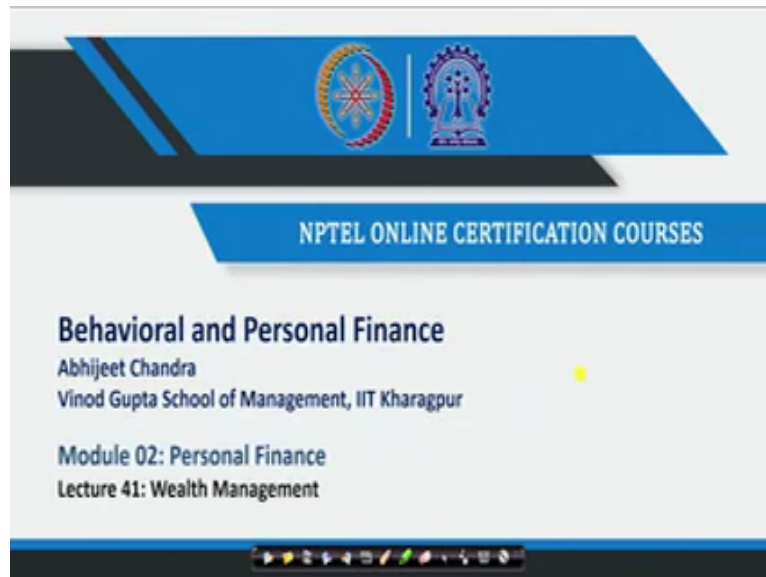


**Behavioral and Personal Finance**  
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**Module – 02**  
**Personal Finance**  
**Lecture – 41**  
**Wealth Management**

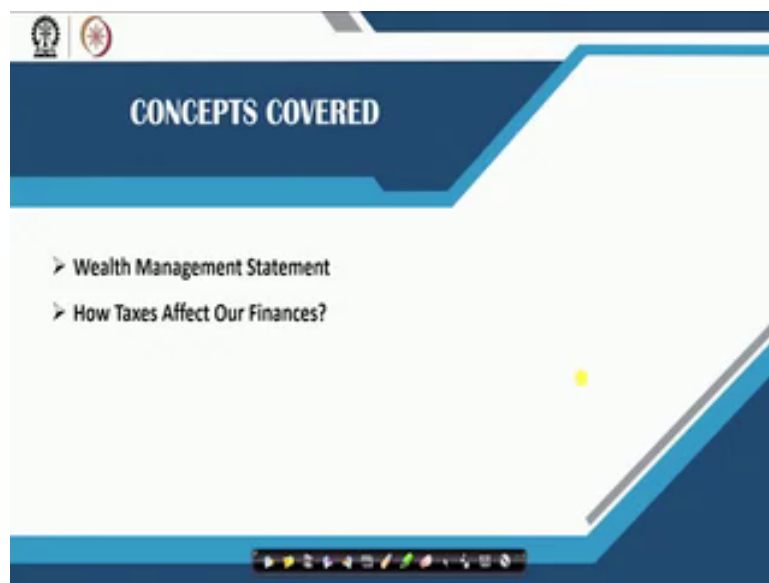
Hello. Welcome back to this session of Wealth Management for the course Behavioral and Personal Finance. In past session we have discussed about structured finance and the instrument of a structured finance for the business and investors. Basically we discussed previously the tools and techniques of securitization and the process through which business organizations raise funds with the help of securitized or financial engineering tools, where investors can also participate and they can invest in alternative sources of investment avenues.

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This session basically sums up most of the discussions that we have had so far and to prepare a summary where you should always consider the factors before you make a financial decision. So, basically we will wrap up this session with a discussion on wealth management and also discuss how taxes can influence our financial decisions and actually influence our finances. So, here the topics that we are going to discuss about the statement for wealth management and we will also look at the tax affect on our returns as well as finances.

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So, when we talk about wealth management, basically we consider in our mind, the money that we have for investment that money can be of our own or of our client. So, if we are acting as investment advisor, we would be managing the money on behalf of our clients. And if we are taking decisions for our self, we will be managing our own money and there by concerned about the well financial well being of ourselves.

So, to understand the wealth management or personal finance in a whole some picture, we need to keep in mind the wealth management statement which captures almost every aspect of financial decision making and wealth management for any investor. And that investor could be you, me or any other of our clients.

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**Wealth Management**  
Policy Statement

1. Investment policy statement
2. Brief client description
3. Client goals
4. Investment objectives
  - i. Return objective
  - ii. Risk objective
5. Investment constraints
  - i. Time horizon
  - ii. Tax consideration
  - iii. Liquidity needs (e.g., cash flow management)
  - iv. Legal and regulatory concerns

Handwritten annotations:  
- 'Investor's description' points to item 2.  
- 'ST/LT' points to item 3.  
- 'Sociological factors', 'Psychological issues', and 'Behavioral Finance' are grouped together and point to a tree diagram in the background.

So, basically when we talk about wealth management statement, we start with the very fundamental idea about the profiling of our investment policy statement. So, we try to understand the investment policy statement in general and we begin with the profiling of our client. So, if we are managing our own finances, we need to understand what is the profile of ourselves as investor.

And if we are managing the money for our clients, we need to understand what the clients profile seems to be. Now a brief client description or the invested description in general would

help us to understand what should be the decision criteria, what should be the goal and what should be the mechanism to achieve that particular goal. So, in order to profile client or investors description, we also need to understand his or her demographics and other characteristics. This is where the social and psychological factors actually come into the picture.

So, when we try to understand client description or in general investor the investors description if we are managing our own money. So, basically we need to keep in mind the following things one is sociological issues or sociological factors and demographic factors. So, basically in demographic factors we need to understand the age, gender, education, income and other factors that might be responsible for that persons profile or the investment statement.

And in sociological factors we can see what are the assets and liability that the person holds as a fraction of the individual or the household asset and liability, what are the cultural backgrounds of the individual or the investor, what are the factors that might be responsible for the behavior of a certain type at the same time we also need to understand the psychology behind a particular clients profile.

So, psychological issues where we need to understand the profile of the investor and that is where behavioral finance actually comes into the picture. We have already discussed about factors that might affect individuals behavior in terms of economic decision making such as risk aversion, overconfidence and other factors coming from the research or in psychology and economic decision making. So, for example, a person of young age with stable income might be able to take more risk compare to a person who is on the verge of retiring with no immediate income or stable income and for that person the risk taking will be a very difficult task.

So, we need to understand the demographic sociological and psychological aspects of individual profiling before we understand the client goals. So, client goals could be defined in terms of the achievement of goals for short term and long term. For example, the individual

might be interested in earning lot of money in short terms because he will be having more liabilities to meet.

For example a young person who has just married will be requiring more money to manage the household rather than a person who is single or a person who is widow and so, on. So, we need to understand the client profile accordingly we have to define the client goal. For example, a young person who might be just entering the job market after graduation would want to go for another higher degree after few years and that would be his one of the goals to achieve through financial planning or financial investment.

So, client goals help us define the short term and long term goals in terms of achieving the financial objectives and then we define the investment objective where we try to understand the return and risk characteristic of the person whether he or she would like to take more risk or less risk compare to the general investors or on average investor and based on that return and risk objective, we can define other factors in terms of where to invest the money and for how long we can be advising to invest that person.

Now, once we define investment objectives in terms of risk and return, we can move on to discuss investment constraint. Because every objective should be optimized or achieved with the help of some objective function, but there might be certain constraint. For example, a person who is just starting the job might be interested in going for a second degree or a higher degree after 2 years. So, the investment horizon after his first job would be only 2 years because in 2 years he need to save sufficient amount of money so, that he can go for higher degree after 2 years of job.

Similarly, tax consideration is one of the constraint, some people invest for tax saving some other people save for some other objectives. So, if individual is saving for tax or investing or looking for investment avenues for tax consideration that has to be kept in mind, we will discuss how taxes can influence our finances. Another objective or constraint basically is the liquidity needs, as we understand the liquidity requirements for different types of investors at

different point of time might be varying and that is why the cash flow management for investor would become more critical.

So, if you recall we have already discussed about personal balance sheet and cash flow statement, where you know that the person need to record all the inflows and outflows of cash from the past as well as the expected cash inflows and cash out flows to understand and relate it to the balance sheet that he or she would maintain. So, liquidity needs should be defined and identified as well as properly related to the assets and liabilities as of the individual for which we are managing the investment.

It goes without saying that legal and regulatory norms has to be followed and the concern related to legal and regulatory obligations relate of an individual or a household is to be taken care of when we define the investment objective for our client or for our self.

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**Wealth Management**  
Policy Statement (cont.)

6. Strategic asset allocation
  - i. Asset class constraints e.g. Equity, Bonds, Cash, Real estate  
Gold
  - ii. Investment constraints (e.g., margin restrictions)
  - iii. Investment strategies and styles
7. Implementation, monitoring, and review
  - i. Performance measures and rebalancing guidelines
  - ii. Review schedule
8. Risk management and insurance
  - i. Longevity risk (i.e., the risk of living too long)
  - ii. Mortality risk (i.e., the risk of dying too short)
  - iii. Unforeseen factors (medical and health care, costly illness, wills)

After understanding the investment constraint, we can decide on the asset location strategies. We have already discussed that there are multiple tools through which we can allocate our resources and one of the tools is known as an asset allocation strategy with the help of portfolio optimization.

Where if we have identified a set of assets, where we would like to invest we can optimize the weights with the given constraint of returned risk and other constraint as such and then we can allot the amount of money as optimized in different type of assets. Here we know that strategic allocation focuses on three aspects first is asset class, second is investment constraint and third is investment strategy and style.

So, asset class basically explains the asset allocation strategy across class for example you would like to invest in equity or bonds which are basically fixed income or you want to keep a some amount of cash real estate or any other asset that you would like to invest in. Investment constraint refers to the margin restrictions basically in each of the asset class when you are investing or trading you need to maintain certain amount of money or liquidity as well as the margin in order to meet the transactions and finally, the investment strategies and styles are determined by the investment advisor in order to achieve the objective of strategic asset allocation.

Next comes the implementation monitoring and review. Basically its about performance measurement and rebalancing guidelines. So, after every certain period which is basically known as review schedule or rebalancing schedule, you need to measure the performance and see which type of assets are doing well which type of assets are not doing well and accordingly you rebalance your portfolio.

So, you need to advise your clients or you need to do it for yourself in terms of evaluating the performance of different investment. For example, if you have invested in equity, bonds and gold you need to see which market or which investment is doing better and if you want you can increase your share or share of investment or a proportion of investment in that particular

asset and if certain asset class is not doing well in terms of return and the risk assumed then you can reduce your exposure to that particular asset class.

So, this rebalancing basically indicates to the changing weights or changing proportion of investment across different asset classes. In the process you need to understand the risk management and insurance because there are different types of risk that an individual or an investor might be taking. So, most of the risk are covered in strategic asset allocation category only where you need to consider a risk related to a loss of asset or loss of loss of value of assets and the risk related to interest rate or market risk or any other risk.

Mainly along with those type of risk you need to consider the longevity, mortality and unforeseen factors as risk. So, basically the risk of living too long for example, if you have invested only for 20 years and apparently you start living or you hope happen to live for more than 40 years, your investment might not be sufficient to support you for that long of life. Similarly or the opposite situation is mortality risk where if you invest for 50 years, but apparently the life of that investor is not so, long. So, then the investment does not matter much.

So, these type of risk need to be considered before we plan for our investments and financial resources. Along with that there are unforeseen factors such as certain healthcare bills or too costly illness wills and other planning that we do for our next generation. So, these factors have to be considered in a wealth management policy statement. Basically when you are done with policy statement you need to also see how investment in different assets and different asset classes are actually doing in terms of financial performance and the risk returned combination and then we need to also incorporate the taxes that we are likely to pay.

Basically we have already discussed and understood that taxes affect our decision to large extent.

And when we have to incorporate taxes in our financial planning we need to see what is the impact or the net impact of taxes on our final return that we are getting. So, many times for investors who are actually investing in a wide class of assets such as equity debt, fixed deposit,



gold, real estate and other markets they will be getting income from different type of assets investment and these different types of investment would require them to pay taxes at different rates.

So, this is known as blended tax taxing environment and for this type of environment maybe we need to take an example here to understand how these this type of environment of blended tax might actually influence the net return that an investor is making.

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**Wealth Management and Taxes**

**Blended tax environment**

Ms. Sharma has a balanced portfolio of stocks and bonds. At the beginning of the year, her portfolio had a market value of Rs. 100,000. By the end of the year, the portfolio is worth Rs. 108,000 before any annual taxes have been paid, and there have been no contributions or withdrawals. Interest of Rs. 400 and dividends of Rs.2000 were reinvested into this portfolio. During the year, Ms Sharma had Rs. 3600 of realized long-term capital gains. These proceeds were again reinvested into the portfolio.

What percentage of Ms Sharma's return is in the form of:

1. Interest?
2. Dividend?
3. Realized capital gains?
4. Deferred capital gains?

*Handwritten annotations:*

- $t_0$  and 100,000
- $t_1$ , 108,000
- 400 (Int), 2000 (Dividend)
- 3600 (LTCG), 2000 (unrealized)

So, here we have taken a hypothetical example of Miss Sharma, she has a balanced portfolio of stocks and bonds. And at the beginning of the year her portfolio had a market value of 100,000 rupees.

So, she had a portfolio of 100,000 rupees and by in the beginning of the year and by the end of the year the portfolio is worth 100,000 a 108,000 of value before taxes have been paid. So, before taxes have been paid the money the value of that portfolio of 100,000 would become 108,000 and there have been no contributions or withdrawal during the meantime.

The break off of the income or the growth of that portfolio is basically interest of 400 dividend of 2000; these are reinvested and during that particular year 3600 of realized long term capital gain have been received by Miss Sharma these proceeds were also reinvested.

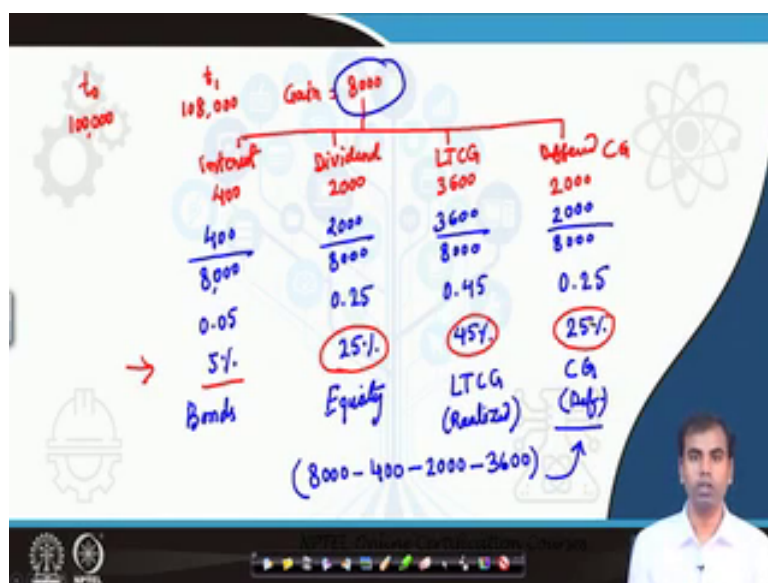
So, basically in the beginning of the year you had 100,000 of value of your portfolio and it in at the end of the year you actually have 108,000 of value. Now out of this 8,000 you have received 4,000 as interest, 2,000 as dividend which is basically coming from the stock investment and 3,600 as long term capital gains which is basically gains arising out of sale of assets after 1 year.

So, suppose you buy a land or a piece of property in year 0 and you sell it after 1 year which is basically in year 2 or year 3 and the gain that you have made out of this transaction is known as long term capital gains. We have already discussed about the basics of long term and short term capital gains. So, this long term capital gain is 3600. So, remaining if you see there is a total gain that have been explicitly mentioned is 400 plus 2000 plus 3600.

So, basically 6000 of explicit gain and then remaining 2000 of unrealized gain is actually included in the investment value of 108,000.

Now, the question here is what percentage of Misses Sharma's return is in the form of interest dividend, realized capital gains and unrealized or deferred capital gains? To understand this in a very systematic way we can simply do a basic calculation.

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We know that the value of portfolio is as on day 0 is 100,000 value of portfolio at the end of period is 108,000 which means there is net gain of 8,000 on that investment.

So, the gain that is realized and unrealized on that portfolio is 8,000 out of which interest is 4,000 rupees dividend is 2,000 long term capital gain realized is 3,600 and deferred capital gain is 2,000. Now the question is what is what proportion of these gains are basically are coming for Misses Sharma? So, we know that 400 as a fraction of 8,000 of total gain similarly 2,000 as a fraction of 8,000 of total gain, 3,600 as a fraction of total gain of 8,000 and similarly 2,000 of gain on deferred capital gains as a fraction of 8,000 of total gain.

So, this is basically 0.05 percent, this is 0.25, this is 0.45 and this is 0.25. So, basically this is 5 percent contribution to the total gain, this is 25 percent of contribution to total gain, this is 45 percent of contribution to total gain and this is 25 percent of contribution to total gain. So, as

total gain stands out to be 8,000 rupees, 5 percent is coming from investment in bonds, 25 percent is coming from investment in equity, 45 percent is coming from long term capital gains realized and 25 percent is coming from capital gain deferred.

So, this is how the breakup of gains have been mentioned. Now this unrealized gain is actually coming as a function of total gains coming from. So, let us say 8,000 minus 4,400 of interest, minus 2,000 of dividend minus 3,600 of capital gain and this is actually giving us the gain that is deferred of 2,000 rupees of value.

Now, this is simple we know that we can find the breakup of total gain from coming out of different investment and based on that we can decide. So, basically the implication for any investor is to know the contribution of each investment in the total gain and if you analyze it for period after period that is for year after year, you can see that for certain year you are getting more income or more proportion of total income from one type of asset or the other type of asset and based on that, you can decide whether to continue in that investment avenue or increase or decrease the proportion.

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**Wealth Management and Taxes**

**Blended tax environment**

Ms. Sharma has a balanced portfolio of stocks and bonds. At the beginning of the year, her portfolio had a market value of Rs. 100,000. By the end of the year, the portfolio is worth Rs. 108,000 before any annual taxes have been paid, and there have been no contributions or withdrawals. Interest of Rs. 400 and dividends of Rs. 2,000 were reinvested into this portfolio. During the year, Ms Sharma had Rs. 3,600 of realized long-term capital gains. These proceeds were again reinvested into the portfolio.

1. What is the annual return after realized taxes?
2. Assuming taxes are paid out of the investment account, what is the balance in the account at the end of the first year?

A related example would be of the same situation where the lady has the same a 108,000 of portfolio value out of which 400 is coming from interest 2,000 from dividend 3,600 from long term realized capital gains. Now the question is what is the annual return after realized taxes and assuming tax rate taxes are paid out of the investment account what is the balance at the end of the year.

Now, to explain this example, we need to find the annual return after realized taxes. So, we let us try to do this here.

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$100,000 \rightarrow 108,000$   
 $r = \text{Return} = \frac{108,000 - 100,000}{100,000} = 8\%$   
 $r^* = r(1 - p_i t_i - P_d t_d - P_c t_{cg})$   
 $= 8\% (1 - (0.05 \times 10) - (25 \times 0) - (45 \times 15))$   
 $t_i = 10\%$   
 $t_d = \text{NIL}$   
 $t_{cg} = 15\%$   
 $= 8\% \times (1 - 0.005 - 0 - 0.675)$   
 $= 8\% \times (1 - 0.675)$   
 $= 8\% \times 0.325 = 2.6\%$   
 $(t_i = 40) + (t_d = 0) + (t_{cg} = 540) = 580 \text{ (tax paid)}$   
 $108,000 - 580 = 107,420$

Unrealized gain of 2000 ~ Not taxed

So, we know that from 100,000 the asset has become the investment portfolio has become 108,000. So, return as percentage would be 108,000 minus 100,000 divided by 100,000. So, you get 8 percent of return before you pay any taxes. Now the taxes are to be paid on different type of investment.

So, return with revise structured that is after paying taxes is basically return which is given here and 1 minus gain coming from interest, taxes paid on interest, gain or profit coming from dividend taxes paid on dividend minus gain coming from capital gains taxes paid on capital gains because unrealized assets or unrealized gains which is basically 2000 rupees not taxed because you have not realized it. So, you will not be taxed on that income.

So, this is the formula. So, we know that 8 percent is our return 1 minus 0.05 into tax on interest income in India is assumed to be 10 percent. So, let us assume that tax on interest is

10 percent, tax on dividend is nil. In India we do not have to pay taxes on dividends unless it is exceeding 10 lakh rupees if it is exceeding 10 lakh rupees then we have to pay dividend tax and then taxes on capital gains is 15 percent for short term capital gains and similarly 20 percent for 20 percent for short term capital gains.

Now, this is 10 percent minus 25 percent was the profit coming from income. So, tax is nil 0 minus 45 percent is coming from capital gain and the tax rate is 15 percent. So, now, we can calculate these this value. So, this value is apparently 8 percent into 1 minus 0.005 minus this becomes 0 minus 0.0675 which happens to be 8 percent into zero point or other its 1 minus 0.0725.

So, ultimately you have 8 percent into 9.275 that happens to be 7.42 percent. So, ultimately you were earning 8 percent of return, but actually after paying tax you are having only 7.42 percent of return. Now if you try to understand the tax implication after paying the tax. So, you know that you have to pay taxes on income. So, on taxes on interest will be 10 percent. So, of 400 income 40 rupees plus taxes on dividend nil plus taxes on capital gain it was 15 percent of 3600.

So, it is 540. So, total taxes you need to pay is 580 you had a balance of 108,000 out of which you paid out 580 rupees of tax. So, at the end of the first year your balance is 107,420. So, this is your net balance in the account where you have kept all the investment portfolio. This is how we can calculate the effect of taxes in a blended tax environment where your investment are distributed across different assets and you can actually see if that net tax after tax in return that we are making is competitive enough or reasonably good for your investment objectives.

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**Wealth Management and Taxes**

**Tax Loss Harvesting**

Mohit has a Rs.1 million portfolio held in a taxable account. The end of the 2020 tax year is approaching, and Mohit has recognized Rs.100,000 worth of capital gains. His portfolio has securities that have experienced Rs.60,000 of losses. These securities have not yet been sold and their losses are therefore unrecognized. Mohit could sell these securities and replace them with similar securities expected to earn identical returns. The central tax rate on LTCG is 20%.

1. Without making any further transactions, how much tax does Mohit owe this year?

2. How much tax will Mohit owe this year if he sells the securities with the Rs.60,000 loss?

3. How much tax will Mohit save this year if he sells the securities with the Rs.60,000 loss?

$100,000 \times 20\% = ₹ 20,000$

$(100,000 - 60,000) \times 20\% = 8,000/-$

**Savings = 20,000 - 8,000 = ₹ 12,000**

A similar example we can take in a different context where the tax loss harvesting can be understood. So, suppose that there is one person who has one million of portfolio held in a taxable account the end of that 20 tax year is approaching and that person realize that 100,000 worth of capital gain is due. Now his portfolio has security that have experienced 60,000 of loss. So, of this 100,000 of capital gains 60,000 has been considered as losses and this has these securities have not been sold. So, their losses are unrecognized.

So, unrecognized or unrealized losses will not be considered for taxation purposes. So, he has a choice to sell all these security and replace them with similar securities were they can earn identical return, capital gain tax is 20 percent. Now if we assume that there is no further transaction how much tax does Mohit owe for this particular year? So, if we know that there



is no transaction the tax that Mohit will be earning or sorry Mohit will be owing is considered to be. So, 100,000 of capital gains into 20 percent of tax which is basically 20,000.

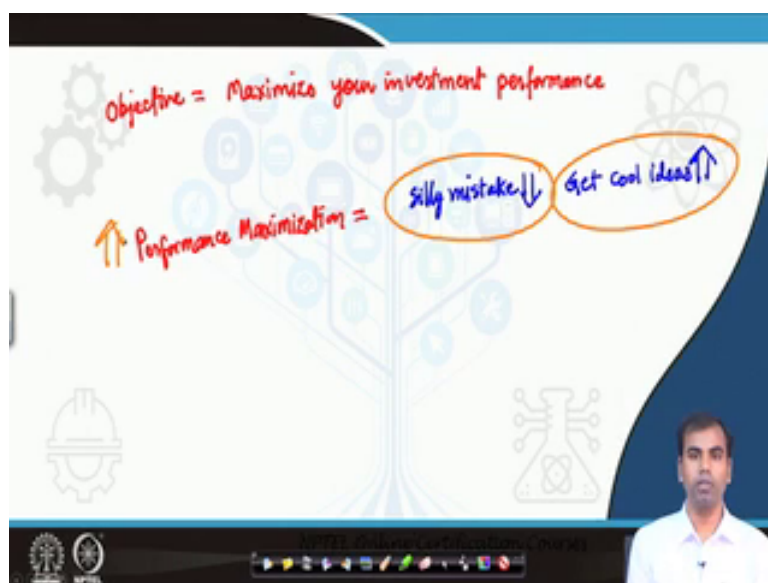
So, 20,000 of money will be accruing as tax liability for Mohit. Second scenario says if Mohit sells those security how much money or how much tax will be owing to the authorities? So, if Mohit sells the securities then in that case 100,000 of capital gains minus tax loss harvesting of 60,000 basically the loss on account of sale of assets. So, if he sale the assets or securities and adjust for 60,000 of losses his net gain will be 40,000 on which he has to pay 20 percent of tax.

So, his tax liability will be only 8,000 rupees. So, thereby though third point says that if Mohit does. So, how much money will Mohit save? So, basically savings will be 20,000 of tax if he did not choose to sale those security minus 8,000 of tax if he sold those security. So, tax saving will be 12,000 rupees for that particular year.

So, this is how you can actually identify and recognize the losses on securities that you are holding, sell those asset do the tax loss harvesting and save some amount of money in the process. This is meant for managing your wealth in a more suitable way. Now having understood all these things to conclude this session I would like to make certain observation so, far that we have understood the behavioral finance and behavioral economic concept in financial decision making.

We try to understand with the help of different examples and illustrations as well as some theoretical explanation of different finance and economic theories that how financial decision making can lead us to secure a better financial future and manage our resources and finances in a better way.

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So, ultimately the lesson that will be given at the end of the session is to ensure that as an investor you need to have one objective. And that objective should be maximize your maximize your investment performance basically that is the objective of any investor.

So, maximize your investor investment performance in terms of financial performance of the investment that you have met and performance can be maximized. So, basically performance maximization if it is one of the objective that can be achieved through two approaches or two or tools and these tools are you need to stop making silly mistakes. So, for example, do not put your money in assets, which are going down or do not keep the assets that are losing value and thereby make some silly mistakes.

So, basically try to reduce the silly mistakes and at the same time get some cool ideas which are coming from different sources readings and other resources that you can refer to. So, get

cool ideas and these two things will be clubbed together to help you achieve your performance in a better way.

So, with this I conclude this session as well as the course that we have been discussing for past 8 weeks. We hope that you have learnt or listen or too. And try to implement this in the financial management and the planning of finance resources for yourself as well as your client. If you have any and try to achieve the financial objectives and have a better financially secured future.

Thank you very much.