

Security Analysis and Portfolio Management

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Lecture No. # 01

Introduction to Investment Management

The course on security analysis and portfolio management basically deals with the investment management of the market. Basically, whenever we do the investment in the market, we should take care of certain things before taking part in the financial market. And if those aspects will not be taken care, then it is very difficult to maximize the return with a given amount of the risk or to minimize the risk with a given amount of the return. In this context, it is very much imperative to know certain basic concepts, basic objectives; and as well as the certain theoretical foundations about the secret analysis at portfolio management before going to discuss about that particular issue.

So, today I am going to explain about the introduction to investment management, which deals with the investment philosophy, the investment concept; and how this particular investment is or investment decision is taken in the market. And in this context, we will try to explain certain things like what exactly the investment is, who are the people who can invest, and how we can define the different types of the investor, and as well as how this investment process goes on.

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What is Investment?

- **Investments is the study of the process of committing funds to one or more assets**
 - Emphasis on holding financial assets and marketable securities
 - Concepts also apply to real assets
- **It is the current commitment / holding of money or other resources in the expectation reaping further benefits and that will compensate the investor for**
 - The time the investors hold the fund
 - Expected rate of inflation
 - Uncertainty of the future

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So, here whenever we see these things, what basically we look into? First of all, we should know that, what is investment? Investment is the study of the process; investment is the study of the process of committing funds to one or more assets. It emphasizes certain things, it emphasizes on holding financial assets and the marketable securities, which can be traded in the market; and as well as also most of the people can participate in the market. And this concept also is related to the real assets; real asset in the sense, we take the example of housing, we take the example like a real estate market as well as also certain other related market, which are generally concerned with the intangible factors.

So, therefore, investment is not confined to only the physical or the financial assets, it basically also related to some of the real variables, which may not be quantified or may not be signified in a physical manner, but still the investor or the people can use those kinds of assets, before investing in the market situation. So, then here whenever we talk about certain things, we should look carefully about their characteristics; and as well as that certain features, how they are different themselves, how we can say one asset is different from the others. Therefore, here basically if you dig talk about the investment philosophy, the investment philosophy is nothing but it is current commitment or the holding of the money of other resources in the exception, in the expectation reaping further benefits, and that will compensate the investor for certain things like the time the investor hold the fund, expected rate of inflation uncertainty of the future.

Let us elaborate this concepts little bit further; what exactly in the investment process or the investment philosophy talks about. The investment philosophy is basically what we do or the investment philosophy what basically explains that one investor invest certain things in the market, expecting that he can get certain return in the future or he can maximize the return in the future. And whenever he takes part in the market, what basically he always sees? He always sees that how much time he will take, and how much time he has before getting the return from the market.

And as well as also, he always considers the certain objectives; certain objectives in the sense that whenever we take part in the market, we basically see that if I invest in a particular asset for certain times, **this particular** in that particular period, my real returns should be maximized. Then definitely the question comes, how to define this real return? So, basically in the financial world, the real return is nothing but the return adjusted to the inflation. And inflation is a buzzword in the market, all of the people who deals with the financial market, they are very much acquainted with the concept like inflation and basically, which talks about the pricing situation in the market.

So here, whenever we **sees** see the market will analyze the return, what basically we see? We see that whenever we get certain return, which is defined as the nominal return; for example, we get a return of 20 percent, and in that particular time, the inflation rate is let 8 percent. Then definitely we see that or we can say that the actual return or the real return of the market is 20 percent minus 8 percent that is 12 percent. So, the investor whenever takes part in the financial market for investment to maximize the return, he always sees that what is this pricing situation that time, by which the return can be maximized, which is adjusted to the inflation rate; and that is why the real return can be maximized. And finally, we talk about the uncertainty; what exactly the uncertainty means, because uncertainty is a word, which is very much related to the concept of the risk; and because whenever we participate in certain markets, the return is not assured; and once we say that the return is not assured, the uncertainty is involved there.

There are certain variables, which generally takes part the concept of uncertainty; and whenever the investor basically goes for investing in the market, he should always see the uncertainty, and he should analyze the uncertainty, he should analyze certain factors which are responsible for this uncertainty, then only he can get or he can maximize the return with this given circumstances. So, therefore, these three variables like the time and

as well as the macroeconomic prospective, he should see the inflation rate and finally, the uncertainty. These three factors should be taken into account or the investment philosophy always takes into account, before analyzing the return in the market case.

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So, then we should go to the next one; the question will arise, why basically, why we study investments; or whenever we talked about investment, what is the basic objective of this? The investment objectives is basically, one is in the real terms or we can say that always everybody wants to maximize their wealth to maximize their particular financing position in the market. So, that is why most the individual's wants to know wants to study the investments or wants to analyze the investment philosophy to manage their own wealth. How they can maximize their wealth with a given amount of the risk or how they can minimize the risk with a given amount of the return.

And another way of reading, we can say reading this investment or studying these investments is that they can make a carrier out of this, because in most of the cases in the financial market, if we analyze the investment in a better way, we can work like a security analyst, it will be also useful to act as an portfolio manager in the different concerting forms in the mutual fund etcetera; then as well as also we can work like a registered representative in the financial organization, and as well as also it is useful for certified financial planner. So, these are basically one way, we can say that we can maximize the wealth, if we know how to manage the investment; and number two - it is

also helpful to make the carrier in a certain way, by that we can make our life more peaceful or more systematic.

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So, here already I used these word investment constraints. So, before analyzing this investment philosophy or why generally people invests in the market, we should know what are those factors behind that. In the real terms, if you see investment is nothing but it is a one way, we can say in the layman prospective, it is basically a optimization problem; what basically the optimization **optimization** problem is, and how this optimization problem is defined. In the optimization case, in certain things whenever we want to optimize, what basically we will do? First, we should have certain objectives. And here, already I have explained these things in two ways; our objective is to maximize the return with a given amount of the risk or to minimize the risk with a given amount of the return; which means that whatever resources we have, whatever financial position we have, whatever macroeconomic situation we have, in that situation basically always we want to maximize our return.

So, here this objective is to maximize the return or to minimize the risk, then what are those constants; and what are those variables always comes to in our mind or comes to our practical investment area, where always they play the significant role before taking

the decision in the market. So, in that case, the first variable comes to our mind is basically the time, because various people have various objectives; if somebody wants a certain amount of the money, maybe after 5 years, maybe after 6 years, maybe after 7 years; so, where he should invest. For example, you need 5 lakhs or 10 lakhs rupees after 5 years for certain requirements. So, here the basic question arises is, how I can make my particular money more assured, and how I can be satisfied that if I invest this much money today, maybe it is 50,000; 50,000 money today or 1 lakh today, then this can be converted into 5 lakh tomorrow or maybe after 5 years. So, in that case time is a variable, which is very important for the investor to decide where to invest, where not to invest.

And another example if you take, if somebody does not need money after certain time, but he just wants to maximize the money, maximize the return in the future period. So, that time what happens? He is free to decide the different investment alternatives, what in the further session we will discuss, how these investment alternatives are available in the various markets, on which we can do the investment; so then what you will do is free to choose, where to invest, where not to invest. Then second factor is basically, we talk about age, what exactly the age means? For example, if somebody's age is quite around 30 years, he is quite young. So, in that case, the cash flow what he is going to expect in the future is always enormous or we can say that he can take as most of the risk in the market, because he can take part in the market for a longer period.

But if you take the example of a person, who is more than 60 years or 70 years old, then what will happen in that case he cannot take that much risk in the market or he cannot participate in the process of uncertainty in the market. So, in that case what he will do? He will not choose those assets, which are very much risky in nature; definitely he will choose those assets, where the return is assured, and where the return is guaranteed after certain period.

Then after that also even if the age is 30 years or 35 years something like that, then still he may not choose certain assets, which are very much risky; what is the reason? The reason is maybe the risk tolerance limit of that investor is quite low; that means, he is very much risk averse in nature, he cannot take part in those markets, where the return is not guaranteed or he cannot take that much risk, where we can say that they can't, even we can say, somebody can tell him that if you take part in that market he can take

more risk and accordingly the return will be more, but still he is very much care about that market, because the tolerance limit, particular the risk tolerance limit of that particular investor is not enough to participate in that market; where the investment alternatives or investment assets, the assets on which he is trying to invest are basically risky in nature.

Then finally, we talk about the tax liability; in general, if you talk about the people where the financial pollution is not that much strong, most of the people participate in the market for their tax to save the tax; or we can say we choose certain alternatives, where with investment, we can also save some of the tax or we can say that investment plan will be such a way that those assets can give some return in the future. And as well as the second objective of those people particularly, the **the** people who have their income is their **their** cash flow is regular, particular the people who is working, the people who are basically depending upon the salary, basically they generally, always see tax is also one of the factors.

Number two even tax is also a factor on the basis of their implications or on the basis of the policy; for example, you say the if the government says that there is no tax on deviant there is a tax on deviant or there is no tax on capital gain or the capital gain tax will be more than the tax of the deviant or the tax deviant tax will be more than the capital gain tax; in that situation also people are very much choosy how to decide, how to take part in the investment process in the financial market.


Secondly it is the income fluctuations; what exactly this income fluctuation means? The income fluctuations are basically nothing but how much your income is basically the regular; that means, whenever you are working, if your job is guaranteed by the government or maybe you are self employed or you are working in a corporate sector. So, in that case most of the cases, you take the example of the recent recession; the in the recent recession what is happening? The people who are working in the corporate sector particularly their income fluctuations are more than the people who are working in the government sector, public sector. So, in that situation may be this investment philosophy, the investment objective of the person who works in the public sector, and the investment philosophy, who works in the private sector, and the investment philosophy who is self employed is always different, because there is an income fluctuation involved that case.

And finally, this is the most important variable in today's condition that is economic condition, because there is nothing in our hand whenever we discuss about the economic condition, because economic conditions are driven by certain factors. Let you can talk about growth rate of the GDP, you talk about the inflation rate, you talk about the industrial production, you talk about the foreign exchange market, you talk about the overall capital market, the situation varies from time to time depending upon certain variables. So, in that case what happens that if macroeconomic situation fails, macroeconomic situation is going to be (()); so, in that situation what will happen, even if your investment philosophy, your investment objective is quite clear from the beginning, and you have used certain methods to maximize your returns, still you may not get it, because your external involvement does not support you. Let your alternatives are not available; even if it is available, then it cannot conducive to the environment, because of that your return cannot be maximized.

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How Investment is Done?

- Current Income > Current Consumption--- Savings---Investment
- Current Income < Current Consumption--- Borrowings---Needs to Payback--- Investment

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Then basically, whenever enough we have discussed about the different constant whatever we have, then we come to that how the investment is done. If you see this investment is how this investment is done basically, how people do investment? Basically, they do the investment from their income; and when they invest? They invest whenever the current income is more than their current **current income is more than their current** consumption; that means, whenever they earn something and out of the earning,

they consume something; out of that, basically we know the total income is composed of two; one is consumption and another one is saving.

And another equation also we know that the total income is equal to consumption and investment. If we believe that whatever money we save that is invested in the market that may not be so say so; but still what we can say whatever money we earn, if the amount of the money we earn will be more than our consumption requirements, the extra amount of the money can be invested in the market to maximize the return. But still in certain cases, what happens? Even if the current income whatever we have, it is less than the current consumption; still we can invest it, still we can participate in the investment process in the financial market.

How generally we will do? We can borrow the money from the various sources or we can go to the different financial institutions like banks, from which we can get this money, and we can assured them by putting some of the collateral or the mortgage that once the return will be, we will get the return or the return will be realized, we can pay back that borrowings what we have received from them; and finally, whatever the extra amount of the return we can get that is our benefits what we can draw. But when it happens? Basically it happens in various markets, why it happens? If it happens, because let the analyst or the investor fields, that there is enough opportunity in the market, through which this return can be enough; the return can be very high.

Let we can assured that the return if I, now I will participate in the financial market for investment for example, let stock market, and I can get a return of 25 percent; and let I do not have the money to invest it in the market. So, that time what basically the investors do? The investors go to the different financial institutions including banks; they borrow the money from the financial institutions; and after borrowing the money, what they generally do? They basically take that money to the financial market like stock market, they invest it, and the bank may charge around 15 percent or 12 percent interest rate on that; but still if they are sure that they are going to get a return of 25 percent, still extra 10 percent benefits, they can draw from that particular market. So, this is basically how this investment is made, and how generally particular investor even if they do not have the money with them, immediately they still can participate in the investment process.

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Then various books basically talk about the different types of the investor; and in general also we know that how this different investor can or the investor different people can be categorized into various ways on the basis of their objectives, on the basis of their time period, they take to invest in the market, and how much risk they can take in the market like that. So, in this case, what we see; first of all we talk about a normal investor; basically, whenever we talk about a normal investor, who generally invest in the market, they generally always take part in the market for a long period. And they do not want to take their investment process out of the market, once the return is not realized; and as well as if you see those types of people are basically not that much risk lovers in nature or they we cannot say that there are the risk lovers, basically always those people will take the moderate risk.

And already in the previous case, we talked about some of the people, they participate in the market without money; even if the money is not owned by them, they may borrow it; but in whenever we talk about a normal investor, they basically take part in the market for a longer period with a moderate risk, whenever the money is owned by them, the funds are owned by them; unless they basically are reluctant to take part in the market without the money. So, basically the normal investors business, normal investor's objective is to invest the money, invest on that money, which is owned by him.

Then another type of investor if you little bit go further we can call them speculator also the investor is a speculator, but if you categorize the speculator is a different type of investor. So, here what they do? They want use their knowledge, they want use their analysis to predict the market very carefully; and once they can predict that market using certain parameters, whatever the availability we have, they want to maximize the return in a very short period; that is why they invest in those assets, which are very much risky. And once they were ready to invest in those assets, who are **who are** very which are very much risky; definitely they want to take high risk.

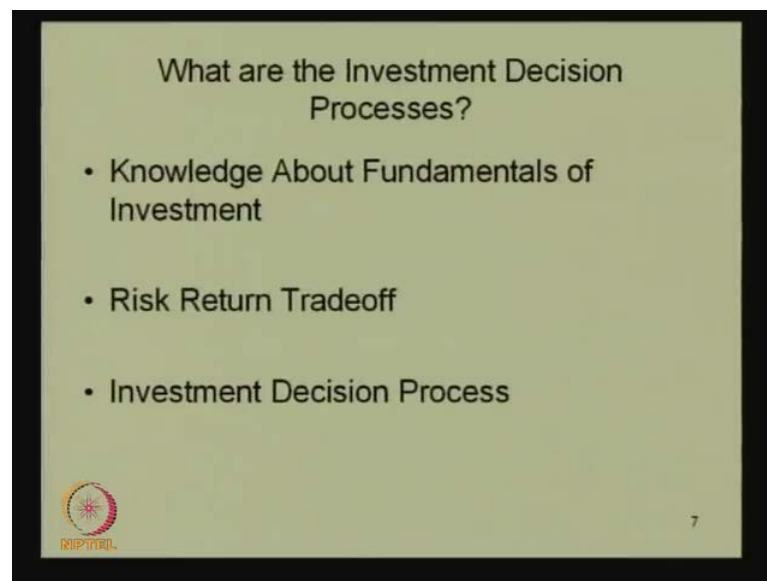
But in that case, they can use their own fund, they also borrow the money from the various financial institutions to get or to maximize the return in that particular time, because already they have analyzed from the various sources or using the various parameters, they have already found that there is an opportunity, which is their, which can maximize their return in that particular time. So, in that kind of investors certain books or certain literature explains them as the speculator. Then finally, another type of investor also there we call them the gambler; and basically the gamblers also one type of investor, and they take the highest risk in the market, and they want to maximize their return in a very short period of time.

And here whenever here this is one type of categorization about the investment or about the investor; but there are other investors or there are some investors, who also participate in the money market; there are certain investor, who always wants to participate in the equity market; there are certain investor, who always love to invest in the bond market. And as well as if little bit more risky investors are there, they can always participate in the future market or in general, we say derivatives market. And there are certain investor, who never participate directly into the market, they can do investment in the indirect manner may be through mutual funds or maybe only putting the money in the fixed deposits or in saving deposits in the various commercial banks.

So, those type of investor also are there in the financial market, and their objective is also to maximize the return, but it is not that always those type of investors are coming into the discussion, because in those cases, the return is quite assured; the people who does not want to take the risk, they know that the return is assured, and this much return, they are going to get. So in that case, what generally happens? There is no much complexity about analyzing their investment objectives or investment philosophy.

Always we should analyze those investor's philosophy and the people and about those people who always wants to take the risk in the market; and in those investment where there is a uncertainty, and where the risk return trade off is always prevails. So, in that that is why in the equity market whenever we deal with or even the corporate bond market we deal with, we always try to analyze about those investor, who always take part in the market with certain amount of the risk.

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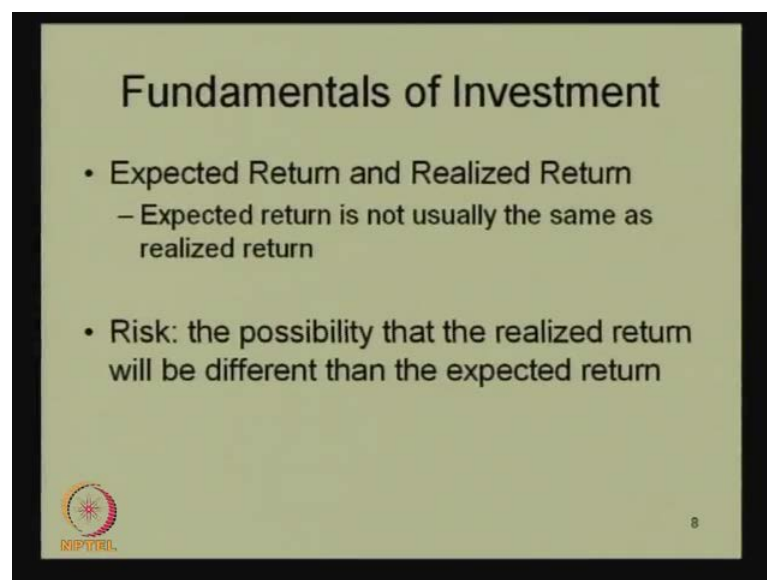
Then already what we discussed up to now, about the investment philosophy, about the different constraints, about the different types of the investor; and as well as also we have seen that when we invest, whether the surplus money we invested in the market or the money, which is borrowed from the financial institution, and they also can be used for the investment objectives; so about these things, whenever we see; and now let us clear that we are going to invest it in the market or the investor is ready to invest it in the market. If the investor is ready to invest it in the market, how this investment decision process goes on; what are those different steps; they should know before participating or before taking part in the investment process in the financial market.

If he see these things, basically first what we see or what generally the process this investor follow? The investors first follow or they should first know or they should have the knowledge about the fundamentals of the investment; there are various fundamentals of the investment involved in the investment process; one by one we will discuss that

one. Then, they should also see the risk return tradeoff; the risk return tradeoff in this sense that what kind of return he is expecting, how much risk he can take, and how this risk return tradeoff can be established, with what amount of the risk how much return he is expecting, how much risk he wants to minimize to get a certain amount of the return and as well as the investment decision process.

And finally, whenever he is sure that this much risk I am going to take and this much return I am going to expect. So, after knowing these things, the preliminary things, the fundamental concepts related to investment, once he is clear about those things what basically the investors should do they generally goes for the investment decision process. So, that is why we have categorized into three steps.

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Then coming back to one by one the different fundamentals of investment, what basically the fundamentals of investment is; always two fundamentals, two words always we use; one is your expected return and a realized return, and another one is the risk. What basically the expected return is, you take the example; basically, whenever we talked about the expected return, let the investor wants to participate in the investment decision making process or he wants to investment in a certain market, what basically he feels? He sees certain variable which are already available in the market, for example, you talk about market return; market return mean, what I mean that this is let the return what you are getting from BSC census, the return what you are getting from NSC nifty.

So, if those parameters are there, and let the investor feels that if I am going to invest let the company like reliance, then what will happen that in that situation, using the macroeconomic fundamentals, using the political stability, using the company fundamentals - fundamentals in the sense, I am referring to profit, maybe companies liquidity, companies return earnings, companies growth, and as well as the certain other variables let market to book ratio etcetera, etcetera; what in the further sessions we will discuss very elaborate manner.

So, after analyzing those fundamentals let the investor decides that if I will invest in this particular stock, which is issued by the reliance, I am going to expect a return of 20 percent; and there are various methods to calculate this, and those methods also we will discuss in the portfolio management process. So, whenever he decides that or he expects that I am going to get a return of 20 percent, that return basically is not the actual return what he is going get. It is the only his expectations that he is going to get a return of 20 percent in the future, if he will invest in the stock of reliance.

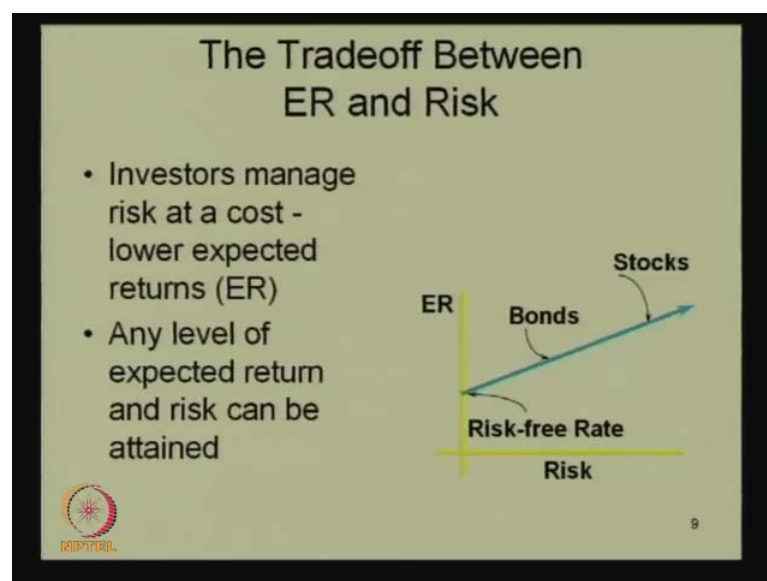
But actually, let in today he started the investment, and he is expecting that if I will invest in that particular stock for 7 days or 15 days or for 3 months, then I am going to get a return of 20 percent, but it is not necessary that these 20 percents can be realized after 3 months. So, what will happen that after 3 months, the 20 percent may be realized, the return may be more than 20 percent, the return may be less than 20 percent. So, the return what actually he will get after 3 months; whenever he will mature that particular investment, he will out of this particular investment process or he wants to if it is a stock, let he wants to sell that particular stock; and that particular time after 3 months, that time he will calculate the return, how much return exactly he has got in that particular time; let in that particular time, if he has got a return of 25 percent; that means, his return is more than what he was expecting, and if you get a return of 50 percent, maybe he got the less the return of what he was expecting before.

So, that is why there is a difference between the expected return and the actual return or the realized return what word we can use. So, that is why always the expected return is not exactly equal to the actual return. So, in this case, the investor should very much thorough about these two concepts. So, the financially knowledge about the expected return and the realized return always help the investor to decide whether to invest in that particular stock or not.

Then another concept the another fundamental which is related to the investment is risky; already we discussed little bit about this, about the risk tolerance limit, about the risk capacities of the investor, how much risk one investor can take, at what level he can go etcetera, etcetera; depending upon his various objectives, depending upon the nature of the investor, depending upon the characteristics, depending upon the financial position always his risk level varies. And whenever we see this risk factor basically, what exactly the how this risk is **how the risk is** defined. The risk is nothing but it is the possibility, **it is the** it is the probability that how the realized return will be different than the expected return; that means, he **he** will be satisfied if you get a return of 20 percent, but still there is one concept related to, there is always some kind of fearness in the mind of the investor that whether really I am going to get this 20 percent or not, if I take part in that particular investment process.

So in that time, what happens that he always prone certain amount of the risk, because of certain external factors including the macroeconomic conditions, and including the other things; so that is why the risk factor is something different, the risk is always there or the risk concept is always there in the decision making process. So, therefore, the return and within the return realized, and as well as expected, and the risk, these are the fundamental concepts, which are always related or which are always involved in the risk management or the investment management process.

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So, then if you see certain things, how this tradeoff between expected return and risk is made. Here, what generally investors always do? The investors manage risk at a cost lower expected return, any level of the expected return and risk can be attained. Here if you see this certain diagram, basically this x-axis represents risk, y-axis represents the expected return, and if you see this particular line, this line basically talks about the tradeoff between the expected return and the risk.

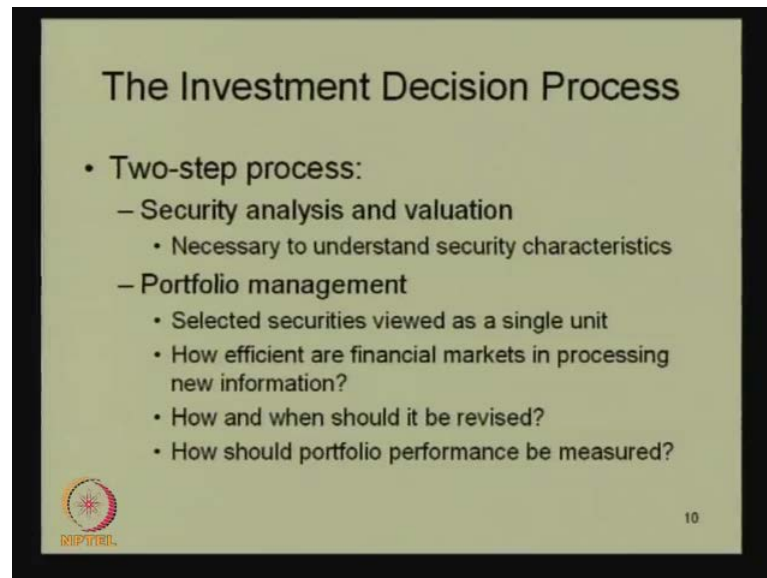
And here if you see the tradeoff, what basically it shows; it shows that there is a intercept here involved in this case, if you are comfortable with the regression, here always we will have one intercept, and this is a straight line, the straight line will have a slope. But here if you see that basically, if you do not take any risk, what basically you will get that is you are risk free rate; without any risk, if you are going to get certain return that is basically explained as a risk free rate. And in the financial market, the examples of the risk free rate are like the treasury bill rate; that means, whenever you started investing in a treasury bill rate, definitely that much amount of the return is assured, because it is guaranteed by the government; and once it is guaranteed by the government, and there is no risk involved in that case.

And in that case, minimum the 6 percent or 7 percent whatever the treasury bill rate or any other proxy whatever we can use, as a risk free rate that thing can be gained by the investor. He started investing without any risk he can get a return of 6 percent or 7 percent, which is defined as the risk free rate. So, that part is always there; so that is why we take it as a intercept in our diagram. But whenever you go on moving in that particular graph, if you observe that there various assets, generally we will take their position on the basis of risk and return involved in that.

I will take some example in this case, let you take the bonds, always we know that the bonds are less riskier than the stocks; the bonds are less riskier than the stocks, then the in the tradeoff process - the risk rate on tradeoff process, the bond will be there always below the stocks, the bond position will be always there below the stocks; that means the expected return of the bond is always lower than the expected return of the stock; and because of that the expected risk what you are going face from the bond that is always less than the expected risk what we are going to get, because of the stock investment in the stock. So, that is why like that if you put other assets, different financial assets in that, the risk return tradeoff is always varies, depending upon the various investment

objectives whatever we have or the different investment alternatives whatever we have. So, this is basically the tradeoff between expected return and the risk.

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The Investment Decision Process

- Two-step process:
 - Security analysis and valuation
 - Necessary to understand security characteristics
 - Portfolio management
 - Selected securities viewed as a single unit
 - How efficient are financial markets in processing new information?
 - How and when should it be revised?
 - How should portfolio performance be measured?

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Now, **the** in the final step, what in the beginning, we have started that the investment decision process. So, in the investment decision process basically, we know these are two steps in that particular process; one process is basically we always say that this is security analysis, and the valuation of this particular asset, and number two is a portfolio management. In these two process, what basically happens? Whenever we analyze the individual security or individual stock, individual bond or any of the financial assets or any of the physical assets; in that process or in that step what basically the investors do? The investors always analyze, investors always try to understand the characteristics of that particular security.

Characteristics in the sense, whenever we do the security analysis, already we have taken the example of the reliance; but how he has chosen that particular stock like reliance. So, he must have analyzed that certain things, then he must have reach that; and in the portfolio management process basically, it is the combination of the securities, but before going to discuss about that portfolio management process, let us briefly explain what exactly this security analysis is? Definitely the curiosity will be there in your mind, because in the beginning what I talked about that security analysis and portfolio management is nothing but the different, it is a different process of the investment. So, in

that case, what exactly the security analysis is here in the security analysis, always we analyze one individual stock.

What basically we analyze in this case? In a textbook way, if you talk, then the security analysis basically deals with certain things; what are those certain things? The certain things are first of all, we should analyze about a particular economy. So, there are basically two approaches in the security analysis; one is top down approach and another one is the bottom up approach. So, in the top down approach, what basically the investors do? The investors first analyze the market, analyze the macroeconomic situation; once they will see the macroeconomic situation, they will analyze the market, they will see the political situation, then next thing what they generally do; after analyzing let they found that they now the macroeconomic situation is very much conducive to invest in the market.

So, then what they do? They analyze the different industries; that means, which industry has more potential to maximize the return. So, after analyzing the industry, let some of the industries they have identified, let out of them was one of the industry was the manufacturing industry. Let after analyzing the manufacturing industries, they found Reliance has the power; Reliance has the potential, which can maximize my return; how they know? So, after industrial analysis, they have to do the company analysis.

So, what generally in this process they do? First they analyze the market or the macroeconomic scenario, macroeconomic conditions, macroeconomic situations, then after knowing about the market, they go to analyze the different type of industry; and from the industry, once they are clear that okay, now I am this particular industry has the potential; if I invest that particular industry, I can maximize my the return, then they analyze certain companies; and after analyzing the company fundamentals, already I talked about company fundamentals like profit, like liquidity, like a growth, like your financing, all those things whenever he will analyze.

After analyzing certain those fundamental things of the company finally, they have found that the Reliance is the better candidate or better company on which I if I will invest, I can maximize my return. So, then what generally happens in this case that they first go from broader prospective, the narrow prospective, after analyzing the market, then industry, then company, they have concluded that I am going to invest in this particular

stock. And let them choose the stock, but how much return they are expecting; how much return they can get, if they will invest in that stock for that, they generally use these different valuation techniques, through which they can say that the expected return of this particular stock can be this much; whether it will be realized or not that is a separate story, but they can say that this much return I can get out of this. So, this is basically the security analysis in the top down approach.

In the bottom up approach, what they do? First they analyze the company, let the company have the potential, then they see that the company belongs to which industry? Even if the company has the potential whether the industry has the potential or not; and after analyzing the industry, they go for the macroeconomic situation, macroeconomic condition. They want to analyze the macroeconomic economic condition in the last. So, this particular method is called the bottom up approach, from the bottom to top. So, that is a pyramidal structure in that case; either you go from top to bottom or you can go from **top** bottom to top; and through which they can decide in which security is a better candidate for investment in that case

Second step already I told that the subtitle of this particular course is the portfolio management, which is the step of the investment process, decision making process. So, in that case actually in the portfolio means what? The portfolio is basically the combination of the different securities; security means what I feel, the security means basically we talk about any of the assets, it means the equity or the stocks, it may be bonds, it may be the derivatives instruments, it may be the real assets, it may be the awesome feature, there are enough alternatives whatever we have. It also includes the risk free assets whatever we have in the market. So, in that case what generally the investors do? They always try to invest in those assets in a combined form.

So, they can make a portfolio by taking only stocks, they can make a portfolio by combination of the stocks, bonds, risk free rate etcetera; and as well as also they can take some of the real assets, and they can also make this investment only on the bonds, they can also make investment only on the real assets of the real or the housing or real estate kind of thing. So, in that case what generally we see basically, the portfolio management is nothing but the combinations of the different securities, but why they do it this combination, they can invest in the individual stocks. They do it this combination, because they can minimize the risk in certain situations, if they will have the basket of

the securities, that means, let one stock is not performing, then another stock may perform or one type of asset is not performing, may be another type of asset can perform. So, in that case they can neutralize their losses with their extra gains, what they are going to get in another asset. So, in that case the investor should take a very thorough step, the investor should take a very cautionary step to choose those assets, which should be consider in the portfolio, which is a very important aspect of the security analysis and the portfolio management objects.

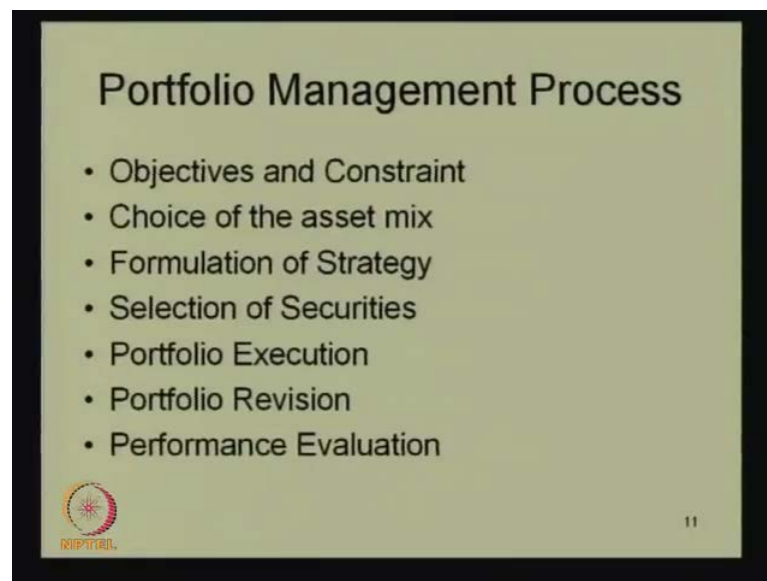
The portfolio management is basically talks about how to combine; which are the assets should be included in my portfolio; how much assets should be included in my portfolio; those answers generally answered by the portfolio management theories. There are certain theories in various lessons, we will discuss those things, but if you see this is basically the theme of the portfolio management. So, after making before make or you can say that whenever they make this portfolio management or they do this portfolio construction, what generally they should see? They should see this market scenario market scenario in the sense the market situation, what I refer - the efficiency about the market; the efficiency of the market should be thoroughly analyzed, thoroughly examined before making this portfolio; why it is so? It is so, because the portfolio construction basically varies from efficiency of the one point of one form of efficiency to another form of efficiency.

There are different forms of efficiency that also we will discuss; one is your weak form of efficiencies, one is strong form of efficiency, strong from of efficiency. So, the investor should analyze the market; the market is efficient in the weak form or the market is efficient in the semi strong form or the market is efficient in a strong form. So, in that basis, they can decide which portfolio is better and how much stocks or how much assets are required to maximize the return, if I can make this portfolio by taking those assets. Then finally, another thing once you have made portfolio, which we call it the optimal portfolio, which can minimize the risk with a given amount of the return or they can maximize the return with a given amount of the risk.

So, after analyzing these things, what the investor basically do? They see is there any kind of fault? So, if there is a fault, they can go for provisioning it and that is why there is a another step in the portfolio management process that we call it portfolio provisioning. So, after doing this portfolio provisioning, what generally they do? Finally,

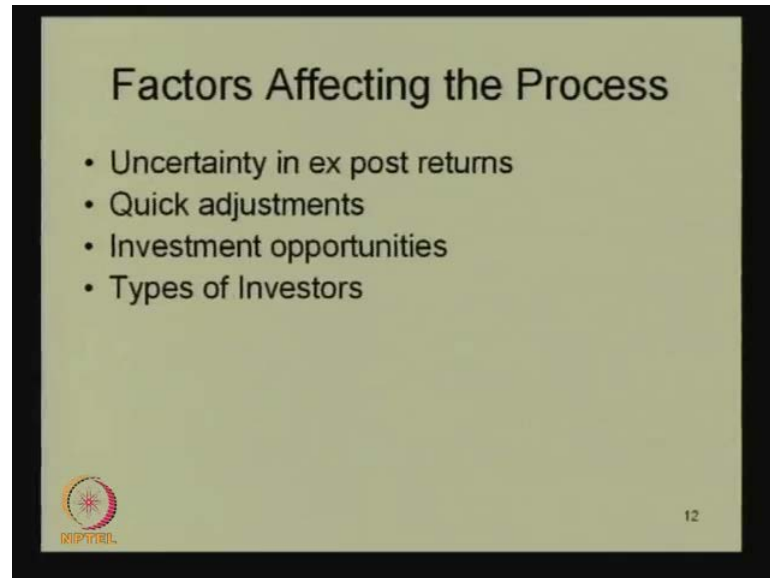
let there is some mistakes, there is some kind of a assets, stocks have been included or assets have been included in their portfolio, they may remove it; and after removing it, what generally they can do? They can reconstruct the portfolio; after the reconstruction of the portfolio they generally finally, go for performing the performance of the portfolio or whether this particular performance can be how much return I can get, if I go ahead with that portfolio or we can invest in that particular portfolio.

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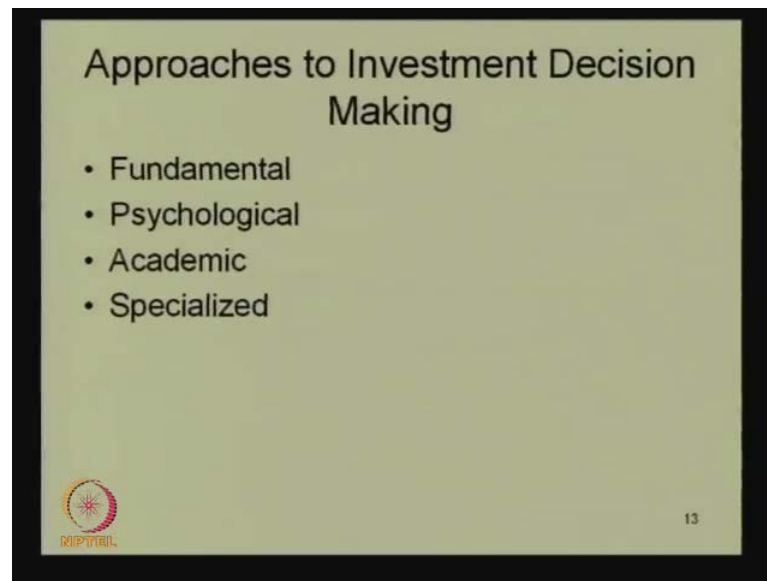
So, that is why in the portfolio management process, already I told that we have or now we can say that the in the portfolio management process, we have objectives, we have constant, we have the choice of the asset mix, which are the asset should be included in the portfolio, which are the asset should not be included in the portfolio. Then the formulation of the strategy, which strategy we should added, whether we have aggressive investor or passive investor accordingly they can decide that which strategy they should add up. Then they can decide the selection of the securities on the basis of the risk return profile then they can go for the portfolio execution. And after making the portfolio, when they find that there is something problem, there is some kind of abstracts stocks or abstract securities have been included, then they can go for portfolio revisioning; and after making the portfolio revisioning, they can finally go for the performance evaluation.

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There are certain ways through which we can measure the performance of the portfolio, how this portfolio is performing, and how this return we can get out of this. So, which are the basically the factors, which are responsible in this process; already we discussed a lot about this uncertainty, due to the uncertainty in the export returns, what you are get. Then finally, the adjustment; adjustment in the sense, I refer if there is a change in the market situation, if the degree of efficiency of the market changes, how the different variables are quickly adjusting to each other; if you are market is quietly perfect, then they will adjust immediately; if the market is not perfect, then there is a time lag there is uncertain kind of inefficiency, that is why it will take some time. Then they will have the investment opportunities have means what are those opportunities are available in that type of market. Then finally, the types of the investor the types of investor already we have discussed; the types of investors generally defined on the basis of their objective, on the basis of their risk return profile.

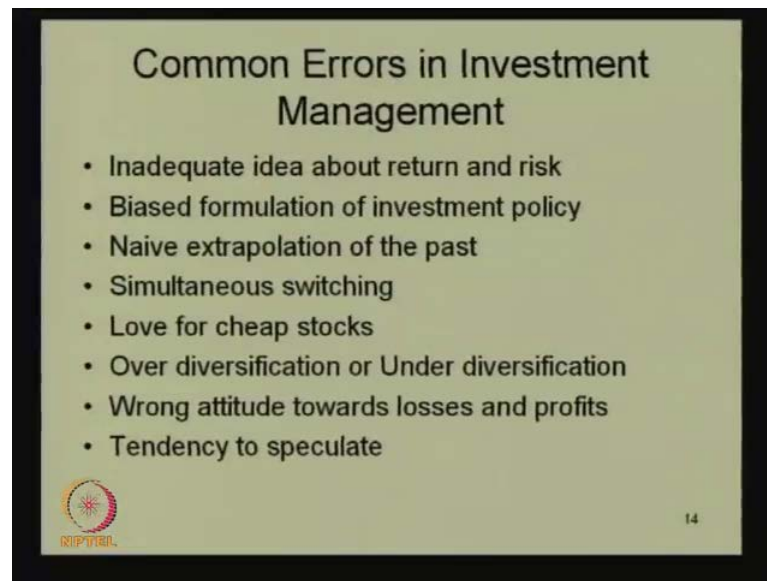
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So, that is why whenever we use this portfolio management process or investment management process, there are various approaches we can use. The approaches are basically it can be a psychological approach or we can say it is very much psychological nature, we feel that I should invest, I should **I should** invest in that particular stock or my sentiment is going towards that investment that is why I should choose that particular stock, and it also can be academic that means, we can say there are certain factors certain variables we should take, we have to analyze it we should see how much return which stock is giving; on the basis of that we can make this particular analysis, and as well as also we can analyze the fundamental factors like company fundamentals and macroeconomic variables, like the security analysis what we do; that process also we can use and finally, specialized process or somehow we can say that eclectic process.

This eclectic process or the specialized process is nothing but this is basically in the mind is - the investor's mind is presumed that I am going to invest in that particular type of assets; or I am very much sure that if I want to invest in this particular stock or in this particular category of stock, on which it will fulfill my objectives or I can maximize my return in the future. So, like some of the investors are the value investors, some of the investors are the growth investors. So, those things we will discuss one by one further.

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So, finally, what generally we see that in general, what mistakes people do? The mistakes are sometimes they do not have that much idea, maybe because of lack of knowledge about this particular asset; they can make the biased formulation of investment policy; sometimes they **they** only extrapolate the data whatever data they have from the past, but sometimes they give the misleading results, then the simultaneous switching of the **the** various variables, which are responsible for this particular investment process; sometimes some of the investors are very much biased for the cheap stocks that also creates the problem; sometimes whenever they go for making the portfolio, they do over diversification or the sometimes they do under diversification by that they face the race; and sometimes they are very much inclined very much sensitive towards the loss and profit, which should not happen, because to read maximize the return you have to stay certain period in the market; otherwise it is very **very** difficult to maximize the return in that particular situation.

And most of the time the means they are very much keen or there are very much they were impatient about the speculate of the market, because there are market dynamics sometimes is not in the hand, man's hand basically there are certain external factors which plays the role. But still if too much speculation sometimes creates the problem in that particular time. If the too much speculation you make, then maybe your market is not conducive with the speculation that also creates the problem.

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So, that is why we should think about some of the innovation in the investment process; the innovations can be made you can think in the contrarian way, you should have lot of patience, you should be very composed, you should be very much analytical before analyzing, you should have very much flexibility, you should **should** not be biased towards that particular stock, you should not be biased towards that particular industry, unless the investor cannot maximize the return

Then finally, you should be very decisive; decisive in the sense what I mean what basically your objective is; whether really you want to minimize the return or you want to maximize the risk either you want to minimize the risk or you want to maximize the return. So, those objective from the beginning should be very much clear; if you want to maximize return, then your strategy, your category, yours other thing should be different than the if your objective is to minimize the risk. So, this is basically about the investment concept, investment philosophy, investment objectives, and which gives the broader idea to take part in the investment process in the financial market.