 index and hold that portfolio as part of the ETF portfolio.

There are similar there are ETFs that are very much similar to tracker funds where funds are tracking in individual indices. In terms of they replicate a particular index such as let us say for example, BAC 100 in India or S and P 500 in USA and the portfolio that are held by those fund managers or those funds are basically the replica of the index that they are tracking, which means if I hold a portfolio or tracker fund that is tracking Nifty 50 index, I will hold a portfolio of stocks exactly in the same proportion of Nifty 50 index constituents.

So, if Nifty 50 index has 50 stocks in certain proportion and I hold a tracker fund as a portfolio then my tracker fund that is tracking Nifty 50 index will also be based on those exact 50 stocks in exact same proportion and that tracker fund can be a replica of Nifty 50, which means if Nifty 50 goes up then my portfolio will also go up and if Nifty 50 goes down then my portfolio will also go down.

This not only helps an investor to be to remain competitive in the market in the sense that if market is doing well the investor will holding such a portfolio will also do well in terms of return. And if market is bad, it will not do much worse than the average market in say any scenario, which means if market goes down the portfolio that I am holding as a replica of Nifty 50 that will also go down, but it will not go further down compared to the market and that is how I can save my investment to certain extent.

Once all these money management task is done, which means the fund that is accumulated by the company and invested in basket of shares or any other tradable asset. And here tradable asset includes not only the stocks of companies that are part of any index, but also it can be precious commodities such as gold or crude oil or any other financial securities as well.

In fact, just like equity ETFs or index ETFs gold ETFs are also very much popular in recent times where the money is invested in gold or similar assets by the exchange traded funds. Once at the end of the day the index yield is calculated or figured out which means fund managers will be able to find out how much money how much return the fund has generated.

They will keep certain part of it as fund expenses and remaining money is paid as dividends to the holders of the unit of exchange traded funds where share holders can also make a capital gain or capital loss by selling their shares just like they do in case of mutual funds.

Which means there are two sources of return for share holders or investors; one the dividend that are declared that are paid by ETFs from time to time. And if share holders choose to sell that units of ETFs in the secondary market while trading, they can also make capital gain or loss while selling the these units of ETFs or shares of ETFs.

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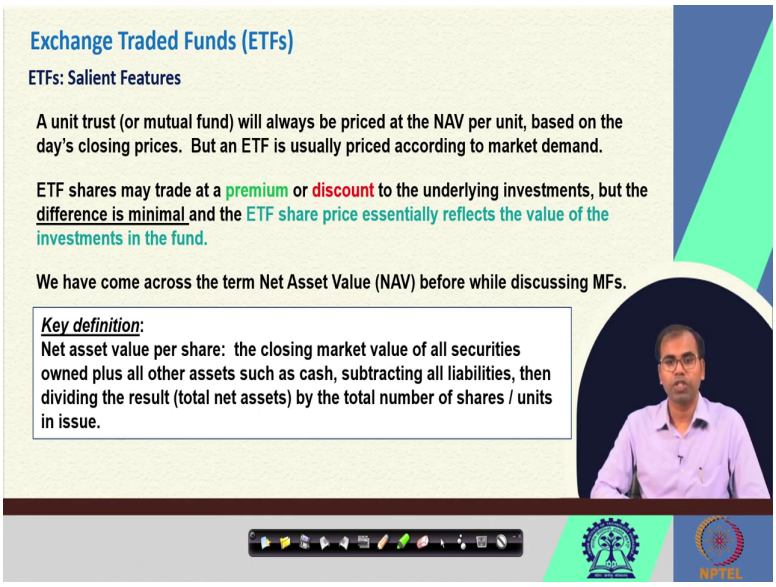

This is how typically ETFs work. We know that typically any fund such as mutual fund or ETF will always be priced at Net Asset Value per unit, NAV per unit and that NAV is based on days closing price of the asset that the fund is holding, but an ETF is usually priced according to the market demand.

It also means that the shares of ETF may trade at a premium or a discount which is basically higher than the face value or lower than the face value of the underlying investments. But most of the time the difference in the price is very minimal and the ETF share price essentially reflects the value of the investment in the fund, which is basically the value of the assets, value of the shares or stocks held as part of the fund portfolio.

We do have we do see the term net asset value before while discussing mutual funds. So, we know what net asset value means. Essentially it is about all the value of all the assets being

held as part of the portfolio of the fund minus any liabilities that the fund might have committed divided by number of units of shares or number of units of mutual fund or ETF in the this case will get us the net asset value at the end of the day.

Just to reiterate the closing market value of all the securities all the assets that are held as part of the portfolio that are owned plus all other assets such as liquid asset in terms of cash minus all the liabilities and dividing it by total number of shares or units of the issue gives us net asset value per share for mutual fund as well as ETFs.

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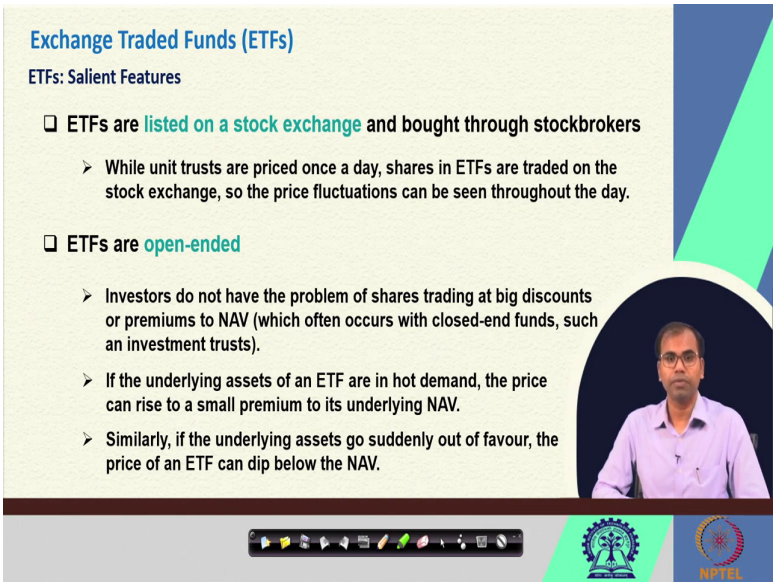

We know we have been talking about ETFs and we know so far that ETFs are listed on stock exchange and typically bought or sold through stock brokers or intermediaries. While unit trusts are priced once a day, just like mutual funds shares in ETFs are traded on stock exchange and the price fluctuations can be seen throughout the day.

Which means it is traded on an intraday basis as well and we can see the price fluctuation or changes in price during the day during the period as well, which means we do not have to wait for finding the price at the end of the day in case of mutual fund where mark to market is practiced.

In case of the NAB of mutual fund typically we wait for end of the period be it daily or weekly or monthly or fortnightly or some cases quarterly or annually where the total the total asset is evaluated and the value of all the assets held as part of the portfolio of the mutual fund is calculated to find out the NAB; whereas, the ETFs shares or shares or units of ETFs are traded on the stock exchange. So, we can see the price on an intraday basis as well.

So, we have seen that ETFs are traded as an open ended instrument open ended security where investors do not have the problem of shares trading at big discounts or big premium to NAV, which basically occurs with closed ended funds such as investment trust or sometimes closed ended mutual funds as well.

In such scenarios typically the discount or the premium is much significant compared to the NAV which is not the case with exchange traded funds. If underlying assets of an exchange traded funds are in high demand suppose an ETF is based on gold as a commodity as an asset that is held as part of the portfolio. If gold is in high demand, then the price of ETF units can rise to a small premium compared to the underlying net asset value and this will be justified because of the high demand in the underlying asset that is gold in this example.

Similarly, if the underlying assets go suddenly out of favour suppose the ETFs are based on certain seasonal product based companies and the season passed away and then we realize that the demand for such a company share or such an asset is no longer there, which means the price of the ETF will typically drop or it typically drops a little more little compared to the net asset value in this case.

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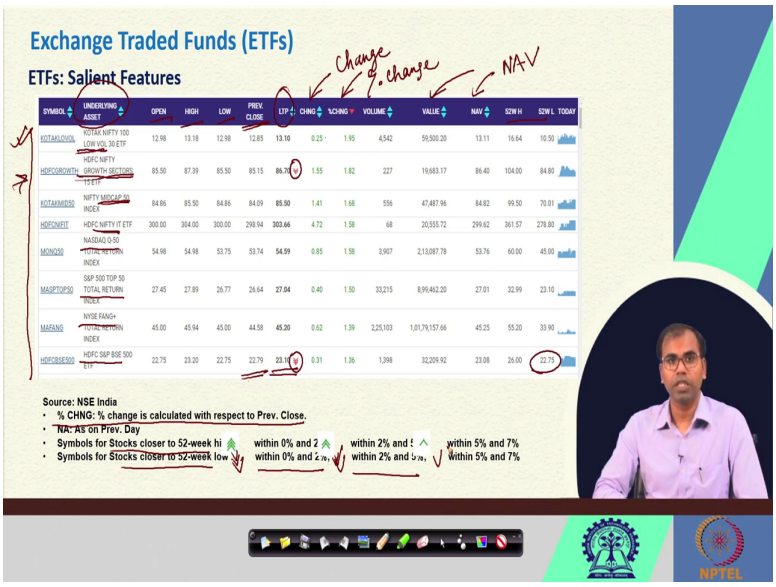

We also know that the price of ETF are typically determined by demand and supply and that is why we have to keep a look at the demand and supply of the underlying assets subsequently the demand and supply for ETF units can be figured out and that will determine the price for the ETF units.

Here I have the snapshot of some of the exchange traded funds that have changed to in the positive direction from their previous close. So, if we look at the numbers here, we know that these are the ETFs that we are talking about. Here it is about the issuing company or the ETFs that are issued by different companies, the different asset management company and this particular column suggest the underlying asset. So, we can see that the first ETF is based on Kotak Nifty 100 low volatility 30 ETF.

Similarly, second ETF is based on HDFC Nifty growth sector 50 15 ETF. We can see that the first ETF is about low volatility assets. Second ETF is about growth sector asset. Similarly, it is about next third is midcap. Then we have Nifty IT which is basically the stocks in IT sector listed in National Stock Exchange.

Then we have NASDAQ Q50 Total Return Index, another S and P 500 Total Return Index, NYSE FANG plus, which is basically the emerging technology companies such as Facebook, Apple, Netflix, Google and so on. And then finally, it is HDFC S and P BAC 500 ETF. So, this gives us an idea about what kind of assets are held as part of the portfolio of the exchange traded fund.

Then we have the typical numbers which basically indicate about the open price, high price, low price and previous close, which is basically the previous day's closing price of the unit of ETF. This column indicates the last traded price and next column tells us about the change.

So, change basically as a percentage change calculated with respect to the previous close. And in this case since this is arranged in an increasing order, in an decreasing order then we know that these companies have positive change. So, we can see that percentage change is given as percentage change with respect to the previous close, which means we compare the price of the price, today's trading price with previous closing price and see how much percentage change it has observed.

And next column suggests about the volume which is the number of units of ETF being sold or bought. Sub further columns suggest about volume and NAV for that ETF units. And last three two column which are basically numbers is 52 weeks high and 52 weeks low. And then there is a visual representation of the movement of the prices.

Now, here the this snapshot which is basically a snapshot of the ETFs listed on a particular stock exchange. We can see that there are some indicators here like this. Basically, it tells us about the stocks that are closer to 52 weeks high if it is in green, which is not the case

anywhere here. And if it is closer to 52 weeks low then it is indicated in red, which means if there are three downward arrow, we know that within 0 to 2 percent it is 52 weeks low.

So, we can see here 52 weeks low is 22.75 and it is close to 23.10 which is last trading price or if you see at previous close it is 22.79. Similarly, if it is too downward arrow its tells us about 52 stocks being 52 weeks low closer within 2 percent and 5 percent and single downward arrow will tell us about 5 percent and 7 percent.

So, this way we can understand the trend of the prices and the valuation of ETFs and accordingly we can take decisions. For buying exchange traded funds we need to go to the companies that issues exchange traded units or to the brokers.

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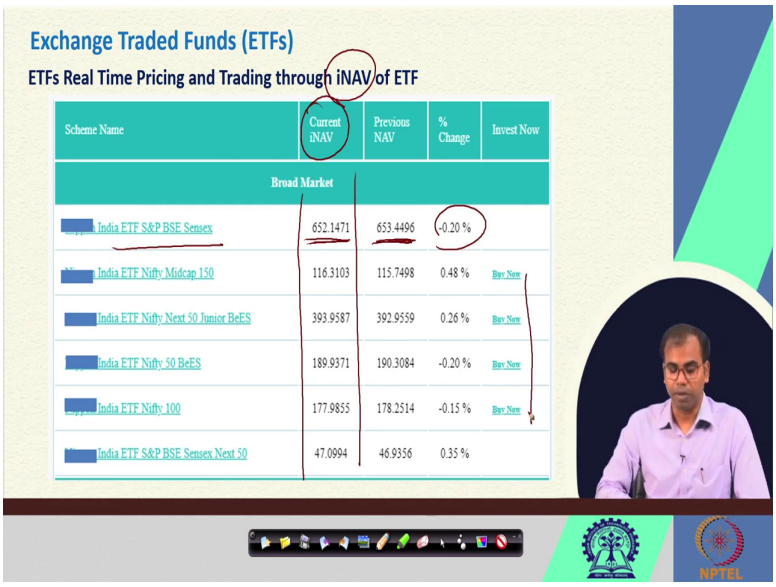

If you typically go to a company that offers ETFs as product here is another snapshot, which tells us about the real time pricing and trading of ETFs, particularly on the basis of iNAV. So, iNAV basically indicates about indicative Net Asset Value which is basically the momentary net asset value of that asset and based on iNAV which is indicated in this column. We can decide about whether it has increased from the previous close or previous NAV or it has decreased.

So, as we can see in this particular ETF it has decreased from the previous NAV previous NAV by 635.4496 and current iNAV that is indicative NAV is 652.1471 that is minus 0.2 percent change. So, based on that we can understand which n which ETF is doing better or which ETF is available for a cheaper price and accordingly we can take a decision to buy or sell.

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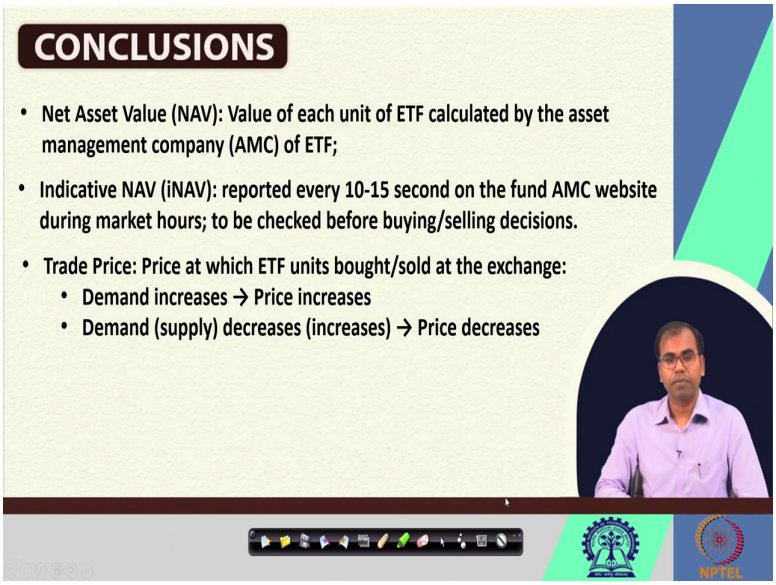

With this I would like to conclude this session, but we know that Net Asset Value of any fund that is indirectly investing in different assets in stock market where, NAV is calculated on the basis of value of each unit of exchange traded funds and calculated by the asset management company that launches or that floats the exchange traded fund as an asset.

Indicative NAV or iNAV basically reported every 10 to 15 seconds of on the funds asset management company website during the trading hours and before we buy or sell any unit of ETF we need to check this iNAV to understand, what is the price, that we are likely to get. And that is the trade price we know that ETF units are priced on the basis of demand and supply.

So, if demand increases price increases for the ETF units and if demand decreases or an alternative approach is supply increases which means more people are willing to sell the units of ETF then this will drop the prices further down. So, if demand increases the price of ETF units will increase and if demand decreases or the supply increases for ETF units the price will decrease. With this I end this session.

Thank you very much.