CHAPTER – III

3.1 RISK

3.1.1 EVOLUTION OF RISK

Graham Dodd and Cottle talked about the margin of safety in 1962. According to them, intrinsic value or fair value of a security would be a security analyst’s judgement, based on it earning power and financial characteristics and without reference to its market price. The difference between intrinsic value and the market price was called margin of safety. The rule use by them for the assessment was ‘higher the margin of safety, the lower the risk’. Markowiz was another, who brought the concept of risk for a portfolio.

All investments are risky. However, the degree of risk varies based on the features of the securities, the mode of investment, the issuer of the security, etc. In general, the term risk refers to the possibility of incurring a loss in a financial transaction. But risk involves much more than that.

A person making an investment expects to get some return from the investment in future. But future is uncertain. So the return, which is expected, also may not be certain. It is this uncertainty associated with the returns from an investment introduces risk into an investment.
3.1.2 RISK – MEANING

All investment involve some risk because the future value of an investment is never certain. Risk simply stated, is the possibility that the actual return on the investment will vary from the expected return or that the initial principal will decline in value. Risk implies the possibility of loss of investment.

Risk can be defined as a situation where the possible consequences of the decision that is to be taken are known. Risk and return are related. The higher the risk, the greater the return is expected to be.

The Webster’s New Collegiate Dictionary definition of risk includes the following meanings;”... possibility of loss/injury... The degree or probability of such loss”. This confirms the connotations put on the term by most investors. Professionals often speak of “downside risk” and “upside potential”.

3.1.3 TYPES OF RISK

1. SYSTEMATIC RISK

Systematic risk is non-diversifiable and is associated with the securities market as well as the economic, sociological, political and legal considerations of the prices of all securities in the economy. The
effect of these factors is to put pressure on all securities in such a way that the prices of all stocks will move in the same direction.

Market risk, interest rate risk and purchasing power risk are grouped under systematic risk.

(i) **MARKET RISK**

Market risk is referred to as stock variability due to changes in investor’s attitudes and expectations. Market risk triggers off through real events comprising political, social, economic reasons. Investors are more reactive towards decline in prices rather than increase in prices.

Through diversification, market risk can be reduced but not eliminated because prices of all stocks move together and any equity stock investor will be faced by the risk of a downwards market and decline in security prices. With a wise combination of stocks on the portfolio, to some extent, the risk will be reduced. While the impact on an individual security varies, experts in investment markets feel that all securities are exposed to market risk. Market risk includes such factors as business recessions, depressions and long-run changes in consumption in the economy.
(ii) INTEREST RATE RISK

A major source of risk to the holders of high quality bonds is change in interest rates, commonly referred to as interest rate risk. The longer the maturity period of a security the higher the yield on an investment and lower the fluctuation in prices. Short-term interest rates fluctuate at a greater speed and are more volatile than long-term securities. Consequently, changes in interest rates affect investors in long-term as well as in short-term.

Interest rates continuously changes for bonds, preferred stock and equity stock. Interest rate risk can be reduced by diversifying in various kinds of securities and also buying securities of different maturity dates.

The direct effect of increase in the level of interest rates will raise the price of securities. High interest rates usually lead to lower stock prices because of a diminished demand by speculators who purchase and sell by using borrowed funds and maintaining a margin.

(iii) PURCHASING POWER RISK

Purchasing power risk is also known as inflation risk. This risk arises out of a change in the prices of goods and services and technically it covers both inflation and definition.
The behavior of purchasing power risk can in some ways be compared to interest rate risk. They have a systematic influence on the prices of both stocks and bonds. If the consumer price index in a country shows a constant increase of 4% and suddenly jumps to 5% in the next year, the required rates of return will also have to be adjusted with an upward revision. Such a change in process will affect government securities, corporate bonds and common stocks.

The explanation of the ingredients of systematic risks show that market, interest rate risk and purchasing power risk are the principal sources of systematic risk in securities.
2. **UNSYSTEMATIC RISK**

Unsystematic risk is unique to a firm or industry. It does not affect an average investor. The unsystematic risk, which affects the internal environment of a firm or industry although peculiar to a particular industry, also causes variability of returns for a company's stock. Unsystematic risk is caused by factors like labour strike, irregular discorganized management policies and consumer preferences. These
factors are independent of the price mechanism operating in the securities market.

The two kinds of unsystematic risks in a business organisation are business risk and financial risk.

(i) BUSINESS RISK

Business risk, which is sometimes called operating risk, is the risk associated with the normal day-to-day operations of the firm. Business risk is also associated with risks directly affecting the internal environment of the firm and those of circumstances beyond its control. The former is classified as internal business risk and the later as external business risk. Within the two broad categories of risk the firm operates.

(a) INTERNAL BUSINESS RISK

This risk may be defined as the limiting environment of the concern. It is the framework within which an enterprise conducts its business operations. This will be of different degrees in cash enterprise. An enterprise can reduce its internal business risk with the help of the following measures:

- Reduction of fixed costs and expenses,
- Diversification of its business into a wide range of products.
- Cutting costs of production through various techniques and skills of management.
(b) **EXTERNAL BUSINESS RISK**

There are certain specific external factors, which are responsible for external risk. They are beyond the control of the enterprise. However, they are responsive to specific operating environmental conditions. Such factors include — business cycle, geographical distribution of population by age, group and race, political policies affecting the working of the enterprise, monetary policy i.e., RBI control, economic environment, etc.

In the sources uses context, business risk represents the chance of loss and the variability of return created by a firm’s uses of funds. Business risk is concerned with EBIT. The two components of business risk signify the chance that the firm will fail because of the inability of the assets of the firm to generate a sufficient level of earnings before interest and the variability of such earnings.

(ii) **FINANCIAL RISK**

Financial risk is created by the use of fixed cost securities (i.e. debt and preference shares). In the sources and uses context, financial risk is the chance of loss and the variability of the owner’s return created by a firm’s sources of funds.
Financial risk is concerned with earnings available to equity holders. The two components of financial risk reflect the chance of the firm will fail because of the inability to meet interest and/or principal payments on debt, and the variability of earnings available to equity holders caused by fixed financing changes (i.e. interest expense and preferred dividend). The second component is the extent to which earnings available to equity holders will vary at a greater rate than EBIT. Incase the firm does not employ debt; there will be no financial risk.

(iii) OTHER RISKS

(a) REGULATION OR SOCIAL RISK

Some investments can be more attractive than others because of certain regulation or tax laws that give them an advantage of some kind. Some bonds introduced by insurance sector or the UTI are exempted from some tax laws. As a result of that special tax exemption, such institutions can price bonds to yield a lower interest rate since the net after tax yield may still make them attractive to investors. The risk of a regulatory change that could adversely affect the stature of an investment is a real danger.
b. INTERNATIONAL RISK

International risk can include both country risk and exchange rate risk.

❖ EXCHANGE RATE RISK

All investors who invest internationally to today’s increasingly global Investment arena, face the prospect of uncertainly in the returns after they convert the foreign gains back to their own currency. Exchange rate risk can be defined as the variability in returns on securities caused by currency fluctuations. Exchange rate risk is sometimes called currency risk.

For example, an Indian investor who buys a German stock denominated in marks must ultimately convert the returns from this stock back to Rupee value. If the exchange rate has moved against the investor, losses from these exchange rate movements can partially and totally negate the original return earned.

Obviously, Indian investors who invest only in Indian stock markets do no face this risk, but in today’s global environment where investors increasingly consider alternatives from other countries, this factor has become important. Currency risk affects International Mutual
Funds, Global Mutual Funds, Closed-End Single Country Funds, American Depository Receipts, Foreign Stocks, and Foreign Bonds.

- **COUNTRY RISK**

  Country risk, also referred to as political risk, is an important risk for investors today. With more investors investing internationally, both directly and indirectly, the political, and therefore economic, stability and viability of a country’s economy need to be considered.

- **LIQUIDITY RISK**

  Liquidity risk is the risk associated with the particular secondary market in which a security is in trade. An investment that can be bought or sold quickly without significant price concession, the greater the liquidity risks. A treasury bill has little or no liquidity risk, whereas a small OTC (Over the Counter) stock may have substantial liquidity risk.

3.2 **RETURN**

The chief aim of every investment is to earn income on investments. The return may take several forms. On a debenture, an investor expects to receive interest. On a share, he anticipates dividends. He may anticipate capital appreciation from some investments say corporate securities and rental income from house property.
Total return is the profit (or loss) on an investment. It is a combination of current income (cash received from interest, dividends etc.,) and capital gains or losses (the change in the value of the investment between the time bought and sold it). The published rate of return for a selected investment is usually expressed as a percentage of the current price on an annual basis. However, the real rate of return is the rate of earnings adjusted for inflation, which is further, reduced by income taxes and transactions costs.

\[
\text{% Rate of Return} = \frac{\text{Ending Wealth} - \text{Beginning Wealth}}{\text{Beginning Wealth}} \times 100
\]

The two parts of total return are:

a. Capital appreciation/price increase/capital gain and 

b. Cash flow/dividends/interest/income.

\[
\text{Ending Wealth} = \text{Ending Value (Price)} + \text{Cash flows}
\]

3.3 RISK AND RATE OF RETURN RELATIONSHIP

Generally speaking, risk and rate of return are directly related. As the risk level of an investment increases, the potential return usually increases as well. The pyramid of investment risk illustrates the risk and return associated with various types of investment options. As investors'
moves up the pyramid, they incur a greater risk of loss of principal along with the potential for higher returns.

<table>
<thead>
<tr>
<th>Risk Taken by Investor</th>
<th>Return</th>
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<tbody>
<tr>
<td>Insurance Schemes</td>
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<tr>
<td>Bank Deposits</td>
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<tr>
<td>Post Office Certificates</td>
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<tr>
<td>Mutual Funds</td>
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<tr>
<td>Debentures</td>
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<tr>
<td>Company Deposits</td>
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<tr>
<td>Equity Shares</td>
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<tr>
<td>Venture Capital</td>
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Source: Investment Management – V.A. Avadhani

Causes of Risks

Risks are caused by the following factors:

1. Default in taking correct investment decision,
2. Failure to decide the correct timing of investments,
3. Selection of highly risky investment instruments,
4. Unsatisfactory creditworthiness of the issuer,
5. Selection of the investment having larger maturity period. This is because, the larger the period, the more risky is the investment normally,

6. Putting huge amount in any security. The higher the amount invested in any security the larger is the risk.

7. If the investment is secured by collateral there will not be much risk,

8. Selection of a risky industry or business in which the company is operating,

9. National and international factors, acts of god, etc., also affect investments badly.

3.4 SUCCESS IN INVESTMENTS

Success in most things is relative, and not less so in the field of investment. Success in investment can never be guaranteed as there are too many factors outside the control of the individual investor which influence the value of his investment – age, family needs, liquidity requirements, tax position and acceptability of risk. Inflation is one of these. Genuine success also means winning the battle against inflation, against the fall in the real value of savings and capital.

There are many other areas whether interference by government can affect an investment. Leasehold reform and nationalisation are two, which come readily to mind.
Thus, we are left with two definitions of success.

1. Success is achieving the rate of return warranted by the level of risk assumed. Investors expect returns proportional to the risk assumed.

2. Success is achieving a rate of return in excess of warranted by the level of risk assumed. Investors expect abnormal returns for the risk assumed.

To be successful under the first definition, an investor must have a rational approach to portfolio construction and management. Reasonably efficient diversification is the key. To be successful under the second definition, an investor must have at least one of the following.

- Superior Analytical Skill,
- Superior Forecasting Ability,
- Inside Information, and
- Dumb Duck.

But it is possible to be relatively successful in investment if one sets out with a sensible approach and if one is prepared to spend sometime and trouble on the selection of investments and the talking of decisions concerning existing holdings. A summary of the requirements for a successful investment policy might be as follows.
a. **SUITABILITY**

Every investment of whatever type must be suitable for the investor and for inclusion in the investment portfolio. This presupposes that each investor is aware of the nature of a proposed investment, as only then can suitability be judged. It is a strange fact that, whereas hardly anyone would buy an overcoat to protect them against the weather without trying it on to see if it fits, many people will buy an investment to protect them against inflation without the slightest idea whether it fits their requirements or not.

b. **CRISIS-PROOF**

An investment portfolio should be free from the effects of personal crises. No foreseeable crisis should ever cause the sale of investment at a loss. Before setting out on a policy of investment into risk situations (and every ordinary share is in a risk situation) there should be enough provision for crises. Thus the investor will have guarantees against loss of income through sickness or accident. He will have life assurance cover to protect his dependents, as this will meet estate duty liabilities and provide additional cash at such a time. And he will have cash investments so that the new car, the new household appliance, the new roof on the house, or, heaven forbid, redundancy and unemployment, do not cause immediate financial embarrassment.
c. **DIVERSIFICATION**

An investment portfolio will be diversified in two ways. Firstly in types of investment, to suit the needs of the investor, and secondly across industries and areas. Concentration of interest can produce greater profits. Obviously having all one's capital in the company, which will be the best market performer over the coming year, will produce maximum profits. So will putting all one owns at long odds on the horse, which will win the next race. Diversification will never make millionaires out of most people. But it will let them sleep at night.

d. **FLEXIBILITY**

The investment portfolio must be flexible. This is to say that every holding must be capable of realisation and every investor must be prepared to dispose of any holding if circumstances require him to. He should avoid holdings where he is 'locked-in' for any reason. Examples of unrealizable holdings are: (i) corporation fixed-term mortgages with severe penalties for early repayment; (ii) some offshore unit trusts which cannot be disposed of for a minimum period; (iii) loans to and interests in private companies.
3.4.1 THE SUCCESSFUL INVESTOR

A successful investor will have a portfolio of investments, which fulfils the requirements we have discussed. In addition he will have certain personal qualities and attitudes. These may be summarized as follows.

a. ACCEPTANCE OF RISK

The person who always wants to ‘play safe’ will never make a successful investor. This is not to say that foolhardiness is a virtue. But people, who consider that debts must always be kept to a minimum and that investments chosen must never, go down in value, will fail to achieve the best rewards. So the successful investor who owns his house will always have a mortgage or a bank loan secured on his house to give gearing to his portfolio and he will from time to time undertake bank borrowing for further investment when he considers that an exceptional buying opportunity presents itself. But he will not maintain bank borrowing when this can be repaid out of cash investments without prejudicing his ‘emergency reserve’. Borrowing at interest is only worthwhile when the additional cash is held in growth investments, and can remain there for an indefinite period.

b. DESIRE FOR INFORMATION

The successful investor will be informed. He will read a daily paper, including the City pages. He will read a weekly journal, either devoted entirely to investments matters or containing a large investment section. He will read communications sent to him by the companies and institutions in which he holds investments. And he will increase his general knowledge by reading books and other publications on investment matters. He will not become an expert on fundamental or technical analysis but he will understand the results of such analyses.

c. ACCEPTANCE OF ADVICE

Everyone needs advice on individual investments. The range of available investment opportunities is so large that no one can be expert on them all. The professional investment manager needs the advice of a surveyor when buying a house, and a surveyor needs advice on insurance contracts. The successful investor makes up his own mind on policy. He knows what the balance of his portfolio should be, and he goes to the specialist for advice on the individual holdings. He tries to evaluate the advice he receives by examining the reasons put forward in support of the advice.
d. AVOIDANCE OF GREED

The commonest vice amongst investors is greed. The desire for the last few coppers on the top an overpriced share causes more paper losses than any other factor. No one can calculate the top or bottom of a market. If one sells at the very top and bus at the very bottom this is not investment skill, it is sheer luck. When a share is overpriced it should be sold. When a share is cheap it should be bought. More profits have been made by buying too late and by selling too soon than by waiting for prices to be more favorable.

A balanced view should also be taken generally. The successful investor will sell fashion trends for what they are and will not be swept along with the herd, willy-nilly. He will not let the enthusiasm of others outweigh his own judgement. He will not be persuaded by salesmen or advertisements to enter into a scheme, which is not exactly what he requires. He will realise that no one is ever always right. And above all he will know that there is no guaranteed road to a fortune.

To end this chapter on a reflective not, there are three facts, which an investor, should never forget.
A. A free market requires a balance of buyers and sellers. Therefore every time someone sells a holding of ordinary shares because the price is too high, someone else is buying those same shares, usually for excellent reasons.

b. The vast majority of investment decisions, which result in purchase or sales on the market, are made by professional investment managers and advisers. Therefore every time a professional investment manager sells a holding because the price is too high, the chances are that another professional is buying those same shares.

Any one who had the key to a fortune would not be advising others for a living.