V UNIT – PORTFOLIO MANAGEMENT

A portfolio refers to a collection of investment tools such as stocks, shares, mutual funds, bonds, cash and so on depending on the investor's income, budget and convenient time frame.

Following are the two types of Portfolio:

1. Market Portfolio
2. Zero Investment Portfolio

What is Portfolio Management ?

The art of selecting the right investment policy for the individuals in terms of minimum risk and maximum return is called as portfolio management.

Portfolio management refers to managing an individual's investments in the form of bonds, shares, cash, mutual funds etc so that he earns the maximum profits within the stipulated time frame.

Portfolio management refers to managing money of an individual under the expert guidance of portfolio managers.

In a layman's language, the art of managing an individual's investment is called as portfolio management.

Need for Portfolio Management

Portfolio management presents the **best investment plan** to the individuals as per their income, budget, age and ability to undertake risks.

Portfolio management **minimizes the risks** involved in investing and also increases the chance of making profits.

Portfolio managers understand the client's financial needs and suggest the best and unique investment policy for them with minimum risks involved.

Portfolio management enables the portfolio managers to **provide customized investment solutions** to clients as per their needs and requirements.

Types of Portfolio Management

Portfolio Management is further of the following types:

- **Active Portfolio Management:** As the name suggests, in an active portfolio management service, the portfolio managers are actively involved in buying and selling of securities to ensure maximum profits to individuals.
- **Passive Portfolio Management:** In a passive portfolio management, the portfolio manager deals with a fixed portfolio designed to match the current market scenario.
- **Discretionary Portfolio management services:** In Discretionary portfolio management services, an individual authorizes a portfolio manager to take care of his financial needs on his behalf. The individual issues money to the portfolio manager who in turn takes care of all his investment needs, paper work, documentation, filing and so on. In discretionary portfolio management, the portfolio manager has full rights to take decisions on his client's behalf.

- **Non-Discretionary Portfolio management services:** In non discretionary portfolio management services, the portfolio manager can merely advise the client what is good and bad for him but the client reserves full right to take his own decisions.

Who is a Portfolio Manager ?

An individual who understands the client's financial needs and designs a suitable investment plan as per his income and risk taking abilities is called a portfolio manager. A portfolio manager is one who invests on behalf of the client.

A portfolio manager counsels the clients and advises him the best possible investment plan which would guarantee maximum returns to the individual.

A portfolio manager must understand the client's financial goals and objectives and offer a tailor made investment solution to him. No two clients can have the same financial needs.

Portfolio management refers to the art of managing various financial products and assets to help an individual earn maximum revenues with minimum risks involved in the long run. Portfolio management helps an individual to decide where and how to invest his hard earned money for guaranteed returns in the future.

Portfolio Management Models

1. **Capital Asset Pricing Model**

   Capital Asset Pricing Model also abbreviated as CAPM was proposed by Jack Treynor, William Sharpe, John Lintner and Jan Mossin.

   When an asset needs to be added to an already well diversified portfolio, Capital Asset Pricing Model is used to calculate the asset's rate of profit or rate of return (ROI).

   In Capital Asset Pricing Model, the asset responds only to:

   - Market risks or non diversifiable risks often represented by beta
   - Expected return of the market
   - Expected rate of return of an asset with no risks involved

   What are Non Diversifiable Risks ?

   Risks which are similar to the entire range of assets and liabilities are called non diversifiable risks.

   Where is Capital Asset Pricing Model Used ?

   Capital Asset Pricing Model is used to determine the price of an individual security through security market line (SML) and how it is related to systematic risks.

   What is Security Market Line ?

   Security Market Line is nothing but the graphical representation of capital asset pricing model to determine the rate of return of an asset sensitive to non diversifiable risk (Beta).

$$\text{SML} : E(R_i) = R_f + \beta_i[E(R_M) - R_f]$$

2. **Arbitrage Pricing Theory**

Stephen Ross proposed the Arbitrage Pricing Theory in 1976.

Arbitrage Pricing Theory highlights the relationship between an asset and several similar market risk factors.

According to Arbitrage Pricing Theory, the value of an asset is dependent on macro and company specific factors.

3. **Modern Portfolio Theory**

Modern Portfolio Theory was introduced by Harry Markowitz.

According to Modern Portfolio Theory, while designing a portfolio, the ratio of each asset must be chosen and combined carefully in a portfolio for maximum returns and minimum risks.

In Modern Portfolio Theory emphasis is not laid on a single asset in a portfolio, but how each asset changes in relation to the other asset in the portfolio with reference to fluctuations in the price.

Modern Portfolio theory proposes that a portfolio manager must carefully choose various assets while designing a portfolio for maximum guaranteed returns in the future.

4. **Value at Risk Model**

Value at Risk Model was proposed to calculate the risk involved in financial market. Financial markets are characterized by risks and uncertainty over the returns earned in future on various investment products. Market conditions can fluctuate anytime giving rise to major crisis.

The potential risk involved and the potential loss in value of a portfolio over a certain period of time is defined as value at risk model.

1. Value at Risk model is used by financial experts to estimate the risk involved in any financial portfolio over a given period of time.

2. **Jensen's Performance Index**

Jensen's Performance Index was proposed by Michael Jensen in 1968.

Jensen's Performance Index is used to calculate the abnormal return of any financial asset (bonds, shares, securities) as compared to its expected return in any portfolio.

Also called Jensen's alpha, investors prefer portfolio with abnormal returns or positive alpha.

Jensen's alpha = Portfolio Return – [Risk Free Rate + Portfolio Beta * (Market Return – Risk Free Rate)

$$\alpha_J = R_i - [R_f + \beta_{iM} \cdot (R_M - R_f)]$$

3. **Treynor Index**

Treynor Index model named after Jack.L Treynor is used to calculate the excess return earned which could otherwise have been earned in a portfolio with minimum or no risk factors involved.

Where T-Treynor ratio

$$T = \frac{r_i - r_f}{\beta_i}$$

Roles and Responsibilities of a Portfolio Manager

A portfolio manager is one who helps an individual invest in the best available investment plans for guaranteed returns in the future.

Let us go through some roles and responsibilities of a Portfolio manager:

- **A portfolio manager plays a pivotal role in deciding the best investment plan for an individual as per his income, age as well as ability to undertake risks**. Investment is essential for every earning individual. One must keep aside some amount of his/her income for tough times. Unavoidable circumstances might arise anytime and one needs to have sufficient funds to overcome the same.
- **A portfolio manager is responsible for making an individual aware of the various investment tools** available in the market and benefits associated with each plan. Make an individual realize why he actually needs to invest and which plan would be the best for him.
- **A portfolio manager is responsible for designing customized investment solutions for the clients**. No two individuals can have the same financial needs. It is essential for the portfolio manager to first analyze the background of his client. Know an individual's earnings and his capacity to invest. Sit with your client and understand his financial needs and requirement.
- **A portfolio manager must keep himself abreast with the latest changes in the financial market**. Suggest the best plan for your client with minimum risks involved and maximum returns. Make him understand the investment plans and the risks involved with each plan in a jargon free language. A portfolio manager must be transparent with individuals. Read out the terms and conditions and never hide anything from any of your clients. Be honest to your client for a long term relationship.
- **A portfolio manager ought to be unbiased and a thorough professional**. Don't always look for your commissions or money. It is your responsibility to guide your client and help him choose the best investment plan. A portfolio manager must design tailor made investment solutions for individuals which guarantee maximum returns and benefits within a stipulated time frame. It is the portfolio manager's duty to suggest the individual where to invest and where not to invest? Keep a check on the market fluctuations and guide the individual accordingly.
- **A portfolio manager needs to be a good decision maker**. He should be prompt enough to finalize the best financial plan for an individual and invest on his behalf.
- Communicate with your client on a regular basis. A portfolio manager plays a major role in setting financial goal of an individual. Be accessible to your clients. Never ignore them. Remember you have the responsibility of putting their hard earned money into something which would benefit them in the long run.
- Be patient with your clients. You might need to meet them twice or even thrice to explain them all the investment plans, benefits, maturity period, terms and conditions, risks involved and so on. Don't ever get hyper with them.

- **Never sign any important document on your client's behalf**. Never pressurize your client for any plan. It is his money and he has all the rights to select the best plan for himself.

What is a Portfolio ?

A combination of various investment products like bonds, shares, securities, mutual funds and so on is called a portfolio.

In the current scenario, individuals hire well trained and experienced portfolio managers who as per the client's risk taking capability combine various investment products and create a customized portfolio for guaranteed returns in the long run.

It is essential for every individual to save some part of his/her income and put into something which would benefit him in the future. A combination of various financial products where an individual invests his money is called a portfolio.

What is Portfolio Revision ?

The art of changing the mix of securities in a portfolio is called as portfolio revision.

The process of addition of more assets in an existing portfolio or changing the ratio of funds invested is called as portfolio revision.

The sale and purchase of assets in an existing portfolio over a certain period of time to maximize returns and minimize risk is called as Portfolio revision.

Need for Portfolio Revision

- An individual at certain point of time **might feel the need to invest more**. The need for portfolio revision arises when an individual has some additional money to invest.
- **Change in investment goal** also gives rise to revision in portfolio. Depending on the cash flow, an individual can modify his financial goal, eventually giving rise to changes in the portfolio i.e. portfolio revision.
- Financial market is subject to risks and uncertainty. An individual might sell off some of his assets owing to fluctuations in the financial market.

Portfolio Revision Strategies

There are two types of Portfolio Revision Strategies.

1. **Active Revision Strategy**

   Active Revision Strategy involves **frequent changes** in an existing portfolio over a certain period of time for maximum returns and minimum risks.

   Active Revision Strategy helps a portfolio manager to sell and purchase securities on a regular basis for portfolio revision.

2. **Passive Revision Strategy**

Passive Revision Strategy involves rare changes in portfolio only under certain predetermined rules. These predefined rules are known as formula plans.

According to passive revision strategy a portfolio manager can bring changes in the portfolio as per the formula plans only.

What are Formula Plans ?

Formula Plans are certain predefined rules and regulations deciding when and how much assets an individual can purchase or sell for portfolio revision. Securities can be purchased and sold only when there are changes or fluctuations in the financial market.

Why Formula Plans ?

- Formula plans help an investor to make the best possible use of fluctuations in the financial market. One can purchase shares when the prices are less and sell off when market prices are higher.
- With the help of Formula plans an investor can divide his funds into aggressive and defensive portfolio and easily transfer funds from one portfolio to other.

Aggressive Portfolio

Aggressive Portfolio consists of funds that appreciate quickly and guarantee maximum returns to the investor.

Defensive Portfolio

Defensive portfolio consists of securities that do not fluctuate much and remain constant over a period of time.

Formula plans facilitate an investor to transfer funds from aggressive to defensive portfolio and vice a versa.