

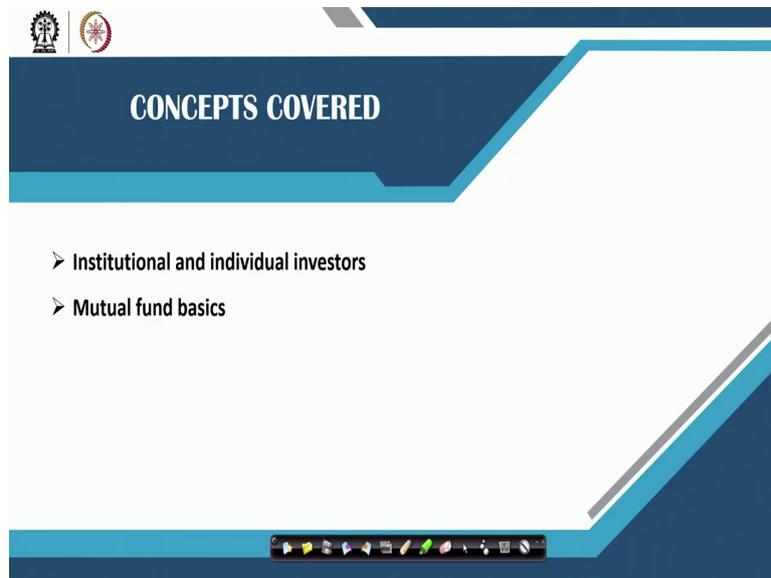
Behavioral and Personal Finance
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Module – 02
Personal Finance
Lecture – 29
Investment Alternatives for Individuals

Hi there, continuing with the previous discussion on portfolio construction, in this session we will discuss about how portfolio construction can be optimized or the benefit can be maximized with the help of using different assets and different investment avenues in our decision making. This session basically focuses on 2 concepts; the concepts that we are going to discuss in this session are why specific and focused investment strategies should be designed for individual investors and how one of the investment avenues, that is quite popular in financial markets and investment domain is more important and suitable for individual investors.

So, the topic that we are going to cover is the distinction between individual and institutional investors in general.

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And how a unique type of investment products, which is known as mutual funds, can be used for getting the financial planning of individuals in a better way?

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Institutional and Individual Investors: Major differences

Resources and Skillsets

- Large fund availability with institutional investors (Inslnv):
 - Higher risk affordability, deep pockets
- Access to information: public versus insider information
- Technical skills and expertise:
 - Optimization of choices, informed decisions

Decision-making Process

- Organized decision-making body: board of directors, committees
- Structured and accountable management: fund managers, research analysts
- Individual investors (Indlnv) take mostly heuristic-driven driven
 - More susceptible to biases and errors

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So, when we talk about the distinction between individual and institutional investors, we all know that institutional investors are a big player in financial markets and investment domain basically, they are at advantage on many frontiers and some of these frontiers or the factors at which institutional investors are at advantage can be as follows. The first thing, that comes as advantage for institutional investors is the availability of resources and skill sets.

So, when we try to understand the investment decision making for individuals and institutional in different contexts we know that the level of resources or the availability of resources with respect to institutional investors is huge as they can have huge amount of money pooled together from different sources. And that amount of money can be invested in different assets that are available to them, they have deep pockets they can take more risk so, they are at advantage in terms of scale of operations.

When it comes to individual investors we know that, individual investors have their savings and they cannot invest huge amount of money in financial securities or financial assets. So, their scale of operation is very marginal.

Second factor that comes to the advantage of institutional investors is the access to information. And at the same time the technical skill and expertise that are available to them. Institutional investors can access to information which are publicly available as well as the information that are privately available in some cases whereas, individual investors cannot have access to most of the information or even if they have access to information it comes to them very late.

Similarly, if it is about individual investors they are not able to, they are not able to optimize the choices or incorporate all the information that they have access to in their decision making whereas, institutional investors are having technical skill set and experts who can take better decisions and make informed investment choices for on behalf of their investors.

So, this is how the first thing that distinguishes institutional and individual investors. Second factor or rather second most important factor is about the process of decision making that are followed in case of individual and institutional investors. Individual investors are basically focusing their decision making with the help of different organized, the committees and stake stakeholders for example, most of the institutional investors have board of directors who are themselves very much expert in their domain and they have committees who take care of different aspect of the businesses and fund management.

So, if you talk about any financial institution or any financial investor in terms of institutional domain they have structured decision making bodies, such as board of directors, sub committees, sub committees and so on. They also have accountable decision makers who take decisions on behalf of their investors and they are accountable and responsible for the performance of those decisions.

So, referring to fund managers or research analysts who take the decisions on the basis of the information that they can get access to and they are responsible for the decisions that they take. On when we talk about individual investors their decisions mostly are driven by the heuristics they are more likely to be biased in terms of decision making because, they are more apprehensive about their skill set and technical expertise. They do not have access to all the technical tools and methods that can be applied for better decision making.

So, their decisions are less efficient compared to the decisions taken by institutional investors.

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Institutional and Individual Investors: Major differences (cont.)

Taxes and Others Costs

- Economies of scale and expert planning: lower costs

Benchmarking

- Tracking of strategies, managers, assets, markets;
- Who herds, who doesn't? Return chasers vs. leaders

Product Availability

- Availability of investment avenues: Insinv trade in (almost) all markets/assets
 - Indinv prohibited in highly risky markets/assets (derivatives, short-selling)
- Institutional investors avail exclusivity due to risk management, fund size

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If we move this discussion further we know that, there are certain other inputs and factors which might be distinguishing the institutional investors from the individual investors for example, taxes and other cost. Because, of their scale of operations the institutional investors have the economies of scale and that is why they have expertise as well as the advantage to

save cost, and taxes, and other trading costs such as brokerage charges or transaction cost institutional investors can also have very structured way of benchmarking their performance.

They know that they can track each of the assets strategies, fund managers, decision maker, markets and economies as well. They know that their performances have been observed by their managers and superiors who are actually looking at what they are doing, and that is why their decision-making has to be most efficient to their knowledge. They also realize that it is them who are actually leading the market most of the time and other investors, who are marginal investor or retail investors they are basically trying to consider them as benchmark in most cases.

So, institutional investors tend to be the return leaders which means that they determine the return achieved by the individual investors because, individual investors alone or in general cannot drag the volume as well as the prices in their favor. The another factor that is most important for understanding the differences between individual and institutional investors is the availability of products, in most of the markets across the world the products that are available to institutional investors might not be available for individual investors as well.

Whereas individual investors can invest in equity bonds and other products in financial markets they cannot take part in to investment choices that are considered to be highly risky. Such as, trading in options market or short selling for by investors these are exclusively available for institutional investors and that comes to their advantage because they can mix money at a shorter cost and time duration.

So, institutional investors can exclusively exploit these opportunities which are not available for individual investors. Given that these factors that comes to the advantage of institutional investors we can say that individual investors have to be served better products or the investment products which are more suitable for their risk, bearing capabilities and other contextual factors such as, their fund size or the investable amount that they have to invest their ability to incorporate information into their decision making And similar other factors which are important for making the financial decision making more optimal.

Now, when we understand that individual investors might be biased, might not be able to take into account all the information that they have they have typically a shorter amount of money for investment. We should focus our discussion towards products or investment avenues where individual investors can gain the advantage of the market movement by using the expertise of finance institutional investors. One such product or investment avenue that are available for individual investors at large is mutual funds.

So, when we talk about investment opportunities available for individual investors, the first thing that we should discuss is about the availability of mutual funds investment where individual investors can invest their savings and gain the advantage of the market movement.

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Mutual Funds: Boon for individual investors

MF: An introduction

- An investment company that issues its portfolio shares to investors
- Money from shareholders pooled and invested in a wide range of assets
 - Assets including stocks, bonds, commodities, money market securities
 - Based on fund objectives and risk bearing goals
 - e.g., equity funds, hybrid funds, tax-saving funds, growth funds
 - Managed by professional money-managers
- Each investor shares proportionately in the income and investment gains/losses
 - As well as the brokerage expenses and management fees

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So, mutual funds basically are investment companies or institutions, we that pool money or resources from definite individual investors or other small investors and use their financial and professional expertise to invest that pooled money for the gain of their shareholders.

So, basically it is a kind of fund or an investment company where people like you and me can give the, our savings and they pool the all these savings together to create a huge fund and then they invest this huge fund into different assets and securities. And after they earned the return on this investment they keep their cut or their expenses, and commission, and other charges and the remaining amount of profit is distributed back to investors like you and me who had initially invested. The advantage that comes to mutual fund is they are they are considered to be an under institutional investor category. So, they can take advantage of the markets in a better way than we as individual can take.

So, basically they have access to the assets all the assets class, that are available they invest in a different type of assets such as stocks, bonds, commodities, money market instruments. The decision to invest in these assets or a combination of these assets can be determined by the fund objective or the investment objective of the fund and the risk bearing capabilities of the investors, who have pooled in their money for this mutual fund. Now investment objective can be depending on the type of customers or the type of investors that the funds target.

For example, mutual funds can be completely focusing on equity or it can be totally investing in bonds or fixed income securities there can be hybrid funds, which means that they can invest in both equity and fixed income. There could be tax saving funds where they will be investing the pooled money in tax saving instruments such as, government bonds and so on. There would be funds which are considered to be growth fund, there could be value fund and there are numerous categorizations of mutual funds which basically determine their investment objectives.

Since, they are managed by professional money managers so; it is always in favor of the investors who have pooled in their money. Each of the investors while pooling the money gets the proportionate amount of share or the units in the mutual fund. And after the return is

generated the expenses and management fee as well as any other cost associated with managing that mutual fund is kept by the mutual fund organization and the remaining amount of return is, returned to the or given back to the shareholders who have initially pooled the money to create this mutual fund.

Now, mutual fund can be of different types as well for example, closed ended mutual fund as well as open ended mutual funds these categorization will be discussed later.

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Mutual Funds: As an investment tool

What matters for individuals?

- Understand the structure and pricing of mutual funds
- Know the advantages (and disadvantages) of buying mutual fund shares
 - Tax savings, expert money management, indirect exposure to markets/assets
- Should be able to assess mutual fund performance
 - Key indicators to look at: NAV, Unit price, management fees,
- Assess fund manager(s) and governance-related issues:
 - Qualifications, conflict of interests, incentives
- Recognize the impact of taxable distributions on fund returns

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To understand the benefit for individual investors for these mutual funds as an investment avenue we should focus our discussion on the factors that matters most to the individuals. Now, if you are an individual and you are willing to make some investment in financial market or a stock market through mutual fund because this is how you can passively participate in the advantage of market.

You should understand the structure and pricing of mutual fund which means you should always try to understand the advantage and disadvantage along with the investment objective for which mutual fund is created. If you want to save your money in, in terms of tax saving then invest in tax saving funds. Similarly, if you have let us say planning for savings to achieve a better life after retirement you pool your money in mutual funds which are going to give you some advantage in long run.

So, there are certain factors which we should always keep in mind before we take decisions with respect to investment in mutual funds. These factors are basically some indicators such as, net asset value, then unit price and management fee or expense ratio also known as the expenses that are incurred by the mutual funds in order to manage the money. These funds or mutual funds can be assessed with the help of managers performance and other governance related issues.

For example, who are the people, who are managing the money? What are their qualifications are they qualified enough to manage our money? Whether there is any conflict of interest, in terms of people managing the money having the investment decision, which are conflicting with their personal interest? And what are the incentives that are being promised or given to the managers and other people sitting in the management of the mutual fund. These are some qualitative factors that we should always consider before making a mutual fund investment.

As discussed earlier we should also keep in mind that if we are making some investment in mutual fund this should also be considered in terms of tax savings and tax advantage for individual investors because, in long run taxes affect our decision-making.

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Mutual Funds: As an investment tool (cont.)

Net Asset Value (NAV)

- NAV: per share value of a mutual fund's investment holding.

$$NAV = \frac{\text{Market Value of Assets} - \text{Portfolio Liabilities}}{\text{Number of Shares Outstanding}}$$

Example

A mutual fund has ₹100 million in assets and ₹3 million in short term liabilities. 10.765 million shares outstanding. The NAV should be:

$(\text{₹}100 \text{ mil} - \text{₹}3 \text{ mil}) / 10.765 \text{ mil} = \text{₹}9.0107 \text{ per share}$

Money pooled from investors

Expenses, commissions, fees

Talking about the fact one of the most important factors to understand the decision criteria for mutual fund it is net asset value, also known as NAV. NAV can be defined as: the total value of the asset as on the date that is: the Market Value of the Asset minus the total liabilities that the fund has and liabilities include the expenses or the commission that has charged for managing the money divided by Number of units or Number of Shares Outstanding. And this function gives us the net asset value of that mutual fund.

If you look at the example given at the screen you can see that; if a mutual fund has 100 million rupees in assets, which is basically the amount pooled from different investors. We can see that; so in the example shown at the screen you can see that there is a mutual fund which has 100 millions of of rupees in asset and 3 million in short term liabilities so, assets are basically money pooled from investors and their value.

So, this is the money that is pooled from investors or the shareholders who are holding the units of this mutual fund and this is the liabilities which are basically including the expenses, or any other commission, or fee, or any other fees, that is chargeable for managing the mutual fund. So, if these 2 are the values considered to be assets and liabilities and the number of units issued to shareholders is 10.765 million we can calculate the net asset value of this mutual fund as follows. So, we did we adjust this liability from the asset which gives us 97 million divided by this value it that is basically number of units outstanding as on date.

So, this gives the net asset value of this mutual fund that we are talking about. So, NAV is basically an important factor while taking decisions to invest in mutual funds. So, if you are considering mutual fund as a possible investment, you should always consider or compare NAVs of different mutual funds so that you make a better decision in terms of value of the mutual fund that you are investing in.

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Mutual Funds: Advantages for Investors

Broad diversification

- Equity/stock funds hold large and small company stocks broadly spread across:
 - Industries, sectors, economies/markets at times.
- Bond funds hold bonds diversified investments:
 - with different maturities, coupon rates, and credit qualities.
- Professional investment management
 - Ability to retain professional management at reasonable costs
- Investor convenience and passive decision-making
 - Fund family on offer
 - Saved time and costs

Disadvantages:

1. Significant volatility exposure
2. High management fees/commissions

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The advantage or the benefits for individuals or individual investors of investing their money in mutual fund is basically coming from the broad diversification. As discussed earlier we know that individual investors cannot be at advantage if they directly invest in markets because of certain reasons. These reasons are the lack of professional and technical expertise and the size of funds that are available with them for investment and some other factors such as, susceptibility to heuristics and biases while taking decisions.

Given these factors we can understand that if a mutual fund is available for individuals the broad diversification advantage comes handy. So, mutual funds can technically invest in as many assets as possible across industries, sectors, economies and markets sometime they can also invest in equity as well as bonds with different maturity and coupon rate and other credit qualities.

So, they know that if they have to create an mutual fund for just fixed income which is basically bond mutual fund they can put their money in bond mutual fund, by keeping in mind or keeping the criteria such as maturity and credit quality and coupon rate as preferable.

At the same time, they have this professional in money management expertise they can source different inputs and data as well as information from different sources and make a better informed decision for their investor at a reasonable cost. So, cost saving is also one of the advantages for individuals to invest in mutual funds. Another important factor that is at advantage for individual investor is the convenience and passive decision making. So, they essentially do not have to take any direct decision with respect to allocation of assets across different markets or asset classes. Many a times there are fund families which are basically variety of funds available for investment.

So, even if you want to stick to a particular fund promoter you can find multiples fund offerings where you can invest your money that saves your cost and effort in terms of asset allocation.

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Mutual Funds: Sources of Returns

Where do we get the returns from?

- **Total return:**
 - Dividend and interest income and realized and unrealized appreciation in value
- **Income distribution:**
 - Interest and dividend income after accounting for expenses
- **Capital gains:**
 - Unrealized until the fund sells the shares (unrealized capital gains)
- **The realized capital gains:**
 - Part of gains paid out to shareholders at the end of the period/year

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The disadvantages although are the basically the lack of, lack of uncertainty about volatility exposure, which means that if you invest in mutual fund and the markets are volatile you are still going to suffer the loss.

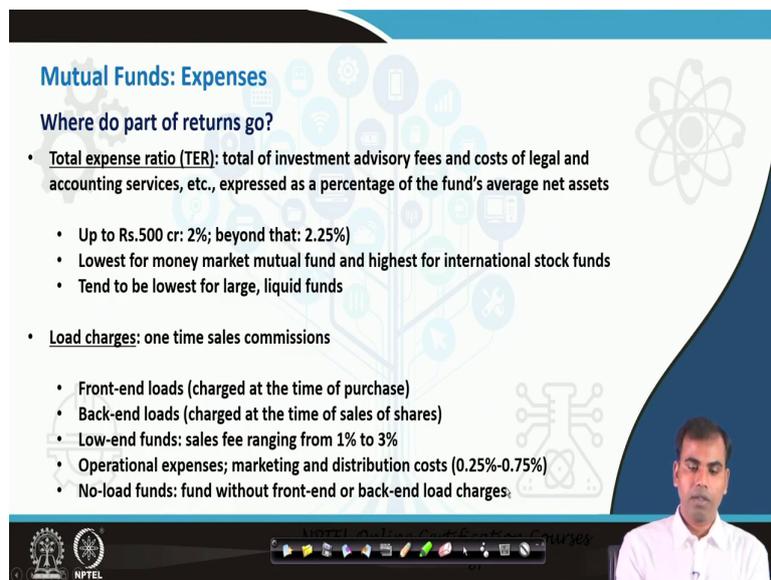
Because of the market volatility so that cannot be avoided in even if you invest in mutual fund and the reason for it is. It is always exposed to the financial market or the stock market in general, that is why the losses that you are going to suffer because of market volatility cannot be avoided even if you are investing in typical mutual fund.

And second disadvantage is basically the higher cost at times because some of the fund managers charge extremely high fee and management charges, which might reduce the

ultimate return that an individual investors in mutual fund is going to get. The returns that we are talking about here for individual investors might come from two major sources.

One is the dividend or the unit gain that investor is getting and second is the capital appreciation in terms of value increase of the unit. So, capital appreciation might be realized and unrealized. Realized when the individual investor is selling the units or the share and if it is not realized, which means the value is notional and the day when the individual investor is going to sell the unit he or she will get the capital appreciation part as well. So, there are two sources of return capital appreciation and dividend or in interest income.

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Mutual Funds: Expenses

Where do part of returns go?

- **Total expense ratio (TER):** total of investment advisory fees and costs of legal and accounting services, etc., expressed as a percentage of the fund's average net assets
 - Up to Rs.500 cr: 2%; beyond that: 2.25%)
 - Lowest for money market mutual fund and highest for international stock funds
 - Tend to be lowest for large, liquid funds
- **Load charges:** one time sales commissions
 - Front-end loads (charged at the time of purchase)
 - Back-end loads (charged at the time of sales of shares)
 - Low-end funds: sales fee ranging from 1% to 3%
 - Operational expenses; marketing and distribution costs (0.25%-0.75%)
 - No-load funds: fund without front-end or back-end load charges.

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If we talk about returns we should not ignore the part of expenses or the cost of maintaining that mutual fund. So, here is a once in a factor which is important to keep in mind while you invest your money in mutual fund.

It is about the expenses or the in management charges and fees that is incurred in managing the money pooled from different investors. So, the term that is known as the total expense ratio essentially indicates that total investment advisory fee and cost of legal and financial services that is given to manage the funds. And it is expressed as a percentage of the funds average net asset value.

Typically in India the scenario is up to 500 crore rupees the total expense ratio is going to be 2 percent and if the mutual fund has more than 500 rupees of 500 crore rupees of assets, it is going to be fixed at 2.25 percent. Lowest for money market mutual fund the TER that Total expense ratio becomes the lowest for money market fund, because it does not require lot of money management tools and efforts.

And it is highest for the international stock funds because it requires lot of research and inputs on part of the management of fund and that is why; the total expense ratio is the highest for international stock funds. Typically total expense ratio tend to be lowest for large and liquid funds because it essentially requires lot of turnover and churning of portfolio that is why management of the fund charges high fee. Another factor that we keep in mind is the load charges, which is basically 1 time sales commission when the mutual fund is floated.

Typically it is accounted in terms of front end load which is charged at the time of purchase or back end load when you are selling the units of the share, basically this of back end load is charged as sales commission. Low end funds typically have sales fee or the this load ranging from 1 to 3 percent it is also including the operational expenses typically marketing and distribution cost of 0.25 to 0.75 percent in general.

However there are few funds which are available and for the individual investors and carry no loads which means there are no charges in terms of sales commission at the time of buying as well as at the time of selling. These types of funds are very rare and if you are a smart investor you would like to find a fund where there is no load charged for individual investors.

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Mutual Funds: Expenses (cont.)
The impact of equity MF costs on long-term investor returns

| | Fund A | Fund B | Fund C |
|---------------------|----------|---------|---------|
| Initial investment* | ₹ 10,000 | ₹10,000 | ₹10,000 |
| Day 1 | 10,000 | 10,000 | 9,525 |
| 5 years ✓ | 18,189 | 17,451 | 16,186 |
| 10 years ✓ | 33,084 | 30,565 | 29,689 |
| 15 years ✓ | 60,178 | 53,145 | 52,416 |
| 20 years ✓ | 109,458 | 92,743 | 92,539 |
| Gross return | 13.00% | 13.00% | 13.00% |
| Operating expenses | 0.29% | 1.22% | 0.96% |
| Net return | 12.71% | 11.78% | 12.04% |

Fund A: typical cost efficient index fund
Fund B: conventional no-load stock mutual fund
Fund C: low-load stock mutual fund with less than typical annual operating expenses

If I would like to give an example where the charges or the loads actually determine the ultimate return that individuals are going to get, if you look at the example here there are 3 funds; Fund A Fund B and Fund C. In 3 funds the overall initial investment is same that is 10,000 rupees and in long run the return or the value of that 10,000 rupee is changing. So, if you look at the situation here the initial investment of 10,000 rupees in these 3 funds in Day 1 is this.

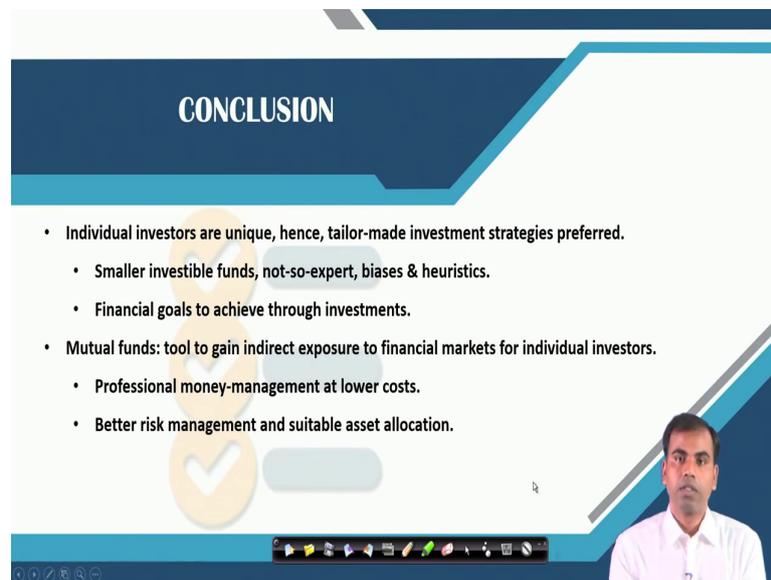
Because of certain characteristic explained here. So, Fund A is basically a typical cost efficient index fund, where not much management expertise is required. Fund B is conventional no load stock mutual fund, which means there is no load on buying or selling. And Fund C basically is low load stock mutual fund with less than typical annual operating expenses.

So, load is reducing your initial value of the investment that you are making which essentially mean if you are investing 10,000 rupees some amount of money which is basically 475 rupees is taken as frontend load. So, Day 1 investment value is 9,525 for 5 if you stay invested for 5 year the value keeps on increasing and 10 years, 15 years, 20 years.

So, if we assume that, the gross return on these mutual funds or these 3 funds are same that is 13 percent because of these unique characteristics the operating expenses would vary. So, in first case it is 0.29 percent, in second case it is 1.22 percent and in third case it is 0.96 percent. Because it is low load stock mutual fund with less than typical annual operating expenses. So, the net return available for individual or the investor who has invested 10,000 thousand rupees in the beginning is going to be 12.71 percent in case 1. 11.78 percent in case 2 and 12.04 percent in case 3.

This essentially shows which type of funds you should look for when you are trying to make an investment decision in mutual fund with different time horizon. So, keeping in mind that the different time horizon of 5 year, 10 year, 15 year and 20 years this percentage of rate of return would definitely lead to significant amount of monetary value. And that is why you should keep in mind when you make decisions.

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CONCLUSION

- Individual investors are unique, hence, tailor-made investment strategies preferred.
 - Smaller investible funds, not-so-expert, biases & heuristics.
 - Financial goals to achieve through investments.
- Mutual funds: tool to gain indirect exposure to financial markets for individual investors.
 - Professional money-management at lower costs.
 - Better risk management and suitable asset allocation.

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So, in this session we discussed why individual investors are unique compared to the institutional investors and the reasons are the scale of operations and their expertise in managing the money. We also discussed how mutual funds can be a better and more suitable investment products available for individual investors and different characteristic of mutual funds that we have discussed.

In coming session we will discuss about other investment opportunities available for individual investors so, that their financial goals can be achieved. That is all.

Thank you very much.