Behavioral and Personal Finance
Prof. Abhijeet Chandra
Vinod Gupta School of Management
Indian Institute of Technology, Kharagpur

Module - 02
Personal Finance
Lecture – 30
Investing in Mutual Funds

Hi there. Welcome back to the course Behavioural and Personal Finance. Continuing with the previous discussion that we were having on Mutual Funds and other similar investment alternative for individual investors. This session will focus on topics that are the basics of Mutual Fund investment for individual investors, and how we can evaluate the performance, and where do we find the information related to the Mutual Funds that we can consider for investment.

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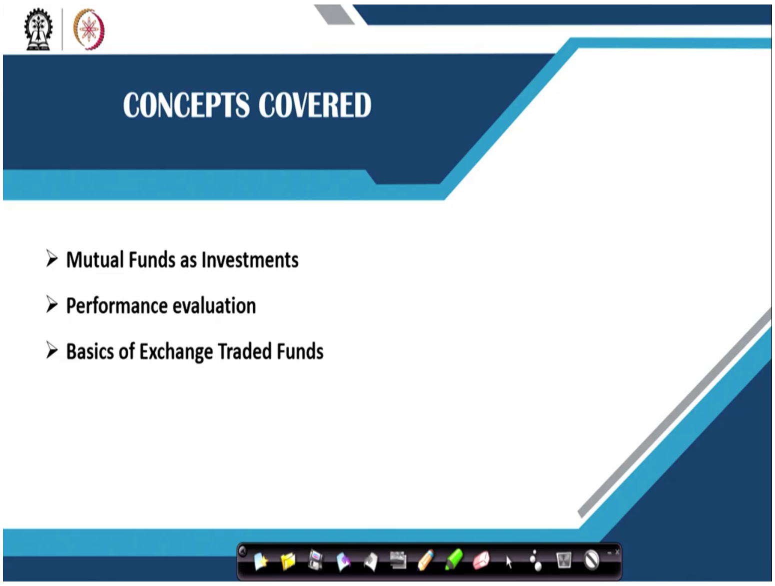

Also, we will touch upon the related topic which is basically the exchange traded fund which are very much similar to Mutual Funds, but have unique characteristics and how it can help individuals in making a better financial portfolio.

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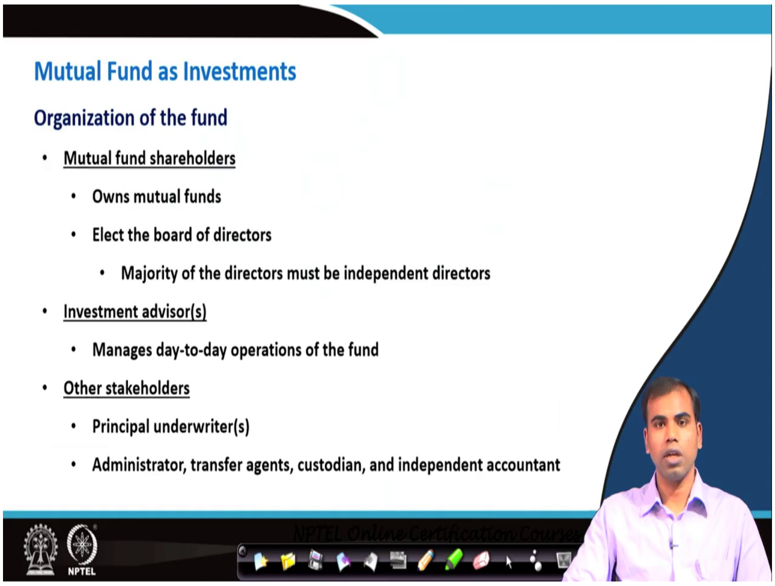

When we are talking about Mutual Funds, basically we understand that Mutual Funds are an asset investment company or an organization in financial services sector that pool investment or investible funds from individuals in large number. And then use their professional money management skills and expertise to invest that pooled money in different resources.

The governance of a Mutual Fund company or an organization that floats the Mutual Fund as investment avenue, basically follows a structure just like a similar financial services company, such as the people who hold their units or shares are the Mutual Fund holders and these shares could also be known as unit. So, basically the unit holders or the shareholders of Mutual Fund

Company are the owner of the company and they elect a set of people to be representing them as the board of directors.

So, board of directors is the apex decision making body in Mutual Fund Company and most of them the members of the board of directors are basically independent directors. So, that there is no conflict of interest and the decisions that they take pertain to the service of the stakeholders.

Second, decision making body or the people who are responsible for making, right decision in the interest of the shareholders are the investment advisors. Basically, these are the people with, right kind of expertise for managing the fund or the money that they have pooled from different investors and they basically manage day to day operations in terms of buying or selling or investing and disinvesting the portfolio that they are managing.

Other people who are associated with Mutual Fund body are those who are responsible for managing risk and ensuring that the interest of the shareholders are taken care of in the process of managing money and these people include principal underwriters who are basically those who underwrite the issue or the fund offering. Then there are administrators, transfer agents, custodian of the assets and independent accountant. All these people put together make the decisions that are in the best interest of the shareholders.

Now, when you have an investment in Mutual Fund you are also likely to be interested in knowing what tax consideration or implications these Mutual Fund investments have. Earlier we have discussed that taxes affect our decisions and before taking any financial decision we must consider taxes as an important input. In fact, taxes are tax planning is as important as a successful financial planning, so in the in case of Mutual Fund investment decision as well we will consider taxes as an important input for decision making.

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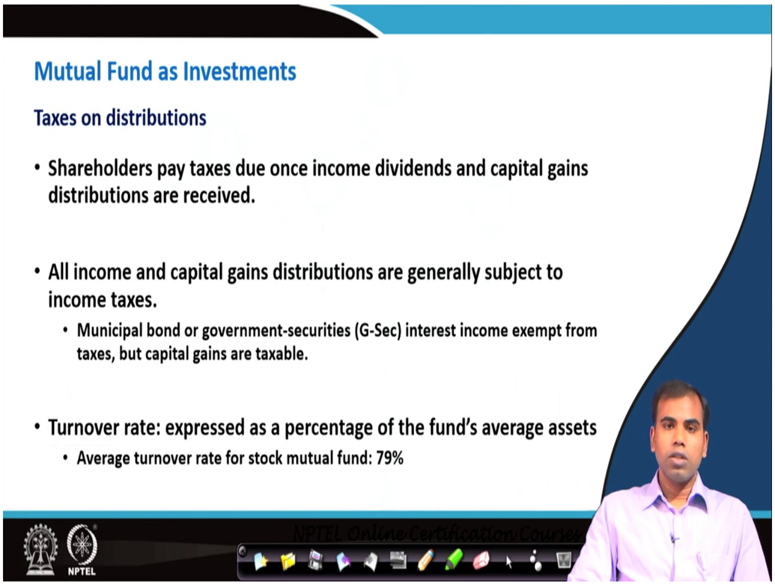

When we talk about taxes on distribution of Mutual Fund gains basically we mean that the money invest taken from shareholders and pool together to make investment decisions are invested in assets as decided and advised by shareholders. And with the input by the research analysts and investment advisors, the invested money yield some return over the period of holding of that investment and then that return is used for distribution of dividend to the shareholders. So, basically when shareholders receive money as the return on their investment they pay taxes due once the income as dividends and capital gains are received.

If you recall, we know that the source of return for any investment belongs to two categories, one is capital appreciation or the capital gains and second is the dividend or the interim income. Basically, it is in terms of the appreciation of value due to capital gain and the return on investment. So, when the shareholders receive their investment return due to whatever of the two reasons, they pay taxes as due to the tax authorities. All income and capital gains taxes are generally subject to the income tax prevailing in the land where they belong to.

For example, there are certain securities which are exempted from taxes as per the tax laws of the land and such assets or such investment are mutual municipal bonds and government securities as and when issued by the governing authority. These assets are exempted from taxes in the hands of the recipients.

Whereas, in most cases when the taxes are due be essentially it is more relevant to the capital gains in the hands of the recipient. Which means if I have invested 100 rupees at time 0 and I received some income at time 1 in that same period I also received some capital gains we can pay taxes on dividend income as well as on the capital gains. And we have all earlier discussed that capital gains taxes are subject to the prevailing law.

For example, typically short term capital gains are subject to higher tax rates compared to the long term capital gains, which means if you buy a Mutual Fund investment and sell it within a year and in that period you are getting some capital gains you are subject to pay higher taxes compared to the taxes that might be due if you hold that Mutual Fund investment for more than 1 year.

Another factor that are important to consider taxes on distribution of dividend income or income on Mutual Fund investment is the turnover rate because that determines the acceptance or the popularity of the particular Mutual Fund. Basically, turnover rate is expressed as a percentage of the funds average asset and in general basically in Indian market the average turnover over rate for stock Mutual Fund is 79 percent. So, when we consider Mutual Fund as an investment avenue we should also look for the turnover rate applicable to the Mutual Fund that we are considering for investment.

Having understood the basic governance structure of Mutual Fund and how taxes are affecting the decisions with respect to Mutual Fund gains, we should understand what are the alternatives or the types of funds that we have where we can choose from and include in our investment portfolio.

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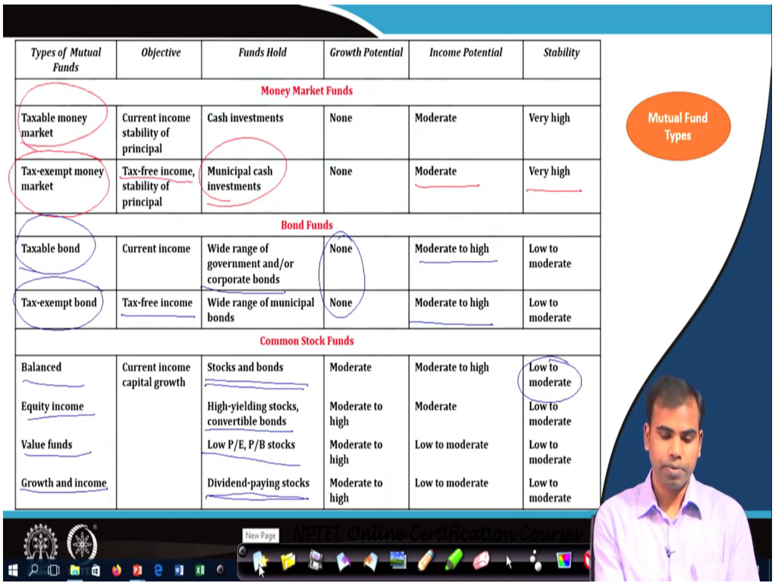

Types of Mutual Funds	Objective	Funds Hold	Growth Potential	Income Potential	Stability
Money Market Funds					
Taxable money market	Current income stability of principal	Cash investments	None	Moderate	Very high
Tax-exempt money market	Tax-free income, stability of principal	Municipal cash investments	None	Moderate	Very high
Bond Funds					
Taxable bond	Current income	Wide range of government and/or corporate bonds	None	Moderate to high	Low to moderate
Tax-exempt bond	Tax-free income	Wide range of municipal bonds	None	Moderate to high	Low to moderate
Common Stock Funds					
Balanced	Current income capital growth	Stocks and bonds	Moderate	Moderate to high	Low to moderate
Equity income		High-yielding stocks, convertible bonds	Moderate to high	Moderate	Low to moderate
Value funds		Low P/E, P/B stocks	Moderate to high	Low to moderate	Low to moderate
Growth and income		Dividend-paying stocks	Moderate to high	Low to moderate	Low to moderate

If you look at the table it shows the types of Mutual Funds that are typically offered to the individual investors and these funds have unique characteristics. So, for example, if we classify the overall Mutual Fund offerings in three broad domains namely money market fund, bond funds and common stock funds each of these categories have their own unique characteristic such as if we consider money market funds and we be have two types of Mutual Funds based on their characteristic of the assets or the investment.

Here if you see here there are two types of funds being offered in money market fund category and these are if we have three categories of Mutual Fund offerings namely money market fund, bond funds and common stock fund, basically these three categories belong to three different type of assets.

First category is money market fund that includes assets which are belonging to the risk free asset category or the assets which are offered in short term market. Second category is bond market bond funds which are basically funds where investments are made to the bonds or fixed income category of assets. And third is common stock fund where assets are invested in common stock or the share pertaining to different companies.

Within money market fund category we have two funds as shown here. If we see these two funds are basically taxable money market fund and tax exempt money market fund. These two categories if you see their characteristics the first characteristic is the objective of the funds for which the fund has been floated and offered to the investors. Taxable money market fund has an objective to give current income with the stability of principal which means it will ensure that the principal amount that you have invested remains secured and it also gives you some income.

So, basically it is cash investment and it is invested in assets which are very liquid. There are no growth potential because the cash is saved in terms of safety of principal amount. The income potential is moderate because as the value of liquid asset grows which is very slow the growth of the fund also occurs and stability is very high.

Whereas, when you talk about tax exempt money market fund there these are tax exempt money market fund which means there is no taxes on the growth or the income that you will receive from these funds and these are invested in typically in investment which are typically municipal cash investment. And there is no growth potential as such, but there might be moderate income potential and stability is again very high. So, if you are an investor who is very risk averse and does not want to assume any risk for you these type of funds are most suitable.

If you are an investor who would like to take moderate risk then you can consider bond market funds as your potential investment source. So, bond market funds are basically funds such as taxable bond funds and tax exempt bond fund. So, tax exempt bond fund basically are funds which have no tax liability on the income that you generate and these funds are basically invested in government bonds or in most cases corporate bonds as well, where the growth of the fund or the investment is very low or almost negligible whereas, the income is moderate to high.

The stability is low to moderate because of the secured investment that are made in government securities or government bonds and corporate bonds as depending on the objective of the Mutual Fund.

For people who would like to take certain risks and they do not shy away from taking some risk of the stock market they can consider common stock fund and these funds are basically categorized into balanced fund, equity income fund, value fund and growth and income fund. So, these four categories of funds are basically focused at the objective which is being achieved through the investment. So, if I am an investor who would like to have my money invested in funds which give me value addition in future and it the value grows in long run, I would like to consider value funds as my target investment.

Typically, these funds target to achieve the current income through investment in capital markets, and these are invested in stocks and bonds, they can be invested in high yielding stock or convertible bonds the assets or the stocks which have low price equity and price to book value ratio and the stocks which are paying dividends. So, if I want to have my investment done in growth and income fund I would like to have investment in stocks which are dividend paying stocks.

If I have my money invested in balanced fund where I can get some current income as well as the stability of my investment I would like to invest in a mixture of stock and bond fund. So, growth potential in these funds are typically moderate to high because they are exposed to stock market and stock market is supposed to give growth to the investment that are being made.

Income potential is also moderate. If you take more risk the potential of generating higher income is high and that is why people who are in the earlier stage of their life they invest in assets which give them high income potential. Similarly, if you would like to see if the stability of your investment is low or low to moderate then you can consider investing in these funds.

If you take another category of these funds for example, let us say you want to invest your money in international stocks or a fund which invest in international stocks the stability will become very low because the international markets are more volatile and the exposure of your investment to international stocks would lead to a lower stability. So, these are some examples of different type of funds that are on offer for individual investors to invest their money.

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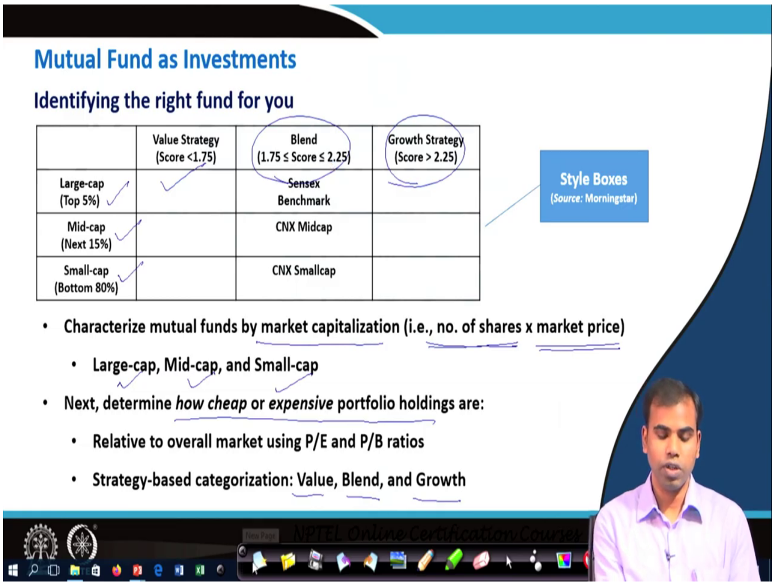

If you try to understand how these funds can be evaluated or how you can identify the right fund for you, here is one proprietary thing that was developed by a Mutual Fund database

Morningstar which gives you an idea how to choose the, right investment from the offers that you have. So, if you look at the table it is basically known as a style box, and this style box give you gives you an idea how you can categorize a particular fund where you want to invest your money.

So, the first step is you want to see if the stock where the Mutual Fund has invested that is that can be characterized by the market capitalization and when I say market capitalization basically it means that the number of shares that has been floated by the fund into the market price is basically giving you the market capitalization, and this could be large cap, mid cap and small cap. These three categories of market capitalization can be identified. So, you can see that the style box gives you an idea about the large cap mid cap and small cap.

Similarly, if you have already identified the market capitalization of the Mutual Fund you can see if they are cheap or expensive in terms of their holding. So, you can compare their holdings relative to the overall market using price equity or price to book value ratio and based on their strategy you can assign the particular fund in a style box. So, the strategy could be value or hybrid or growth. So, these are three value proposition that Mutual Funds typically can be categorized and depending on their strategy of investment they can be considered under value category or blend category or growth category. Blend is basically also known as hybrid category of Mutual Funds or investment.

So, this style box gives you an idea of identifying a particular Mutual Fund that falls under either of these categories and based on your risk taking potential and investment worth you can choose the right fund for you.

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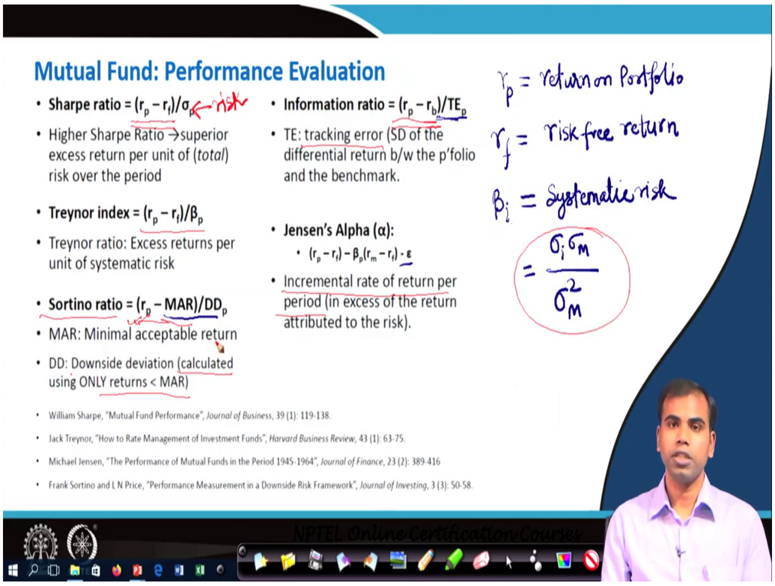

Next step is once you have identified the Mutual Fund and made some investment you would like to see if the Mutual Fund has performed well or as per your expectation. So, here are certain measures that we should keep in our mind and use it for evaluation of the performance of our investment. These are some popular measures namely Sharpe ratio, Information ratio, Treynor's ratio, Jensen alpha and Sortino ratio.

If we talk about these ratios or these performance indicators one by one, the Sharpe ratio here first I would like to highlight that these ratios or these indicators have certain notations, where r p is basically return on portfolio. So, portfolio that your holding is going to give you some return, so you can consider r p to be the return on portfolio. r f is risk free rate of return which means the return that is being given if you invest your money in assets which are considered to be risk free such as government bond or treasury bills.

Then there are beta which we have already discussed earlier that beta is basically the indicator of system at systematic risk and beta can be considered as the covariance of asset or the portfolio that you are holding with the variance of the market and the market variance that you are considering. So, this is your beta of equity or the portfolio that you are holding.

So, if I can use this notation as the beta of the investment that you are holding. And then there are certain other indicators such as tracking error and the excess noise or return and these two indicators which are already given in here.

So, Sharpe ratio gives you a risk adjusted return which indicates that if your excess return which is basically the return on your portfolio minus return of the risk free asset with respect to the sigma of the portfolio which is basically the risk of portfolio that you are holding is gives you the risk adjusted return for comparison of different investment alternatives. And the thumb rule is higher the Sharpe ratio the superior excess return that your investment is generating for every unit of risk over the period. So, if you are taking higher risk you can consider how much higher return it should be generating if you keep an eye on the Sharpe ratio.

Information ratio take talks about the excess return which is basically return of portfolio minus return on the holding or the risk free asset with respect to the tracking error. So, tracking error basically is standard deviation of the differential return between the portfolio and the benchmark. So, basically this will tell you each unit of tracking error is leading to how much of excess return.

Similarly, Treynor’s ratio this is also similar, but in it is different from a Sharpe ratio in the sense that it gives you excess return per unit of systematic risk. And systematic risk is basically with respect to the market covariance, so that is why it gives you an idea of how much extra return that you get for every unit of systematic risk.

Another measure is Jensen’s alpha, which also tells you about the risk in terms of rate of return that you are generating on your portfolio. So, it tells you about the incremental rate of return per unit of period in excess of the return that is attributed to the risk. And finally, the Sortino ratio which is again another measure of considering your evaluation of performance of your investment is basically how much return that you have generated minus the minimum acceptable return with respect to the downside deviation which you can calculate by using this approach which is basically the returns smaller than the minimum acceptable return.

So, if you have minimum acceptable return of 10 percent on your investment you can see how much extra your portfolio has given with respect to the all less than ten percent returns that the investment had generated. So, these measures can be used for calculation of performance evaluation for investment be it in Mutual Fund or any other similar assets.

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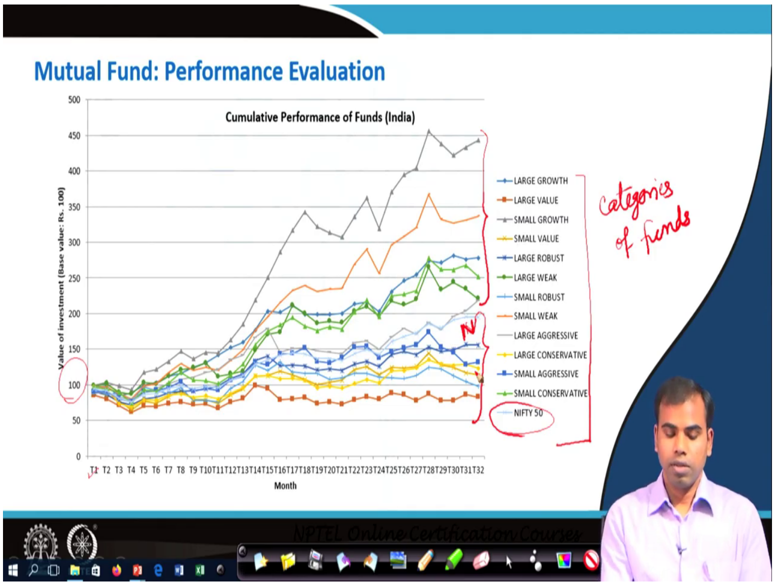

If you move further to understand more about Mutual Funds here is one indicative idea or evidence that shows that in last 4 years how much growth the investment in different type of funds has been achieved in the Indian market.

So, this is basically an evidence of last few years, where if you had invested in 32 months back, if you have invested your money in terms of 100 rupees if you have invested your money to the tune of 100 rupees 32 months ago then that the value of that money would have become this much in terms of the growth of your investment. So, you can see that these are the categories of funds that we are considering.

So, this is categories of funds which we are considering for investment and these funds are based on different characteristics. So, and this is our benchmark return which is the market return and you can see that this is your nifty market return here where which gives you an idea how much the market has given in terms of return, if you had invested 100 rupees, how much you would have got today. And if you invest in these funds basically then you would have gotten more return than the market has given, and if you had invested in these investment or these funds this would have given you less than what the market has given.

In most cases your investment is more than 100 rupees, but if you choose your investments wisely which is what are these funds that are going to give you more than your investment that has been done in other side of the investment choices, you would have got a better return for your investment than the other side of the set of investment.

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Here is the list of top 10 Mutual Funds in India as on December 2019. If you look at the list these funds belong to different categories and offered by different financial institutions, but one thing is very clear that most of the funds are not focused on one particular type of assets rather they have asset composition which can be mixed or combined or rather have a more wide range of assets for investment of the fund that they pool from different investors.

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So, moving on towards the extension of Mutual Fund category, there is another asset which is very much similar to Mutual Funds in nomenclature and the characteristics, but they are very unique in terms of the offering of risk and return combinations for the investors. These are known as exchange traded funds. Basically they are assets or they are tradable funds in the basket of stocks that closely track broad market averages. They can also track market sectors major stock markets from around the world and the duty is they can be traded over exchanges.

So, here is the list of top 5 Indian exchange traded funds. If you see and try to relate from the discussion we had done in previous session where we touch upon the characteristic of every Mutual Fund, we know that three characteristic that we should always keep in mind while selecting the Mutual Fund are net asset value which is NAV, total expense ratio which is TER and the yield that is return that you get for holding that investment.

So, these are the top 5 exchange traded funds that people can consider for investment, given the fact that they have the highest amount of net asset value or highest net asset value compared to other funds available in the market. They have very low or comparable total exchange expense ratio which means they are not costly and they are non-expensive for holding. And yield is also better than many other investment of opportunities available in this category.

Now, that we have understood or we have discussed a lot about Mutual Funds and their associated characteristics and what should be kept in mind before selecting a Mutual Fund, you might be wondering where do we get the data for understanding or making a decision related to Mutual Fund.

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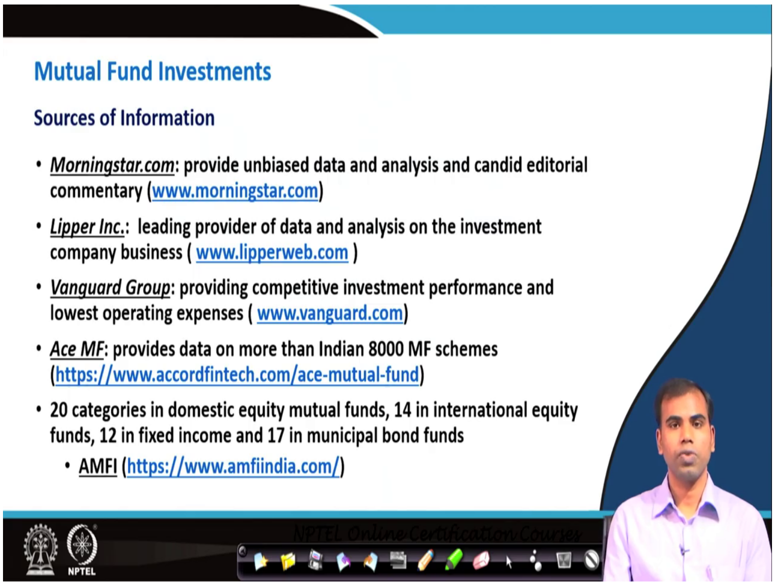

So, here are the list of sources where you can get the information related to Mutual Funds that you would like to consider for investment. One of the largest source sources of information for Mutual Fund is Morningstar which is a financial service form and it provides lot of information related to each and every fund that are offered across markets and you can get this information related to your Mutual Fund queries on Morningstar.

There are other sources such as Lipper and Vanguard. In India which are serving the Indian markets and Indian investors we have Ace Mutual Fund and finally, the government of India has given this mandate for an organization called association of Mutual Fund of India which is AMFI and on their website also you can get lot of information related to Mutual Funds.

These sources will provide you adequate amount of information related to the Mutual Funds that are offered in Indian market and in some cases the Mutual Funds or similar funds which are offered for markets in abroad and you can use this information for making a sensible financial decision related to Mutual Funds.

That is it for now.

Thank you very much.