Portfolio Management

- Portfolio is a combination of securities such as stocks, bonds and money market instruments.
- The process of blending together the broad asset classes so as to obtain optimum return with minimum risk is called portfolio management.
- Diversification of investments helps to spread risk over many assets.

WHY PORTFOLIOS?

- The simple fact that securities carry differing degrees of expected risk leads most investors to the notion of holding more than one security at a time, in an attempt to spread risks by not putting all their eggs into one basket.
- Most investors hope that if they hold several assets, even if one goes bad, the others will provide some protection from an extreme loss.

Diversification

- Efforts to spread and minimize risk take the form of diversification.
- The more traditional forms of diversification have concentrated upon holding a number of security types(shares, bonds) across industry lines(mining , manufacturing , steel).
- Most people would agree that a portfolio consisting of two stocks is probably less risk than one holding either stock alone.

Approaches in Portfolio Construction

- 1.Traditional approach
- 2.Markowitz efficient frontier approach

 Traditional approach evaluates the entire financial plan of the individual.

 In the modern approach, portfolios are constructed to maximise the expected return for a given level of risk.

Traditional Approach

The traditional approach basically deals with two major decisions:

- Determining the objectives of the portfolio.
- Selection of securities to be included in the portfolio.

Steps in Traditional Approach



Analysis of Constraints

- Income needs
 - Need for current income
 - Need for constant income
- Liquidity
- Safety of the principal
- Time horizon
- Tax consideration
- Temperament

Determination of Objectives

The common objectives are stated below:

- Current income
- > Growth in income
- Capital appreciation
- > Preservation of capital

Selection of Portfolio

- Objectives
- Growth of income
- Capital appreciation
- Safety of principal
- Risk and return analysis

 According to the investor's need for income and risk tolerance level portfolio is diversified.

 In the bond portfolio, the investor has to strike a balance between the short term and long term bonds.

Stock Portfolio

Following steps as shown in the figure are adopted



Modern Approach

- Modern approach gives more attention to the process of selecting the portfolio.
- The selection is based on the risk and return analysis.
- Return includes the market return and dividend.
- Investors are assumed to be indifferent towards the form of return.
- The final step is asset allocation process that is to choose the portfolio that meets the requirement of the investor.

Managing the Portfolio

- Investor can adopt passive approach or active approach towards the management of the portfolio.
- In the passive approach the investor would maintain the percentage allocation of asset classes and keep the security holdings within its place over the established holding period.
- In the active approach the investor continuously assess the risk and return of the securities within the asset classes and changes them accordingly.

Simple Diversification

- Portfolio risk can be reduced by the simplest kind of diversification.
- In the case of common stocks, diversification reduces the unsystematic risk or unique risk.
- Analysts says that if 15 stocks are added in a portfolio of the investor, the unsystematic risk can be reduced to zero.
- But at the same time if the number exceeds 15, additional risk reduction cannot be gained.
- But diversification cannot reduce systematic or undiversifiable risk.

Diversification and Portfolio Risk



- The standard deviations of the portfolios are given in y axis and the number of randomly selected portfolio securities in the X axis.
- The S.D was calculated for each portfolio and plotted.
- As the portfolio size increases, the total risk line starts declining.
- It flattens out after a certain point.
- Beyond that limit, risk cannot be reduced.
- This indicates that spreading out the assets beyond certain level cannot be expected to reduce the portfolio's total risk below the level of undiversifiable risk.