PORTFOLIO MANAGEMENT

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INTRODUCTION

Portfolio Management refers to acquiring of different set of securities and assets in a block by the investor and plan in systematic manner as it gives maximum return and minimum risk. It relates to set of efficient investment in financial assets , including shares and debentures of companies. So Portfolio can be defined as combination of securities such as bonds, and money market instruments. SEBI has provided various guidelines to make portfolio management as professionally rendered service by experts. In simple words we can say portfolio management involves a proper decision to what to purchase and sell. It's a dynamic and continuous process that involves many activities as pertaining to systematic analysis, judgments and operations.

ELEMENTS OF PORTFOLIO MANAGEMENT

Portfolio Management is on going process and it involves the following elements:

- Collection of data base of the investor

- Portfolio construction

- Formulation and implementation of investment strategy

- Review and monitoring of the performance of the portfolio

- Evaluation of the portfolio

Each stage involves crucial process and contains different approaches and models to deal with it. Each step has its own features and gives different concepts about portfolio management and its practical compliance in the process of planning the portfolio.

APPROACHES IN PORTFOLIO MANAGEMENT

There are two approaches in the construction of portfolio of securities.

• Traditional approach- This method is old and follows the normal investor's needs and preferences in terms of income and capital appreciation of securities selected. Risk and return analysis is carried normally and weights are assigned. The following procedure is followed in traditional approach:

Determination of the objective of the investor

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Selection of securities

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Risk and Return Analysis

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Diversification
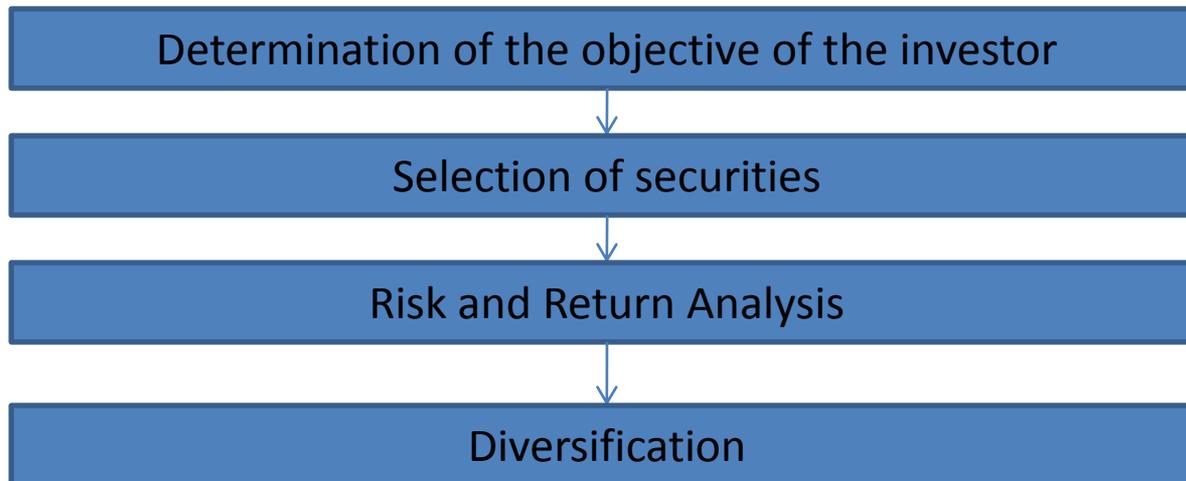
- Modern Approach

Dr. Harry M.Markowitz was the person who developed the first modern portfolio analysis model. He used mathematical programming and statistical analysis in order to arrange for the optimum allocation of assets within portfolio. This approach determines for the investors the efficient set of portfolio through the optimum variables. The basic three parameters are:

- Expected Return

- Standard deviation

- Coefficient of correlation

It is also called Full Covariance Model. For a given level of risk investor prefers higher returns. Similarly for a given level of expected return they prefer less risk.

TRADITIONAL V/S MODERN PORTFOLIO APPROACH

TRADITIONAL APPROACH

- It is subjective in nature .

- Return and risk is calculated depending upon the dividends , price earning ratio, common holding period of each security.

- It believes that market is inefficient.

- Analysis are mainly done with a view of single security.

- There are few qualitative factors which are traditional in nature.

MODERN APPROACH

- It is based on proper judgements.

- It emphasizes the need for maximization of returns through combination of securities whose total variability is lower.

- It believes in diversification of securities.

- Analysis are mainly done with a view of portfolio.

- There are many techniques with which risk –return trade off can be calculated,

RISK AND RETURN ANALYSIS

The main objective of Portfolio Management is to maximize return and minimize the risk. Risk can be managed by the use of Beta of different companies. In simple terms we can say that:

β = % change in the scrip return /% change in market return;

If β =1 , the scrip risk is same as market risk

If $\beta \geq 1$, the scrip risk is more than market risk

If $\beta \leq 1$, the scrip risk is less than market risk

The investor invests accordingly so to earn maximum return an minimum risk.

METHODS TO MEASURE RISK AND RETURN OF PORTFOLIO

Risk is measured by variances or standard deviation around the expected return for an individual security. Risk of portfolio is measured by the co variances among securities.

Expected return is return from an asset that investor anticipate that they will earn in future. It consists of two components:

- Periodic cash receipts
- Change in price

Total return= Income + Price change

MODELS TO MEASURE RISK

Portfolio risk is measured by various models like

- Markowitz model

- Capital Asset Pricing model

- Arbitrage Pricing Theory

   All the models have their own postulates and assumptions followed by criticism and implications. These models are given by various authors giving their own set of risk analysis.

                    The models highlights different aspects of risk and return and they give all new concepts with different perspectives. The details are as follows:
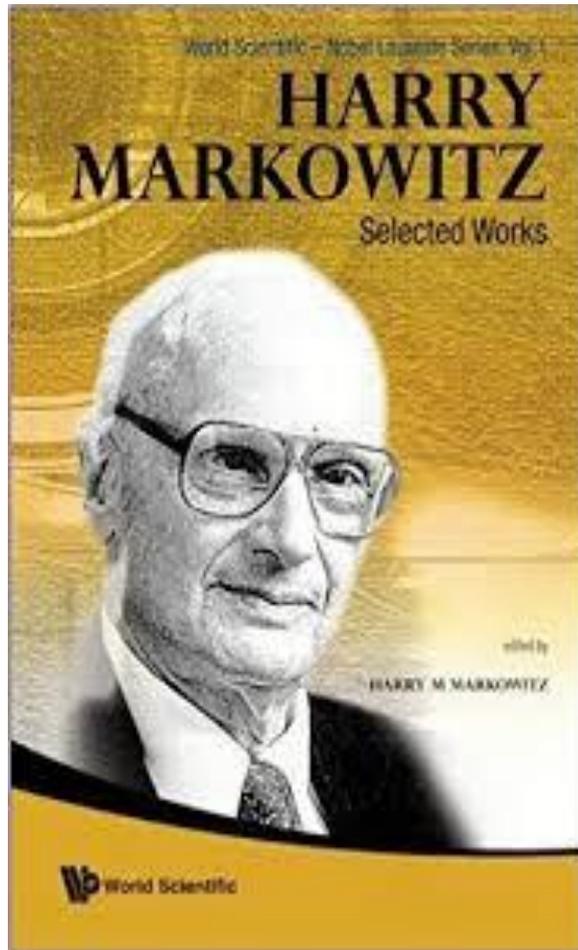
- **MARKOWITZ MODEL**

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.CAPITAL ASSET PRICING MODEL

CAPM – It is developed by WILLIAM F. SHARPE . He emphasized that the risk factor in portfolio theory is combination of two risks i.e. systematic and unsystematic risk. The systematic risk is attached to all securities as it is due to market fluctuations.

Unsystematic risk is attached to individual security and can be diversified by taking into account many factors. The total risk of portfolio is reduced with increase in the no. of stocks, as a result of decrease in the unsystematic risk distributed over no. of stocks in the portfolio.

$$E(r_i) = R_f + \beta_i(E(r_m) - R_f)$$

$E(r_i)$ = return required on financial asset i
R_f = risk-free rate of return
β_i = beta value for financial asset i
$E(r_m)$ = average return on the capital market

ARBITRAGE PRICING THEORY

It is an equilibrium model of asset pricing, and is a multi factor model. There are whole set of beta values for each factor. It states that expected return on investment is dependent on how that investment reacts to a set of macro economic factors . The theory has been developed by ROSS in 1976. It derives return from the properties of the process generating stock returns and employs arbitrage process to attain equilibrium.

$$R = E + b_1f_1 + b_2f_2 + b_3f_3 + \ldots\ldots + e$$

Each of the middle term in the equation is the product of returns on a particular economic factor and the given stock sensitivity to that factor.

CONCLUSION

In nutshell we can say that portfolio management is concept which has to be understood in better manner practically by taking into consideration real life examples and taking into account market forces which are responsible for risk and return . Managing Portfolio is big task and is not administered by a common man. Efficient portfolio consultants are required to manage them and they are expert people in their own field.