“AN INSIGHT INTO PORTFOLIO MANAGEMENT WITH RELEVANCE TO CUSTOMER EXPECTATIONS”

Very broadly, the investment process consists of two tasks. The first task is security analysis which focuses on seeking the risk and return characteristics of the available investment alternatives. The second task is portfolio selection which involves choosing the best possible portfolio from the set of feasible portfolio.

Portfolio theory originally was proposed by Harry Markowitz in 1950s, was the first formal attempt to quantify the risk of a portfolio and develop a methodology for determining the optimal portfolio. Prior to the development of the theory, investors dealt with the concepts of risk and return somewhat loosely. Intuitively smart investors knew the benefit of diversification which is reflected in the traditional adage “Do not put all your eggs in one basket”. Henry Markowitz was the first person to show quantitatively why and how diversification reduces risk. In recognition of his seminal contributions in this field he was awarded the Nobel Prize in Economics in 1990.

This present study focuses how investors can construct the best possible portfolio with the help of efficient diversification.

The Indian broking industry is one of the oldest trading industries that have been around even before the establishment of the BSE in 1875. Despite passing through a number of changes in the post liberalisation period, the industry has found its way towards sustainable growth.

The product offerings of brokerage firms today go much beyond the traditional trading of equities. A typical brokerage firm today offers *trading in equities and derivatives online*, most probably *commodities futures, exchange traded funds, distributes mutual funds* and *insurance* and also offers *personal loans for housing, consumptions and other related loans, offers portfolio management services,* and some even go to the extent of creating niche services such as a brokerage firm offering *art advisory services*. In the background of growing opportunities for Investors to invest in India as also abroad, the range of products and services will widen further. In the offing will be interesting opportunities that might arise in the exchange enabled corporate bond trading, soon after its commencement and futures trading that might be introduced in the near future in the areas of interest rates and Indian currency.

Indian brokerage industry is highly fragmented. Numerous small firms operate in this space. Given the growing importance of technology in operations and increasing emphasis on regulatory compliance, smaller firms might find it constrained to make right type of investments that will help in business growth and promotion of investor interests.

The way the brokerage industry is run and the manner in which several of them pursued growth and development attracted foreign financial institutions and investment banks to buy stakes in domestic brokerage firms, paving the way for stronger brokerage entities and possible scope for consolidation in the future. Foreign firms picked up stake in some of the leading brokerage firms, which might lead to creating of greater interest in investing in brokerage firms by entities in India and abroad.

Portfolio is a combination of assets 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 construction.

Diversification of investments helps to spread risk over many assets. A diversified portfolio, some securities may not perform as expected, but others may exceed the expectation and making the actual return of the portfolio reasonably close to the anticipated one. Keeping a portfolio of single security may lead to a greater likelihood of the actual return somewhat different from that of the expected return. Hence, it is a common practice to diversify securities in the portfolio.

Portfolio may or may not take on the aggregate characteristics of their individual parts. Portfolio is the collection of financial or real assets such as equity shares, debentures, bonds, treasury bills and property etc. Portfolio is a combination of assets or it consists of collection of securities. These holdings are the result of individual preferences, decisions of the holders regarding risk, return and a host of other considerations.

Portfolio management concerns the construction & maintenance of a collection of investment. It is investment of funds in different securities in which the total risk of the portfolio is minimized, while expecting maximum return from it. It primarily involves reducing risks rather that increasing return. Return is obviously important though, and the ultimate objective of portfolio manager is to achieve a chosen level of return by incurring the least possible risk.

OBJECTIVES OF PORTFOLIO MANAGEMENT

1. **Basic objectives**

The basic objective of Investment/portfolio management can be classified into two categories as follows:

(a) To maximize yield

(b) To minimize risk.

2. **Secondary objectives**

(a) Regular return

(b) Stable income

(c) Appreciation of capital

(d) More liquidity

(e) Tax benefits

(f) Safety of the investment

(g) Marketability

(h) Liquidity

NEED FOR PORTFOLIO MANAGEMENT

Portfolio management is a process encompassing many activities of investment in assets and Securities. It is a dynamic and flexible concept and involves regular and systematic analysis, judgment and actions. The objective of this service is to help the unknown and investors with the expertise of professionals in Investment portfolio management. It involves construction of a portfolio based upon the investor's objectives, Constraints, preferences for risk and returns and tax liability. The portfolio is reviewed and adjusted from time to time in tune with the market conditions. The evaluation of portfolio is to be done in terms of targets set for risk and return. The changes in the portfolio are to be effected to meet the changing conditions.

Portfolio construction refers to the allocation of surplus funds in hand among a variety of financial assets open for investment. Portfolio theory concerns itself with the principles governing such allocation. The modern view of investments is oriented more towards the assembly of proper combinations of individual securities to form investment portfolios. A combination of securities hold together will give a beneficial result if they are grouped in a manner to secure higher return after taking into consideration the risk element.

The modern theory is of the view that by diversification, risk can be reduced. Diversification can be made by the investor 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 combination of securities under constraints of risk and return.

ELEMENTS OF PORTFOLIO MANAGEMENT

Investment management is also known as Portfolio Management, is a complex process or activity that may be divided into seven broad phases: -

1. Specification of Investment Objectives and Constraints.
2. Choice of Asset Mix.
3. Formulation of Portfolio Strategy.
4. Selection of Securities.
5. Portfolio Execution.
6. Portfolio Rebalancing.
7. Performance Evaluation.

- ✓ **Specification of Investment Objectives and Constraints**

  The first step in the portfolio management process is to specify one's investment objectives and constraints. The commonly stated investment goals are:

  Income: - To provide a steady stream of income through regular interest/dividend payment.

  Growth: - To increase the value of the principal amount through capital appreciation.

  Stability: - To protect the principal amount invested from the risk of loss.

- ✓ **Choice of asset mix**

  Based on the objectives and constraints, you have to specify your asset allocation, that is, you have to decide how much of your portfolio has to be invested in each of the following asset categories:

  - Cash

- Bonds
- Stocks
- Real estate
- Precious metals
- Others.

Empirical studies have shown that nearly 90 percent of the variance of the portfolio return is explained by its asset mix. Put differently, only about 10 percent of the variance of the portfolio return is explained by other elements like ‘sector rotation’ or ‘security selection’.

✓ **Formulation of portfolio strategy**

After you have chosen a certain asset mix, you have to formulate an appropriate portfolio strategy. Two broad choices are available in this respect, an active portfolio and passive portfolio.

➢ Active portfolio strategy is followed by most investment professionals and aggressive investors who strive to earn superior returns, after adjustment for risk. The 4 principal vectors of an active strategy are:

- ♦ Market timing
- ♦ Sector rotation
- ♦ Security selection
- ♦ Use of a specialized concept

➢ Passive strategy rests on the tenet that the capital market is fairly efficient with respect to the available information. Hence, the search for superior returns through an active strategy is considered futile.

- ✓ **Selection of securities**

  This involves selecting an asset which best suits the portfolio. An asset should be selected based on certain study viz. fundamental analysis, technical analysis or random selection of assets. Some of the factors such as yield to maturity, risk of default, tax shield, and liquidity should be properly evaluated.

- ✓ **Portfolio execution**

  The next step is to implement the portfolio plan by buying and/or selling specified securities to be included in the portfolio have been identified. It is an important practical step that has a significant bearing on investment results. For effectively handling the portfolio execution phase you should understand the trading game, what motivates trade, nature of key players in this game, who are the likely winners and losers in this game and what guidelines should be borne in mind while trading.

- ✓ **Portfolio rebalancing**

  Portfolio rebalancing involves reviewing and revising the portfolio composition. The initial portfolio is left undisturbed. It is essentially a ‘buy and hold policy’. Irrespective of what happens to relative values, no rebalancing is done. Then after a specific time, ‘the constant mix policy calls’ for maintaining the portfolio in line with their target value.

- ✓ **Performance evaluation**

  The key dimensions of portfolio performance evaluation are rate of return and risk. The performance attribution is to determine the contribution made by the decisions in the areas of asset allocation, sector choice and security selection.

RETURN ON PORTFOLIO:

Each security in a portfolio contributes returns in the proportion of its investment in security. Thus the portfolio expected return is the weighted average of the expected returns, from each of the Securities, with weights representing the proportionate share of the security in the total investment. Why does an investor have so many securities in his portfolio? If the security ABC gives the maximum return why not he invests in that security all his funds and thus maximize return? The answer to this question lies in the investor's perception of risk attached to investments, his objectives of income, safety , appreciation, liquidity and hedge against loss of value of money etc. this pattern of investment in different asset categories, security categories, types of investments, etc, would all be described under the caption of diversification, which aims at the reduction or even elimination of non-systematic or company related risks and achieve the specific objectives of the investors.

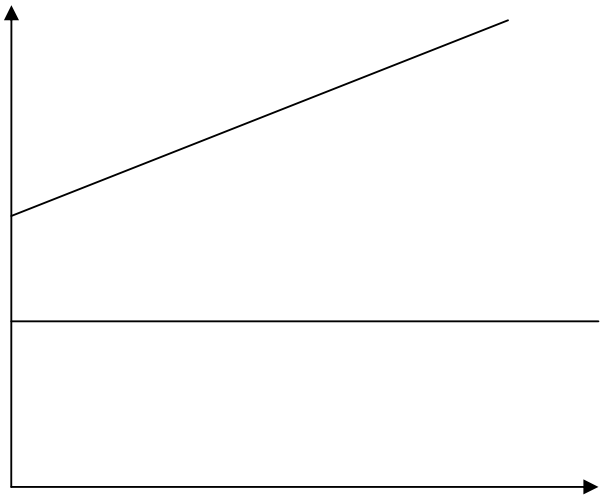
PORTFOLIO RISK:

Risk on a portfolio is different from the risk on individual securities. This risk is reflected in the variability of the returns from zero to infinity. The expected return depends on the probability of the returns and their weighted contribution to the risk of the portfolio. There are two measures of risk in this context-one is the absolute deviation and the other standard deviation.

Most investors invest in a portfolio of assets, as they don't want to pull all their eggs in one basket. Hence, what really matters to them is not the risk and return of the stocks in isolation, but the risk and the return of the portfolio as a whole.

RISK-RETURN ANALYSIS:

All investments have some risks. Investments in shares of companies have its own risks or uncertainty. These risks arise out of variability of returns on yields and uncertainty of appreciation or depreciation of share prices, loss of liquidity, etc, and the risk over time can be represented by the variance of the returns, while the return over time is capital appreciation plus payout divided by the purchase price of the share.



Normally, the higher the risk that the investors takes, the higher is the return. There is, however, a risk less return on capital of about 12%, which is the bank rate charged by the RBI or long-term, yielded on govt. securities at around 13% to 14%. This risk less returns refers to lack of variability of return and no uncertainty in the repayment of the capital. But other risks such as loss of liquidity due to parting with money etc, may, however, remain but are rewarded by the total return on the capital. Risk-return is subject to variation and the objective of the portfolio manager is to reduce that variability and thus reduce the risk by choosing an appropriate portfolio.

There are two types of risks, namely:

- Market risk or Systematic risk, and
- Company risk or Unsystematic risk.

SEBI NORMS:

SEBI has prohibited the Portfolio Manager to assume any risk on behalf of the client. Portfolio Manager cannot also assure any fixed return to the client. The investments made or advised by him are subject to risk, which the client has to bear. The investment consultancy and management has to be charged at rates, which are fixed at the beginning and transparent as per the contract. No sharing of profits or discounts or cash incentives to clients is permitted.

The Portfolio Manager is prohibited to do lending, badla financing and bills discounting as per SEBI norms. He cannot put the clients' funds in any investment, not permitted by the contract, entered into with the client. Normally investments can be made in both capital market and money market instruments.

Client's money has to be kept in a separate account with the public sector bank and cannot be mixed up with his own funds or investments. All the deals done for a client's account are to be entered in his name and Contract Notes, Bills and etc., are all passed by his name. A separate ledger account is maintained for all purchases/sales on client's behalf, which should be done at the market price. Final settlement and termination of contract is as per the contract. During the period of contract, Portfolio Manager is only acting on a contractual basis and on a fiduciary basis. No contract for less than a year is permitted by the SEBI.

CRITERIA FOR INVESTMENT DECISION:

Firstly, the investment decision depends on the mood of the market. As per the empirical studies, share prices depends on the fundaments of the company only to the extent of 50% and the rest is decided the mood of the market and the expectations of the company's performance and its share price. These expectations depend on the analyst's ability to foresee and forecast the future performance of the company. For price paid for a share at present depends on the flow of returns in future, expected from the company.

Secondly and following from the above, decision to invest will be based on the past performance, present working and the future expectations of the company's performance, both operationally and financially. These in turn will influence the share prices.

Thirdly, investment decision depends on the investor's perception on whether the present share price is fair, overvalued or undervalued. If the share price is fair he will hold it (Hold Decision) if it is overvalued, he will sell it (Sell Decision) and if it is undervalued, he will buy it (Buy Decision). These are general rule, but exceptions may be there. Thus even when prices are rising, some investors may buy as their expectations of further rise may outweigh their conception of overvaluation. That means, the concepts of overvaluation or under valuation are relative to time, space and man. What may be overvalued a little while ago has become undervalued following later developments; information or sentiment and mood may change the whole market scenario and of the valuation of shares. There are two more decisions, namely, Average Up and Average Down of prices.

The investment decision may also depend on the investor's preferences, moods, or fancies. Thus an investor may go on a spending spree and invest in

cats and dogs of companies, if he has taken a fancy or he is flooded with money from lottery or prizes. A Rational investor would however make investment decisions on scientific study of the fundamentals of the company and in a planned manner.

At present, investors mostly depend on hearsay and advice of friends, relatives, sub-brokers, etc., for the investment decision, but not on any scientific study of the company's fundamentals. In view of the increasing mushroom growth of companies and lack of any track record of many promoters, investment decision making became on hunches, hearsay etc.

INVESTMENT OBJECTIVES:

1) The first basic objective of investment is the return on it or yields. The yields are higher, the higher is the risk taken by investors. The risk less return is the bank deposit rate of 8% at present or Bank rate of 6.5%. Here the risk is least as funds are safe and returns are certain.

2) Secondly, each investor has his own asset preferences and choice of investments. Thus some risk adverse operators put their funds in bank or post office deposits or deposits/certificates with co-operatives and PSU's. Some invest in real estate; land and building while others invest mostly in gold, silver and other precious stones, diamonds etc.

3) Thirdly, every investor aims at providing for minimum comforts of house furniture, vehicles, consumer durables and other household requirements. After satisfying these minimum needs, he plans for his income, saving in insurance (LIC and GIC etc.) pension and provident funds etc. In the choice of these, the return is subordinated to the needs of the investor.

4) Lastly, after satisfying all the needs and requirements, the rest of the savings would be invested in financial assets, which will give him future incomes and capital appreciation so as to improve his future standard of living. These may be in stock/capital market investments.

QUALITIES FOR SUCESSFUL INVESTING

- Contrary thinking
- Patience
- Composure
- Flexibility and
- Openness

CASE LETS

As a part of study, 3 clients have been picked up to construct portfolio. The customers are evaluated on different parameters to know their taking capacity and their expectations as returns. The portfolio is constructed based on their expectations and limitations in the construction of portfolio. The risk taking capacity of the customers is evaluated based on the questionnaire and accordingly the assets are selected. The risk and return of the client on the portfolio is calculated based on statistical calculations. The details of the client and selection of portfolio are discussed below:

Client 1

Investor profile

54 year old investor, a government employee, saving and investing to get regular income and aggressive returns. After evaluating risk, it is concluded that he is a conservative risk taker.

His annual income is Rs. 550000 per annum.

Out of this, his savings are Rs. 200000 per annum.

Now, diversification is to be made so as to meet his requirements and expectations.

So, his investment avenues include:

Rs. 50000 in bank deposits out of which Rs. 25000 in Savings Bank account and Rs. 25000 in Fixed Deposits, to earn to earn regular income and bear less/nil risk.

Rs. 50000 in government bonds, 6.07%, 2014 presently trading at Rs. 102.30 whose face value is Rs 100. The bond to be held till maturity so as to earn regular interest.

Rs. 100000 to be invested in equities so as to earn aggressive returns.

As analyzed above the securities which suit the client better are ONGC and ITC.

Calculating weights of the security so as to make an ideal investment is shown below:

Standard Deviation of ONGC= 3.45 ($\sigma 1$)

Standard Deviation of ITC= 2.38 ($\sigma 2$)

Weight of ONGC i.e. $X_1 = \frac{\sigma 2}{\sigma 1 + \sigma 2}$

$$= \frac{2.38}{3.45 + 2.38}$$

$$= 0.40$$

Weight of ITC X_2= 0.60

That means 40% to be invested in ONGC and 60% to be invested in ITC.

Using the following formula, risk can be calculated

$\sqrt{[(X_1)^2 (\sigma 1)^2 + (X_2)^2(\sigma_2)^2 + 2(\acute{r}_{12})(\sigma_1)(\sigma_2)(X_1)(X_2)]}$.

$\sqrt{[(0.40)^2(3.45)^2 + (0.60)^2(2.38)^2 + 2(-0.20)(0.4)(0.6)(3.45)(2.38)]}$

$\sqrt{3.15}$= 1.78.

Therefore, risk of portfolio is 1.78.

Now calculating expected return on equities is shown below:

Average return on ITC = 0.112%

Average return on ONGC = 0.7337%.

Probability of occurrence is 0.50 in both the cases.

So, expected return = (0.5)(0.112%)+(0.5)(0.7337%)

= 0.562%.

If 0.562 is for one day then, for 100 days return would be 0.1532

Therefore, return on equity= 100000*0.1532

= 15320+100000

=115320.

The above mentioned return is for 6 months.

PORTFOLIO OF CLIENT1

ASSET CLASS	INVESTMENT	RETURN
FIXED DEPOSITS	50000	8% P.A
SAVINGS DEPOSIT	25000	3% P.A
BONDS	25000	6.07%
EQUITIES	100000	115320 (after 6 months expected returns)

CLIENT 2

INVESTOR PROFILE

28 year old, hardware engineer,

Working for an MNC,

Investing to earn regular fixed income and steady returns.

His annual income is Rs. 700000 and his savings are Rs. 300000 per annum.

- Rs. 50000 to be invested every year in Gayatri Projects Ltd to purchase land after a period of time.

Rs. 25000 to be invested in Life Insurance Policy.

Rs. 50000 to be invested in bank fixed deposits

Rs. 25000 in savings bank account.

Rs. 25000 to be invested in National Savings Certificate.

Rs. 100000 to be invested in equities to enhance his returns.

Based on the evaluation, he is declared to be risky client.

σ_1= HUL

σ_2= HDFC

σ_3= BHARTI AIRTEL

Calculation of weights

$X_1 = \sigma_1 / (\sigma_1 + \sigma_2 + \sigma_3)$

$= 14.47 / (14.47+3.35+4)$

$= 0.60$

$X_2 = \sigma_2 / (\sigma_1 + \sigma_2 + \sigma_3)$

$= 4 / (4+14.47+3.35)$

$= 0.20$

$X_3 = 0.20.$

Equity portfolio risk can be calculated as follows:

$\sqrt{[(X_1)^2 (\sigma 1)^2 + (X_2)^2(\sigma_2)^2 + 2(\acute{r}_{12})(\sigma_1)(\sigma_2)(X_1)(X_2)]}$.

$=\sqrt{[(.6)^2(14.47)^2 + (.2)^2(4)^2 + (.2)^2(3.35)^2 + 2(.6)(.2)(-0.08)(14.47)(4) + 2(.6)(.2)(-.026)(14.47)(3.35) + 2(.2)(.2)(-.10925)(4)(3.35)]}$

$=8.65$

Therefore, risk on portfolio is 8.65%.

Expected return from the portfolio is:

(.2)(-.00102) + (.2)(-.21) + (.5)(.33)

= 0.122796

= 0.122796 * 100000

= Rs. 122796.

Calculating number years of cash outflows

Cost of land is minimum Rs.3000000. the investment is made in annuities i.e., equal cash flows. Rate of interest is 12%. Now we have to check in how many years the land can be acquired.

$$FV = \frac{PV\left(1 + r\right)^{n} - 1}{r}$$

$1000000 = \{50000[(1 + 0.12)^{n}] – 1\}/ 0.12$

$120000 = 50000(1.12)^{n}$

log2.4 = nlog1.12

0.380 = 0.0492n

N= 7.72 or 8 years approximately.

PORTFOLIO OF CLIENT 2

ASSET CLASS	INVESTMENT	RETURN
LAND	50000	APPRECIATION
LIC POLICY	25000	SUM ASSURED
FIXED DEPOSITS	25000	6.07%
SAVINGS BANK A/C	50000	8%
NATIONAL SAVINGS CERTFICATE	25000	MATURITY
EQUITIES	100000	122796 (expected after 6 months)

CLIENT 3

INVESTOR PROFILE

30 year old, working as Doctor,

Investing to earn regular income.

Slow and positive returns.

His annual income is Rs. 400000.

His savings are Rs. 100000.

He is evaluated to be moderate risk taker.

Diversification

Rs. 15000 to be invested in Savings Bank account.

Rs. 10000 to be invested in Fixed Deposit.

Life Insurance Policy of Rs. 15000.

To be invested in bonds Rs. 10000.

Equities Rs. 50000.

Calculating risk and return on equity segment

σ_1= Infosys = 2.467

σ_2= MTNL = 2.64

σ_3= NTPC = 18.264.

$X_1 = \sigma_1/(\sigma_1 + \sigma_2 + \sigma_3)$.

= 2.46 / (2.46 + 2.64 + 18.26)

= 0.10.

X_2 = 0.12.

X_3 = 0.78.

$\sqrt{[(X_1)^2 (\sigma 1)^2 + (X_2)^2(\sigma_2)^2 + 2(\acute{r}_{12})(\sigma_1)(\sigma_2)(X_1)(X_2)]}$.

$= \sqrt{[(.1)^2(2.46)^2 + (.12)^2(2.64)^2 + (18.26)^2(.78)^2 + 2(2.46)(2.64)(.1)(.12)}$
$+ 2(2.64)(18.26)(-.09)(.12)(0.78) + 2(.33)(.78)(.1)(2.46)(18.26)]$

$= 7.2$

Calculation of expected return =

$(.5)(.16) + (.5)(.64) + (.2)(-.933)$

$= 0.2151.$

**Total return (expected for 6 months) = 50000* 0.2150815

= 10754

= Rs.10754 + Rs. 50000

= Rs. 60754.

PORTFOLIO OF CLIENT 3

ASSET CLASS	INVESTMENT	RETURN
SAVINGS BANK A/C	15000	3%
FIXED DEPOSIT	10000	8%
LIC POLICY	15000	SUM ASSURED
BONDS	10000	6.07%

EQUITIES	50000	0.2150815% per day on average.

FINDINGS

Investing in more number of equities may turn portfolio very volatile.

Portfolio Management Service is not available in many places because of lack of awareness and confidence in people.

Rebalancing of portfolio is very important i.e., passive portfolio cannot fetch good returns. In order to play safe in the market one needs to maintain active portfolio strategy especially in this current volatile situation.

There are different models in constructing a portfolio, but in market the ultimate decision lies with the investor, whatever be the model, if one can understand the market behavior, he can play safe game.

Portfolio of a person differs from one person to another depending on the risk appetite, return expectations, needs and many other factors.

A portfolio manager should have wide knowledge about each and every investment avenue. A portfolio manager should be able to study the market behavior as well as investor very well.

On the company

The company has many inactive accounts piled up which are more than the active accounts.

The company aggressively tried to recruit customer relations officer in large number but couldn’t penetrate in its own surroundings.

The company had failed in properly having a strategy to sell their products.

None of the dealers have knowledge on technical analysis except one.

SUGGESTIONS TO THE INVESTOR

- Grape wine knowledge is not advantageous. Listen to rumors and tips, check for yourself.
- A proper mix of assets is necessary
- Buy stocks in companies with potential for surprises.
- Take advantage of volatility before reaching a new equilibrium.
- The investor must select the right advisors who have sound knowledge about the product which they are offering.
- Professionalized advisory is the most important feature to the investors. Professionalized research, analysis which will be helpful for reducing any kind of risk to overcome.
- Check your long term and short term goals before investing.
- Do not use idle portfolio.