Behavioral and Personal Finance
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Module - 01
Behavioral Economics and Finance
Lecture - 13
Beliefs, Biases and Heuristics (Contd.)

Hi there, welcome back to the course Behavioral and Personal Finance. So, far we have discussed about this expected utility theory, its improvisation in terms of the prospect theory and its applications. We have also touched upon several heuristics and biases that might be affecting the decision making process and how these affect biases and heuristics affect our financial decision making.

In today's session we will discuss about behavioral investing approaches and loss aversion that might be the key input for any behavioral decision making processes in terms of financial decision making.

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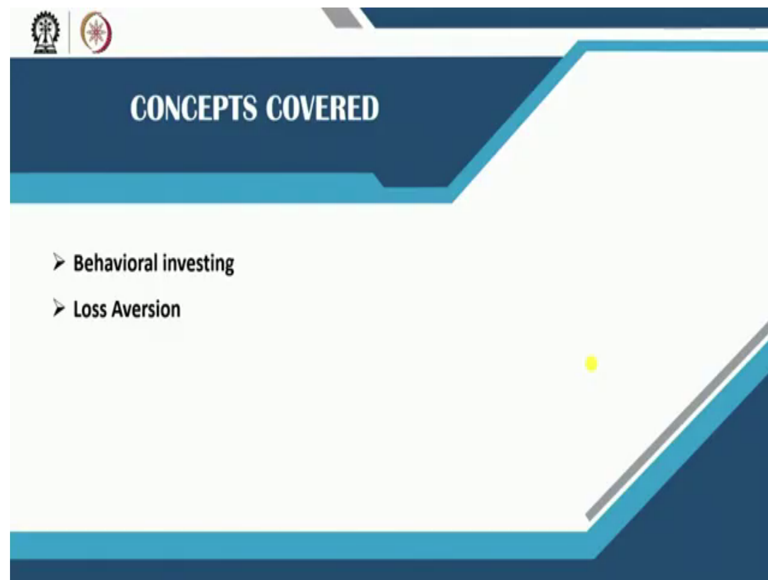

Today's topics are different aspects of behavioral aspect, behavioral investing and loss aversion. When we talk about behavioral investing it is certainly different from the traditional investing approaches.

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Beliefs, Biases, and Heuristics

Behavioral Investing

- Traditional investing: follow the fundamentals
  - Smart-money investor: Graham-Dodd (1934)*, Warren Buffett's way
- Behavioral investing: trading with information and some *humane* touch!
  - Psychology + Sociology + Politics + Economics + Finance + ...everything else!
- Three ways of investing (Ellis & Vertin, 1997)**:
  - The intellectually difficult path,
  - The physically difficult path, and
  - The emotionally difficult path

*Benjamin Graham & David Dodd (1934), Security Analysis, McGraw Hill
**Charles Ellis & James Vertin (1997), An Investor's Anthology: Original ideas from the industry's greatest minds, John Wiley & Sons

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In traditional investing approaches, we understand that we have to follow the fundamentals which means that when we want to invest our money in any investment avenue; let us say stock or bond or any other investment alternative that we are presented with. We need to understand the fundamental value of that particular asset. By fundamental value we mean that we need to calculate what kind of returns we are going to generate over the holding period and whether the current price that we are about to pay is commensurate with the return that we are expecting as well as the risk that we are going to assume.

This is very much in line with the smart money investor approach by Graham and Dodd and Warren Buffett. These people Benjamin Graham, David Dodd and Warren Buffett and other people like them focus more on understanding the fundamental value of investments and

consider the prices that we are about to pay as a return for the risk that we are going to assume by investing in those assets.

Behavioral investing is different from traditional investing. In the sense that we not only consider the economics and finance of any decision related to investment, but also we try to understand the psychology, sociology, politics and anything else that might be relevant. This implies that when we are about to take a financial decision we not only consider what the fundamentals value are, but we also consider whether the person who is making the investment decision is able to assume the risk that is associated. And, other factors in terms of sociological and political factors that might be affecting the decision process in future.

Here I am going to highlight three different approaches of behavioral investing. These approaches are given by Ellis in his keynote address in 1996 which was later published as a book with Vertin in 1997. They highlight three major behavioral investing approaches namely, the intellectually difficult path, the physically difficult path and the emotionally difficult path.

Let us try to understand each one of these three different approaches and highlight how behavioral, economics and finance can affect the decision making in investment processes.

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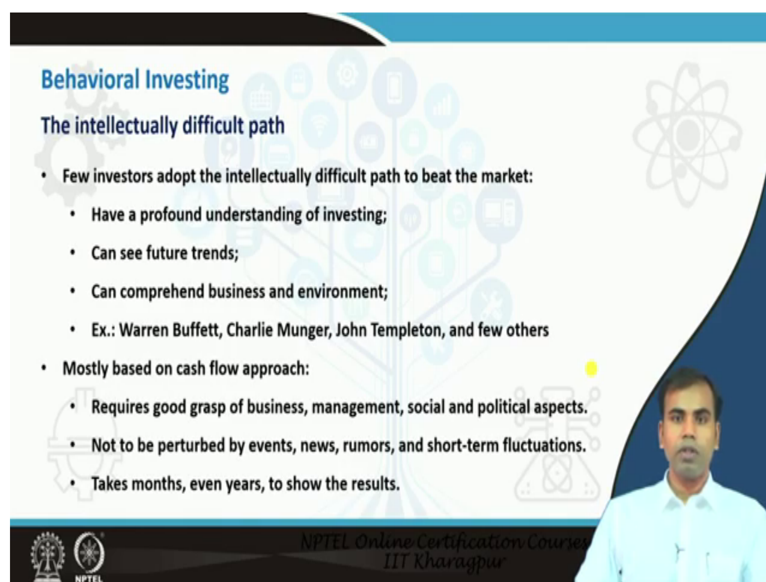

The first approach of behavioral investing is the intellectually difficult path to investment. Basically, this path focuses on understanding the fundamentals and businesses where we want to invest. This path is adopted by very few people who are very smart in terms of understanding the business and environment.

They have a profound understanding of investment processes and they can easily see the future trends. They can comprehend the business, politics and economics and we can easily identify people who are associated with this approach of investing. In successful investors such as Warren Buffett, Charlie Munger, John Templeton and very few people like them are those people who invest in intellectually difficult pathway.

If we go to the root of this path, we know that this path is basically based on cash flow approach. By mean of cash flow people try to understand the right valuation of this particular

investment avenue that they are presented with and they try to evaluate whether the initial investment that they are making is going to be returned with sufficient risk premium and it is going to be successful investment in future.

Basically, cash flow approach of investment requires good grasp of businesses, management, social and political aspects. People who follow these fundamental path basically are supposed to not to be disturbed by event, news, rumours or any other short term fluctuations. Sometimes these approaches particularly the approach, that are intellectually difficult might take months or even years to be successful. This is basically what is the fundamental approach of investing. Here investors or the individuals making decisions are expected to stick to the decision after considering the fundamental analysis as well as understanding the right valuation.

Investors like Warren Buffett evaluate each and every investment alternative before they make the decision and then they make they make investment and stick to it. This particular path is adopted by very few people because not all of us are blessed with that intellect which will result in successful investment identification. Many of us would try to deviate from this intellectually difficult path and take up the physically difficult path of investment.

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Behavioral Investing

The physically difficult path

- Some investors adopt the physically difficult path to beat the market:
  - Very hard working, spend lots of time in reading, meetings, and digging opportunities;
  - Information-driven decisions: Overloaded with information;
  - Ex.: day-traders, active fund managers
- Assumption: lot of opportunities out there, keep digging hard to be successful.
  - Do lot of research, keep an eye on every new information.
  - Keep busy with networking and meeting with people, get more and more info.
  - *But*, do remember that others are also doing the same!

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Physically difficult path of investment indicates that investors are supposed to a spend considerable amount of time in gathering information, analyzing and incorporating those information in the investment decision making process. This requires the people to spend lot of time in meeting, reading and doing research to identify the right investment opportunities.

Basically this is an information driven decision where people are overloaded with information that they have gathered from different sources and based on that information they are supposed to take investment decisions. Examples of this particular approach of investment could be day traders or active fund managers who are supposed to be spending lot of their active time on information gathering process and subsequently incorporating those information into their decision making for investment.

The underlying assumption of this physically difficult path is that there are lot of opportunities out there and unless you spend huge amount of time and resources on digging those opportunities you cannot be successful in investment. And, that is why you are expected to do lot of research, keep an eye on each and every new information that is coming to the market.

You are supposed to be busy with meeting with people gathering information get lot and lot of input for your decision making process, but here you should remember that there are lot many other people who might be doing the same thing. So, if you are expecting that this decision process is going to make you successful probably you are one of very many people who might be adopting this approach of physically difficult path to investing.

Having understood the intellectually difficult path and physically difficult path we know that in one case it requires lot of mental understanding and intellect to understand the investment identification process. In another second case it requires lot of physical effort and lot of time before you actually make investment decision. Now, third approach of behavioral investing is the emotionally difficult path to investing.

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Behavioral Investing

The emotionally difficult path

- Most investors follow the emotionally difficult path to beat the market:
  - Straightforward: work out a long-term investment plan and be committed to it;
  - Don't deviate from it: don't listen to random advice, stay calm and unconcerned;
  - Requires patience and discipline, for long-term.
- Rule: Learn to think *with* our emotions, rather than have our emotions do the thinking.
- News/info → Sentiment → Market fluctuations → Sentiment → Market fluctuation↑...
  - Emotions → Behaviors → Decisions → Sentiment → Herding/Bubbles/Crashes...
  - Ex.: 9th Nov. 2016 (next day to demonetization): Sensex 6%↓ /Nifty 541 points↓

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Emotionally difficult path of investment is very much straightforward. It requires you to identify on a long term investment opportunity, make the investment and stick to it for long term. This is essentially implying that when you make an investment you are expected to stick over it for the long term because in long run you are going to get the return that you have desired for. The basic expectation is you should not deviate from it once you have committed to it.

So, the key to success here is do not listen to any advice or news or event or rumour that you can come across, stay calm and unconcerned when you are invested and it of course, requires you to be patient and in discipline for very long term. Basically the philosophy here is learn to think with emotions and not let the emotion do the thinking, because in a typical decision making process whenever you come across with a new information or news it translates into sentiment which further reflect into the behavior of people and result in decision making by

those people affected by those news or new information and we call it sentiment when lot of people collectively take decisions based on information or let us call it sentiment, it is reflecting in the market in terms of certain biases or anomalies and some of these biases or anomalies could be herding or bubble or even crashes.

One famous recent example could be on 9th November 2016, the next day to the demonetization announcement by the Government of India Sensex fell down to 6 percent and similarly Nifty also fell down significantly to the extent that 541 points. And, if you analyze fundamentally you would see that it had a lot of thing to do with the announcement, but in sort to long run not immediately. Whereas, the market reacted so sharply that lot of people lost their money and subsequently lot of people got panic and make bad decisions in the stock market.

So, the idea here is if you are adopting emotionally difficult paths if you cannot adopt the other two that is physically difficult path and intellectually difficult path then you have to be exercising self control and discipline in terms of investment decision making.

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Behavioral Investing

Loss Aversion and Investor Behavior

- Investors tend to prefer fixed income investments to stocks
  - e.g., post-dot com bubble, 2003
  - Rather, right time to invest due to attractive valuations;
- Investors realize their profits very early;
  - Sell winners and hold on to losers.
  - Tax aversion: consider income net of taxes
- Investors take more risk when threatened with a loss.
  - More cognitive load leading to bad decisions.

POVERTY
Economic decision making
Lack of Control
STRESS
Cognitive Load
Narrowing of focus

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All these issues related to behavioral investing ultimately get transferred into one or the other behavioral biases or heuristics and one of the major heuristics and biases that we have discussed earlier is loss aversion. Fundamentally loss aversion is a phenomena where individuals exhibit different risk behavior when presented with different situations. In situations where they have show short gain they show risk averse behavior whereas, under situation where the outcome is very uncertain they show risk seeking behaviour.

Now, these biases can actually affect your decision making and that can be shown with the help of a very standard of structure given by research done at UNDP in 2014 where they try to exhibit the decision making process of individuals who are facing resource constraint. In their constraint, if you look at the graph the process shows that when people are faced with poverty

they basically exhibit lack of control which implies that if you are facing resource constraint and this resource could be anything it could be time, money or any other resource.

So, when you have resource constraint you tend to behave with lack of self control which will further result in stress, cognitive load and your narrowed focus and all these things put together will encourage you to take decisions which are sub optimal. And, ultimately you make bad economic decisions which will eventually lead to further poverty or further resource constraint.

For example: if you are a manager and you are running short of time, but you have to make a decision in hurry probably you would lose self control and under stress and cognitive load you make choices that might result in losses or suboptimal gains and that will further lead you to more resource constraint stage or more cognitive load. So, this is basically a loop a cycle that might affect the decision making process. Loss aversion is one such factor that might affect your thinking process and decision making process and we have seen that people in the stock market basically tend to prefer fixed income over stocks or other risky investment.

For example, after post after dot com bubble in 2003 people used to invest in fixed income securities rather than in stock because in their opinion the stock market was too risky and they used to invest their money in secured investment such as bonds or fixed income securities instead some opinion was that it was the right time to invest in securities particularly stock markets because of attractive valuation and higher dividend yields. So, if the market is down it is not always necessary that you will be losing money if you invest rather it is right time to buy at a cheaper price and subsequently if the market goes up you would eventually make some money.

Loss aversion also result in people realizing their profit too early which means that if you are suffering from loss aversion you would tend to sell your winner stocks and keep holding the looser ones. It also may lead you to tax aversion which basically implies that you might not consider taxes in your decision making. So, when you are considering a decision making on

the basis of net gains or net profits, you should consider the net profit after taxes or net gains after considering taxes as a deduction.

These are some of the factors related to loss aversion that influence our decision making. We have known through several examples where investors or other individuals take more risk when threatened with losses and this is because of the cognitive load that they have. We see in several other biases where this loss aversion or in some context risk aversion might be resulting in several other associated biases. And, subsequently the decision making process get in affected because of which the individuals or the economic agents in general will be suffering from sub optimal gains and less than the optimal profits and returns in their investment.

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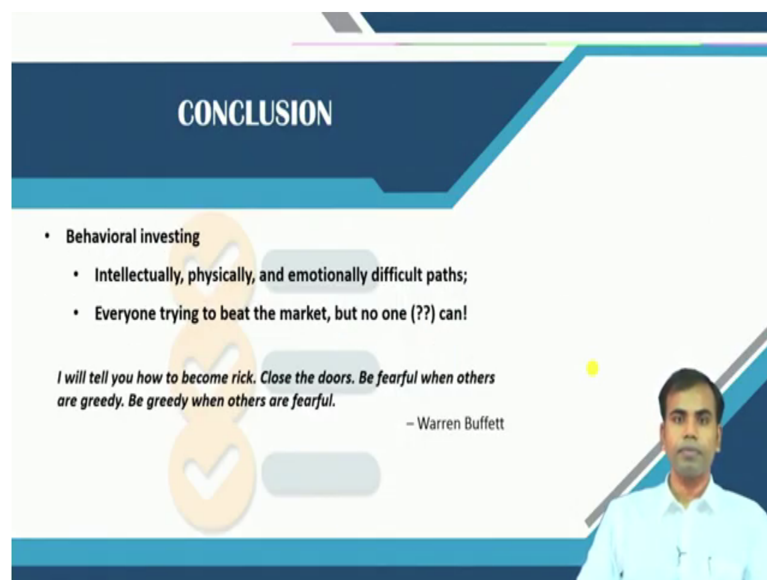

With the help of understanding loss aversion and other biases associated with it such as endowment effect or risk aversion, we could implement it in our decision making process through any of the behavioral investing approaches as discussed in this session earlier. Basically the choice of an individual to go for intellectually physically or emotionally difficult pathway investment can be improved with the help of exercising self control and mental accounting in a positive way. So, when everyone tries to beat the market and you are considering psychological factors or behavioral biases into account before making a decision you would probably have an edge over others who are just taking the decision based on the standard output variables.

Now, to conclude this session I would quote Warren Buffett who says that I will tell you how to become rich make an investment close the doors be fearful when others are greedy and be greedy when others are fearful. The these sentence basically highlight how important it is to exercise self control particularly in stock market investment decisions where most of us get influenced by biases and heuristics as well as external factors such as news rumours events and any other information that we may come across.

So, when you are making a decision in investment particularly in the stock market where multiple agents are acting at the same time, it is very important for you to consider psychological biases proactively and try to avoid getting influenced by the rumours or news or any other new information without properly analyzing it. This is it for now.

Thank you very much.