International Journal of Business Economics and Management Research
Vol. 5, Issue 2, February 2014 Impact Factor: 3.298 ISSN: (2229-4848)
www.skirec.org Email Id: skirec.org@gmail.com

INVESTMENT IS AN ACTIVITY THAT IS UNDERTAKEN BY THOSE WHO HAVE SAVINGS

Randeep Singh

Research Scholar, Singhania University

Jhunjhunu, Rajasthan

ABSTRACT:

Investment may be defined as an activity that commits funds in any financial form in the present with an expectation of receiving additional return in the future. The expectations bring with it a probability that the quantum of return may vary from a minimum to a maximum. This possibility of variation in the actual return is known as investment risk. Thus every investment involves a return and risk.

Investment is an activity that is undertaken by those who have savings. Savings can be defined as the excess of income over expenditure. An investor earns /expects to earn additional monetary value from the mode of investment that could be in the form of financial assets.

INTRODUCTION:

Investment may be defined as an activity that commits funds in any financial form in the present with an expectation of receiving additional return in the future. The expectations bring with it a probability that the quantum of return may vary from a minimum to a maximum. This possibility of variation in the actual return is known as investment risk. Thus every investment involves a return and risk.

Investment is an activity that is undertaken by those who have savings. Savings can be defined as the excess of income over expenditure. An investor earns /expects to earn additional monetary value from the mode of investment that could be in the form of financial assets.

The three important characteristics of any financial assets are:

- Return – the potential return possible from an asset.
- Risk- the variability in returns of the asset from the chances of its value going down/up
- Liquidity – the ease with which an asset can be converted into cash.

Investor tends to look at these three characteristics while deciding on their individual preference pattern of investments. Each financial asset will have a certain level of each of these characteristics.

INVESTMENT AVENUES:

There are a large Number of investment avenues for savers in India. Some of them are Marketable and liquid, while some others are non-marketable. Some of them are highly risky while some others are almost risk less. Investment avenues can be broadly categorized under the following basis:

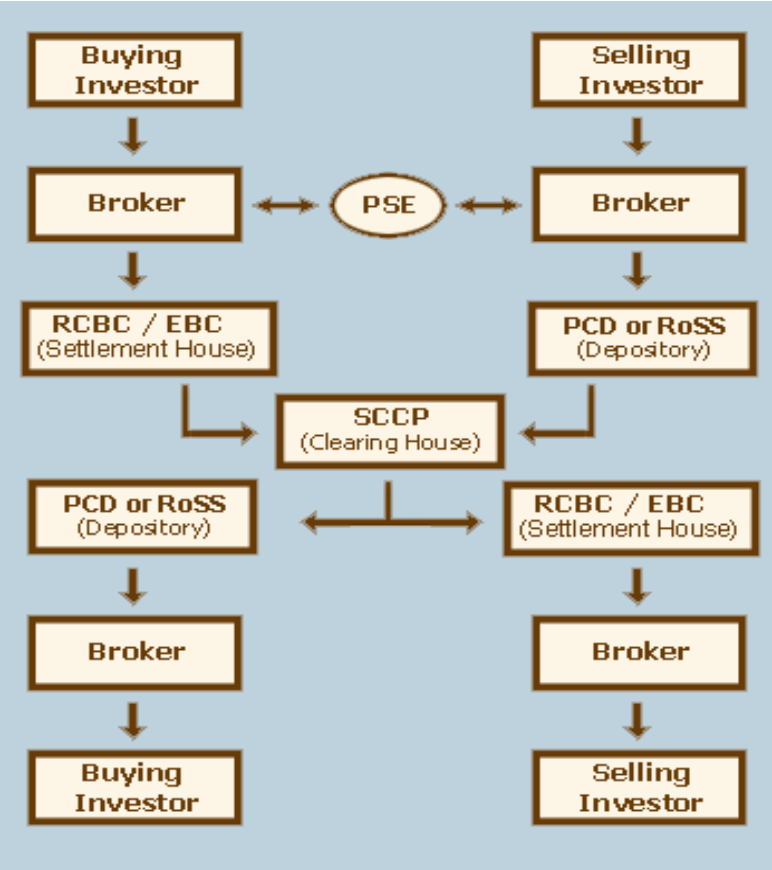
- Corporate securities
- Equity shares
- Preference shares
- Debentures/Bonds
- Derivatives
- Others.

Corporate securities Joint stock companies in the private sector issue corporate securities. These include equity shares, preference shares, and debentures. Equity shares have variable dividend and hence belong to the high –risk – return category; preference shares and debentures have fixed returns with lower risk. The classification of corporate securities that can be chosen as investment avenues can be depicted as below:

Equity shares by investing in shares, investors basically buy the ownership right to the company. When the company makes profits, shareholders receive their share of the profits in the form of dividends. In addition, when company performs well and the future expectation from the company is very high, the price of the company's shares goes up in the market. This allows shareholders to sell shares at a profit, leading capital gains. Investors can invest in shares either through primary market offerings or in the secondary market. The primary market has shown abnormal returns to investors who subscribed for the public issue and were allotted shares.

Stock exchange: in a stock exchange a person who wishes to sell his security is called a seller, and a person who is willing to buy the particular stock is called as the buyer. The rate of stock depends on the simple law of demand and supply. If the demand of shares of company x is greater than its supply then its price of its security increases. Online exchange the trading is done on a computer network. The sellers and buyers log on to the network and propose their bids. The system is designed in such a ways that at given instances, the buyers/sellers are bidding at the best prices. The transaction cycle for purchasing and selling shares online is depicted below:

Transaction cycle



PORTFOLIO:

A Portfolio an appropriate mix or collection of investments held by an institution or a private individual. It is a collection of securities, since it is rarely desirable to invest the entire funds of an individual or an institution in a single security.

- Portfolio analysis considers the determination of future risk and return in holding various blends of individual securities.
- Portfolio expected return is a weighted average of the expected return of individual securities but portfolio variance, in short contrast, can be something less than a weighted average of security variances.
- As a result an investor can something reduce portfolio risk by adding security with greater individual risk than any other security in the portfolio This is because risk depends greatly on the co- variance among return of individual securities.
- Since portfolio expected return is a weighted average of the expected return of its securities, the contribution of each security to the portfolio's expected returns depends on its expected returns and its proportionate share of the initial portfolio's market value.

RISK:

Risk is a concept that denotes that a potential negative impact to an asset or some characteristic of value that may arise from some present process or future event. In everyday usage, risk is often used synonymously with the probability of a known loss. Risk is uncertainty of the income /capital appreciation or loss of the both. The total risk of an individual security comprises two components, the market related risk called systematic risk also known as un diversifiable risk and the unique risk of that particular security called unsystematic risk or diversifiable risk.

TYPES OF RISK:

Systematic risk(market)	Unsystematic risk (company risk)
Examples: Interest rate risk Market risk Inflation risk Demand Government policy International factors	Examples: Labour troubles Liquidity problems Raw material risks Financial risks Management problems

Returns are the gains or losses from a security in a particular period and are usually quoted as a percentage. What kind of returns can investors expect from the capital markets? A number of factors influence returns?

RISK: In the investing world, the dictionary definition of risk is the chance that an investment's actual return will be different than expected. Risk means you have the possibility of losing some, or even all, of your original investment. Low levels of uncertainty (low risk) are associated with low potential returns. High levels of uncertainty (high risk) are associated with high potential returns. The risk/return tradeoff is the balance between the desire for the lowest possible risk and the highest possible return. Investment risks can be divided into two categories: systematic and unsystematic

SYSTEMATIC RISK: Also known as "market risk" or "un-diversifiable risk", systematic risk is the uncertainty inherent to the entire market or entire market segment. Also referred to as volatility, systematic risk is the day-to-day fluctuations in a stock's price. Volatility is a measure of risk because it refers to the behavior, or "temperament," of your investment rather than the reason for this

behavior. Because market movement is the reason why people can make money from stocks, volatility is essential for returns, and the more unstable the investment the more chance there is that it will experience a dramatic change in either direction. Interest rates, recession and wars all represent sources of systematic risk because they affect the entire market and cannot be avoided through diversification. Systematic risk can be mitigated only by being hedged.

UNSYSTEMATIC RISK: Also known as "specific risk," "diversifiable risk" or "residual risk," this type of uncertainty comes with the company or industry you invest in and can be reduced through diversification. For example, news that is specific to a small number of stocks, such as a sudden strike by the employees of a company you have shares in, is considered to be unsystematic risk.

CREDIT OR DEFAULT RISK: Credit risk is the risk that a company or individual will be unable to pay the contractual interest or principal on its debt obligations. This type of risk is of particular concern to investors who hold bonds in their portfolios. Government bonds, especially those issued by the federal government, have the least amount of default risk and the lowest returns, while corporate bonds tend to have the highest amount of default risk but also higher interest rates. Bonds with a lower chance of default are considered to be investment grade, while bonds with higher chances of default are considered to be junk bonds. Bond rating services, such as Moody's, allows investors to determine which bonds are investment-grade and which bonds are junk.

COUNTRY RISK: Country risk refers to the risk that a country won't be able to honor its financial commitments. When a country defaults on its obligations it can harm the performance of all other financial instruments in that country as well as other countries it has relations with. Country risk applies to stocks, bonds, mutual funds, options and futures that are issued within a particular country. This type of risk is most often seen in emerging markets or countries that have a severe deficit

FOREIGN-EXCHANGE RISK: When investing in foreign countries you must consider the fact that currency exchange rates can change the price of the asset as well. Foreign-exchange risk applies to all financial instruments that are in a currency other than your domestic currency. As an example, if you are a resident of America and invest in some Canadian stock in Canadian dollars, even if the share value appreciates, you may lose money if the Canadian dollar depreciates in relation to the American dollar.

INTEREST RATE RISK: Interest rate risk is the risk that an investment's value will change as a result of a change in interest rates. This risk affects the value of bonds more directly than stocks.

POLITICAL RISK: Political risk represents the financial risk that a country's government will suddenly change its policies. This is a major reason why developing countries lack foreign investment. Some additional factors that influence actual returns are as follows:

TAXES: Different types of investments are taxed differently. The type of account an investment is held in and a taxpayer's tax bracket also affect the amount by which taxes diminish investment returns. For example, the interest paid on municipal bond investments is generally not taxable, and gains on investments held in a retirement account like an IRA or 401(k) are not taxable until the money is withdrawn.

FEES: Investors pay brokerage fees to buy and sell certain investments. They also pay management fees. These fees diminish investment returns.

COMPOUNDING: the frequency with which your investment returns are reinvested and able to earn additional returns can significantly impact your total returns. The more frequently earnings are compounded, the better. Daily compounding is better than annual compounding.

PHASES OF PORTFOLIO MANAGEMENT:

Five phases can be identified in this process:

1. Security analysis
2. Portfolio analysis
3. Portfolio selection
4. Portfolio revision
5. Portfolio evaluation

SECURITY ANALYSIS:

An examination and evaluation of the various factors affecting the value of a security.

Security analysis stands for the proposition that a well- disciplined investor can determine a rough value for a company from all of its financial statements, make purchases when the market inevitably under-prices some of them, earn a satisfactory return, and never be in real danger of permanent loss.

PORTFOLIO ANALYSIS:

Analysis phases of portfolio management consist of identifying the range of possible portfolios that can be constituted from a given set of securities and calculating their return and risk for further analysis.

PORTFOLIO SECLECTION:

The proper goal of portfolio management constitute is to generate a portfolio that provides the highest returns at a given level of risk. A portfolio having this characteristic is known as an efficient

portfolio. The inputs from portfolio analysis can be used to identify the set of efficient portfolios. From this set of efficient portfolios, the optimal portfolio has to be selected for investment. Harry Markowitz theory provides both the conceptual framework and analytical tools analytical tools for determining the optimal portfolio in a disciplined and objectives way.

PORTFOLIO REVISION:

Having constructed the optimal portfolio, the investor has to constantly monitor the portfolio to ensure that it continues to be optimal. Portfolio revision is as important as portfolio analysis and selection.

PORTFOLIO EVALUATION:

It is the process, which is concerned with assessing the performance of the portfolio over a selected period of time in terms of returns and risk. This involves quantitative measurement of actual return realized and the risk born by the portfolio over the period of investment. it provides a feedback mechanism for improving the entire portfolio management process.

MODELS:

Some of the financial models used in the process of valuation, stock, selection, and management of portfolio include:

- Maximizing return, given an acceptable level of risk.
- Modern portfolio theory –a model proposed by harry Markowitz among others.
- The single index model of portfolio variance.
- Capital asset pricing model
- Arbitrage pricing theory
- Jenson index
- The treynor index
- The sharpe diagonal (or index)model
- Value at risk model

MARKOWITZ: PORTFOLIO SELECTION MODEL:

The basic portfolio model, developed by harry Markowitz, derived the expected rate of return for a portfolio of assets and an expected risk measure. Markowitz showed that the variance of the rate of return was meaning full measure of risk under a reasonable set of assumptions and derives the formulas for computing the variance of the portfolio. This portfolio variance formulation indicated the importance of diversification for reducing risk, and showed how to properly diversify.

PARAMETERS OF MARKOWITZ: THE MEAN VARIANCE CRITERION:

Based on his research, for building up the efficient set of portfolio, as laid down by Markowitz, we need to look into these important parameters.

1. Expected return
2. Variability of returns as measured by standard deviation from the mean.
3. Covariance or variance of one asset return to other asset returns.

ASSUMPTIONS OF MARKOWITZ MODEL:

1. Investor considers each investment alternative as being represented by a probability distribution of expected returns over some holding period.
2. Investor maximizes one period expected utility and possesses utility curves that demonstrate diminishing marginal utility of wealth.
3. Individuals estimates risk on the basis of the variability of expected returns.
4. Investor base decisions solely on expected return and risk, i.e., their utility curves are a function of expected return and variance (or standard deviation) of returns only.
5. For a given risk level, investors prefers higher returns to lower returns. Similarly, for a given level of expected return, investor prefer less risk to more risk.

EXPECTED RETURN CALCULATION:

PORTFOLIO RISK = SQRT

$[((X_X^{2*}SD_X^2) + X_Y^{2*}SDY2) + (2*X_X*X_Y*(r_{XY}*SDX^2*SDY^2))]$

Where

X_x, X_y = proportion of total portfolio invested in security x & y respectively

Sd_x, sd_y=standard deviation of stock x & stock y respectively

r_{xy}= correlation coefficient of x and y

Expected return of a portfolio calculation:

Where

xx = proportion of total portfolio invested in security X

Xy = proportion of total portfolio invested in security Y

Rx = expected return to security X

Ry = expected return to security Y

FORMULAS USED IN MARKOWITZ MODEL:

ARITHMETIC RETURN:

$$\text{ROI ARITH} = \frac{Vf - Vi}{Vi}$$

Where

- V*i* is the initial investment value and
- V*f* is the final investment

This return has following characteristics:

- ROI Airth = +1.00=+ 100% when the final value is twice the initial value
- ROI Airth >0 when the investment is profitable
- ROI Airth <0 when the investment is at a loss.
- ROI Airth = -1.00 = - 100% when investment can no longer be recovered.

STANDARD DEVIATION:

S.D = SQUARE ROOT ((∑MEAN RETURN –expected return) 2/N)

Covariance:

Cov(X,Y)= 1/N ∑[(Rx-Rx)(Ry-Ry)]

BETA: The beta coefficient, in terms of finance and investing is a measure, of stock (or portfolio)'s volatility in relation to the rest of the market. Beta is calculated for individual companies using regression analysis. The beta coefficient is a key parameter in the capital asset pricing model (CAPM). It measures the part of the asset's statistical variance that cannot be mitigated by the diversification provided by the portfolio of many risk assets, because it is correlated with the return of the other assets that are in the portfolio.

For example, if every stock in the New York stock exchange was uncorrelated with every other stock, then every stock would have a beta zero, and it would be possible to create a portfolio that was nearly risk free, simply by diversifying it sufficiently so that the variations in the individual stock's prices averaged out. In reality, investments tend to be correlated, more so with in an industry, or when considering a single asset class (such as equities). This correlated risk, measured, by ,beta, is what actually creates almost all of the risk in diversified portfolio.

The formula for the beta of an asset with in a portfolio is

$$\beta_a = \frac{\text{cov}(r_a, r_p)}{\text{Var}(r^p)}$$

Where

Ra measures the rate of return of the asset

Rp measures the rate of return of the portfolio of which the asset is a part

And **cov (ra,rp**) is the covariance between the rates of return.

In the CAPM formulation, the portfolio is the market portfolio that contains all risky assets, and so the rp terms in the formula are replaced by rm, the rate of return of the market.

The beta movement should be distinguished from the actual returns of the stocks. For example, a sector may be performing well and may have good prospects , but the fact that its movement does not correlated well with the broader index may decrease its ;beta betais a measure of risk and not to be confused with the attractiveness of the investment.

SECURITY MARKET LINE: The security market line (sml) is the graphical representation of the capital asset pricing model. It displays the unexpected rate of return for an overall market as a function of systematic (non–diversifiable) risk (beta).The x-axis represent the risk (beta) and the y-axis represents the expected return. The market risk premium is determined from the slope of sml. The securities market line can be regarded as representing a single factor model of the asset price, where beta is exposure to change in value of the market. The equitation of the SML is thus:

SML: $E(r_i)- R_f=\beta_i(E(R_m)-R_f)$.

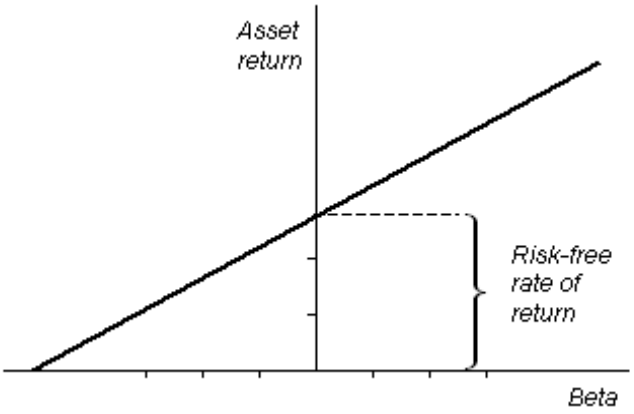


FIG 1.2 CAPM &SML

Implications for investors from the measurement of portfolio risk

If the investor conservative and interested in low variability of portfolio returns from the expected return (actual realize able return not from expected), he should:

1. Invest his funds in securities with low standard deviations and
2. Ensures that the securities that the securities chosen for his portfolio have relatively low coefficients of correlation with one another.

Theoretically, if it is possible, he should include some securities with negative coefficients of correlation with other securities in the portfolio.

BIBLIOGRAPHY:

- Christopher b. Barry, Jhon w. peavey 3rd and Mauricio Rodriguez, performance characteristics of emerging capital markets, financial analysts journal, januaary /feburary 998, pp. 72-80.
- Jayen B. patel, inter – temporal risk and return between the u.s. stock market and the emerging portofilo, journal of business and economics research, volume1, number 10, coctober 2003, pp- 1-6.
- Harvinder kaur, time varying risk and return in the Indian stock market, vikalpa, volume29, number 4, October- December 2004, pp-25-42.
- Michael keppler and xing hong xue, the seasonal price behaviour of global equity markes, the journal of investing, winter 2003,pp. 49-53.
- National stock exchange website, www.nseindia.com
- S.N. Sharma, stock marketseasonality in an emerging market, vikalpa, volume 29, numer3, july-september 2004, pp- 35-41.
- The term structure of credit spreads, firm fundamentals, and expected stock returns written by -Bing Han, Avanidhar Subrahmanyamc,, Yi Zhoud
- An Empirical Analysis of the Effects of Online Trading on Stock Price and Trading Volume Reactions to Earnings Announcements
- Anwer S. Ahmed[1],
- Richard A. Schneible Jr.[2] and
- Douglas E. Stevens[3] Version of Record online: 15 JAN 2010