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A STUDY ON RISK RETURN ANALYSIS- HDFC

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ABSTRACT

Risk & Return Analysis is used to select a portfolio of new product development projects to achieve the following goals:

- Maximize the profitability or value of the portfolio
- Provide balance •
- Support the strategy of the enterprise

Risk & Return Analysis is the responsibility of management team of senior the an organization or business unit. This team, which might be called the Product Committee, meets regularly to manage the product pipeline and make decisions about the product portfolio. Often, this is the same group that conducts the stage-gate reviews in the organization.

A logical starting point is to create a product strategy - markets, customers, products, strategy approach, competitive emphasis, etc. The second step is to understand the budget or resources available to balance the portfolio against. Third, each project must be assessed profitability (rewards), for investment requirements (resources), risks, and other appropriate factors.

The weighting of the goals in making decisions about products varies from company. But organizations must balance these goals: risk vs. profitability, new products vs. improvements, strategy fit vs. reward, market vs. product line, long-term vs. short-term. Several types of techniques have been used to support the Risk & Return Analysis process:

- Heuristic models
- Scoring techniques
- Visual or mapping techniques

The earliest Risk & Return Analysis techniques optimized projects' profitability or financial returns using heuristic or mathematical models. However, this approach paid little attention to balance or aligning the portfolio to the organization's strategy. Scoring techniques weight and score criteria to take into account investment requirements, profitability, risk and strategic alignment. The shortcoming with this approach can be an over emphasis on financial measures and an inability to optimize the mix of projects.

1. INTRODUCT

ION MEANING: Risk-Return Analysis opens the door to a groundbreaking four-book series giving readers a privileged look at the personal reflections and current strategies of a luminary in finance. This first volume is Markowitz's response to what he calls the "Great Confusion" that spread when investors lost faith in the diversification benefits of MPT during the financial crisis of 2008. It demonstrates why MPT never became ineffective during the crisis, and how you can continue to reap the rewards of managed diversification into the future. Economists and financial advisors will benefit from the potent balance of theory and hard data on mean- variance analysis aimed at improving decision- making skills.

Relationship between risk and return Investors are risk averse; i.e., given the same expected return, they will

investment for choose the which that return is more certain. Therefore, investors demand a higher expected return for riskier assets. Note that a higher expected return does not guarantee a higher realized return. Because by definition returns on risky assets are uncertain, an investment may not earn its expected return.

Although the historical (realized) returns rather than expected (future) returns, they are useful to demonstrate the relationship between risk and return. Note that the mean (average) annual return increases as the dispersion of returns increases.

A portfolio is a collection of assets. The assets may be physical or financial like Shares, Bonds, Debentures, Preference Shares, etc. The individual investor or a fund manager would not like to put all his money in the shares of one company that would amount to great risk. He would therefore, follow the age old maxim that one should not put all the eggs into one basket. By doing so, he can achieve objective to maximize portfolio return and at the same time minimizing the portfolio risk by diversification.

- Portfolio management is the management of various financial assets which comprise the portfolio.
- Portfolio management is a decision support system that is designed with a view to meet the multi-faced needs of investors.
- According to Securities and Exchange Board of India Portfolio Manager is defined as: "Portfolio means the total holdings of securities belonging to any person".

FUNCTIONS OF RISK-RETURN:

- To frame the investment strategy and select an investment mix to achieve the desired investment objectives
- To provide a balanced portfolio which not only can hedge against the inflation but can also optimize returns with the associated degree of risk
- > To make timely buying and selling of

securities

To maximize the after-tax return by investing in various tax saving investment instruments.

STRUCTURE / PROCESS OF TYPICAL PORTFOLIO MANAGEMENT

In the small firm, the portfolio manager performs the job of security analyst.

In the case of medium and large sized organizations, job function of portfolio manager and security analyst are separate.



CHARACTERISTICS

OF

PORTFOLIO(*Risk-Return*):

Individuals will benefit immensely by taking portfolio management services for the following reasons:

- Whatever may be the status of the capital market, over the long period capital markets have given an excellent return when compared to other forms of investment. The return from bank deposits, units, etc., is much less than from the stock market.
- The Indian Stock Markets are very complicated. Though there are thousands of companies that are listed only a few hundred which have the necessary liquidity. Even among these, only some have the growth prospects which are conducive for investment. It is impossible for any individual wishing to invest and sit down and analyze all these intricacies of the market unless he does nothing else.
- Even if an investor is able to understand the intricacies of the market and separate chaff from the grain the trading practices in India are so complicated that it is really a difficult task for an investor to

trade in all the major exchanges of India, look after his deliveries and payments

NEED & IMPORTANCE OF STUDY:

A risk-Return analysis has emerged as a separate academic discipline in India. Portfolio theory that deals with the rational investment decision-making process has now become an integral part of financial literature.

Investing in securities such as shares, debentures & bonds is profitable well as

exciting. It is indeed rewarding but involves a great deal of risk & need artistic skill. Investing in financial securities is now considered to be one of the most risky avenues of investment. It is rare to find investors investing their entire savings in a single security. Instead, they tend to invest in a group of securities. Such group of securities is called as PORTFOLIO. Creation of portfolio helps to reduce risk without sacrificing returns. Portfolio management deals with the analysis of individual securities as well as with the theory & practice of optimally combining securities into portfolios.

The modern theory is of the view that by diversification, risk can be reduced. The investor can make diversification either by having a large number of shares of companies in different regions, in different industries or those producing different types of product lines. Modern theory believes in the perspective of combinations of securities under constraints of risk and return.

SCOPE OF STUDY:

This study covers the Markowitz model. The study covers the calculation of correlations between the different securities in order to find out at what percentage funds should be invested among the companies in the portfolio. Also the study includes the calculation of individual Standard Deviation of securities and ends at the calculation of weights of individual securities involved in the portfolio. These percentages help in allocating the funds available for investment based on risky portfolios.

II. OBJECTIVES OF THE STUDY:

- To study the investment pattern and its related risks & returns In The Housing Development Finance Corporation Limited (HDFC).
- To find out optimal portfolio of The Housing Development Finance Corporation Limited (HDFC), which gave optimal return at a minimize risk to the investor in HDFC.
- To see whether the portfolio risk is less than individual risk on whose basis the portfolios are constituted
- To see whether the selected portfolios is yielding a satisfactory and constant return to the investor
- To understand, analyze and select the best portfolio

STEPS IN PORTFOLIO MANAGEMENT:

- Specification and qualification of investor objectives, constraints, and preferences in the form of an investment policy statement.
- Determination and qualification of capital market expectations for the economy, market sectors, industries and individual securities.
- Allocation of assets and determination of appropriate portfolio strategies for each asset class and selection of individual securities.
- Performance measurement and evaluation to ensure attainment of investor objectives.
- Monitoring portfolio factors and responding to changes in investor objectives, constrains and / or capital market expectations.
- Rebalancing the portfolio when necessary by repeating the asset allocation, portfolio strategy and security selection.

III. METHODOLOGY AND FRAMEWORK

DATA COLLECTION METHODS

The data collection methods

include both the primary and secondary collection methods.

Primary collection methods:

This method includes the data collection from the personal discussion with the authorized clerks and members of the hdfc financial services.

Secondary collection methods:

The secondary collection methods includes the lectures of the superintend of the department of market operations and so on., also the data collected from the news, magazines and different books issues of this study Superintend

LIMITATIONS OF THE STUDY

- 1. Construction of Portfolio is restricted to two companies based on Markowitz model.
- 2. Very few and randomly selected scripts / companies are analyzed from BSE listings.
- 3. Data collection was strictly confined to secondary source. No primary data is associated with the project.
- 4. Detailed study of the topic was not possible due to limited size of the project.
- 5. There was a constraint with regard to time allocation for the research study i.e. for a period of two months.

IV. TYPES OF RISKS:

Risk consists of two components. They are

- 1. Systematic Risk
- 2. Un-systematic Risk

1. Systematic Risk:

Systematic risk is caused by factors external to the particular company and uncontrollable by the company. The systematic risk affects the market as a whole. Factors affect the systematic risk are

- economic conditions
- political conditions
- sociological changes

The systematic risk is unavoidable. Systematic risk is further sub-divided into three types. They are

- a) Market Risk
- b) Interest Rate Risk
- c) Purchasing Power Risk

a). Market Risk

One would notice that when the stock market surges up, most stocks post higher price. On the other hand, when the market falls sharply, most common stocks will drop. It is not uncommon to find stock prices falling from time to time while a company's earnings are rising and viceversa. The price of stock may fluctuate widely within a short time even though earnings remain unchanged or relatively stable.

b). Interest Rate Risk:

Interest rate risk is the risk of loss of principal brought about the changes in the interest rate paid on new securities currently being issued.

c). Purchasing Power Risk:

The typical investor seeks an investment which will give him current income and / or capital appreciation in addition to his original investment.

2. Un-systematic Risk:

Un-systematic risk is unique and peculiar to a firm or an industry. The nature and mode of raising finance and paying back the loans, involve the risk element. Financial leverage of the companies that is debt-equity portion of the companies differs from each other. All these factors affect the un-systematic risk and contribute a portion in the total variability of the return.

Managerial inefficiently

- Technological change in the production process
- > Availability of raw materials
- Changes in the consumer preference
- Labor problems

The nature and magnitude of the above mentioned factors differ from industry to industry and company to company. They have to be analyzed separately for each industry and firm. Un-systematic risk can be broadly classified into:

- a) Business Risk
- b) Financial Risk

a. Business Risk:

Business risk is that portion of the unsystematic risk caused by the operating environment of the business. Business risk arises from the inability of a firm to maintain its competitive edge and growth or stability of the earnings. The volatility in stock prices due to factors intrinsic to the company itself is known as Business risk. Business risk is concerned with the difference between revenue and earnings before interest and tax. Business risk can be divided into.

i). Internal Business Risk

Internal business risk is associated with the operational efficiency of the firm. The operational efficiency differs from company to company. The efficiency of operation is reflected on the company's achievement of its pre-set goals and the fulfillment of the promises to its investors.

ii).External Business Risk

External business risk is the result of operating conditions imposed on the firm by circumstances beyond its control. The external environments in which it operates exert some pressure on the firm. The external factors are social and regulatory factors, monetary and fiscal policies of the government, business cycle and the general economic environment within which a firm or an industry operates.

b. Financial Risk:

It refers to the variability of the income to the equity capital due to the debt capital. Financial risk in a company is associated with the capital structure of the company. Capital structure of the company consists of equity funds and borrowed funds.

V. CONCLUSIONS

In case of perfectly correlated securities or stocks, the risk can be reduced to a minimum point.

In case of negatively correlative securities the risk can be reduced to a zero.(which is company's risk) but the market risk prevails the same for the security or stock in the portfolio.

BIBLIOGRAPHY

1. Security Analysis ad Portfolio Management, Sudhindra Bhatt, Excel Publications

2. Security Analysis ad Portfolio Management, Kelvin S.

3. Investment Analysis and Portfolio Management, Prasanna Chnadra

4. Financial Management and Policy, Van Home, James C, Englewood Cliffs, N.J. Prentice Hall, 1995

5. Money and Stock prices, Sprinkel, Beryl, W., HomewoodIll, Richard S. Irwin, Inc, 1964.

6. Portfolio and Investment Section: Theory and Practice, Prentice Hall, 1984

WEBSITES:

1. www.investopedia.com

- 2. www.nseindia.com
- 3. www.bseindia.com.
- 4. www.moneycontrol.com
- 5. www.indiainfoline.com
- 6. www.moneybhai.com

NEWSPAPERS& MAGAZINE

- 1. Dairy News Papers.
- 2. Economic Times,
- 3. Financial Express.

BOOKS:

1. Securities Analysis And Portfolio Management , Donalde, Fisher & Ronald J.Jodon , 6th Edition