

Financial Markets Management: XI

Study Material

Preface

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UNIT-1 Markets and Financial Instruments

1.1 WHAT IS INVESTMENT?

The money you earn is partly spent and the rest saved for meeting future expenses. Instead of keeping the savings idle you may like to use savings in order to get returns on it in the future. This is called Investment.

1.1.1 Why should one invest?

One needs to invest to:

- earn return on your idle resources
- generate a specified sum of money for a specific goal in life
- make a provision for an uncertain future

One of the important reasons why one needs to invest wisely is to meet the cost of *Inflation*. Inflation is the rate at which the cost of living increases. The cost of living is simply what it costs to buy the goods and services you need to live. Inflation causes money to lose value because it will not buy the same amount of a good or a service in the future as it does now or did in the past. For example, if there was a 6% inflation rate for the next 20 years, a Rs. 100 purchase today would cost Rs. 321 in 20 years. This is why it is important to consider inflation as a factor in any long-term investment strategy. Remember to look at an investment's 'real' rate of return, which is the return after inflation. The aim of investments should be to provide a return above the inflation rate to ensure that the investment does not decrease in value. For example, if the annual inflation rate is 6%, then the investment will need to earn more than 6% to ensure it increases in value. If the after-tax return on your investment is less than the inflation rate, then your assets have actually decreased in value; that is, they won't buy as much today as they did last year.

1.1.2 When to start Investing?

The sooner one starts investing the better. By investing early you allow your investments more time to grow, whereby the concept of compounding (as we shall see later) increases your income, by accumulating the principal and the interest or dividend earned on it, year after year. The three golden rules for all investors are:

- Invest early
- Invest regularly
- Invest for long term and not short term

Warren Buffet Quote: "I bought my first share at the age of 11 years and even then it was too late!"¹

1.1.3 What care should one take while investing?

Before making any investment, there are certain steps to ensure safety of investments. There are 12 important steps to investing where the investor must make sure to:

1. Obtain written documents explaining the investment
2. Read and understand such documents
3. Verify the legitimacy of the investment
4. Find out the costs and benefits associated with the investment
5. Assess the risk-return profile of the investment

6. Know the liquidity and safety aspects of the investment
7. Ascertain if it is appropriate for your specific goals
8. Compare these details with other investment opportunities available
9. Examine if it fits in with other investments you are considering or you have already made
10. Deal only through an authorised intermediary
11. Seek all clarifications about the intermediary and the investment and invest only if you are comfortable. Refuse to invest if you are not convinced.
12. Explore the options available to you if something were to go wrong, and then, if satisfied, make the investment.

1.1.4 What is meant by Interest?

When we borrow money, we are expected to pay for using it - this is known as Interest. Interest is an amount charged to the borrower for the privilege of using the lender's money. Interest is usually calculated as a percentage of the principal balance (the amount of money borrowed). The percentage rate may be fixed for the life of the loan, or it may be variable, depending on the terms of the loan.

1.1.5 What factors determine interest rates?

When we talk of interest rates, there are different types of interest rates - rates that banks offer to their depositors, rates that they lend to their borrowers, the rate at which the Government borrows in the Bond/Government Securities market, rates offered to investors in small savings schemes like NSC, PPF, rates at which companies issue fixed deposits etc.

The factors which govern these interest rates are mostly economy related and are commonly referred to as macroeconomic factors. Some of these factors are:

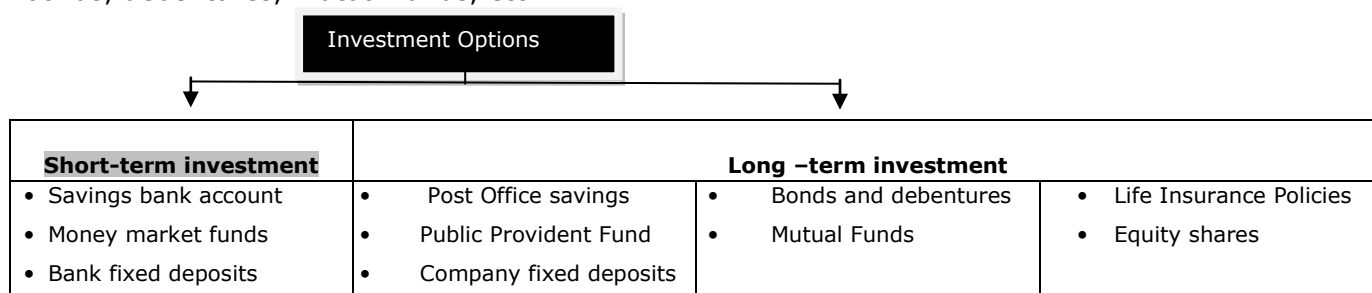
- Demand for money
- Level of Government borrowings
- Supply of money
- Inflation rate

The policies set by the Reserve Bank of India and the Government determine some of the variables mentioned above.

1.2 WHAT ARE VARIOUS OPTIONS AVAILABLE FOR INVESTMENT?

One may invest in:

- **Physical assets** like real estate, gold/jewellery, commodities etc. and/or
- **Financial assets** such as fixed deposits with banks, small saving instruments with post offices, insurance/provident/pension fund etc. or securities market related instruments like shares, bonds, debentures, mutual funds, etc.



1.2.1 What are various Short-term financial options available for investment?

Broadly speaking, savings bank account, money market/liquid funds and fixed deposits with banks may be considered as short-term financial investment options.

- **Savings Bank Account** is often the first banking product people use, which offers low interest (4%-6% p.a.), making them only marginally better than fixed deposits.
- **Money Market or Liquid Funds** are a specialized form of mutual funds that invest in extremely short-term fixed income instruments and thereby provide easy liquidity. Unlike most mutual funds, money market funds are primarily oriented towards protecting your capital and then, aim to maximise returns. Money market funds usually yield better returns than savings accounts, but lower than bank fixed deposits.
- **Fixed Deposits with Banks** are also referred to as term deposits and minimum investment period for bank FDs is 30 days. Fixed Deposits with banks are for investors with low risk appetite, and may be considered for 6-12 months investment period as normally interest on less than 6 months bank FDs is likely to be lower than money market fund returns.

1.2.2 What are various Long-term financial options available for investment?

There are several options available for long term investments like Post Office Savings Schemes, Public Provident Fund, Company Fixed Deposits, Bonds and Debentures, Mutual Funds etc.

- **Post Office Savings:** Post Office Monthly Income Scheme is a low risk saving instrument, which can be availed through any post office. It provides an interest rate of 8.4% per annum, which is paid monthly. Minimum amount, which can be invested, is Rs. 1,000/- and additional investment in multiples of 1,500/-. Maximum amount is Rs. 4,50,000/- (if Single) or Rs. 9,00,000/- (if held Jointly) during a year. It has a maturity period of 6 years. A bonus of 10% is paid at the time of maturity. Premature withdrawal is permitted if deposit is more than one year old. A deduction of 5% is levied from the principal amount if withdrawn prematurely; the 10% bonus is also denied.
- **Public Provident Fund:** A long term savings instrument with a maturity of 15 years and interest payable at 8.7% per annum compounded annually. A PPF account can be opened through a nationalized bank at any time during the year and is open all through the year for depositing money. Tax benefits can be availed for the amount invested and interest accrued is tax-free. A withdrawal is permissible every year from the seventh financial year of the date of opening of the account and the amount of withdrawal will be limited to 50% of the balance at credit at the end of the 4th year immediately preceding the year in which the amount is withdrawn or at the end of the preceding year whichever is lower the amount of loan if any.
- **Company Fixed Deposits:** These are short-term (six months) to medium-term (three to five years) borrowings by companies at a fixed rate of interest which is payable monthly, quarterly, semi-annually or annually. They can also be cumulative fixed deposits where the entire principal along with the interest is paid at the end of the loan period. The rate of interest varies between 8-12% per annum for company FDs. The interest received is after deduction of taxes.
- **Bonds and Debentures:** It is a fixed income (debt) instrument issued for a period of more than one year with the purpose of raising capital. The central or state government, corporations and similar institutions sell bonds. A bond is generally a promise to repay the principal along with a fixed rate of interest on a specified date, called *the Maturity Date*. Debentures are instruments issued by companies similar to bonds. These could be convertible, non-convertible or partly convertible. Convertible debentures can be fully converted to equity at the option of the debenture holder on maturity. Non-convertible debentures are fully repaid on maturity and partly convertible debentures are partly repaid and partly convertible on maturity, at the option of the debenture holder.
- **Mutual Funds:** These are funds operated by an investment company which raises money from the public and invests in a group of assets (shares, debentures etc.), in accordance with a

stated set of objectives. It is a substitute for those who are unable to invest directly in equities or debt because of resource, time or knowledge constraints. Benefits include professional money management, buying in small amounts and diversification. Mutual fund units are issued and redeemed by the *Fund Management Company* based on the fund's net asset value (NAV), which is determined at the end of each trading session. NAV is calculated as the value of all the shares held by the fund, minus expenses, divided by the number of units issued. Mutual Funds are usually long term investment vehicles though there some categories of mutual funds, such as money market mutual funds which are short term instruments.

- **Life Insurance Policies:** Though not strictly investment avenues, life insurance policies also can be considered so based on the type of policy. Life Insurance is a contract providing for payment of a sum of money to the person assured or, following him to the person entitled to receive the same, on the happening of a certain event. It is a good method to protect your family financially, in case of death, by providing funds for the loss of income. Types of policies include term life insurance, endowment policies, annuities/pension policies and Unit Linked Insurance Plans or ULIPs. In term life policies, lump sum is paid to designated beneficiary in case of the death of the insured. Endowment policies provide for periodic payment of premiums and a lump sum amount either in the event of death of the insured or on the date of expiry of the policy, whichever occurs earlier. Annuities/pension policies give a guaranteed income for life or for a certain period. In case of the death, or after the fixed annuity period expires for annuity payments, the invested annuity fund is refunded, usually with some additional amounts as per the terms of the policy. A ULIP is a life insurance policy which provides a combination of risk cover and investment.

1.3 WHAT IS MEANT BY A STOCK EXCHANGE?

The Securities Contract (Regulation) Act, 1956 [SCRA] defines 'Stock Exchange' as any body of individuals, whether incorporated or not, constituted for the purpose of assisting, regulating or controlling the business of buying, selling or dealing in securities. Stock exchange could be a regional stock exchange whose area of operation/jurisdiction is specified at the time of its recognition or national exchanges, which are permitted to have nationwide trading since inception. NSE was incorporated as a national stock exchange.

1.3.1 What is an 'Equity'/Share?

Total equity capital of a company is divided into equal units of small denominations, each called a share. For example, in a company the total equity capital of Rs 200,00,000 is divided into 20,00,000 units of Rs 10 each. Each such unit of Rs 10 is called a Share. Thus, the company then is said to have 20,00,000 equity shares of Rs. 10 each. The holders of such shares are members/owners of the company to the extent of shareholding and have voting rights.

1.3.2 What is a 'Debt Instrument'?

Debt instrument represents a contract whereby one party lends money to another on pre-determined terms with regards to rate and periodicity of interest, repayment of principal amount by the borrower to the lender.

In the Indian securities markets, the term "*bond*" is used for debt instruments issued by the Central and State governments and public sector organizations and the term "*debenture*" is used for instruments issued by private corporate sector.

1.3.3 What is a Derivative?

Derivative is a product whose value is derived from the value of one or more basic variables, called underlying. The underlying asset can be equity, index, foreign exchange (forex), commodity or any other asset.

Derivative products initially emerged as hedging devices against fluctuations in commodity prices and commodity-linked derivatives remained the sole form of such products for almost three hundred years. The financial derivatives came into spotlight in post-1970 period due to growing instability in the financial markets. However, since their emergence, these products have become very popular and by 1990s, they accounted for about two-thirds of total transactions in derivative products.

1.3.4 What is a Mutual Fund?

A Mutual Fund is a body corporate registered with SEBI (Securities Exchange Board of India) that pools money from individuals/corporate investors and invests the same in a variety of different financial instruments or securities such as equity shares, Government securities, Bonds, debentures etc. Mutual funds can thus be considered as financial intermediaries in the investment business that collect funds from the public and invest on behalf of the investors. Mutual funds issue units to the investors. The appreciation of the portfolio or securities in which the mutual fund has invested the money leads to an appreciation in the value of the units held by investors. The investment objectives outlined by a Mutual Fund in its prospectus are binding on the Mutual Fund scheme. The investment objectives specify the class of securities a Mutual Fund can invest in. Mutual Funds invest in various asset classes like equity, bonds, debentures, commercial paper and government securities. The schemes offered by mutual

funds vary from fund to fund. Some are pure equity schemes; others are a mix of equity and bonds. Investors are also given the option of getting dividends, which are declared periodically by the mutual fund, or to participate only in the capital appreciation of the scheme.

1.3.5 What is an Index?

An Index shows how a specified portfolio of share prices are moving in order to give an indication of market trends. It is a basket of securities and the average price movement of the basket of securities indicates the index movement, whether upwards or downwards. The main index of the NSE is the Nifty 50. The Nifty 50 is a well diversified 51 stock index accounting for 13 sectors of the economy. It is used for a variety of purposes such as benchmarking fund portfolios, index based derivatives and index funds.

1.4 WHAT IS A DEPOSITORY?

A depository is like a bank wherein the deposits are securities (viz. shares, debentures, bonds, Government securities, units etc.) in electronic form.

1.4.1 What is Dematerialization?

Dematerialization is the process by which physical certificates of an investor are converted to an equivalent number of securities in electronic form and credited to the investor's account with his *Depository Participant* (DP).

Share Certificate Template

Certificate Number _____ Number of Shares _____

Share Certificate

Corporate Name _____

Incorporated In: _____

Has a Total Authorized Amount of _____ Shares, at _____ Par Value

This is to certify that _____ is the owner of _____ shares of _____ stock of the above mentioned corporation, which are non-accessible, fully paid shares. The transfer of these shares must be done in accordance with the by-laws of the named corporation, in person, or by a duly appointed attorney or officer of the named corporation, and recorded in the books of the corporation.

President Vice President Secretary Treasurer

If Sold:

For _____ received, I, _____, sell and transfer _____ shares represented by this certificate to _____, and appoint _____, the _____, to record this transfer in the corporate books.

Name of Shareholder Signature of Shareholder Witness

The above is the image of a physical share certificate. When this is dematerialised, it will be converted to electronic form. The physical certificate will be destroyed and the number of shares held will be transferred to the beneficiary account. The report of the DP submitted to the investor will look like the image below.

DP Name & Address
DP ID and DP SEBI Reg. No.
Instruction Slip for Delivery / Receipt
(To be filled in duplicate)

1. Delivery 2. Receipt

3. We request you to debit / credit my / our account to order :-

Serial No. _____
Date : ____/____/20__

DP ID: _____ B-D-C-CLIENT ID: **		First/Second Holder's Name	
Sr. No.	ISIN	Security Name	Quantity
		In figures	In words
1	IN		
2	IN		
3	IN		
4	IN		
Total Transactions Used (in words only)		Cash Transfer ☐ Yes ☐ No ☐ Not required	
Tick the relevant columns			
Exchange	☐ BSE ☐ NSE ☐ Others (Mention name)	Exemption date	☐ 1. 1. 1. ☐ 2. 2. 2. ☐ 3. 3. 3.
Instruction details	☐ 1. On Market	☐ 2. Off market (Transfer to/from CM account)	☐ 3. Off market (Transfer to/from BO account)
Settlement type	☐ 1. Delivery	☐ 2. Early pay-in	☐ 3. Later delivery
Settlement no.			
CM ID	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
Counter DP ID / Client ID	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
Counter DP ID / CM DP ID	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
Signature of First / Sole Holder		Signature of Second Holder	
Signature of Third Holder		Signature of Fourth Holder	

For DPs offering only Internal Ref. No.

** Precedence

1.5 WHAT IS MEANT BY 'SECURITIES'?

The definition of 'Securities' as per the Securities Contracts Regulation Act (SCRA), 1956, includes instruments such as shares, bonds, scrips, stocks or other marketable securities of similar nature in or of any incorporate company or body corporate, Government securities, derivatives of securities, units of collective investment scheme, interest and rights in securities, security receipt or any other instruments so declared by the Central Government.

To give the exact definition:

(h) "securities" include— (i) shares, scrips, stocks, bonds, debentures, debenture stock or other marketable securities of a like nature in or of any incorporated company or other body corporate; 9 [(ia) derivative; 6 Inserted by the Securities Laws (Amendment) Act, 2004 (w.e.f. 12-10-2004). 7 Inserted by the Securities Laws (Second Amendment) Act, 1999 (w.e.f. 16-12-1999). 8 Clause (ga) lettered as Cl. (gb) by the Securities Laws (Amendment) Act, 2004 (w.e.f. 12-10-2004) 9 Inserted by the Securities Laws (Amendment) Act, 1999 (w.e.f. 22-02-2000). (ib) units or any other instrument issued by any collective investment scheme to the investors in such schemes;] 10[(ic)security receipt as defined in clause (zg) of section 2 of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002;] 11 [(id) units or any other such instrument issued to the investors under any mutual fund scheme;] 12(ii) Government securities; (iia) such other instruments as may be declared by the Central Government to be securities; and (iii) rights or interest in securities;

1.5.1 What is the function of Securities Market?

Securities Markets is a place where buyers and sellers of securities can enter into transactions to purchase and sell shares, bonds, debentures etc. Further, it performs an important role of enabling corporates, entrepreneurs to raise resources for their companies and business ventures through public issues. Transfer of resources from those having idle resources (investors) to others who have a need for them (corporates) is most efficiently achieved through the securities market. Stated formally, securities markets provide channels for reallocation of savings to investments and entrepreneurship. Savings are linked to investments by a variety of intermediaries, through a range of financial products, called 'Securities'.

1.5.2 Which are the securities one can invest in?

- Shares
- Bonds and Debentures
- Government Securities
- Derivative products
- Units of Mutual Funds

are some of the securities investors in the securities market can invest in.

1.6 REGULATOR

1.6.1 Why does Securities Market need Regulators?

The absence of conditions of perfect competition in the securities markets makes the role of the Regulator extremely important. The regulator ensures that the market participants behave in a desired manner so that securities market continues to be a major source of finance for corporate and government and the interest of investors are protected.

1.6.2 Who regulates the Securities Market?

The responsibility for regulating the securities market is shared by Department of Economic Affairs (DEA), Department of Company Affairs (DCA), Reserve Bank of India (RBI) and Securities and Exchange Board of India (SEBI).

1.6.3 What is SEBI and what is its role?

The Securities and Exchange Board of India (SEBI) is the regulatory authority in India established under Section 3 of SEBI Act, 1992. SEBI Act, 1992 provides for establishment of Securities and Exchange Board of India (SEBI) with statutory powers for (a) protecting the interests of investors

in securities (b) promoting the development of the securities market and (c) regulating the securities market. Its regulatory jurisdiction extends over corporates in the issuance of capital and transfer of securities, in addition to all intermediaries and persons associated with securities market. SEBI has been obligated to perform the aforesaid functions by such measures as it thinks fit. In particular, it has powers for:

- Regulating the business in stock exchanges and any other securities markets
- Registering and regulating the working of stock brokers, sub-brokers etc.
- Promoting and regulating self-regulatory organizations
- Prohibiting fraudulent and unfair trade practices

Calling for information from, undertaking inspection, conducting inquiries and audits of the stock exchanges, intermediaries, self-regulatory organizations, mutual funds and other persons associated with the securities market.

1.7 PARTICIPANTS

1.7.1 Who are the participants in the Securities Market?

The securities market essentially has three categories of participants, namely, the issuers of securities, investors in securities and the intermediaries, such as merchant bankers, brokers etc. While the corporates and Government raise resources from the securities market to meet their obligations, it is households and other corporates and financial institutions that invest their savings in the securities market.

1.7.2 Is it necessary to transact through an intermediary?

It is advisable to conduct transactions through an intermediary. For example you need to transact through a trading member of a stock exchange if you intend to buy or sell any security on stock exchanges. This is mandatory as per SCRA. You need to maintain an account with a depository if you intend to hold securities in demat form. You need to deposit money with a banker to an issue if you are subscribing to public issues. You get guidance if you are transacting through an intermediary. Choose a SEBI registered intermediary, as it is accountable for its activities. The list of registered intermediaries is available with exchanges, industry associations and also on the SEBI website, www.sebi.gov.in.

1.7.3 What are the segments of Securities Market?

The securities market has two interdependent segments: the primary (new issues) market and the secondary market. The primary market provides the channel for sale of new securities while the secondary market deals in securities previously issued.

POINTS TO REMEMBER

- Investing is the process of employing the savings made in order to make money from the savings. There are certain precautions to be taken while investing. The investor should be comfortable with the investments made. Earlier investments yield better returns. The investment mantra is to start early to earn maximum. There are various short and long term options of investments including equity and debt. Interest is the amount earned on debt. Equity represents ownership in the company and gives returns in the form of dividends and capital appreciation. The purchase and sale of equity is governed by stock exchanges. The movement of the markets is represented by the index. Other products include derivatives which are derived from equity, debt as underlying assets and mutual funds which invest professionally in the markets. Almost all dealings on the stock exchange are through dematerialised securities, which are financial securities in electronic form.

- Securities markets comprise financial securities like shares, bonds and debentures, mutual fund units, Government securities, derivatives. The securities markets is a means for buying and selling financial markets through intermediaries. It is regulated by the Department of Company Affairs, the Department of Economic Affairs, SEBI and RBI. SEBI is the apex regulator responsible for primary regulation of securities markets. Securities markets consist of primary markets - being market of first issue and secondary markets - being trading in listed securities.

UNIT -2 Primary and Secondary Market

2.1 WHAT IS THE ROLE OF THE 'PRIMARY MARKET'?

The primary market provides the channel for sale of new securities. Primary market provides opportunity to issuers of securities; Government as well as corporates, to raise resources to meet their requirements of investment and/or discharge some obligation.

They may issue the securities at face value, or at a discount/premium and these securities may take a variety of forms such as equity, debt etc. They may issue the securities in domestic market and/or international market.

2.1.1 What is meant by Face Value of a share/debenture?

The nominal or stated amount (in Rs.) assigned to a security by the issuer. For shares, it is the original cost of the stock shown on the certificate; for bonds, it is the amount paid to the holder at maturity. It is also known as par value or simply par. For an equity share, the face value is usually a very small amount (Rs. 5, Rs. 10) and does not have much bearing on the price of the share, which may quote higher in the market, at Rs. 100 or Rs. 1,000 or any other price as the market decides. For a debt security, face value is the amount repaid to the investor when the bond matures (usually, Government securities and corporate bonds have a face value of Rs. 100). The price at which the security trades depends on the fluctuations in the interest rates in the economy.

2.1.2 What do you mean by the term Premium and Discount in a Security Market?

Securities are generally issued in denominations of Rs. 5, Rs. 10 or Rs. 100. This is known as the Face Value or Par Value of the security as discussed earlier. When a security is sold above its face value, it is said to be issued at a Premium and if it is sold at less than its face value, then it is said to be issued at a Discount. Normally, issues are made at premium. Discount issues are rarely made.

2.2 ISSUE OF SHARES

2.2.1 Why do companies need to issue shares to the public?

Most companies are usually started privately by their promoter(s). However, the promoters' capital and the borrowings from banks and financial institutions may not be sufficient for setting up or running the business over a long term, especially when the business grows and looks to expand. So companies invite the public to contribute towards the equity and issue shares to individual investors. The way to invite share capital from the public is through a '*Public Issue*'. Simply stated, a public issue is an offer to the public to subscribe to the share capital of a company. Once this is done, the company allots shares to the applicants as per the prescribed rules and regulations laid down by SEBI.

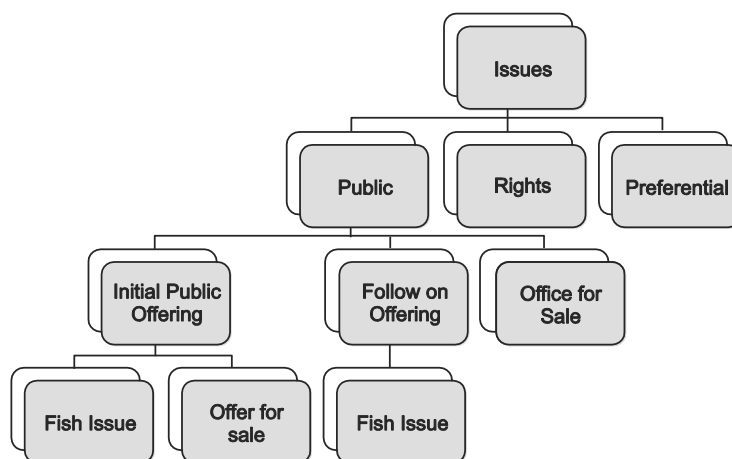
2.2.2 What are the different kinds of issues?

Primarily, issues can be classified as a Public, Rights or Preferential issues (also known as private placements). While public and rights issues involve a detailed procedure, private placements or preferential issues are relatively simpler. The classification of issues is illustrated below:

- **Initial Public Offering (IPO)** is when an unlisted company makes either a fresh issue of securities or an offer for sale of its existing securities or both for the first time to the public. This paves the way for listing and trading of the issuer's securities.

- **A follow on public offering (Further Issue)** is when an already listed company makes either a fresh issue of securities to the public or an offer for sale to the public, through an offer document.
- **Rights Issue** is when a listed company proposes to issue fresh securities to its existing shareholders as on a record date. The rights are normally offered in a particular ratio to the number of securities held prior to the issue. For example, in a rights issue of 1:1, one new equity share is issued for every equity share held by the shareholders. Hence, the shareholding of the investor doubles after the rights issue. This route is best suited for companies who would like to raise capital without diluting the stake of its existing shareholders.
- **A Preferential issue** is an issue of shares or of convertible securities by listed companies to a select group of persons under Section 62 of the Companies Act, 2013 which is neither a rights issue nor a public issue. This is a faster way for a company to raise equity capital. The issuer company has to comply with the Companies Act and the requirements contained in the Chapter pertaining to preferential allotment in SEBI guidelines which inter- alia include pricing, disclosures in notice etc.

Classification of Issues



2.3 WHAT IS MEANT BY ISSUE PRICE?

The price at which a company's shares are offered initially in the primary market is called as the Issue price. When they begin to be traded, the market price may be above or below the issue price. Students can follow trades of public issues on the NSE website to see whether the security is being traded above or below the issue price.

2.3.1 What is meant by Market Capitalisation?

The market value of a quoted company, which is calculated by multiplying its current share price (market price) by the number of shares in issue is called as market capitalization. E.g. Company A has 120 million shares in issue. The current market price is Rs. 100. The market capitalisation of company A is Rs. 12000 million.

2.3.2 What is the difference between public issue and private placement?

When an issue is not made to only a select set of people but is open to the general public and any other investor at large, it is a public issue. But if the issue is made to a select set of people, it is called private placement. As per Companies Act, 2013, an issue becomes public if it results in allotment to 50 persons or more. This means an issue can be privately placed where an allotment is made to less than 50 persons excluding Qualified Institutional Buyers and Employee Stock Options.

2.4 WHAT IS AN INITIAL PUBLIC OFFER (IPO)?

An Initial Public Offer (IPO) is the selling of securities to the public in the primary market. It is when an unlisted company makes either a fresh issue of securities or an offer for sale of its existing securities or both for the first time to the public. This paves way for listing and trading of the issuer's securities. The sale of securities can be either through book building or through normal public issue.

2.4.1 Who decides the price of an issue?

Indian primary market ushered in an era of free pricing in 1992. Following this, the guidelines have provided that the issuer in consultation with Merchant Banker shall decide the price. There is no price formula stipulated by SEBI. SEBI does not play any role in price fixation. The company and merchant bankers are however required to give full disclosures of the parameters which they had considered while deciding the issue price. There are two types of issues, one where company and Lead Merchant Banker fix a price (called fixed price) and other, where the company and the Lead Manager (LM) stipulate a floor price or a price band and leave it to market forces to determine the final price (price discovery through book building process). Nowadays, all issues are normally done through the book built route. However, the fixed price route has been kept open to allow small and medium enterprises to offer shares on the SME platform of the exchanges.

2.4.2 What does 'price discovery through Book Building Process' mean?

Book Building is basically a process used in IPOs for efficient price discovery. It is a mechanism where, during the period for which the IPO is open, bids are collected from investors at various prices, which are above or equal to the floor price. The offer price is determined after the bid closing date.

2.4.3 What is the main difference between offer of shares through book building and offer of shares through normal public issue?

Price at which securities will be allotted is not known in case of offer of shares through Book Building while in case of offer of shares through normal public issue, price is known in advance to investor. Under Book Building, investors bid for shares at the floor price or above and after the closure of the book building process the price is determined for allotment of shares.

In case of Book Building, the *demand* can be known everyday as the book is being built. But in case of the public issue the demand is known at the close of the issue.

2.4.4 What is Cut-Off Price?

In a Book building issue, the issuer is required to indicate either the price band or a floor price in the prospectus. The actual discovered issue price can be any price in the price band or any price above the floor price. This issue price is called "Cut-Off Price". The issuer and lead manager decides this after considering the book and the investors' appetite for the stock

2.4.5 What is the floor price in case of book building?

Floor price is the minimum price at which bids can be made.

2.4.6 What is a Price Band in a book built IPO?

The prospectus may contain either the floor price for the securities or a price band within which the investors can bid. The spread between the floor and the cap of the price band shall not be more than 20%. In other words, it means that the cap should not be more than 120% of the floor price. The price band can have a revision and such a revision in the price band shall be widely disseminated by informing the stock exchanges, by issuing a press release and also indicating the change on the relevant website and the terminals of the trading members participating in the book

building process. In case the price band is revised, the bidding period shall be extended for a further period of three days, subject to the total bidding period not exceeding ten days.

2.4.7 Who decides the Price Band?

It may be understood that the regulatory mechanism does not play a role in setting the price for issues. It is up to the company to decide on the price or the price band, in consultation with Merchant Bankers.

2.4.8 What is minimum number of days for which a bid should remain open during book building?

The Book should remain open for a minimum of 3 days.

2.4.9 Can open outcry system be used for book building?

No. As per SEBI, only electronically linked transparent facility is allowed to be used in case of book building. The bids are submitted online only so that the total amount bid for is always transparently known. This facility/platform is provided by the exchanges.

2.4.10 Can the individual investor use the book building facility to make an application?

Yes.

2.4.11 How does one know if shares are allotted in an IPO/offer for sale? What is the timeframe for getting refund if shares not allotted?

As per SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009 the Basis of Allotment should be completed with 4 working days from the issue close date. As soon as the basis of allotment is completed, within a working day the details of credit to demat account / allotment advice and despatch of refund order needs to be completed. So an investor should know in about 5 working days time from the closure of issue, whether shares are allotted to him or not.

2.4.12 What is ASBA?

ASBA means "Application Supported by Blocked Amount". ASBA is an application containing an authorization to block the application money in the bank account, for subscribing to an issue. If an investor is applying through ASBA, his application money shall be debited from the bank account only if his/her application is selected for allotment after the basis of allotment is finalized, or the issue is withdrawn/failed.

Under ASBA facility, investors can apply in any public/ rights issues by using their bank account. Investor submits the ASBA form (available at the designated branches of the banks acting as Self Certified Syndicated Banks (SCSBs)) after filling the details like name of the applicant, PAN number, demat account number, bid quantity, bid price and other relevant details, to their banking branch by giving an instruction to block the amount in their account. In turn, the bank will upload the details of the application in the bidding platform. Investors shall ensure that the details that are filled in the ASBA form are correct otherwise the form is liable to be rejected.

From 1st January 2016, it is mandatory that all public issues are subscribed through ASBA only.

2.4.13 How long does it take to get the shares listed after issue?

It takes 6 working days after the closure of the book built issue.

2.4.14 What is the role of a 'Registrar' to an issue?

The Registrar finalizes the list of eligible allottees after deleting the invalid applications and ensures that the corporate action for crediting of shares to the demat accounts of the applicants is done

and the dispatch of refund orders to those applicable are sent. The Lead Manager coordinates with the Registrar to ensure follow up so that the flow of applications from collecting bank branches, processing of the applications and other matters till the basis of allotment is finalized, dispatch security certificates and refund orders completed and securities listed.

2.4.15 Does NSE provide any facility for IPO?

Yes. NSE's electronic trading network spans across the country providing access to investors in remote areas. NSE decided to offer this infrastructure for conducting online IPOs through the Book Building process. NSE operates a fully automated screen based bidding system called NEAT IPO that enables trading members to enter bids directly from their offices through a sophisticated telecommunication network.

Book Building through the NSE system offers several advantages:

The NSE system offers a nationwide bidding facility in securities

It provides a fair, efficient & transparent method for collecting bids using the latest electronic trading systems

Costs involved in the issue are far less than those in a normal IPO

The system reduces the time taken for completion of the issue process

The IPO market timings are from 10.00 a.m. to 5.00 p.m.

2.5 WHAT IS A PROSPECTUS?

A large number of new companies float public issues. While a large number of these companies are genuine, a few may want to exploit the investors. Therefore, it is very important that an investor before applying for any issue identifies future potential of a company. A part of the guidelines issued by SEBI (Securities and Exchange Board of India) is the disclosure of information to the public. This disclosure includes information like the reason for raising the money, the way money is proposed to be spent, the return expected on the money etc. This information is in the form of 'Prospectus' which also includes information regarding the size of the issue, the current status of the company, its equity capital, its current and past performance, the promoters, the project, cost of the project, means of financing, product and capacity etc. It also contains lot of mandatory information regarding *underwriting* and statutory compliances. This helps investors to evaluate short term and long term prospects of the company.

2.5.1 What does Draft Offer document' mean?

'Offer document' means *Prospectus* in case of a public issue or offer for sale and *Letter of Offer* in case of a rights issue which is filed with the Registrar of Companies (ROC) and Stock Exchanges (SEs). An offer document covers all the relevant information to help an investor to make his/her investment decision.

'Draft Offer document' means the offer document in draft stage. The draft offer documents are filed with SEBI, at least 30 days prior to the registration of red herring prospectus or prospectus with ROC. SEBI may specify changes, if any, in the draft Offer Document and the issuer or the lead merchant banker shall carry out such changes in the draft offer document before filing the Offer Document with ROC. The Draft Offer Document is available on the SEBI website for public comments for a period of 21 days from the filing of the Draft Offer Document with SEBI.

Red Herring Prospectus is a prospectus, which does not have details of either price or number of shares being offered, or the amount of issue. This means that in case price is not disclosed, the number of shares and the upper and lower price bands are disclosed.

2.5.2 What is an 'Abridged Prospectus'?

'Abridged Prospectus' is a shorter version of the Prospectus and contains all the salient features of a Prospectus. It accompanies the application form of public issues.

2.5.3 Who prepares the 'Prospectus'/'Offer Documents'?

Generally, the public issues of companies are handled by '*Merchant Bankers*' who are responsible for getting the project appraised, finalizing the cost of the project, profitability estimates and for preparing of 'Prospectus'. The 'Prospectus' is submitted to SEBI for its approval.

2.5.4 What does one mean by 'Lock-in'?

'Lock-in' indicates a freeze on the sale of shares for a certain period of time. SEBI guidelines have stipulated lock-in requirements on shares of promoters mainly to ensure that the promoters or main persons, who are controlling the company, shall continue to hold some minimum percentage in the company after the public issue.

2.6 WHAT IS MEANT BY 'LISTING OF SECURITIES'?

Listing means admission of securities of an issuer to trading privileges (dealings) on a stock exchange through a formal agreement. The prime objective of admission to dealings on the exchange is to provide liquidity and marketability to securities, as also to provide a mechanism for effective control and supervision of trading. In other words, listed securities can be traded on the stock exchanges where they are listed. After the allotment and on the listing day, a listing ceremony is performed where the shares open for trading.

2.6.1 What is a 'Listing Agreement'?

At the time of listing securities of a company on a stock exchange, the company is required to enter into a listing agreement with the exchange. The listing agreement specifies the terms and conditions of listing and the disclosures that shall be made by a company on a continuous basis to the exchange.

2.6.2 What does 'Delisting of securities' mean?

The term "Delisting of securities" means permanent removal of securities of a listed company from a stock exchange. As a consequence of delisting, the securities of that company would no longer be traded at that stock exchange.

2.7 WHAT IS SEBI'S ROLE IN AN ISSUE?

Any company making a public issue or a listed company making a rights issue of value of more than Rs 50 lakhs is required to file a draft offer document with SEBI for its observations. The company can proceed further on the issue only after getting observations from SEBI. The validity period of SEBI's observation letter is three months only i.e. the company has to open its issue within three months period after the observations are issued by SEBI.

2.7.1 Does it mean that SEBI recommends an issue?

SEBI does not recommend any issue nor does it take any responsibility either for the financial soundness of any scheme or the project for which the issue is proposed to be made or for the correctness of the statements made or opinions expressed in the offer document. SEBI mainly scrutinizes the issue for seeing that adequate disclosures are made by the issuing company in the prospectus or offer document.

2.7.2 Does SEBI tag make one's money safe?

The investors should make an informed decision purely by themselves based on the contents disclosed in the offer documents. SEBI does not associate itself with any issue/issuer and should in

no way be construed as a guarantee for the funds that the investor proposes to invest through the issue. However, the investors are generally advised to study all the material facts pertaining to the issue including the risk factors before considering any investment. They are strongly warned against relying on any 'tips' or news through unofficial means.

2.8 FOREIGN CAPITAL ISSUANCE

2.8.1 Can companies in India raise foreign currency resources?

Yes. Indian companies are permitted to raise foreign currency resources through two main sources: a) issue of foreign currency convertible bonds more commonly known as FCCBs and b) issue of ordinary shares through depository receipts namely 'Global Depository Receipts (GDRs)/American Depository Receipts (ADRs)' to foreign investors i.e. to the institutional investors or individual investors.

2.8.2 What is an American Depository Receipt?

An American Depository Receipt ("ADR") is a physical certificate evidencing ownership of American Depository Shares ("ADSs"). The term is often used to refer to the ADSs themselves.

2.8.3 What is an ADS?

An American Depository Share ("ADS") is a U.S. dollar denominated form of equity ownership in a non-U.S. company. It represents the foreign shares of the company held on deposit by a custodian bank in the company's home country and carries the corporate and economic rights of the foreign shares, subject to the terms specified on the ADR certificate.

One or several ADSs can be represented by a physical ADR certificate. The terms ADR and ADS are often used interchangeably.

ADSs provide U.S. investors with a convenient way to invest in overseas securities and to trade non-U.S. securities in the U.S. ADSs are issued by a depository bank, such as JPMorgan Chase Bank. They are traded in the same manner as shares in U.S. companies, on the New York Stock Exchange (**NYSE**) and the American Stock Exchange (AMEX) or quoted on **NASDAQ** and the over-the-counter (**OTC**) market.

Although ADSs are U.S. dollar denominated securities and pay dividends in U.S. dollars, they do not eliminate the currency risk associated with an investment in a non-U.S. company.

2.8.4 What is meant by Global Depository Receipts?

Global Depository Receipts (GDRs) may be defined as a global finance vehicle that allows an issuer to raise capital simultaneously in two or markets through a global offering. GDRs may be used in public or private markets inside or outside the US. The term GDR, though, normally applies to issues outside the US. GDR, a negotiable certificate usually represents company's traded equity/debt. The underlying shares correspond to the GDRs in a fixed ratio say 1 GDR=10 shares.

2.8.5 What is meant by Foreign Currency Convertible Bonds?

As per definition given by RBI, 'Foreign Currency Convertible Bond' (FCCB) means a bond issued by an Indian company expressed in foreign currency, and the principal and interest in respect of which is payable in foreign currency'. These are bonds that are convertible to equity after a certain period of time at the option of the bond holder. These are issued in the international markets by Indian companies.

2.9 INTRODUCTION

2.9.1 What is meant by Secondary market?

Secondary market refers to a market where securities are traded after being initially offered to the public in the primary market and/or listed on the Stock Exchange. Majority of the trading in securities markets is carried out in the secondary market. It is a market where seller and buyers meet directly and the issuer does not meet the investor as it is listed securities that are bought and sold. Secondary market comprises of equity markets and debt markets.

2.9.2 What is the role of the Secondary Market?

For the general investor, the secondary market provides an efficient platform for trading of his securities. For the management of the company, secondary equity markets serve as a monitoring and control conduit—by facilitating value- enhancing control activities, enabling implementation of incentive-based management contracts, and aggregating information (via price discovery) that guides management decisions. Secondary markets are regulated markets where all transactions are carried out through stock exchanges. Hence it is a safe platform for investors. And listed companies have to abide by stringent rules and regulations which acts as a quality control on them.

2.9.3 What is the difference between the Primary Market and the Secondary Market?

In the primary market, securities are offered to public for subscription for the purpose of raising capital or fund. Here, the investors and issuers are in direct contact for purchase and sale of securities. Secondary market is an equity trading venue in which already existing/pre-issued securities are traded among investors. Here, only the investors are in contact with each other and there is no contact between issuers and investors for purchase and sale of securities. Secondary market could be either auction or dealer market. While stock exchange is the part of an auction market, Over-the-Counter (OTC) is a part of the dealer market.

2.10 STOCK EXCHANGE

2.10.1 What is the role of a Stock Exchange in buying and selling shares?

The stock exchanges in India, under the overall supervision of the regulatory authority, the Securities and Exchange Board of India (SEBI), provide a trading platform, where buyers and sellers can meet to transact in securities. The trading platform provided by NSE is an electronic one and there is no need for buyers and sellers to meet at a physical location to trade. They can trade through the computerized trading screens available with the NSE trading members or the internet based trading facility provided by the trading members of NSE.

2.10.2 What is Demutualisation of stock exchanges?

Demutualisation refers to the legal structure of an exchange whereby the ownership, the management and the trading rights at the exchange are segregated from one another.

2.10.3 How is a demutualised exchange different from a mutual exchange?

In a mutual exchange, the three functions of ownership, management and trading are concentrated into a single Group. Here, the broker members of the exchange are both the owners and the traders on the exchange and they further manage the exchange as well. This at times can lead to conflicts of interest in decision making. A demutualised exchange, on the other hand, has all these three functions clearly segregated, i.e. the ownership, management and trading are in separate hands.

2.11 DEPOSITORY

2.11.1 HOW IS A DEPOSITORY SIMILAR TO A BANK?

A Depository can be compared with a bank, which holds the funds for depositors. An analogy between a bank and a depository may be drawn as follows:

BANK	DEPOSITORY
Holds funds in an account	Hold securities in an account
Transfers funds between accounts on the instruction of the account holder	Transfers securities between accounts on the instruction of the account holder.
Facilitates transfers without having to handle money	Facilitates transfers of ownership without having to handle securities.
Facilitates safekeeping of Money	Facilitates safekeeping of shares.

2.11.2 WHICH ARE THE DEPOSITORIES IN INDIA?

There are two depositories in India which provide dematerialization of securities. The National Securities Depository Limited (NSDL) and Central Depository Services (India) Limited (CDSL).

1. What are the benefits of participation in a depository?

The benefits of participation in a depository are:

- Immediate transfer of securities
- No stamp duty on transfer of securities
- Elimination of risks associated with physical certificates such as bad delivery, fake securities, etc.
- Reduction in paperwork involved in transfer of securities
- Reduction in transaction cost
- Ease of nomination facility
- Change in address recorded with DP gets registered electronically with all companies in which investor holds securities eliminating the need to correspond with each of them separately
- Transmission of securities is done directly by the DP eliminating correspondence with companies
- Convenient method of consolidation of folios/accounts
- Holding investments in equity, debt instruments and Government securities in a single account; automatic credit into demat account, of shares, arising out of split/consolidation/merger etc.

2. Who is a Depository Participant (DP)?

The Depository provides its services to investors through its agents called depository participants (DPs). These agents are appointed by the depository with the approval of SEBI. According to SEBI regulations, amongst others, three categories of entities, i.e. Banks, Financial Institutions and SEBI registered trading members can become DPs. Normally brokers and banks themselves offer DP services in order to provide all services to the investors through a single window.

3. Does one need to keep any minimum balance of securities in his account with his DP?

No. The depository has not prescribed any minimum balance. You can have zero balance in your account.

4. What is an ISIN?

ISIN (International Securities Identification Number) is a unique identification number for a security.

5. What is a Custodian?

A Custodian is basically an organisation, which helps register and safeguard the securities of its clients. Besides safeguarding securities, a custodian also keeps track of corporate actions on behalf of its clients. A custodian is also responsible for the following functions:

- Maintaining a client's securities account
- Collecting the benefits or rights accruing to the client in respect of securities
- Keeping the client informed of the actions taken or to be taken by the issue of securities, having a bearing on the benefits or rights accruing to the client.

6. How can one convert physical holding into electronic holding i.e. how can one dematerialise securities?

In order to dematerialise physical securities one has to fill in a Demat Request Form (DRF) which is available with the DP and submit the same along with physical certificates one wishes to dematerialise. Separate DRF has to be filled for each ISIN number.

7. Can odd lot shares be dematerialised?

Yes, odd lot share certificates can also be dematerialised.

8. Do dematerialised shares have distinctive numbers?

Dematerialised shares do not have any distinctive numbers. These shares are *fungible*, which means that all the holdings of a particular security will be identical and interchangeable.

9. Can electronic holdings be converted into Physical certificates?

Yes. The process is called *Rematerialisation*. If one wishes to get back your securities in the physical form one has to fill in the Remat Request Form (RRF) and request your DP for rematerialisation of the balances in your securities account.

10. Can one dematerialise his debt instruments, mutual fund units, Government securities in his demat account?

Yes. You can dematerialise and hold all such investments in a single demat account.

POINTS TO REMEMBER

Secondary markets, as opposed to primary markets, are regulated markets for dealing in listed securities. Here, the investors buy and sell between themselves and there is no contact between investor and issuer. Stock exchanges are the medium through which these transactions take place. NSE has an online platform, NEAT, which facilitates such trading. Only brokers can trade on stock

exchanges. The investor can place the trades through brokers by direct meeting, email, internet, sms or phone. The trade is confirmed through a contract note. There are certain precautions that an investor must take before investing. The securities traded here include equity, bonds, mutual fund units and derivatives. It is advisable to have a diversified portfolio, investing in different asset classes.

Primary markets are markets for first issue of securities. Primary issues can be either public issues or private placements. The price of issues can be either fixed or found out through book building. The chief intermediaries in primary markets are the merchant bankers who lead the company through public issues. SEBI also allows foreign issuances by way of American and Global Depository Receipts and Foreign Currency Convertible Bonds. Public issues are monitored by SEBI and made through issue of prospectus. Once the issue is completed, the securities are listed on a stock exchange.

Depositories hold securities in the accounts of the investors or beneficiaries. These are only for dematerialised securities. The depositories hold these through their depository participants. All securities can be dematerialised. The demat securities do not have distinctive numbers. They are fungible, i.e., every security is like every other security. Custodians helps register and safeguard the securities of its clients.

2.12 STOCK TRADING

2.12.1 What is Screen Based Trading?

The trading on stock exchanges in India used to take place through open outcry without use of information technology for immediate matching or recording of trades. This was time consuming and inefficient. This imposed limits on trading volumes and efficiency. In order to provide efficiency, liquidity and transparency, NSE introduced a nationwide, on-line, fully-automated screen based trading system (SBTS) where a member can punch into the computer the quantities of a security and the price at which he would like to transact, and the transaction is executed as soon as a matching sell or buy order from a counter party is found.

2.12.2 What is NEAT?

NSE is the first exchange in the world to use satellite communication technology for trading. Its trading system, called National Exchange for Automated Trading (NEAT), is a state-of-the-art client server based application. At the server end all trading information is stored in an in-memory database to achieve minimum response time and maximum system availability for users. It has uptime record of 99.7%. For all trades entered into NEAT system, there is uniform response time of less than one second.

2.12.3 How to place orders with the broker?

You may go to the broker's office or place an order on the phone/internet/SMS or as defined in the *Model Agreement*, which every client needs to enter into with his or her broker.

2.12.4 How does an investor get access to internet based trading facility?

There are many brokers of the NSE who provide internet based trading facility to their clients. Internet based trading enables an investor to buy/sell securities through internet which can be accessed from a computer at the investor's residence or anywhere else where the client can access the internet. Investors need to get in touch with an NSE broker providing this service to avail of internet based trading facility. The investor is provided with a user name and password with which he can login to the broker's website and place his orders. Only on such login will the broker accept the order for security reasons.,

2.12.5 What are the other means of trading?

While personally meeting the broker and placing the order and phone trading have been in existence for some time, nowadays, the brokers allow trading through SMS as well. Again there are security measures like using registered phone or cell number, password usage and identification through security questions.

2.12.6 What is a Contract Note?

A contract Note is a confirmation of trades done on a particular day on behalf of the client by a trading member. It imposes a legally enforceable relationship between the client and the trading member with respect to purchase/sale and settlement of trades. It also helps to settle disputes/claims between the investor and the trading member. It is a prerequisite for filing a complaint or arbitration proceeding against the trading member in case of a dispute. A valid contract note should be in the prescribed form, contain the details of trades, stamped with requisite value and duly signed by the authorized signatory. Contract notes are kept in duplicate, the trading member and the client should keep one copy each. After verifying the details contained therein, the client keeps one copy and returns the second copy to the trading member duly acknowledged by him.

2.12.7 What details are required to be mentioned on the contract note issued by the stock broker?

A broker has to issue a contract note to clients for all transactions in the form specified by the stock exchange. The contract note inter-alia should have following:

- Name, address and SEBI Registration number of the Member broker.
- Name of partner/proprietor/Authorised Signatory.
- Dealing Office Address/Tel. No./Fax no., Code number of the member given by the Exchange.
- Contract number, date of issue of contract note, settlement number and time period for settlement.
- Constituent (Client) name/Code Number.
- Order number and order time corresponding to the trades.
- Trade number and Trade time.
- Quantity and kind of Security bought/sold by the client.
- Brokerage and Purchase/Sale rate.
- Service tax rates, Securities Transaction Tax and any other charges levied by the broker.

- Appropriate stamps have to be affixed on the contract note or it must be mentioned that the consolidated stamp duty is paid.
- Signature of the Stock broker/Authorized Signatory.

A sample contract note is given below for reference:

CONTRACT NOTE
(Capital Market Segment of NSE) (Pursuant to Regulation 3.5)

XYZ Ltd.

Contract Note No.
TRADE DATE:
SETTLEMENT NO.:
SETTLEMENT DATE:

BROKER DETAILS

MEMBER OF NATIONAL STOCK EXCHANGE OF INDIA LTD.
 (Cash Market Segment)
SEBI REGN. NO.: : **TRADING MEMBER CODE No.:**
REGD. OFF:
Corp. Off.:

To: **CLIENT DETAILS**

Compliance Officer:
Email:
UNIQUE CLIENT CODE:
PAN NO:

Consolidated stamp duty will be paid directly to stamp office.
Stamp duty as required under schedule 1 to the Indian stamp act.

Sr/Ms/Mr:
I/We have this day done by your order and on your account the following transactions:

Order No.	Order Time	Trade No.	Trade Date	Security	Bought Qty	Sold Qty	Gross Rate Per security	Gross Amount (₹)	Brokerage (₹)	Service Tax (₹)	Gross Amount Incl. (Brng. + ST) (₹)
2011101020010056	12-10-2011 14:55:00	001000002	14-10-11	XYZ LTD.	4		895.85	3439.40	35.0000	3.6950	3478.0950

Security	Quantity	Value	Brokerage	Service Tax	Transaction & SEBI Turnover Charges	Stamp Duty	STT	Net Payable / Receivable
Buy	4	3439.40	35.0000	3.6950	0.1204	0.3439	4.9000	3482.4593
Sell	0	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total Payable / Receivable	4	3439.40	35.0000	3.6950	0.1204	0.3439	4.9000	3482.4593

TRANSACTION DETAILS

Brokerage has been charged as stated and has been at rates not exceeding the official scale of brokerage and indicated separately.
This contract is subject to the Rules, Bye-laws and Regulations and codes of National Stock Exchange of India Limited.
In matters where the Exchange is a party to the dispute, the Civil Courts at Mumbai shall have exclusive jurisdiction and in all other matters, proper courts within the area covered under the Regional Arbitration Centre shall have jurisdiction in respect of the arbitration proceedings being under or conducted in that Regional Arbitration Centre.
This contract constitutes and shall be deemed to constitute an agreement between you and me/us, and in the event of any claim (whether admitted or not), difference or dispute in respect of any dealings, and contracts of a date prior or subsequent to the date of this contract (including any question whether such dealings, transactions or contracts have been entered into or not) shall be referred to arbitration as provided in the Rules, Bye-laws and Regulations of National Stock Exchange of India Limited.
The provisions printed overleaf form a part of the contract.

This is a digitally signed contract and hence no physical signature is required

	₹
Gross Amount Receivable from you	3439.4000
Total Brokerage	35.0000
Service Tax	3.6950
Securities Transaction Tax	4.9000
Transaction & SEBI Turnover Charges	0.1204
Stamp Duty	0.3439
Net Receivable from You	3482.4593
Net Amount Collectible from Bank	3482.4593

OTHER FEES, IF ANY:

2.12.8 What is the maximum brokerage that a broker can charge?

The maximum brokerage that can be charged by a broker from his clients as commission cannot be more than 2.5% of the value mentioned in the respective purchase or sale note. However, it is upto the broker to charge less and many also do so. Hence, SEBI only prescribes the maximum brokerage chargeable and not the minimum.

2.12.9 Why should one trade on a recognized stock exchange only for buying/selling shares?

An investor does not get any protection if he trades outside a stock exchange. Trading at the exchange offers investors the best prices prevailing at the time in the market, lack of any counter-party risk which is assumed by the *clearing corporation*, access to investor grievance and redressal mechanism of stock exchanges, protection upto a prescribed limit, from the Investor Protection Fund etc. It is also mandatory by the SCRA that any trades on a stock exchange are to be routed through brokers only. The investor grievance redressal mechanism can be activated only if the investor transacts through a broker on a recognised stock exchange and not one on one.

2.12.10 How to know if the broker or sub broker is registered?

One can confirm it by verifying the registration certificate issued by SEBI. A broker's registration number begins with the letters 'INB' and that of a sub broker with the letters 'INS'. SEBI website carries the list of registered brokers and sub brokers. Hence, registration can be verified there also.

2.13 WHAT PRECAUTIONS MUST ONE TAKE BEFORE INVESTING IN THE STOCK MARKETS?

2.13.1 Here are some useful pointers to bear in mind before you invest in the markets:

- Make sure your broker is registered with SEBI and the exchanges and do not deal with unregistered intermediaries.
- Ensure that you receive contract notes for all your transactions from your broker within one working day of execution of the trades.
- All investments carry risk of some kind. Investors should always know the risk that they are taking and invest in a manner that matches their risk tolerance.
- Do not be misled by market rumours, wrong advertisement or 'hot tips' of the day.
- Take informed decisions by studying the fundamentals of the company.
- Find out the business the company is into, its future prospects, quality of management, past track record etc. Sources of knowing about a company are through annual reports, economic magazines, databases available with vendors or your financial advisor.
- If your financial advisor or broker advises you to invest in a company you have never heard of, be cautious. Spend some time checking out about the company before investing.
- Do NOT invest in any security or company that you are not comfortable with even if the broker strongly recommends. You should be firm and invest only where you want to.
- Do not be attracted by announcements of fantastic results/news reports, about a company. Do your own research before investing in any stock.
- Do not be attracted to stocks based on what an internet website promotes, unless you have done adequate study of the company.
- Investing in very low priced stocks or what are known as penny stocks does not guarantee high returns.
- Be cautious about stocks which show a sudden spurt in price or trading activity.
- Any advise or tip that claims that there are huge returns expected, especially for acting quickly, may be risky and may lead to losing some, most, or all of your money.

2.13.2 What Do's and Don'ts should an investor bear in mind when investing in the stock markets?

- Ensure that the intermediary (broker/sub-broker) has a valid SEBI registration certificate.
- Enter into an agreement with your broker/sub-broker setting out terms and conditions clearly.
- Ensure that you give all your details in the 'Know Your Client' form.
- Ensure that you read carefully and understand the contents of the 'Risk Disclosure Document' and then acknowledge it.
- Insist on a contract note issued by your broker only, for trades done each day.
- Ensure that you receive the contract note from your broker within 24 hours of the transaction.
- Ensure that the contract note contains details such as the broker's name, trade time and number, transaction price, brokerage, service tax, securities transaction tax etc. and is signed by the Authorised Signatory of the broker.
- To cross check genuineness of the transactions, log in to the NSE website (www.nseindia.com) and go to the 'trade verification' facility extended by NSE. Issue account payee cheques/demand drafts in the name of your broker only, as it appears on the contract note/SEBI registration certificate of the broker.

- While delivering shares to your broker to meet your obligations, ensure that the delivery instructions are made only to the designated account of your broker only.
- Insist on periodical statement of accounts of funds and securities from your broker. Cross check and reconcile your accounts promptly and in case of any discrepancies bring it to the attention of your broker immediately. Please ensure that you receive payments/deliveries from your broker, for the transactions entered by you, within one working day of the payout date.
- Ensure that you do not undertake deals on behalf of others or trade on your own name and then issue cheques from a family members'/ friends' bank accounts.
- Similarly, the Demat delivery instruction slip should be from your own Demat account, not from any other family members'/friends' accounts.
- Do not sign blank delivery instruction slip(s) while meeting security payin obligation.
- No intermediary in the market can accept deposit assuring fixed returns.
- Hence do not give your money as deposit against assurances of returns.
- "Portfolio Management Services' could be offered only by intermediaries having specific approval of SEBI for PMS. Hence, do not part your funds to unauthorized persons for Portfolio Management.
- Delivery Instruction Slip is a very valuable document. Do not leave signed blank delivery instruction slips with anyone. While meeting pay in obligation make sure that correct ID of authorised intermediary is filled in the Delivery Instruction Form.
- Be cautious while taking funding form authorised intermediaries as these transactions are not covered under Settlement Guarantee mechanisms of the exchange.
- Insist on execution of all orders under unique client code allotted to you. Do not accept trades executed under some other client code to your account.
- When you are authorising someone through 'Power of Attorney' for operation of your DP account, make sure that:
- Your authorization is in favour of registered intermediary only.
- Authorisation is only for limited purpose of debits and credits arising out of valid transactions executed through that intermediary only.
- You verify DP statement periodically say every month/ fortnight to ensure that no unauthorised transactions have taken place in your account.
- Authorization given by you has been properly used for the purpose for which authorization has been given.
- In case you find wrong entries please report in writing to the authorized intermediary.
- Don't accept unsigned/duplicate contract note.
- Don't accept contract note signed by any unauthorised person.
- Don't delay payment/deliveries of securities to broker.
- In the event of any discrepancies/disputes, please bring them to the notice of the broker immediately in writing (acknowledged by the broker) and ensure their prompt rectification.

In case of sub-broker disputes, inform the main broker in writing about the dispute at the earliest. If your broker/sub-broker does not resolve your complaints within a reasonable period please bring it to the attention of the 'Investor Services Cell' of the NSE.

While lodging a complaint with the 'Investor Grievances Cell' of the NSE, it is very important that you submit copies of all relevant documents like contract notes, proof of payments/delivery of shares etc., along with the complaint. Remember, in the absence of sufficient documents, resolution of complaints becomes difficult.

Familiarise yourself with the rules, regulations and circulars issued by stock exchanges/SEBI before carrying out any transaction.

2.13.3 What is SEBI SCORES or SEBI Complaints Redressal System?

There will be occasions when you have a complaint against a listed company/ intermediary registered with SEBI. In the event of such complaint you should first approach the concerned company/ intermediary against whom you have a complaint. However, you may not be satisfied with their response. Therefore, you should know whom you should turn to, to get your complaint redressed.

SEBI takes up complaints related to issue and transfer of securities and non-payment of dividend with listed companies. In addition, SEBI also takes up complaints against the various intermediaries registered with it and related issues.

SCORES facilitates you to lodge your complaint online with SEBI and subsequently view its status. To register a complaint online on SCORES portal, click on "Complaint Registration" under "Investor Corner". The complaint registration form contains personal details and complaint details. A PDF document (up to 1MB of size for each nature of complaint) can also be attached along with the complaint as the supporting document. On successful submission of complaint, system generated unique registration number will be displayed on the screen which may be noted for future correspondence. An email acknowledging the complaint with complaint registration number will also be sent to the complainants email id entered in the complaint registration form. The complainant can also follow the status of the complaint online.

2.14 PRODUCTS IN THE SECONDARY MARKETS

2.14.1 What are the products dealt in the Secondary Markets?

Following are the main financial products/instruments dealt in the Secondary market which may be divided broadly into Shares and Bonds:

Shares:

Equity Shares: An equity share, commonly referred to as ordinary share, represents the form of fractional ownership in a business venture.

Rights Issue/ Rights Shares: The issue of new securities to existing shareholders at a ratio to those already held, at a price. For e.g. a 2:3 rights issue at Rs. 125, would entitle a shareholder to receive 2 shares for every 3 shares held at a price of Rs. 125 per share.

Bonus Shares: Shares issued by the companies to their shareholders free of cost based on the number of shares the shareholder owns.

Preference shares: Owners of these kind of shares are entitled to a fixed dividend or dividend calculated at a fixed rate to be paid regularly before dividend can be paid in respect of equity share. They also enjoy priority over the equity shareholders in payment of surplus. But in the event of liquidation, their claims rank below the claims of the company's creditors, bondholders/debenture holders.

Cumulative Preference Shares: A type of preference shares on which dividend accumulates if remained unpaid. All arrears of preference dividend have to be paid out before paying dividend on equity shares.

Cumulative Convertible Preference Shares: A type of preference shares where the dividend payable on the same accumulates, if not paid. After a specified date, these shares will be converted into equity capital of the company.

Bond: is a negotiable certificate evidencing indebtedness. It is normally unsecured. A debt security is generally issued by a company, municipality or government agency. A bond investor lends money to the issuer and in exchange, the issuer promises to repay the loan amount on a specified maturity date. The issuer usually pays the bond holder periodic interest payments over the life of the loan. The various types of Bonds are as follows:

Zero Coupon Bond: Bond issued at a discount and repaid at a face value. No periodic interest is paid. The difference between the issue price and redemption price represents the return to the holder. The buyer of these bonds receives only one payment, at the maturity of the bond.

Convertible Bond: A bond giving the investor the option to convert the bond into equity at a fixed conversion price.

Treasury Bills: Short-term (up to one year) bearer discount security issued by government as a means of financing their cash requirements.

2.15 EQUITY INVESTMENT

2.15.1 Why should one invest in equities in particular?

When you buy a share of a company you become a shareholder in that company. Shares are also known as Equities. Equities have the potential to increase in value over time. Research studies have proved that the equity returns have outperformed the returns of most other forms of investments in the long term. Investors buy equity shares or equity based mutual funds because :-

- Equities are considered the most rewarding, when compared to other investment options if held over a long duration.
- Research studies have proved that investments in some shares with a longer tenure of investment have yielded far superior returns than any other investment. On November 9, 1999, the Nifty closed at 1,364 points. On February 18, 2016, the Nifty closed at 7191 points, showing an increase of 421% over 16 years.
- However, this does not mean all equity investments would guarantee similar high returns. Equities are high risk investments. Though higher the risk, higher the potential returns, high risk also indicates that the investor stands to lose some or all his investment amount if prices move unfavourably. One needs to study equity markets and stocks in which investments are being made carefully, before investing.

2.15.2 What has been the average return on Equities in India?

If we take the Nifty index returns for the past sixteen years as on February 18, 2016, Indian stock market has returned about 26% to investors on an average in terms of increase in share prices or capital appreciation annually. Besides that on average stocks have paid 1.5% dividend annually. *Dividend* is a percentage of the face value of a share that a company returns to its shareholders from its annual profits. Compared to most other forms of investments, investing in equity shares offers the highest rate of return, if invested over a longer duration.

2.15.3 Which are the factors that influence the price of a stock?

Broadly there are two factors: (1) stock specific and (2) market specific. The stock-specific factor is related to people's expectations about the company, its future earnings capacity, financial health and management, level of technology and marketing skills.

The market specific factor is influenced by the investor's sentiment towards the stock market as a whole. This factor depends on the environment rather than the performance of any particular company. Events favourable to an economy, political or regulatory environment like high economic growth, friendly budget, stable government etc. can fuel euphoria in the investors, resulting in a boom in the market. On the other hand, unfavourable events like war, economic crisis, communal

riots, minority government etc. depress the market irrespective of certain companies performing well. However, the effect of market-specific factor is generally short-term. Despite ups and downs, price of a stock in the long run gets stabilized based on the stock-specific factors. Therefore, a prudent advice to all investors is to analyse and invest and not speculate in shares.

2.15.4 What is meant by the terms Growth Stock / Value Stock?

Growth Stocks:

In the investment world we come across terms such as Growth stocks, Value stocks etc. Companies whose potential for growth in sales and earnings are excellent, are growing faster than other companies in the market or other stocks in the same industry are called the Growth Stocks. These companies usually pay little or no dividends and instead prefer to reinvest their profits in their business for further expansions.

Value Stocks:

The task here is to look for stocks that have been overlooked by other investors and which may have a 'hidden value'. These companies may have been beaten down in price because of some bad event, or may be in an industry that's not fancied by most investors. However, even a company that has seen its stock price decline still has assets to its name - buildings, real estate, inventories, subsidiaries, and so on. Many of these assets still have value, yet that value may not be reflected in the stock's price. Value investors look to buy stocks that are undervalued, and then hold those stocks until the rest of the market realizes the real value of the company's assets. The value investors tend to purchase a company's stock usually based on relationships between the current market price of the company and certain business fundamentals. They like P/E ratio being below a certain absolute limit; dividend yields above a certain absolute limit; Total sales at a certain level relative to the company's market capitalization, or market value etc.

2.15.5 How can one acquire equity shares?

You may subscribe to issues made by corporates in the primary market. In the primary market, resources are mobilised by the corporates through fresh public issues (IPOs) or through private placements. Alternately, you may purchase shares from the secondary market. To buy and sell securities you should approach a SEBI registered trading member (broker) of a recognized stock exchange.

2.15.6 What is Bid and Ask price?

The 'Bid' is the buyer's price. It is this price that you need to know when you have to sell a stock. Bid is the rate/price at which there is a ready buyer for the stock, which you intend to sell.

The 'Ask' (or offer) is what you need to know when you're buying i.e. this is the rate/ price at which there is seller ready to sell his stock. The seller will sell his stock if he gets the quoted "Ask" price.

If an investor looks at a computer screen for a quote on the stock of say XYZ Ltd, it might look something like this:

Bid (Buy side)

Ask (Sell side)

	Qty.	Price (Rs.)	Price (Rs.)	Qty.
	1000	50.25	50.35	2000
	500	50.10	50.40	1000
	550	50.05	50.50	1500
	2500	50.00	50.55	3000
	1300	49.85	50.65	1450
Total	5850			8950

Here, on the left-hand side after the Bid quantity and price, whereas on the right hand side we find the Ask prices and quantity. The best Buy (Bid) order is the order with the highest price and therefore sits on the first line of the Bid side (1000 shares @ Rs. 50.25). The best Sell (Ask) order is the order with the lowest sell price (2000 shares @ Rs. 50.35). The difference in the price of the best bid and ask is called as the Bid-Ask spread and often is an indicator of liquidity in a stock. The narrower the difference the more liquid or highly traded is the stock.

2.15.7 What is a Portfolio?

A Portfolio is a combination of different investment assets mixed and matched for the purpose of achieving an investor's goal(s). Items that are considered a part of your portfolio can include any asset you own-from shares, debentures, bonds, mutual fund units to items such as gold, art and even real estate etc. However, for most investors a portfolio has come to signify an investment in financial instruments like shares, debentures, fixed deposits, mutual fund units.

2.15.8 What is Diversification?

It is a risk management technique that mixes a wide variety of investments within a portfolio. It is designed to minimize the impact of any one security on overall portfolio performance. Diversification is possibly the best way to reduce the risk in a portfolio.

2.15.9 What are the advantages of having a diversified portfolio?

A good investment portfolio is a mix of a wide range of asset class. Different securities perform differently at any point in time, so with a mix of asset types, your entire portfolio does not suffer the impact of a decline of any one security. When your stocks go down, you may still have the stability of the bonds in your portfolio. There have been all sorts of academic studies and formulas that demonstrate why diversification is important, but it's really just the simple practice of "not putting all your eggs in one basket." If you spread your investments across various types of assets and markets, you'll reduce the risk of your entire portfolio getting affected by the adverse returns of any single asset class.

2.16 DEBT INVESTMENT

2.16.1 What is a 'Debt Instrument'?

Debt instrument represents a contract whereby one party lends money to another on pre-determined terms with regards to rate and periodicity of interest, repayment of principal amount by the borrower to the lender.

In Indian securities markets, the term '*bond*' is used for debt instruments issued by the Central and State governments and public sector organizations and the term '*debenture*' is used for instruments issued by private corporate sector.

2.16.2 What are the features of debt instruments?

Each debt instrument has three features: Maturity, coupon and principal.

Maturity: Maturity of a bond refers to the date, on which the bond matures, which is the date on which the borrower has agreed to repay the principal. *Term-to-Maturity* refers to the number of years remaining for the bond to mature. The Term-to-Maturity changes everyday, from date of issue of the bond until its maturity. The term to maturity of a bond can be calculated on any date, as the distance between such a date and the date of maturity. It is also called the term or the tenure of the bond.

Coupon: Coupon refers to the periodic interest payments that are made by the borrower (who is also the issuer of the bond) to the lender (the subscriber of the bond). Coupon rate is the rate at which interest is paid, and is usually represented as a percentage of the par value of a bond.

Principal: Principal is the amount that has been borrowed, and is also called the par value or face value of the bond. The coupon is the product of the principal and the coupon rate.

The name of the bond itself conveys the key features of a bond. For example, a GS CG2008 11.40% bond refers to a Central Government bond maturing in the year 2008 and paying a coupon of 11.40%. Since Central Government bonds have a face value of Rs.100 and normally pay coupon semi-annually, this bond will pay Rs. 5.70 as six-monthly coupon, until maturity.

2.16.3 What is meant by 'Interest' payable by a debenture or a bond?

Interest is the amount paid by the borrower (the company) to the lender (the debenture-holder) for borrowing the amount for a specific period of time. The interest may be paid annual, semi-annually, quarterly or monthly and is paid usually on the face value (the value printed on the bond certificate) of the bond.

2.16.4 What are the Segments in the Debt Market in India?

There are three main segments in the debt markets in India, viz., (1) Government Securities, (2) Public Sector Units (PSU) bonds, and (3) Corporate securities.

The market for *Government Securities* comprises the Centre, State and State-sponsored securities. In the recent past, local bodies such as municipalities have also begun to tap the debt markets for funds. Some of the PSU bonds are tax free, while most bonds including government securities are not tax-free. Corporate bond markets comprise of commercial paper and bonds. These bonds typically are structured to suit the requirements of investors and the issuing corporate, and include a variety of tailor-made features with respect to interest payments and redemption.

2.16.5 Who are the Participants in the Debt Market?

Given the large size of the trades, Debt market is predominantly a wholesale market, with dominant institutional investor participation. The investors in the debt markets are mainly banks, financial institutions, mutual funds, provident funds, insurance companies and corporates.

2.16.6 Are bonds rated for their credit quality?

Most Bond/Debenture issues are rated by specialised credit rating agencies. Credit rating agencies in India are CRISIL, CARE, ICRA, Fitch and SMERA. The yield on a bond varies inversely with its credit (safety) rating. The safer the instrument, the lower is the rate of interest offered.

2.16.7 How can one acquire securities in the debt market?

You may subscribe to issues made by the government/corporates in the primary market. Alternatively, you may purchase the same from the secondary market through the stock exchanges.

2.17 Miscellaneous

2.17.1 CORPORATE ACTIONS

Corporate actions tend to have a bearing on the price of a security. When a company announces a corporate action, it is initiating a process that will bring actual change to its securities either in terms of number of shares increasing in the hands on the shareholders or a change to the face value of the security or receiving shares of a new company by the shareholders as in the case of merger or acquisition etc. By understanding these different types of processes and their effects, an investor can have a clearer picture of what a corporate action indicates about a company's financial affairs and how that action will influence the company's share price and performance.

Corporate actions are typically agreed upon by a company's Board of Directors and authorized by the shareholders. Some examples are dividends, stock splits, rights issues, bonus issues etc.

1. What is meant by 'Dividend' declared by companies?

Returns received by investors in equities come in two forms a) growth in the value (market price) of the share and b) dividends. Dividend is distribution of part of a company's earnings to shareholders, usually twice a year in the form of a final dividend and an interim dividend. Dividend is therefore a source of income for the shareholder. Normally, the dividend is expressed on a 'per share' basis, for instance - Rs. 3 per share. This makes it easy to see how much of the company's profits are being paid out, and how much are being retained by the company to plough back into the business. So a company that has earnings per share in the year of Rs. 6 and pays out Rs. 3 per share as a dividend is passing half of its profits on to shareholders and retaining the other half. Directors of a company have discretion as to how much of a dividend to declare or whether they should pay any dividend at all.

2. What is meant by Dividend yield?

Dividend yield gives the relationship between the current price of a stock and the dividend paid by its' issuing company during the last 12 months. It is calculated by aggregating past year's dividend and dividing it by the current stock price.

Example: ABC Co.

Share price: Rs. 360 Annual dividend: Rs. 10

Dividend yield: 2.77% (10/360)

Historically, a higher dividend yield has been considered to be desirable among investors. A high dividend yield is considered to be evidence that a stock is underpriced, whereas a low dividend yield is considered evidence that the stock is overpriced. A note of caution here though. There have been companies in the past which had a record of high dividend yield, only to go bust in later years. Dividend yield therefore can be only one of the factors in determining future performance of a company.

3. What is a Stock Split?

A stock split is a corporate action which splits the existing shares of a particular face value into smaller denominations so that the number of shares increase, however, the market capitalization or the value of shares held by the investors post the split remains the same as that before the split. For e.g. If a company has issued 1,00,00,000 shares with a face value of Rs. 10 and the current market price being Rs. 100, a 2-for-1 stock split would reduce the face value of the shares to 5 and increase the number of the company's outstanding shares to 2,00,00,000, $(1,00,00,000 \times (10/5))$. Consequently, the share price would also halve to Rs. 50 so that the market capitalization or the value shares held by an investor remains unchanged. It is the same thing as exchanging a Rs. 100 note for two Rs. 50 notes; the value remains the same.

Let us see the impact of this on the share holder: - Let's say company ABC is trading at Rs. 40 and has 100 million shares issued, which gives it a market capitalization of Rs. 4000 million (Rs. 40 x 100 million shares). An investor holds 400 shares of the company valued at Rs. 16,000. The company then decides to implement a 4-for-1 stock split (i.e. a shareholder holding 1 share, will now hold 4 shares). For each share shareholders currently own, they receive three additional shares. The investor will therefore hold 1600 shares. So the investor gains 3 additional shares for each share held. But this does not impact the value of the shares held by the investor since post the split, the price of the stock is also split by 25% (1/4th), from Rs. 40 to Rs.10, therefore the investor continues to hold Rs. 16,000 worth of shares. Notice that the market capitalization stays the same - it has increased the amount of stocks outstanding to 400 million while simultaneously reducing the stock price by 25% to Rs. 10 for a capitalization of Rs. 4000 million. The true value of the company hasn't changed.

An easy way to determine the new stock price is to divide the previous stock price by the split ratio. In the case of our example, divide Rs. 40 by 4 and we get the new trading price of Rs. 10. If a stock were to split 3-for-2, we'd do the same thing: $40/(3/2) = 40/1.5 = \text{Rs. } 26.60$.

	Pre-Split	Post-Split
2-for-1 Split		
No. of shares	100 mill.	200 mill.
Share Price	Rs. 40	Rs. 20
Market Cap.	Rs. 4000 mill.	Rs. 4000 mill.
4-for-1		
No. of shares	100 mill.	400 mill.
Share Price	Rs. 40	Rs. 10
Market Cap.	Rs. 4000 mill.	Rs. 4000 mill.

4. Why do companies announce Stock Split?

If the value of the stock doesn't change, what motivates a company to split its stock? Though there are no theoretical reasons in financial literature to indicate the need for a stock split, generally, there are mainly two important reasons. As the price of a security gets higher and higher, some investors may feel the price is too high for them to buy, or small investors may feel it is

unaffordable. Splitting the stock brings the share price down to a more “attractive” level. In our earlier example to buy 1 share of company ABC you need Rs. 40 pre-split, but after the stock split the same number of shares can be bought for Rs.10, making it attractive for more investors to buy the share. This leads us to the second reason. Splitting a stock may lead to increase in the stock’s *liquidity*, since more investors are able to afford the share and the total outstanding shares of the company have also increased in the market.

5. What is Stock Consolidation?

It is the reverse of a stock split. A number of present shares are combined to make a smaller number of shares, like for example turning 3 shares into 1. As a result, the number of shares goes down. However, the price goes up proportionately.

For example, a company has 1 lakh shares valued at Rs.50 each. The company decides to bring down the number of shares to 50,000/-. Then, 2 shares will be combined to make one. Hence, a shareholder who had 400 shares will now only have 200. However, the price will go up from Rs. 50/- per share to Rs. 100/- per share.

6. What is Buy back of Shares?

A buyback can be seen as a method for company to invest in itself by buying shares from other investors in the market. Buybacks reduce the number of shares outstanding in the market. Buy back is done by the company with the purpose to improve the liquidity in its shares and enhance the shareholders’ wealth. Under the SEBI (Buy Back of Securities) Regulation, 1998, a company is permitted to buy back its share from:

- Existing shareholders on a proportionate basis through the offer document.
- Open market through stock exchanges using book building process.
- Shareholders holding odd lot shares.

The company has to disclose the pre and post-buyback holding of the promoters. To ensure completion of the buyback process speedily, the regulations have stipulated time limit for each step. For example, in the cases of purchases through stock exchanges, an offer for buy back should not remain open for more than 30 days. The verification of shares received in buy back has to be completed within 15 days of the closure of the offer. The payments for accepted securities has to be made within 7 days of the completion of verification and bought back shares have to be extinguished within 7 days of the date of the payment.

2.17.2 INDEX

1 What is the Nifty 50 index?

Nifty Fifty is a scientifically developed, 51 stock index, reflecting accurately the market movement of the Indian markets. It comprises of some of the largest and most liquid stocks traded on the NSE. India Index Services & Products Limited (IISL), a subsidiary of NSE Strategic Investment Corporation Limited was setup in May 1998 to provide a variety of indices and index related services and products for the Indian capital markets. Nifty is the barometer of the Indian markets.

2.17.3 CLEARING & SETTLEMENT AND REDRESSAL

1 What is a Clearing Corporation?

A Clearing Corporation is a part of an exchange or a separate entity and performs three functions, namely, it clears and settles all transactions, i.e. completes the process of receiving and delivering shares/funds to the buyers and sellers in the market, it provides financial guarantee for all transactions executed on the exchange and provides risk management functions. National

Securities Clearing Corporation (NSCCL), a 100% subsidiary of NSE, performs the role of a Clearing Corporation for transactions executed on the NSE.

2 What is Rolling Settlement?

Under rolling settlement all open positions at the end of the day mandatorily result in payment/delivery *n' days later. Currently trades in rolling settlement are settled on T+2 basis where T is the trade day. For example, a trade executed on Monday is mandatorily settled by Wednesday (considering two working days from the trade day). The funds and securities pay-in and pay-out are carried out on T+2 days.

A tabular representation of the settlement cycle for rolling settlement is given below:

	Activity	Day
Trading	Rolling Settlement Trading	T
Clearing	Custodial Confirmation	T+1 working days
	Delivery Generation	T+1 working days
Settlement	Securities and Funds pay in	T+2 working days
	Securities and Funds pay out	T+2 working days
	Valuation Debit	T+2 working days
Post Settlement	Auction	T+2 working days
	Auction settlement	T+3 working days
	Bad Delivery Reporting	T+4 working days
	Rectified bad delivery pay-in and pay-out	T+6 working days
	Re-bad delivery reporting and pickup	T+8 working days
	Close out of re-bad delivery and funds pay-in & pay-out	T+9 working days

3 What is Pay-in and Pay-out?

Pay-in day is the day when the securities sold are delivered to the exchange by the sellers and funds for the securities purchased are made available to the exchange by the buyers.

Pay-out day is the day the securities purchased are delivered to the buyers and the funds for the securities sold are given to the sellers by the exchange.

At present the pay-in and pay-out happens on the 2nd working day after the trade is executed on the stock exchange.

4 What is an Auction?

On account of non-delivery of securities by the trading member on the pay-in day, the securities are put up for auction by the Exchange. This ensures that the buying trading member receives the securities. The Exchange purchases the requisite quantity in auction market and gives them to the buying trading member.

5 What is a Bad Delivery?

This was more a problem when trading was carried out in physical securities. Securities given for delivery could be mutilated or damaged or without signature or proper form. These would then be returned to the seller for appropriate action. Now the issue is relatively unimportant on account of electronic trades.

2.17.4 WHAT IS A BOOK-CLOSURE/RECORD DATE?

Book closure and record date help a company determine exactly the shareholders of a company as on a given date. Book closure refers to the closing of the register of the names of investors in the records of a company. Companies announce book closure dates from time to time. The benefits of dividends, bonus issues, rights issue accrue to investors whose name appears on the company's records as on a given date which is known as the record date and is declared in advance by the company so that buyers have enough time to buy the shares, get them registered in the books of the company and become entitled for the benefits such as bonus, rights, dividends etc. With the depositories now in place, the buyers need not send shares physically to the companies for registration. This is taken care by the depository since they have the records of investor holdings as on a particular date electronically with them.

1 What is a No-delivery period?

Whenever a company announces a book closure or record date, the exchange sets up a no-delivery period for that security. During this period only trading is permitted in the security. However, these trades are settled only after the no-delivery period is over. This is done to ensure that investor's entitlement for the corporate benefit is clearly determined.

2 What is an Ex-dividend date?

The date on or after which a security begins trading without the dividend included in the price, i.e. buyers of the shares will no longer be entitled for the dividend which has been declared recently by the company, in case they buy on or after the ex-dividend date.

3 What is an Ex-date?

The first day of the no-delivery period is the ex-date. If there is any corporate benefits such as rights, bonus, dividend announced for which book closure/record date is fixed, the buyer of the shares on or after the ex-date will not be eligible for the benefits.

2.17.5 WHAT RECOURSES ARE AVAILABLE TO INVESTOR/CLIENT FOR REDRESSING HIS GRIEVANCES?

You can lodge complaint with the Investor Grievances Cell (IGC) of the Exchange against brokers on certain trade disputes or non-receipt of payment/securities. IGC takes up complaints in respect of trades executed on the NSE, through the NSE trading member or SEBI registered sub-broker of a NSE trading member and trades pertaining to companies traded on NSE.

2.17.6 WHAT IS ARBITRATION?

Arbitration is an alternative dispute resolution mechanism provided by a stock exchange for resolving disputes between the trading members and their clients in respect of trades done on the exchange. If no amicable settlement could be reached through the normal grievance redressal mechanism of the stock exchange, then you can make application for reference to Arbitration under the Bye-Laws of the concerned Stock exchange.

2.17.7 WHAT IS AN INVESTOR PROTECTION FUND?

Investor Protection Fund (IPF) is maintained by NSE to make good investor claims, which may arise out of non-settlement of obligations by the trading member, who has been declared a defaulter, in respect of trades executed on the Exchange. The IPF is utilised to settle claims of such investors where the trading member through whom the investor has dealt has been declared a defaulter. Payments out of the IPF may include claims arising of non payment/non receipt of securities by the investor from the trading member who has been declared a defaulter. The

maximum amount of claim payable from the IPF to the investor (where the trading member through whom the investor has dealt is declared a defaulter) is Rs. 10 lakh.

2.17.8 WHAT IS SEBI SCORES?

SCORES Stands for SEBI Complaints Redressal. This is an online facility offered by SEBI for investors to place their complaints and follow the action taken against it. The complaint should first be registered. SEBI then gives a unique complaint number, using which, the redressal can be followed up with online. SEBI takes up complaints related to issue and transfer of securities and non-payment of dividend with listed companies. In addition, SEBI also takes up complaints against the various intermediaries registered with it and related issues. SCORES thus, facilitates you to lodge your complaint online with SEBI and subsequently view its status.

POINTS TO REMEMBER

This chapter deals with all the miscellaneous things that an investor must keep in mind. Companies announce certain corporate actions like stock split, stock consolidation, bonus issue and buy back of shares which affect the stock holding by quantity and price. These must be kept in mind while trading in shares. Indices are the representative movement of the stock markets, Nifty is the index of NSE which is considered the benchmark of stock markets in India.

All trades in securities are cleared and settled through the rolling settlement in T+2 days. If certain securities are not settled, they are put up for auction. Certain dates like book closure, no record and ex-date become important while trading in securities.

One of the objectives of SEBI is investor protection. There is an investor protection fund of NSE and an arbitration mechanism in place to address the grievances of the investors. Apart from this, SEBI also has an online mechanism – SCORES for investor grievance redressal.

UNIT -3 Financial Statement Analysis

3.1 CONCEPTS & MODES OF ANALYSIS

3.1.1 WHAT IS SIMPLE INTEREST?

Simple Interest: Simple Interest is the interest paid only on the principal amount borrowed. No interest is paid on the interest accrued during the term of the loan.

There are three components to calculate simple interest: principal, interest rate and time.

Formula for calculating simple interest:

$$I = Prt$$

Where,

I = interest

P = principal

r = interest rate (per year)

t = time (in years or fraction of a year)

Example:

Mr. X borrowed Rs. 10,000 from the bank to purchase a household item. He agreed to repay the amount in 8 months, plus simple interest at an interest rate of 10% per annum (year).

If he repays the full amount of Rs. 10,000 in eight months, the interest would be:

P = Rs. 10,000 r = 0.10 (10% per year) t = 8/12 (this denotes fraction of a year)

Applying the above formula, interest would be: $I = \text{Rs. } 10,000 \times (0.10) \times (8/12) = \text{Rs. } 667$.

This is the Simple Interest on the Rs. 10,000 loan taken by Mr. X for 8 months. If he repays the amount of Rs. 10,000 in fifteen months, the only change is with time.

Therefore, his interest would be:

$$I = \text{Rs. } 10,000 \times (0.10) \times (15/12) = \text{Rs. } 1,250$$

3.1.2 WHAT IS COMPOUND INTEREST?

To quote Albert Einstein: "Compound interest is the eighth wonder of the world. He who understands it, earns it ... he who doesn't ... pays it."

Compound Interest: Compound interest means that, the interest will include interest calculated on interest. The interest accrued on a principal amount is added back to the principal sum, and the whole amount is then treated as new principal, for the calculation of the interest for the next period.

For example, if an amount of Rs. 5,000 is invested for two years and the interest rate is 10%, compounded yearly:

At the end of the first year the interest would be (Rs. 5,000 * 0.10) or Rs. 500.

In the second year the interest rate of 10% will applied not only to Rs.

5,000 but also to the Rs. 500 interest of the first year. Thus, in the second year the interest would be (0.10 * Rs. 5,500) or Rs. 550.

For any loan or borrowing unless simple interest is stated, one should always assume interest is compounded. When compound interest is used we must always know how often the interest rate is calculated each year. Generally the interest rate is quoted annually. E.g. 10% per annum.

Compound interest may involve calculations for more than once a year, each using a new principal, i.e. (interest + principal). The first term we must understand in dealing with compound interest is conversion period. Conversion period refers to how often the interest is calculated over the term of the loan or investment. It must be determined for each year or fraction of a year.

E.g.: If the interest rate is compounded semiannually, then the number of conversion periods per year would be two. If the loan or deposit was for five years, then the number of conversion periods would be ten.

Formula for calculating Compound Interest:

$$C = P (1+i)^n$$

Where

C = amount P = principal

i = Interest rate per conversion period

n = total number of conversion periods

Example:

Mr. X invested Rs. 10,000 for five years at an interest rate of 7.5% compounded quarterly

P = Rs. 10,000

i = 0.075 / 4, or 0.01875

n = 4 * 5, or 20, conversion periods over the five years

Therefore, the amount, C, is:

$$C = \text{Rs. } 10,000(1 + 0.01875)^{20}$$

$$= \text{Rs } 10,000 \times 1.449948$$

$$= \text{Rs } 14,499.48$$

So at the end of five years Mr. X would earn Rs. 4,499.48 (Rs. 14,499.48 - Rs. 10,000) as interest. This is also called as Compounding.

Compounding plays a very important role in investment since earning a simple interest and earning an interest on interest makes the amount received at the end of the period for the two cases significantly different.

If Mr. X had invested this amount for five years at the same interest rate offering the simple interest option, then the amount that he would earn is calculated by applying the following formula:

$$S = P (1 + rt),$$

$$P = 10,000$$

$$r = 0.075$$

$$t = 5$$

$$\text{Thus, } S = \text{Rs. } 10,000[1+0.075(5)]$$

$$= \text{Rs. } 13,750$$

Here, the simple interest earned is Rs. 3,750.

A comparison of the interest amounts calculated under both the method indicates that Mr. X would have earned Rs. 749.48 (Rs.4,499.48 - Rs. 3,750) or nearly 20% more under the compound interest method than under the simple interest method.

Simply put, compounding refers to the re-investment of income at the same rate of return to constantly grow the principal amount, year after year. Should one care too much whether the rate of return is 5% or 15%? The fact is that with compounding, the higher the rate of return, more is the income which keeps getting added back to the principal regularly generating higher rates of return year after year.

The table below shows you how a single investment of Rs 10,000 will grow at various rates of return with compounding. 4-6% is what you might get by leaving your money in a savings bank account, 7-8% is typically the rate of return you could expect from a one-year company fixed deposit, 15% - 20% or more is what you might get if you prudently invest in mutual funds or equity shares, over the long term.

The Impact of Power of Compounding:

The impact of the power of compounding with different rates of return and different time periods:

At end of Year	5%	10%	15%	20%
1	Rs 10,500	Rs 11,000	Rs 11,500	Rs 12,000
5	Rs 12,800	Rs 16,100	Rs 20,100	Rs 24,900
10	Rs 16,300	Rs 25,900	Rs 40,500	Rs 61,900
15	Rs 20,800	Rs 41,800	Rs 81,400	Rs 1,54,100
25	Rs 33,900	Rs 1,08,300	Rs3,29,200	Rs9,54,000

3.1.3 WHAT IS MEANT BY THE TIME VALUE OF MONEY?

Money has time value. The idea behind time value of money is that a rupee now is worth more than rupee in the future. The relationship between value of a rupee today and value of a rupee in future is known as 'Time Value of Money'. A rupee received now can earn interest in future. An amount invested today has more value than the same amount invested at a later date because it can utilize the power of compounding. Compounding is the process by which interest is earned on interest. When a principal amount is invested, interest is earned on the principal during the first period or year. In the second period or year, interest is earned on the original principal plus the interest earned in the first period. Over time, this reinvestment process can help an amount to grow significantly.

Let us take an example:

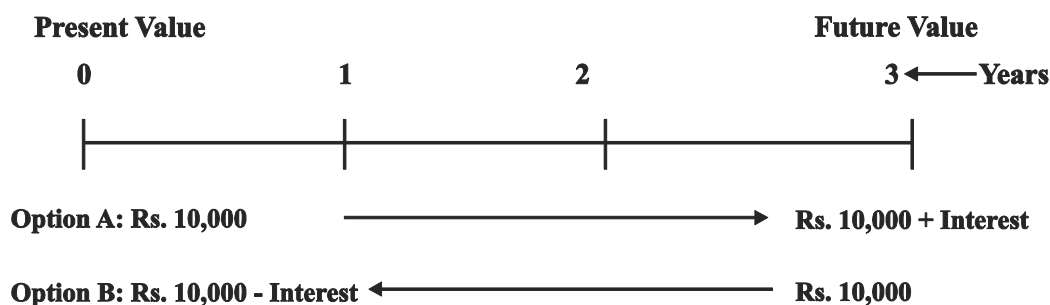
Suppose you are given two options:

Receive Rs. 10,000 now OR

Receive Rs. 10,000 after three years. Which of the options would you choose?

Rationally, you would choose to receive the Rs. 10,000 now instead of waiting for three years to get the same amount. So, the time value of money demonstrates that, all things being equal, it is better to have money now rather than later.

Back to our example: by receiving Rs. 10,000 today, you are poised to increase the *future value* of your money by investing and gaining interest over a period of time. For option B, you don't have time on your side, and the payment received in three years would be your future value. To illustrate, we have provided a timeline:



If you are choosing option A, your future value will be Rs. 10,000 plus any interest acquired over the three years. The future value for option B, on the other hand, would only be Rs. 10,000. This clearly illustrates that value of money received today is worth more than the same amount received in future since the amount can be invested today and generate returns.

Let us take an another example:

If you choose option A and invest the total amount at a simple annual rate of 5%, the future value of your investment at the end of the first year is Rs. 10,500, which is calculated by multiplying the principal amount of Rs. 10,000 by the interest rate of 5% and then adding the interest gained to the principal amount.

Thus, Future value of investment at end of first year:

$$\begin{aligned} &= ((\text{Rs. } 10,000 \times (5/100)) + \text{Rs. } 10,000) \\ &= (\text{Rs. } 10,000 \times 0.050) + \text{Rs. } 10,000 \\ &= \text{Rs. } 10,500 \end{aligned}$$

You can also calculate the total amount of a one-year investment with a simple modification of the above equation:

Original equation: $(Rs.10,000 \times 0.050) + Rs.10,000 = Rs.10,500$ Modified formula: $Rs.10,000 \times [(1 \times 0.050) + 1] = Rs.10,500$ Final equation: $Rs. 10,000 \times (0.050 + 1) = Rs. 10,500$

Which can also be written as: $S = P (r+ 1)$

Where,

S = amount received at the end of period P = principal amount

r = interest rate (per year)

This formula denotes the future value (S) of an amount invested (P) at a simple interest of (r) for a period of 1 year.

1. How is time value of money computed?

The time value of money may be computed in the following circumstances:

- Future value of a single cash flow
- Future value of an annuity
- Present value of a single cash flow
- Present value of an annuity

(1) Future Value of a Single Cash Flow

For a given present value (PV) of money, future value of money (FV) after a period M: for which compounding is done at an interest rate of V, is given by the equation

$$FV = PV (1+r)^t$$

This assumes that compounding is done at discrete intervals. However, in case of continuous compounding, the future value is determined using the formula

$$FV = PV * e^{rt}$$

Where 'e' is a mathematical function called 'exponential' the value of exponential (e) = 2.7183. The compounding factor is calculated by taking natural logarithm (log to the base of 2.7183).

Example 1: Calculate the value of a deposit of Rs.2,000 made today, 3 years hence if the interest rate is 10%.

By discrete compounding:

$$FV = 2,000 * (1+0.10)^3 = 2,000 * (1.1)^3 = 2,000 * 1.331 = \text{Rs. } 2,662$$

By continuous compounding:

$$FV = 2,000 * e^{(0.10*3)} = 2,000 * 1.349862 = \text{Rs. } 2,699.72$$

(2) Future Value of an Annuity

An annuity is a stream of equal annual cash flows. The future value (FVA) of a uniform cash flow (CF) made at the end of each period till the time of maturity 't' for which compounding is done at the rate V is calculated as follows:

$$\begin{aligned} FVA &= CF*(1+r)^{t-1} + CF*(1+r)^{t-2} + \dots + CF*(1+r)^1 + CF \\ &= CF \left[\frac{(1+r)^t - 1}{r} \right] \end{aligned}$$

The term $CF \left[\frac{(1+r)^t - 1}{r} \right]$ is referred as the Future Value Interest factor for an annuity (FVIFA).

The same can be applied in a variety of contexts. For e.g. to know accumulated amount after a certain period, to know how much to save annually to reach the targeted amount, to know the interest rate etc.

Example 1: Suppose, you deposit Rs.3,000 annually in a bank for 5 years and your deposits earn a compound interest rate of 10 per cent, what will be value of this series of deposits (an annuity) at the end of 5 years? Assume that each deposit occurs at the end of the year.

Future value of this annuity is:

$$\begin{aligned} &= \text{Rs. } 3000*(1.10)^4 + \text{Rs. } 3000*(1.10)^3 + \text{Rs. } 3000*(1.10)^2 + \text{Rs. } 3000*(1.10) + \text{Rs. } 3,000 \\ &= \text{Rs. } 3000*(1.4641) + \text{Rs. } 3000*(1.3310) + \text{Rs. } 3000*(1.2100) + \text{Rs. } 3000*(1.10) + \text{Rs. } 3000 \\ &= \text{Rs. } 18315.30 \end{aligned}$$

(3) Present Value of a Single Cash Flow

Present value of (PV) of the future sum (FV) to be received after a period T for which discounting is done at an interest rate of V, is given by the equation

In case of discrete discounting: $PV = FV / (1+r)^t$

Example 1: What is the present value of Rs.5,000 payable 3 years hence, if the interest rate is 10 % p.a.

$$PV = 5000 / (1.10)^3 \text{ i.e. } = \text{Rs. } 3756.57$$

In case of continuous discounting: $PV = FV * e^{-rt}$

Example 2: What is the present value of Rs. 10,000 receivable after 2 years at a discount rate of 10% under continuous discounting? Present Value = $10,000 / (\exp^{(0.1*2)}) = \text{Rs. } 8187.297$

(4) Present Value of an Annuity

The present value of annuity is the sum of the present values of all the cash inflows of this annuity.

Present value of an annuity (in case of discrete discounting)

$$PVA = FV \left[\frac{(1+r)^t - 1}{r * (1+r)^t} \right]$$

The term $[(1+r)^t = 1/ r*(1+r)^t]$ is referred as the Present Value Interest factor for an annuity (PVIFA).

Present value of an annuity (in case of continuous discounting) is calculated as:

$$PV_a = FV_a * (1-e^{-rt})/r$$

Example 1: What is the present value of Rs. 2000/- received at the end of each year for 3 continuous years

$$= 2000*[1/1.10]+2000*[1/1.10]^2+2000*[1/1.10]^3$$

$$= 2000*0.9091+2000*0.8264+2000*0.7513$$

$$= 1818.181818+1652.892562+1502.629602$$

$$= \text{Rs. } 4973.704$$

2. What is Effective Annual return?

Usually while applying for a fixed deposit or a bond it is stated in the application form, that the annual return (interest) of an investment is 10%, but the effective annual return mentioned is something more, 10.38%. Why the difference? Essentially, the effective annual return accounts for intra-year compounding and the stated annual return does not. The difference between these two measures is best illustrated with an example. Suppose the stated annual interest rate on a savings account is 10%, and say you put Rs 1,000 into this savings account. After one year, your money would grow to Rs 1,100. But, if the account has a quarterly compounding feature, your effective rate of return will be higher than 10%. After the first quarter, or first three months, your savings would grow to Rs 1,025. Then, in the second quarter, the effect of compounding would become apparent: you would receive another Rs 25 in interest on the original Rs 1,000, but you would also receive an additional Rs 0.63 from the Rs. 25 that was paid after the first quarter. In other words, the interest earned in each quarter will increase the interest earned in subsequent quarters. By the end of the year, the power of quarterly compounding would give you a total of Rs 1,103.80. So, although the stated annual interest rate is 10%, because of quarterly compounding, the effective rate of return is 10.38%. The difference of 0.38% may appear insignificant, but it can be huge when you're dealing with large numbers. 0.38% of Rs. 100,000 is Rs 380! Another thing to consider is that compounding does not necessarily occur quarterly, or only four times a year, as it does in the example above. There are accounts that compound monthly, and even some that compound daily. And, as our example showed, the frequency with which interest is paid (compounded) will have an effect on effective rate of return.

3.1.4 HOW TO GO ABOUT SYSTEMATICALLY ANALYZING A COMPANY?

You must look for the following to make the right analysis:

Industry Analysis: Companies producing similar products are subset (form a part) of an Industry/Sector. For example, National Hydroelectric Power Company (NHPC) Ltd., National Thermal Power Company (NTPC) Ltd., Tata Power Company (TPC) Ltd. etc. belong to the Power Sector/Industry of India. It is very important to see how the industry to which the company belongs is faring. Specifics like effect of Government policy, future demand of its products etc. need to be checked. At times prospects of an industry may change drastically by any alterations in business environment. For instance, devaluation of rupee may brighten prospects of all export oriented companies. Investment analysts call this as *Industry Analysis*.

Corporate Analysis: How has the company been faring over the past few years? Seek information on its current operations, managerial capabilities, growth plans, its past performance vis-a-vis its competitors etc. This is known as *Corporate Analysis*.

Financial Analysis: If performance of an industry as well as of the company seems good, then check if at the current price, the share is a good buy. For this look at the financial performance of

the company and certain key financial parameters like Earnings Per Share (EPS), P/E ratio, current size of equity etc. for arriving at the estimated future price. This is termed as *Financial Analysis*. For that you need to understand financial statements of a company i.e. Balance Sheet and Profit and Loss Account contained in the Annual Report of a company.

1. What is an Annual Report?

An annual report is a formal financial statement issued yearly by a corporate. The annual report shows assets, liabilities, revenues, expenses and earnings - how the company stood at the close of the business year, how it fared profit-wise during the year, as well as other information of interest to shareholders. Companies publish annual reports and send abridged versions to shareholders free of cost. A detailed annual report is sent on request. Remember an annual report of a company is the best source of information about the financial health of a company.

2. Which features of an Annual Report should one read carefully?

One must read an Annual Report with emphasis on the following:

- Director's Report and Chairman's statement which are related to the current and future operational performance of a company.
- Management Discussion and Analysis or MD&A, which talks about the past performance and the future prospects of the company and the industry in which it operates.
- Auditors' Report (including Annexure to the Auditors Report)
- Profit and Loss Account.
- Balance Sheet.
- Notes to accounts attached to the Balance Sheet.

3. What is a Balance Sheet and a Profit and Loss Account Statement? What is the difference between Balance Sheet and Profit and Loss Account Statements of a company?

The Balance sheet of a company shows the financial position of the company **at a particular point of time**. The balance sheet of a company/firm, according to the Companies Act, 1956 should be either in the *account form* or the *report form*.

Balance Sheet: Account Form

Liabilities	Assets
Share Capital	Fixed Assets
Reserves and Surplus	Investments
Secured loans	Current Assets, loans and advances
Unsecured loans	Miscellaneous expenditure
Current liabilities and provisions	

Balance Sheet: Report Form I.

Sources of Funds

Shareholders' Funds

Share Capital

Reserves & surplus

Loan Funds

Secured loans

Unsecured loans

Application of Funds

Fixed Assets

Investments

Current Assets, loans and advances

Less: Current liabilities and provisions

Net current assets

Miscellaneous expenditure and losses

The Profit and Loss account (Income Statement), on the other hand, shows the financial performance of the company/firm over a period of time. It indicates the revenues and expenses during particular period of time. The period of time is an accounting period/year, April-March. The accounting report summarizes the revenue items, the expense items, and the difference between them (net income) for an accounting period.

4. How to interpret Balance Sheet and Profit and Loss Account of a company?

Let's start with Balance Sheet. The Box-1 gives the balance sheet of XYZ Ltd. company as on 31st March 2005. Let us understand the balance sheet shown in the Box-1.

BOX-I						
XYZ COMPANY LTD.,						
Balance sheet as on 31 st March, 2005				As at 31st March, 2005	As at 31st March, 2004	
SOURCES OF FUNDS		Schedule	Page	Rs. Cr	Rs. Cr	Rs. Cr
1	SHAREHOLDERS' FUNDS					
	(a) Capital	1	19	103.87		104.44
	(b) Reserves and Surplus	2	20	479.21		387.70
					583.08	483.14
2	LOAN FUNDS					
	(a) Secured	3	21	353.34		387.76
	(b) Unsecured	4	21	129.89		101.07
					483.23	488.83
3	TOTAL FUNDS EMPLOYED				1066.31	971.97

BOX-I					
XYZ COMPANY LTD.,					
Balance sheet as on 31 st March, 2005				As at 31st March, 2005	As at 31st March, 2004
SOURCES OF FUNDS		Schedule	Page	Rs. Cr	Rs. Cr
APPLICATION OF FUNDS					
4	FIXED ASSETS				
	(a) Gross Block	5	22	946.84	870.44
	(b) Less: Depreciation			482.19	430.70
	(c) Net Block			464.65	439.74
	(d) Capital Work in Progress			62.10	44.44
				526.75	484.18
5	INVESTMENTS	6	23		108.58
6	CURRENT ASSETS, LOANS AND ADVANCES				
	(a) Inventories	7	24	446.34	350.25
	(b) Sundry Debtors	8	24	458.47	300.32
	(c) Cash and Bank Balances	9	25	66.03	5.67
	(d) Loans and Advances	10	25	194.36	110.83
				1165.20	767.07
7	Less: CURRENT LIABILITIES AND PRIVISIONS				
	(a) Current Liabilities	11	26	595.22	500.19
	(b) Provisions	12	26	139.00	82.57
				734.22	582.76
8	NET CURRENT ASSETS [(6) less (7)1			430.98	184.31
9	TOTAL ASSETS (NET)			1066.31	971.97
10	NOTES TO BALANCE SHEET AND CONTINGENT LIABILITIES	13	27		
	As per our report attached				For and on behalf of the Board.

BOX-1					
XYZ COMPANY LTD.,					
Balance sheet as on 31 st March, 2005				As at 31st March, 2005	As at 31st March, 2004
SOURCES OF FUNDS	Schedule	Page	Rs. Cr	Rs. Cr	Rs. Cr
For A. SDF&CO.	XXXXX	AAAA		ASDFG	
Chartered Accountants,	Chairman	BBBB		LKJH	
Q.W.TYUR		CCCC		TYUB	
Partner.		REFGH		POIUY	Directors
ForHIJKL	YYYY	NSDF			
Chartered Accountants,	Vice- Chairman and	QWER			
WERT	Managing Director	MNBV			
Partner.	ZZZZZZ				
Bombay 10th July, 2004	Secretary			Bombay, 28th June, 2004.	

The balance sheet of a company is a record showing sources of funds and their application for creating/building assets. However, since company's fund structure and asset position change everyday due to fund inflow and outflow, balance sheets are drawn on a specific date, say 31st March.

5. What do these sources of funds represent?

As shown in a sample balance sheet in Box-1, there are two sources of funds:

Shareholders' Fund (also known as **Net Worth**) is the fund coming from the owners of the company; and

Loan Fund is the fund borrowed from outsiders.

When a company/firm starts operations, its owners, called shareholders, contribute funds called **Share Capital**. Note that in Box-1 XYZ COMPANY LTD.'s capital in 2005 was Rs. 103.87 crore. The shareholders being the owners, share part of the profit of the company, as dividend. Share capital has been further divided into **equity capital** and **preference capital**. Equity capital does not have fixed rate of dividend. The preference capital represents contribution of preference shareholders and has fixed rate of dividend.

After distributing dividends, a part of the profit is retained by the company for meeting fund requirements in future. The retained profits accumulated over the years are called **reserves and surplus**, which are shareholders' property. In case of XYZ COMPANY LTD., note that the reserves and surplus increased from Rs. 387.70 crore in 2004 to Rs. 479.21 crore in 2005.

6. What is the difference between Equity shareholders and Preferential shareholders?

Equity Shareholders are supposed to be the owners of the company, who therefore, have right to get dividend, as declared, and a right to vote in the Annual General Meeting for passing any resolution.

The act defines a **preference share** as that part of share capital of the Company which enjoys preferential right as to: (a) payment of dividend at a fixed rate during the life time of the Company; and (b) the return of capital on winding up of the Company.

But Preference shares cannot be traded, unlike equity shares, and are redeemed after a pre-decided period. Also, **Preferential Shareholders** do not have voting rights.

7. What do terms like authorized, issued, subscribed, called up and paid up capital mean?

- **Authorized capital** is the maximum capital that a company is authorized to raise.
- **Issued capital** is that part of the authorized capital which is offered by the company for being subscribed by members of the public or anybody.
- **Subscribed capital** is that part of the issued capital which is subscribed (accepted) by the public.
- **Called up capital** is a part of subscribed capital which has been called up by the company for payment. For example, if 10,000 shares of Rs. 100 each have been subscribed by the public and of which Rs. 50 per share has been called up. Then the subscribed capital of the Company works out to Rs. 1,00,000 of which the called up capital of the Company is Rs. 50,0000.
- **Paid Up capital** refers to that part of the called up capital which has been actually paid by the shareholders. Some of the shareholders might have defaulted in paying the called up money. Such defaulted amount is called as arrears. From the called up capital, calls in arrears is deducted to obtain the paid up capital.

8. What is the difference between secured and unsecured loans under Loan Funds?

Secured loans are the borrowings against the security i.e. against mortgaging some immovable property or hypothecating/pledging some movable property of the company. This is known as creation of charge, which safeguards creditors in the event of any default on the part of the company. They are in the form of debentures, loans from financial institutions and loans from commercial banks. Notice that in case of the XYZ COMPANY LTQ, it was Rs. 353.34 crore as on March 31, 2005. The unsecured loans are other short term borrowings without a specific security. They are fixed deposits, loans and advances from promoters, inter-corporate borrowings, and unsecured loans from the banks. Such borrowings amount to Rs. 129.89 crore in case of the XYZ COMPANY LTD.

9. What is meant by application of funds?

The funds collected by a company from the owners and outsiders are employed to create following assets:

- *Fixed Assets:* These assets are acquired for long-terms and are used for business operation, but not meant for resale. The land and buildings, plant, machinery, patents, and copyrights are the fixed assets. In case of the XYZ COMPANY LTD., fixed assets are worth Rs. 526.75 crore.
- *Investments:* The investments are the financial securities created by investing surplus funds into any non-business related avenues for getting income either for long-term or short-term. Thus incomes and gains from the investments are not from the business operations.
- *Current Assets, Loans, and Advances:* This consists of cash and other resources which can be converted into cash during the business operation. Current assets are held for a short-term period for meeting day-to day operational expenditure. The current assets are in the form of raw materials, finished goods, cash, debtors, inventories, loans and advances, and pre-paid expenses. For the XYZ COMPANY LTD., current assets are worth Rs. 1165.20 crore.

- *Miscellaneous Expenditures and Losses:* The miscellaneous expenditures represent certain outlays such as preliminary expenses and pre-operative expenses not written off. Though loss indicates a decrease in the owners' equity, the share capital can not be reduced with loss. Instead, share capital and losses are shown separately on the liabilities side and assets side of the balance sheet, respectively.

10. What do the sub-headings under the Fixed Assets like 'Gross block' 'Depreciation', 'Net Block' and Capital-Work in Progress' mean?

The total value of acquiring all fixed assets (even though at different points of time) is called '**Gross Block**' or "**Gross Fixed Asset**'.

As per accounting convention, all fixed assets except land have a fixed life. It is assumed that every year the worth of an asset falls due to usage. This reduction in value is called '**Depreciation**'. The Companies Act 1956 stipulates different rates of depreciation for different types of assets and different methods calculating depreciation, namely, Straight Line Method (constant annual method) and Written Down Value Method (depreciation rate decreases over a period of time).

The worth of the fixed assets after providing for depreciation is called '**Net Block**'. In case of the XYZ COMPANY LTD., Net Block was Rs. 464.65 crore as on March 31, 2005.

Gross Block-Depreciation = Net Block Rs. 946.84- Rs. 482.19 = Rs. 464.65

The capital/funds used for a new plant under erection, a machine yet to be commissioned etc. are examples of 'Capital Work in Progress', which also has to be taken into account while calculating the fixed assets as it will be converted into gross block soon.

11. What are Current Liabilities and Provisions and Net Current Assets in the balance sheet?

A company may receive many of its daily services for which it does not have to pay immediately like for raw materials, goods and services brought on credit. A company may also accept advances from the customer. The company thus has a liability to pay though the payment is deferred. These are known as "**Current Liabilities**". Similarly the company may have to provide for certain other expenses (though not required to be paid immediately) like dividend to shareholders, payment of tax etc. These are called '**Provisions**'. In short, Current Liabilities and Provisions are amounts due to the suppliers of goods and services brought on credit, advances payments received, accrued expenses, unclaimed dividend, provisions for taxes, dividends, gratuity, pensions, etc.

Current Liabilities and Provisions, therefore, reduce the burden of day-today expenditure on current assets by deferring some of the payments. For daily operations the company requires funds equal to the current assets less the current liabilities. This amount is called "**Net Current Assets**" or "**Net Working Capital**". In case of the XYZ COMPANY LTD., Net Current Asset figure of Rs. 430.98 cr. has been arrived at by deducting Current Liabilities (Rs. 595.22 cr.) and Provisions (Rs. 139 cr.) from Current Assets worth Rs. 1165.20 crore.

12. How is balance sheet summarized?

A balance sheet indicates matching of *sources of funds* with *application of funds*. In case of the XYZ Company Ltd., Total Funds Employed' to the tune of Rs. 1066.31 cr. are from the said two Sources of Funds-Shareholders Funds and Loan Funds. These funds have been utilized to fund Total (Net) Assets of Rs. 1066.31 cr. that consist of Fixed Assets (Rs. 526.75 cr.), Investments (Rs. cr.) and Net Current Assets (Rs. 430.98 cr.).

Thus in a balance sheet,

Total Capital Employed = Net Assets.

What does a Profit and Loss Account statement consists of?

A Profit and Loss Account shows how much profit or loss has been incurred by a company from its income after providing for all its expenditure within a financial year. One may also know how the profit available for appropriation is arrived at by using profit after tax as well as portion of reserves. Further, it shows the profit appropriation towards dividends, general reserve and balance carried to the balance sheet.

The Box-2 exhibits Profit and Loss Account of XYZ Company Ltd. Item-1 represents income, Items from 2 to 6 show various expenditure items. Items from 7 to 12 show the profits available for appropriation and items 13 (a), (b), and (c) indicate appropriation of profits.

BOX- 2

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2005

PARTICULARS	RUPEES (in crores)	RUPEES (in crores)	RUPEES (in crores)
		As at 31st March, 2005	As at 31st March, 2004
INCOME			
1. SALE OF PRODUCTS AND OTHER INCOME		2595.99	1969.10
EXPENDITURE			
2. MANUFACTURING AND OTHER EXPENSES	2275.37		1742.54
3. DEPRECIATION	54.26		48.91
4. INTEREST	81.63		73.63
5. EXPENDITURE TRANSFERRED TO CAPITAL ACCOUNTS	49.82		(44.27)
6. TOTAL EXPENDITURE		2316.44	1820.81
PROFIT BEFORE TAX		234.55	148.29
7. TAX FOR THE YEAR		92.5	45.75
PROFIT AFTER TAX		142.05	102.54
8. INVESTMENT ALLOWANCE RESERVE ACCOUNT		4.66	3.55
9. INVESTMENT ALLOWANCE (UTILISED) RESERVE WRITTEN BACK		(15.2)	(11.2)
10. DEBENTURE REDEMPTION RESERVE		(0.57)	(0.57)
11. CAPITAL REDEMPTION RESERVE			
12. BALANCE BROUGHT FORWARD FROM PREVIOUS YEAR		86.71	33.65
AMOUNT AVAILABLE FOR APPROPRIATIONS		217.65	127.97

PARTICULARS		RUPEES (in crores)	RUPEES (in crores)	RUPEES (in crores)
			As at 31st March, 2005	As at 31st March, 2004
13. APPROPRIATIONS				
(a) Proposed Dividends*			41.54	31.26
(b) General Reserve			100	10
(c) Balance credited to Balance Sheet			76.11	86.71
			217.65	127.97
14. NOTES TO PROFIT AND LOSS ACCOUNT				
* Details as per Directors Report				
As per our report attached				
to the Balance Sheet		For and on behalf of the Board		
For XYZ & co.	PQR	AAA		
Chartered Accountants,	Chairman	BBB		
ABC		CCC		
Partner		DDD		Directors
For LMN & co.	GHI			
Chartered Accountants,	Vice- Chairman and			
DEF	Managing Director			
Partner	STU			
Mumbai, 10th July 2004	Secretary	Mumbai, 28th June 2004		

13. What should one look for in a Profit and Loss account?

For a company, the profit and loss statement is the most important document presented to the shareholders. Therefore, each company tries to give maximum stress on its representation/ misrepresentation. One should consider the following:

- Whether there is an overall improvement of sales as well as profits (operating, gross and net) over the similar period (half-yearly or annual) previous year. If so, the company's operational management is good.
- Check for the other income carefully, for here companies have the scope to manipulate. If the other income stems from dividend on the investments or interest from the loans and advances, it is good, because such income is steady. But if the other income is derived by selling any assets or land, be cautious since such income is not an annual occurrence.
- Also check for the increase of all expenditure items viz. raw material consumption, manpower cost and manufacturing, administrative and selling expenses. See whether the increases in these costs are more than the increase in sales. If so, it reveals the operating conditions are

not conducive to making profits. Similarly, check whether ratio of these costs to sales could be contained over the previous year. If so, then the company's operations are efficient.

- Evaluate whether the company could make profit from its operations alone.
- For this you should calculate the profits of the company, after ignoring all other income except sales. If the profit so obtained is positive, the company is operationally profitable, which is a healthy sign.
- Scrutinize the depreciation as well as interest for any abnormal increase.
- The increase in depreciation is attributed to higher addition of fixed assets, which is good for long term operations of the company. High depreciation may suppress the net profits, but it's good for the cash flow. So instead of looking out for the net profits, check the cash profits and compare whether it has risen. High interest cost is always a cause of concern because the increased debt burden cannot be reduced in the short run.
- Calculate the earnings per share and the various ratios. In case of half yearly results, multiply half yearly earnings per share by 2 to get approximately the annualized earnings per share.

3.2 RATIO ANALYSIS

Mere statistics/data presented in the different financial statements do not reveal the true picture of a financial position of a firm. Properly analyzed and interpreted financial statements can provide valuable insights into a firm's performance. To extract the information from the financial statements, a number of tools are used to analyse such statements. The most popular tool is the **Ratio Analysis**.

Financial ratios can be broadly classified into three groups: (I) Liquidity ratios, (II) Leverage/Capital structure ratio, and (III) Profitability ratios.

3.2.1 LIQUIDITY RATIOS:

Liquidity refers to the ability of a firm to meet its financial obligations in the short-term which is less than a year. Certain ratios, which indicate the liquidity of a firm, are (i) Current Ratio, (ii) Acid Test Ratio, (iii) Turnover Ratios. It is based upon the relationship between current assets and current liabilities.

(i)

Current Ratio =	Current Assets
	Current Liabilities

The current ratio measures the ability of the firm to meet its current liabilities from the current assets. Higher the current ratio, greater the short- term solvency (i.e. larger is the amount of rupees available per rupee of liability).

(ii)

Acid-test Ratio =	Quick Assets
	Current Liabilities

Quick assets are defined as current assets excluding inventories and prepaid expenses. The acid-test ratio is a measurement of firm's ability to convert its current assets quickly into cash in order to meet its current liabilities. Generally speaking 1:1 ratio is considered to be satisfactory.

(iii) Turnover Ratios:

Turnover ratios measure how quickly certain current assets are converted into cash or how efficiently the assets are employed by a firm. The important turnover ratios are:

Inventory Turnover Ratio, Debtors Turnover Ratio, Average Collection Period, Fixed Assets Turnover and Total Assets Turnover

Inventory Turnover Ratio =	Cost of Goods Sold
	Average Inventory

Where, the cost of goods sold means sales minus gross profit. 'Average Inventory' refers to simple average of opening and closing inventory. The inventory turnover ratio tells the efficiency of inventory management. Higher the ratio, more the efficient of inventory management.

Debtors' Turnover Ratio =	Net Credit Sales
	Average Accounts Receivable (Debtors)

The ratio shows how many times accounts receivable (debtors) turn over during the year. If the figure for net credit sales is not available, then net sales figure is to be used. Higher the debtors turnover, the greater the efficiency of credit management.

Average Collection Period =	Average Debtors
	Average Daily Credit Sales

Average Collection Period represents the number of days' worth credit sales that is locked in debtors (accounts receivable).

Please note that the *Average Collection Period* and the *Accounts Receivable (Debtors) Turnover* are related as follows:

Average Collection Period =	365 Days
	Debtors Turnover

Fixed Assets turnover ratio measures sales per rupee of investment in fixed assets. In other words, how efficiently fixed assets are employed. Higher ratio is preferred. It is calculated as follows:

Fixed Assets turnover ratio =	Net Sales
	Net Fixed Assets

Total Assets turnover ratio measures how efficiently all types of assets are employed.

Total Assets turnover ratio =	Net Sales
	Average Total Assets

3.2.2 LEVERAGE/CAPITAL STRUCTURE RATIOS:

Long term financial strength or soundness of a firm is measured in terms of its ability to pay interest regularly or repay principal on due dates or at the time of maturity. Such long term solvency of a firm can be judged by using leverage or capital structure ratios. Broadly there are two sets of ratios: First, the ratios based on the relationship between borrowed funds and owner's capital which are computed from the balance sheet. Some such ratios are: Debt to Equity and Debt to Asset ratios. The second set of ratios which are calculated from Profit and Loss Account are: The interest coverage ratio and debt service coverage ratio are coverage ratio to leverage risk.

Debt-Equity ratio reflects relative contributions of creditors and owners to finance the business.

Debt-Equity ratio =	Total Debt
	Total Equity

The desirable/ideal proportion of the two components (high or low ratio) varies from industry to industry.

Debt-Asset Ratio: Total debt comprises of long term debt plus current liabilities. The total assets comprise of permanent capital plus current liabilities.

Debt-Asset Ratio =	Total Debt
	Total Assets

The second set or the coverage ratios measure the relationship between proceeds from the operations of the firm and the claims of outsiders.

(iii) Interest Coverage ratio =	Earning Before Interest and Taxes
	Interest

Higher the interest coverage ratio better is the firm's ability to meet its interest burden. The lenders use this ratio to assess debt servicing capacity of a firm.

(iv) Debt Service Coverage Ratio (DSCR) is a more comprehensive and apt to compute debt service capacity of a firm. Financial institutions calculate the average DSCR for the period during which the term loan for the project is repayable. The Debt Service Coverage Ratio is defined as follows:

Profit after tax + Depreciation + Other Non cash Expenditure + Interest on term loan
Interest on Term loan + Re payment of term loan

3.2.3 PROFITABILITY RATIOS:

Profitability and operating/management efficiency of a firm is judged mainly by the following profitability ratios:

(i) Gross Profit Ratio (%) =	Gross Profit	* 100
	Net Sales	

(ii) Net Profit Ratio (%) =	Net Profit	* 100
	Net Sales	

Some of the profitability ratios related to investments are:

Return on Total Assets =	Profit Before Interest And Tax
	Fixed Assets + Current Assets

Return on Capital Employed =	Net Profit After Tax
	Total Capital Employed

(Here, Total Capital Employed = Total Fixed Assets + Current Assets - Current Liabilities)

(v) Return on Shareholders' Equity =	Net Profit After Tax
	Average Total Shareholders' Equity or Net Worth

(Net worth includes Shareholders' equity capital plus reserves and surplus)

A common (equity) shareholder has only a residual claim on profits and assets of a firm, i.e., only after claims of creditors and preference shareholders are fully met, the equity shareholders receive a distribution of profits or assets on liquidation. A measure of his well being is reflected by return on equity. There are several other measures to calculate return on shareholders' equity of which the following are the stock market related ratios:

Earnings Per Share (EPS): EPS measures the profit available to the equity shareholders per share, that is, the amount that they can get on every share held. It is calculated by dividing the profits available to the shareholders by number of outstanding shares. The profits available to the ordinary shareholders are arrived at as net profits after taxes minus preference dividend.

It indicates the value of equity in the market.

EPS =	Net Profit Available To The Shareholder
	Number of Ordinary Shares Outstanding

Price-earnings ratios = P/E Ratio =	Market Price per Share
	EPS

3.2.4 ILLUSTRATION:

Balance Sheet of ABC Co. Ltd. as on March 31, 2005

(Rs. in Crore)

Liabilities	Amount	Assets	Amount	
Share Capital	16.00	Fixed Assets (net)		60.00
(1,00,00,000 equity shares				
of Rs.10 each)				
Reserves & Surplus	22.00	Current Assets:		23.40
Secured Loans	21.00	Cash & Bank	0.20	
Unsecured Loans	25.00	Debtors	11.80	
Current Liabilities & Provisions	16.00	Inventories	10.60	
		Pre-paid expenses	0.80	
		Investments		16.60
Total	100	Total		100

Profit & Loss Account of ABC Co. Ltd. for the year ending on March 31, 2005:

Particulars	Amount	Particulars	Amount
Opening Stock	13.00	Sales (net)	105.00
Purchases	69.00	Closing Stock	15.00
Wages and Salaries	12.00		
Other Mfg. Expenses	10.00		
Gross Profit	16.00		

Total	120.00	Total	120.00
Administrative and Personnel Expenses	1.50	Gross Profit	16.00
Selling and Distribution Expenses	2.00		
Depreciation	2.50		
Interest	1.00		
Net Profit	9.00		
Total	16.00	Total	16.00
Income Tax	4.00	Net Profit	9.00
Equity Dividend	3.00		
Retained Earning	2.00		
Total	9.00	Total	9.00

Market price per equity share = Rs. 20.00

Current Ratio = Current Assets / Current Liabilities

= 23.40/16.00 = 1.46

Quick Ratio = Quick Assets / Current Liabilities

= Current Assets - (inventory + prepaid expenses) / Current Liabilities

= [23.40 - (10.60 + 0.8)] / 16.00 = 12.00 / 16.00 = 0.75

Inventory Turnover Ratio = Cost of goods sold / Average Inventory

= (Net Sales - Gross Profit) / [(opening stock + closing stock) / 2]

= (105 - 16) / [(15 + 13) / 2] = 89 / 14 = 6.36

Debtors Turnover Ratio = Net Sales / Average account receivables (Debtors)

= 105 / 11.80 = 8.8983

Average Collection period = 365 days / Debtors turnover

= 365 days / 8.8983 = 41 days

Fixed Assets Turnover ratio = Net Sales / Net Fixed Assets

= 105 / 60 = 1.75

Debt to Equity Ratio = Debt / Equity

= (21.00 + 25.00) / (16.00 + 22.00) = 46 / 38 = 1.21

Gross Profit Ratio = Gross Profit / Net Sales

$$= 16.00/105.00 = 0.15238 \text{ or } 15.24\%$$

Net Profit Ratio = Net Profit / Net Sales

$$= 9/105.00 = 0.0857 \text{ or } 8.57 \%$$

Return on Shareholders' Equity = Net Profit after tax/Net worth

$$= 5.00/(16.00+22.00) = 0.13157 \text{ or } 13.16\%$$

POINTS TO REMEMBER

Ratio analysis is an important tool in understanding financial statements. The ratios give better data to study a company as compared to actual numbers. Ratios are divided into liquidity ratios, leverage/capital structure ratios and profitability ratios, which help in determining how the company is actually performing.

THE DIRECTOR'S REPORT

The Director's Report is a report submitted by the directors of a company to shareholders, informing them about the performance of the company, under their stewardship:

1. It enunciates the opinion of the directors on the state of the economy and the political situation vis-a-vis the company.
2. Explains the performance and the financial results of the company in the period under review. This is an extremely important part. The results and operations of the various separate divisions are usually detailed and investors can determine the reasons for their good or bad performance.
3. The Director's Report details the company's plans for modernization, expansion and diversification. Without these, a company will remain static and eventually decline.
4. Discusses the profits earned in the period under review and the dividend recommended by the directors. This paragraph should normally be read with sane scepticism as the directors will always argue that the performance was satisfactory. If profits have improved the reasons stated would invariably be superior technology adopted, intense marketing and hard work in the face of severe competition etc. If profits are low, adverse economic conditions are usually blamed for the same.
5. Elaborates on the directors' views of the company's prospects for the future.
6. Discusses plans for new acquisitions and investments.

An investor must intelligently evaluate the issues raised in a Director's Report. If the report talks about diversification, one must the question that though diversification is a good strategy, does it make sense for the company? Industry conditions, the management's knowledge of the new business must be considered. Although companies must diversify in order to spread the risks of economic slumps, every diversification may not suit a company. Similarly, all other issues raised in the Director's Report should be analysed. Did the company perform as well as others in the same industry? Is the finance being raised the most logical and beneficial to the company? It is imperative that the investor read between the lines of the Director's Report and find the answers to

these and many other questions. In short, a Director's Report is valuable and if read intelligently can give the investor a good grasp of the workings of a company, the problems it faces, the direction it intends taking and its future prospects.

UNIT -4 Mutual Funds Products and Features

4.1 Introduction

A **mutual fund** is a professionally managed type of collective investment scheme that pools money from many investors and invests it in stocks, bonds, short-term money market instruments and other securities. Mutual funds have a fund manager who invests the money on behalf of the investors by buying / selling stocks, bonds etc.

Mutual Fund Industry Statistics (India) - September 2016

Scheme Name	Rs. Cr	Increase/Decrease	Change (%)	Growth
Asset Under Management (AUM) (YoY)	1,609,370	294839	22.43%	↑
Asset Under Management (AUM) (MoM)	1,609,370	169669	11.79%	↑

There are various asset classes in which an investor can invest his savings depending on his risk appetite and time horizon viz. real estate, bank deposits, post office deposits, shares, debentures, bonds etc. While investing in these asset classes an individual would need to study the risk and reward closely.

Example

Mr. X proposes to invest in shares of M/s. Linked Ltd.

This requires a detailed analysis of the

- performance of the company
- understanding the future business prospects of the company
- track record of the promoters and the dividend, bonus issue history of the company etc.

However, the above process is cumbersome and time consuming.

Alternatively an investor can utilize professional expertise to achieve superior returns at acceptable risk. This is done by investing through mutual funds which offer various types of schemes. The fund manager studies and analysis numerous stocks before selection for inclusion in the mutual fund scheme. Therefore an individual investor benefits from professional fund management. Another reason why investors prefer mutual funds is because mutual funds offer diversification. An investor's money is invested by the mutual fund in a variety of shares, bonds and other securities thus diversifying the investor's portfolio across different companies and sectors. This diversification helps in reducing the overall risk of the portfolio.

Indian Scenario

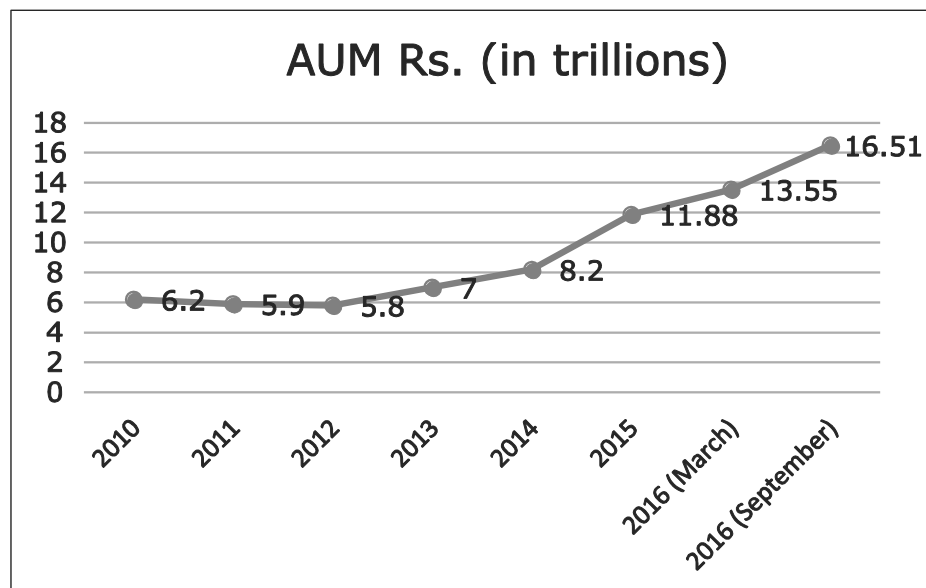
In India gold has been the single largest form of savings. Bank deposits, post office schemes and other traditional savings instruments have been extremely popular and continue to be so even today. Against this background, if we look at approximately Rs.16 lakh crores 1 which Indian Mutual Funds are managing, then it is no mean an achievement. However a country traditionally putting money in safe, risk-free investments has started to invest in stocks, bonds and shares – thanks to the mutual fund industry.

The Rs.16 Lakh crores stated above, includes investments by the corporate sector as well. Going by various reports, not more than 5% of household savings are channelized into the markets, either directly or through the mutual fund route. Not all parts of the country are contributing equally into the mutual fund corpus. 8 cities account for over 60% of the total assets under management in mutual funds. These are issues which need to be addressed jointly by all concerned with the mutual fund industry. Market dynamics are making industry players to look at smaller cities to increase penetration. Competition is ensuring that costs incurred in managing the funds are kept low and fund houses are trying to give more value for money by increasing operational efficiencies and cutting expenses. As of September 30, 2016, there are around 39 Mutual Funds in the country as per AMFI. Together they offer around 11460 schemes to the investor.

Data Source: Mutualfundindia.com

Let us now look at some trends in mutual funds in India over the 10 year period from September 2015 to September 2016:

Growth in Assets under Management over years



Year on Year increase in number of Accounts / Folios in India Mutual Fund Industry

Year	No of Folios (In Crores)
Mar-12	4.65
Mar-13	4.28
Mar-14	3.95
Mar-15	4.17
Mar-16	4.77
Sept-16	5.05

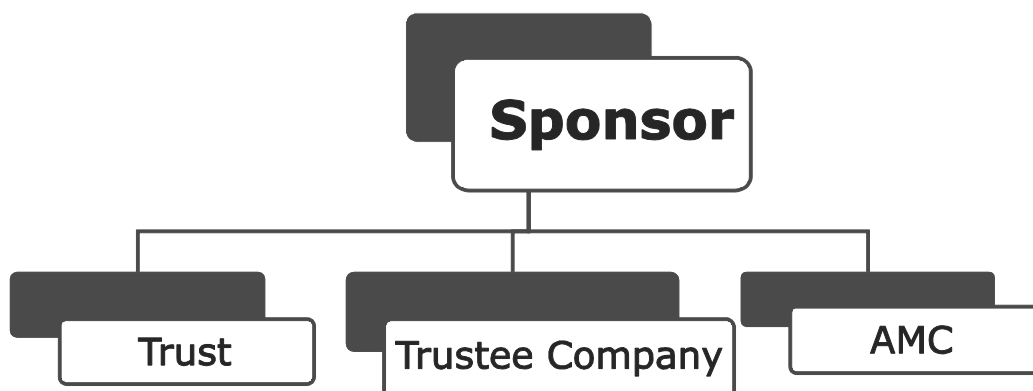
This module is designed to meet the requirements of both the investor as well as the industry , mainly those proposing to enter the mutual fund industry. Investors need to understand the nuances of mutual funds, the workings of various schemes before they invest; since their money is being invested in risky assets like stocks/ bonds (bonds also carry risk). The language of the module is kept simple and the explanation is peppered with 'concept clarifiers' and examples.

Let us now try and understand the characteristics of mutual funds in India and the different types of mutual fund schemes available in the market.

4.2 Mutual Funds: Structure in India

Mutual funds primarily deal in investor's money. Therefore a clear structure is laid out to ensure proper governance.

Mutual Funds in India follow a **3-tier structure**.



There is a **Sponsor** (the First tier), who thinks of starting a mutual fund. The Sponsor approaches the Securities & Exchange Board of India (SEBI), which is the market regulator and also the regulator for mutual funds.

The mutual fund industry is governed by the SEBI (mutual fund) Regulations, 1996 and such other notifications that may be issued by the regulator from time to time. The sponsor should have sound track record and general reputation of fairness and integrity in all his business transactions. Sound track record shall mean the sponsor should

- Be carrying out the business of financial services for not less than five years
- Have positive net worth in all the preceding five years
- The net worth in the immediately preceding financial year is more than the capital contribution in the asset management company
- Has profits after depreciation, interest and tax in three of out the five preceding years including the fifth year

The sponsor has contributed / contributes not less than 40% of the net worth of the asset management company

Once approved by SEBI, the sponsor creates a Public Trust (the Second tier) as per the Indian Trusts Act, 1882. Trusts have no legal identity in India and cannot enter into contracts, hence the Trustees are the people authorized to act on behalf of the Trust. Contracts are entered into in the name of the Trustees. Once the Trust is created, it is registered with SEBI after which this trust is known as the mutual fund.

It is important to understand the difference between the Sponsor and the Trust. They are two separate entities. Sponsor is not the Trust; i.e. Sponsor is not the Mutual Fund. It is the Trust which is the Mutual Fund.

The Trustees role is not to manage the money. Their job is only to see, whether the money is being managed as per stated objectives. Trustees may be seen as the internal regulators of a mutual fund.

4.3 Who Manages Investor's Money?

This is the role of the **Asset Management Company** (the Third tier). Trustees appoint the Asset Management Company (AMC), to manage investor's money. The AMC in return charges a fee for the services provided and this fee is borne by the investors as it is deducted from the money collected from them. The AMC's Board of Directors must have at least 50% directors, who are not associate of, or associated in any manner with, the sponsor or any of its subsidiaries or the trustees. The AMC has to be approved by SEBI. The AMC functions under the supervision of its Board of Directors, and also under the direction of the Trustees and SEBI. It is the AMC, which in the name of the Trust, floats and manages schemes by buying and selling securities. In order to do this, the AMC needs to follow all rules and regulations prescribed by SEBI and as per the Investment Management Agreement it signs with the Trustees.

Whenever the fund intends to launch a new scheme, the AMC has to submit a Draft Offer Document to SEBI. This draft offer document, after getting SEBI approval becomes the offer document of the scheme. The Offer Document (OD) is a legal document and investors rely upon the information provided in the OD for investing in the mutual fund scheme. The Compliance

Officer has to sign the Due Diligence Certificate in the OD. This certificate says that all the information provided inside the OD is true and correct. This ensures that there is accountability and somebody is responsible for the OD. In case there is no compliance officer, then senior executives like CEO, Chairman of the AMC has to sign the due diligence certificate. The certificate ensures that the AMC takes responsibility of the OD and its contents.

4.4 Who is a Custodian?

The assets of the mutual fund scheme are held by the custodian. A custodian's role is safe keeping of physical securities and also keeping a tab on the corporate actions like rights, bonus and dividends declared by the companies in which the fund has invested. The Custodian is appointed by the Board of Trustees. Since the custody of the assets is separated from the management it protects the investors against fraud and misappropriation.

The custodian also participates in a clearing and settlement system through approved depository companies on behalf of mutual funds, in case of dematerialized securities. In India today, securities (and units of mutual funds) are no longer held in physical form but in dematerialized form with the Depositories. The holdings are held in the Depository through Depository Participants (DPs). Only the physical securities are held by the Custodian. The deliveries and receipt of units of a mutual fund are done by the custodian or a depository participant at the instruction of the AMC and under the overall direction and responsibility of the Trustees. Regulations provide that the Sponsor and the Custodian must be separate entities.

4.5 What is the role of the AMC?

The role of the AMC is to manage investor's money on a day to day basis. Thus it is imperative that people with the highest integrity are involved with this activity.

- The AMC cannot deal with a single broker beyond a certain limit of transactions.
- The AMC cannot act as a Trustee for some other Mutual Fund. The responsibility of preparing the OD lies with the AMC.
- Appointments of intermediaries like independent financial advisors (IFAs), national and regional distributors, banks, etc. is also done by the AMC. Finally, it is the AMC which is responsible for the acts of its employees and service providers.

As can be seen, it is the AMC that does all the operations. All activities by the AMC are done under the name of the Trust, i.e. the mutual fund.

The AMC charges a fee for providing its services. SEBI has prescribed limits for this. This fee is borne by the investor as the fee is charged to the scheme, in fact, the fee is charged as a percentage of the scheme's net assets. An important point to note here is that this fee is included in the overall expenses permitted by SEBI. There is a maximum limit to the amount that can be

charged as expense to the scheme, and this fee has to be within that limit. Thus regulations ensure that beyond a certain limit, investor's money is not used for meeting expenses.

4.6 What is an NFO?

Once the 3 – tier structure is in place, the AMC launches new schemes, under the name of the Trust, after getting approval from the Trustees and SEBI. The launch of a new scheme is known as a New Fund Offer (NFO). We see NFOs coming up in markets regularly. It is like an invitation to the investors to put their money into the mutual fund scheme by subscribing to its units. When a scheme is launched, the distributors talk to potential investors and collect money from them by way of cheques or demand drafts. Mutual funds cannot accept cash. (Mutual funds units can also be purchased on-line through a number of intermediaries who offer on-line purchase / redemption facilities). Before investing, it is expected that the investor reads the Offer Document (OD) carefully to understand the risks associated with the scheme.

4.7 What is the role of a Registrar and Transfer Agents?

Registrars and Transfer Agents (RTAs) perform the important role of maintaining investor records. All the New Fund Offer (NFO) forms, redemption forms (i.e. when an investor wants to exit from a scheme, it requests for redemption) go to the RTA's office where the information is converted from physical to electronic form. How many units will the investor get, at what price, what is the applicable NAV, how much money will he get in case of redemption, exit loads, folio number, etc. is all taken care of by the RTA.

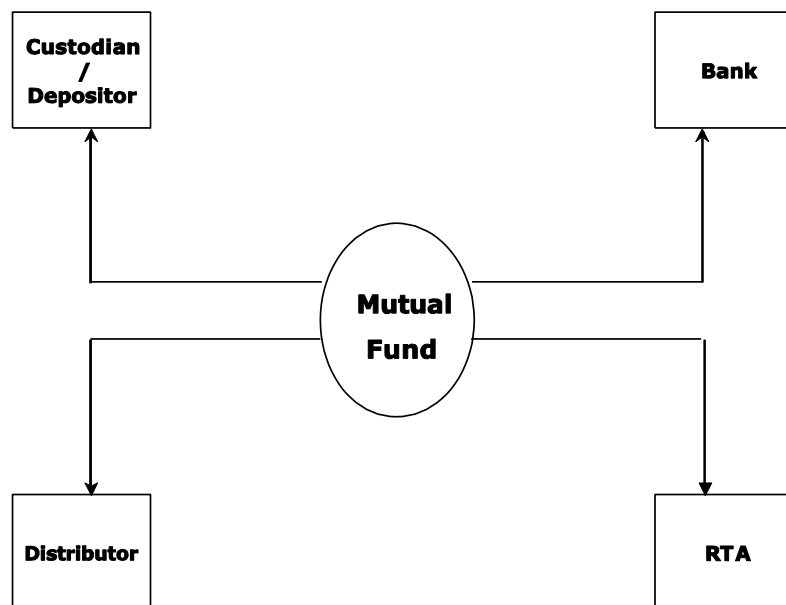
4.8 What is the Procedure for investing in an NFO?

But before investing in mutual funds or NFOs, the investor must have the KYC in place. The mutual funds or the KYC Registration Agencies (KRAs) must be approached to complete the KYC formalities. KYC or know your customer is a form that must be filled giving all details of investor like name, age, address along with supporting documents like PAN Card and address proof. Once this is done, the investor is to have a bank account and a demat account for transactions in mutual fund units for incoming and outgoing of money and units.

Once these formalities are complete, the investor has to fill a form, which is available with the distributor or online. The investor must read the Offer Document (OD) before investing in a mutual fund scheme. In case the investor does not read the OD, he must read the Key Information Memorandum (KIM), which is available with the application form. Investors have the right to ask for the KIM/ OD from the distributor.

Once the form is filled and the cheque is given to the distributor, he forwards both these documents to the RTA. The RTA after capturing all the information from the application form into the system, sends the form to a location where all the forms are stored and the cheque is sent to the bank where the mutual fund has an account. After the cheque is cleared, the RTA then

creates units for the investor. The same process is followed in case an investor intends to invest in a scheme, whose units are available for subscription on an on-going basis, even after the NFO period is over. In an online system, this entire process is carried out electronically from filling of forms to online payment to allotment of units in the demat account of the investor.



Fund Constituents

4.9 What are the Investor's Rights & Obligations?

Some of the Rights and Obligations of investors are:-

- ♦ Investors are mutual, beneficial and proportional owners of the scheme's assets. The investments are held by the trust in fiduciary capacity (The fiduciary duty is a legal relationship of confidence or trust between two or more parties).
- ♦ In case of dividend declaration, investors have a right to receive the dividend within 30 days of declaration.
- ♦ On redemption request by investors, the AMC must dispatch the redemption proceeds within 10 working days of the request. In case the AMC fails to do so, it has to pay an interest @ 15%. This rate may change from time to time subject to regulations.
- ♦ In case the investor fails to claim the redemption proceeds immediately, then the applicable NAV depends upon when the investor claims the redemption proceeds.
- ♦ Investors can obtain relevant information from the trustees and inspect documents like trust deed, investment management agreement, annual reports, offer documents, etc. They must receive audited annual reports within 6 months from the financial year end.
- ♦ Investors can wind up a scheme or even terminate the AMC if unit holders representing 75% of scheme's assets pass a resolution to that respect.
- ♦ Investors have a right to be informed about changes in the fundamental attributes of a scheme. Fundamental attributes include type of scheme, investment objectives and policies

and terms of issue.

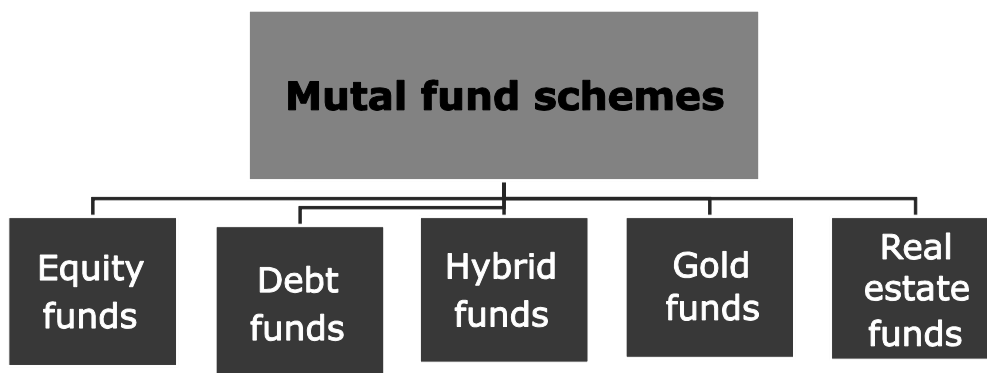
- ♦ Lastly, investors can approach the investor relations officer for grievance redressal. In case the investor does not get appropriate solution, he can approach the investor grievance cell of SEBI. The investor can also sue the trustees.

The offer document is a legal document and it is the investor's obligation to read the OD carefully before investing. The OD contains all the material information that the investor would require to make an informed decision.

It contains the risk factors, dividend policy, investment objective, expenses expected to be incurred by the proposed scheme, fund manager's experience, historical performance of other schemes of the fund and a lot of other vital information.

It is not mandatory for the fund house to distribute the OD with each application form but if the investor asks for it, the fund house has to give it to the investor. However, an abridged version of the OD, known as the Key Information Memorandum (KIM) has to be provided with the application form.

4.10 What are the different schemes offered by Mutual Funds?



- 1) **Equity funds** – funds that primarily invests in equity shares of companies.
- 2) **Debt funds** - funds which invest in debt instruments such as short and long term bonds, government securities, t-bills, corporate paper, commercial paper, call money etc.
- 3) **Hybrid funds** - These are funds which invest in debt as well as equity instruments
- 4) **Gold ETF** – An exchange traded fund that buys and sells gold.
- 5) **Real estate funds** – These funds invest in properties

4.11 Category Wise Funds

Scheme wise composition of Assets i.e. Debt / Equity / Liquid

Scheme wise composition of assets				
Year	Debt Oriented schemes	Equity oriented schemes	Liquid Money Market	ETFs & FOFs
Mar-12	50%	33%	15	2%
Mar-13	57%	27%	14	2%
Mar-14	52%	22%	24.30%	1.70%
Mar-15	44.10%	30.90%	23.50%	1.50%
Mar-16	43.50%	31.10%	23.70%	1.70%

Of the total assets under management of all mutual funds debt funds are the major contributor which includes income funds and gilt funds.

4.12 What are open ended and Close Ended Funds?

- Equity Funds (or any Mutual Fund scheme for that matter) can either be **open ended** or **close ended**.
- An open ended scheme allows the investor to enter and exit at his convenience, anytime (except under certain conditions) whereas a close ended scheme restricts the freedom of entry and exit.
- Whenever a new fund is launched by an AMC, it is known as New Fund Offer (NFO). Units are offered to investors at the par value of Rs. 10/ unit.
- In case of open ended schemes, investors can buy the units even after the NFO period is over. Thus, when the fund sells units, the investor buys the units from the fund and when the investor wishes to redeem the units, the fund repurchases the units from the investor. This can be done even after the NFO has closed. The buy / sell of units takes place at the Net Asset Value (NAV) declared by the fund.
- The freedom to invest after the NFO period is over is not there in close ended schemes. Investors have to invest only during the NFO period; i.e. as long as the NFO is on or the scheme is open for subscription. Once the NFO closes, new investors cannot enter, nor can existing investors exit, till the term of the scheme comes to an end. However, in order to provide entry and exit option, close ended mutual funds list their schemes on stock exchanges. This provides an opportunity for investors to buy and sell the units from each other. This is just like buying / selling shares on the stock exchange. This is done through a stock broker. The outstanding units of the fund does not increase in this case since the fund is itself not selling any units.

- Sometimes, close ended funds also offer 'buy-back of fund shares / units', thus offering another avenue for investors to exit the fund. Therefore, regulations drafted in India permit investors in close ended funds to exit even before the term is over.

4.13 What are Equity Oriented Funds?

4.13.1 Introduction

Equity funds account for around 30% of the total AUM managed by mutual funds. A scheme might have an investment objective to invest largely in equity shares and equity-related investments like convertible debentures. The investment objective of such funds is to seek capital appreciation through investment in this growth asset. Such schemes are called *equity schemes*.

Equity funds essentially invest the investor's money in equity shares of companies. Fund managers try and identify companies with good future prospects and invest in the shares of such companies. The prices of listed securities fluctuate based on liquidity, international scenario and numerous other factors. Therefore investment in equity funds carries higher risk. It is necessary for an investor to understand the features of equity investments in terms of risk and return before investing.

4.13.2 Equity Fund Definition

Equity oriented Funds are funds that invest the investor's money in equity and related instruments of companies.

Section 115 T of the Income Tax Act, 1961 lays down that equity oriented fund means such fund where the investible funds are invested by way of equity shares in domestic companies to the extent of more than 65% of the total proceeds of such fund

In case of equity funds investors need not pay long term capital gains. Hence it is important that this investment norm is met by the fund.

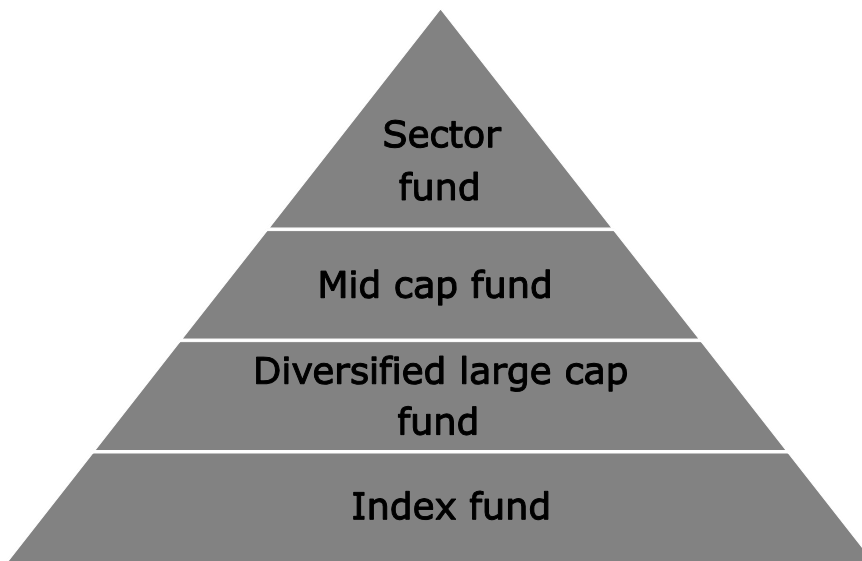
Example

"Equity long term" is a fund hosted by ABC Mutual Fund. This fund has invested 100% of the funds in international equities. Although this fund is also an equity fund from the investors' asset allocation point of view, but the tax laws do not recognise these funds as Equity Funds and hence investors have to pay tax on the Long Term Capital Gains made from such investments.

Equity Funds are of various types and the industry keeps innovating to make products available for all types of investors. Relatively safer types of Equity Funds include Index Funds and diversified Large Cap Funds, while the riskier varieties are the Sector Funds. International Funds, Gold Funds (not to be confused with Gold ETF) and Fund of Funds are some of the different types of funds, which are designed for different types of investor preferences. These funds are explained later.

Equity Funds can be classified on the basis of market capitalisation of the stocks they invest in – namely Large Cap Funds, Mid Cap Funds or Small Cap Funds – or on the basis of investment strategy the scheme intends to have like Index Funds, Infrastructure Fund, Power Sector Fund, Quant Fund, Arbitrage Fund, Natural Resources Fund, etc. These funds are explained later.

Equity Oriented Funds risk pyramid



Equity funds do not guarantee any minimum returns. In terms of risk barometer for equity funds, index funds are the least risky as they mirror the index stocks, followed by the diversified large cap funds. Mid cap and sector focus funds are considered more risky.

4.14 What is an Index Fund?

Index Funds invest in stocks comprising indices, such as the Nifty 50, which is a broad based index comprising 50 stocks. There can be funds on other indices which have a large number of stocks such as the Nifty Midcap 100 or Nifty 500. Here the investment is spread across a large number of stocks. In India today we find many index funds based on the Nifty 50 index, which comprises large, liquid and blue chip 50 stocks.

The objective of a typical Index Fund states – ‘This Fund will invest in stocks comprising the Nifty 50 and in the same proportion as in the index’. The fund manager will not indulge in research and stock selection, but passively invest in the Nifty 50 scrips only, i.e. 50 stocks which form part of Nifty 50, in proportion to their market capitalisation. Due to this, index funds are known as passively managed funds. Such passive approach also translates into lower costs as well as returns which closely tracks the benchmark index return (i.e. Nifty 50 for an index fund based on Nifty 50). Index funds never attempt to beat the index returns, their objective is always to mirror the index returns as closely as possible.

Tracking Error

The difference between the returns generated by the benchmark index and the Index Fund is known as tracking error. By definition, Tracking Error is the variance between the daily returns of the underlying index and the NAV of the scheme over any given period.

Concept Clarifier – Tracking Error

Tracking Error is the Standard Deviation of the difference between daily returns of the index and the NAV of the scheme (index fund). This can be easily calculated on a standard MS office spreadsheet, by taking the daily returns of the Index, the daily returns of the NAV of the scheme, finding the difference between the two for each day and then calculating the standard deviation of difference by using the excel formula for

'standard deviation'.

In simple terms it is the difference between the returns delivered by the underlying index and those delivered by the scheme. This difference may arise on account of any of the following reasons

- The fund manager may buy/ sell securities anytime during the day, whereas the underlying index will be calculated on the basis of closing prices of the Nifty 50 stocks.
- Cash position in the scheme
- If the index's portfolio composition changes, it will require some time for the fund manager to exit the earlier stock and replace it with the new entrant in the index.
- Dividend accrued but not distributed
- Accrued expenses

A lower tracking error is desirable.

The fund with the least Tracking Error will be the one which investors would prefer since it is the fund tracking the index closely. Tracking Error is also function of the scheme expenses. Lower the expenses lower the Tracking Error. Hence an index fund with low expense ratio, generally has a low Tracking Error.

4.15 What are Diversified large Cap Funds?

Another category of equity funds is the diversified large cap funds.

Cap refers to market capitalization. Market capitalization refers to aggregate valuation of the company based on the current market price and the number of shares issued. Accordingly companies are classified into

- ✓ Large cap companies– typically the top 100 to 200 stocks which feature in Nifty 50
- ✓ Mid cap companies– Stocks below large cap which belong to the mid cap segment
- ✓ Small cap – companies – Typically stocks with market capitalization of less than Rs. 5000 cr.

Large cap funds restrict their stock selection to the large cap stocks. It is generally perceived that large cap stocks are those which have sound businesses, strong management, globally competitive products and are quick to respond to market dynamics. Therefore, diversified large cap funds are considered as stable and safe. The stocks command high liquidity.

However, since equities as an asset class are risky, there is no return guarantee for any type of fund. These funds are actively managed funds unlike the index funds which are passively managed. In an actively managed fund the fund manager pores over data and information, researches the company, the economy, analyses market trends, takes into account government policies on different sectors and then selects the stock to invest. This is called as active management.

A point to be noted here is that anything other than an index funds are actively managed funds and they generally have higher expenses as compared to index funds. In this case, the fund manager has the choice to invest in stocks beyond the index. Thus, active decision making comes in. Any scheme which is involved in active decision making is incurring higher expenses and may

also be assuming higher risks. This is mainly because as the stock selection universe increases from index stocks to large caps to midcaps and finally to small caps, the risk levels associated with each category increases above the previous category.

The logical Points to Remember from this is that actively managed funds should also deliver higher returns than the index, as investors must be compensated for higher risks. But this is not always so. Studies have shown that a majority of actively managed funds are unable to beat the index returns on a consistent basis year after year. Secondly, there is no guaranteeing which actively managed fund will beat the index in a given year. Index funds therefore have grown exponentially in some countries due to the inconsistency of returns of actively managed funds.

4.16 What are Midcap Funds?

Midcap funds, invest in stocks belonging to the mid cap segment of the market. Many of these midcaps are said to be the 'emerging blue chips' or 'tomorrow's large caps'. There can be actively managed or passively managed mid cap funds. There are indices such as the CNX Midcap index which tracks the midcap segment of the markets and there are some passively managed index funds investing in the CNX Midcap companies.

4.17 What are Sectoral Funds?

Funds that invest in stocks from a single sector or related sectors are called Sectoral funds. Examples of such funds are Banking Funds, IT Funds, Pharma Funds, Infrastructure Funds, etc. Regulations do not permit funds to invest over 10% of their Net Asset Value in a single company. This is to ensure that schemes are diversified enough and investors are not subjected to concentration risk. This regulation is relaxed for sectoral funds and index funds.

Example

AAA Mutual Fund has a banking sector fund. The fund objective is to generate continuous returns by actively investing in equity and equity related securities of companies in the Banking Sector and companies engaged in allied activities related to Banking Sector.

4.18 Other Equity Schemes:

4.18.1 Arbitrage Funds

These invest simultaneously in the cash and the derivatives market and take advantage of the price differential of a stock in the cash and derivative segment by taking opposite positions in the two markets (for e.g. cash and stock futures).

4.18.2 Multi cap Funds

These funds can, theoretically, have a small cap portfolio today and a large cap portfolio tomorrow. The fund manager has total freedom to invest in any stock from any sector.

4.18.3 Quant Funds

In case of these funds quantitative models are used for stock selection and allocation of weights based on company's size, financial performance and liquidity.

Example

XYZ Mutual Fund has recently launched a quant fund. The SID (scheme information document) specifies the use of a quantitative model for aspects like

- Stock price – parameters based on periodic moving average of price, market capitalization

- Financial parameters – based on key indicators such as EPS, PE, PAT, EBDIT margins (historical and forecasted).

4.18.4 International Equities Fund

This is a type of fund which invests in stocks of companies outside India. This can be a Fund of Fund, whereby, we invest in one fund, which acts as a 'feeder' fund for some other fund(s), .i.e invests in other mutual funds, or it can be a fund which directly invests in overseas equities. These may be further designed as 'International Commodities Securities Fund' or 'World Real Estate and Bank Fund' etc.

4.18.5 Growth Schemes

A **mutual fund** whose aim is to achieve capital appreciation by investing in **growth** stocks. They focus on companies that are experiencing significant earnings or revenue **growth**, rather than companies that pay out dividends. A growth fund aims to produce capital appreciation by investing in growth stocks. They focus on industries and specific companies that are in the phase of signification revenue growth rather than high dividend payouts. These companies are in the growth phase and hence require a holding period of 5-10 years. Hence a higher risk tolerance is required. The time horizon for return is medium to long term.

Example

PU Mutual Fund has a Growth companies fund that has an investment objective to invest in companies / stocks with high growth rates or above average potential.

The fund managers will follow an active investment strategy and will be focusing on rapid growth companies (or sectors). The selection of stocks will be growth measures such as Enterprise Value/EBITDA (Earnings before Interest, Taxes, Depreciation, and Amortization), forward price/sales, and discounted EPS (Earning per Share). The primary focus will be to identify 'high growth' companies, especially in sectors witnessing above average growth. A combination of top-down (macro analysis to identify sectors) and bottom-up approach (micro analysis to pick stocks within these sectors) will be employed. The switch between companies and sectors to be identified based on relative valuations, liquidity and growth potential.

Concept Clarifier – Growth and Value Investing

Investment approaches can be broadly classified into Growth based and Value Based. While Growth investing refers to investing in companies with high growth potential, Value investing approach is based upon the premise that a stock/ sector is currently undervalued and the market will eventually realize its true value. So, a value investor will buy such a stock/ sector today and wait for the price to move up. When that happens, the Value investor will exit and search for another undervalued opportunity.

Hence in Growth investing, it is the growth momentum that the investor looks for, whereas in Value investing, the investor looks for the mismatch between the current market price and the true value of the investment.

Contra Funds can be said to be following a Value investing approach. For example, when interest rates rise, people defer their purchases as the cost of borrowing

increases. This affects banks, housing and auto sectors and the stocks of these companies come down. A Value fund manager will opine that as and when interest rates come down these stocks will go up again; hence he will buy these stocks today, when nobody wants to own them. Thus he will be taking a contrarian call. The risk in Growth investing is that if growth momentum of the company goes down slightly, then the stock's price can go down rather fast, while in Value investing, the risk is that the investor may have to wait for a really long time before the market values the investment correctly.

4.18.6 ELSS

Equity Linked Savings Schemes (ELSS) are equity schemes, where investors get tax benefit upto Rs. 1.5 lacs under section 80C of the Income Tax Act. These are open ended schemes but have a lock in period of 3 years. These schemes serve the dual purpose of equity investing as well as tax planning for the investor. However it must be noted that investors cannot, under any circumstances, get their money back before 3 years from the date of investment.

4.18.7 Fund of Funds

These are funds which do not directly invest in stocks and shares but invest in units of other mutual funds which in their opinion will perform well and give high returns. Almost all mutual funds offer fund of funds schemes.

Let us now look at the internal workings of an equity fund and what must an investor know to make an informed decision.

Concept Clarifier – AUM

Assets Under Management (AUM) represents the money which is managed by a mutual fund in a scheme. Adding AUMs for all schemes of a fund house gives the AUM of that fund house and the figure arrived at by adding AUMs of all fund houses represents the industry AUM.

AUM is calculated by multiplying the Net Asset Value (NAV – explained in detail later) of a scheme by the number of units issued by that scheme.

A change in AUM can happen either due to redemptions or inflows. In case of sharp market falls, the NAVs are expected to move down. This may lead to redemption pressures and the AUMs may come down. Conversely, if the outlook on country and markets is positive, it may lead to inflow of funds leading to overall increase in the AUM. Also if the fund is able to produce superior returns as compared to the benchmark (e.g. Nifty, it may result in inflows into the scheme, leading to an increase in the AUM.

4.19 What is the Importance of basic Offer Documents (SID AND SAI)?

Prior to investing, every investor needs to be aware of the basic objective, term and investment philosophy of the scheme. These are fundamental features of the fund and cannot be altered by the fund house without investor approval.

Mutual Fund Offer Documents have two parts:

- **Scheme Information Document (SID)**, which has details of the scheme
- **Statement of Additional Information (SAI)**, which has statutory information about the mutual fund, that is offering the scheme.

The above documents are prepared by the fund house and vetted by SEBI. Investor can download these documents from the mutual fund website. Investors should understand and analyse them prior to investing.

Every offer document clearly states that

"The particulars of the Scheme have been prepared in accordance with the Securities and Exchange Board of India (Mutual Funds) Regulations 1996, (herein after referred to as 'SEBI (MF) Regulations') as amended till date, and filed with SEBI, along with a Due Diligence Certificate from the AMC. The units being offered for public subscription have not been approved or recommended by SEBI nor has SEBI certified the accuracy or adequacy of the Scheme Information Document.

The Scheme Information Document sets forth concisely the information about the scheme that a prospective investor ought to know before investing. Before investing, investors should also ascertain about any further changes to this Scheme Information Document after the date of this Document from the Mutual Fund / Investor Service Centres / Website / Distributors or Brokers.

The investors are advised to refer to the Statement of Additional Information (SAI) for details of _____ Mutual Fund, Tax and Legal issues and general information on [www._____](http://www._____.).
(Website address)

SAI is incorporated by reference (is legally a part of the Scheme Information Document). For a free copy of the current SAI, please contact your nearest Investor Service Centre or log on to our website.

The Scheme Information Document should be read in conjunction with the SAI and not in isolation".

4.20 What is the Key Information Document?

The Key Information Memorandum (KIM) is a summary of the SID and SAI. As per SEBI regulations, every application form is to be accompanied by the KIM.

The important contents of KIM are:

- Name of the AMC, mutual fund, Trustee, Fund Manager and scheme
- Dates of Issue Opening, Issue Closing & Re-opening for Sale and Re-purchase
- Plans and Options under the scheme
- Risk Profile of Scheme
- Price at which Units are being issued and minimum amount / units for initial purchase, additional purchase and re-purchase
- Benchmark
- Dividend Policy
- Performance of scheme and benchmark over last 1 year, 3 years, 5 years and since inception.
- Loads and expenses
- Contact information of Registrar for taking up investor grievances

4.21 What is NAV?

Net Assets of a scheme is the market value of assets of the scheme less all scheme liabilities. NAV i.e. net asset value is calculated by dividing the value of Net Assets by the outstanding number of Units.

Concept Clarifier – NAV			
Assets	Rs. Crs.	Liabilities	Rs. Crs.
Shares	345	Unit Capital	300
Debentures	23	Reserves & Surplus	85.7
Money Market instruments	12		
Accrued Income	2.3	Accrued	1.5
		Expenditure	
Other Current Assets	1.2	Other Current Liabilities	0.5
Deferred Revenue Expenditure	4.2		
	387.7		387.7
Units Issued (Cr.)	30		
Face Value (Rs.)	10		
Net Assets (Rs.)	385.7		
NAV (Rs.)	12.86		

The above table shows a typical scheme balance sheet. Investments are entered under the

assets column. Adding all assets gives the total of Rs.387.7 cr. From this if we deduct the liabilities of Rs.2 cr. I.e. Accrued Expenditure and Other Current Liabilities, we get Rs. 385.7 cr. as Net Assets of the scheme.

The scheme has issued 30 crs. units @ Rs.10 each during the NFO. This translates in Rs.300 crs. being garnered by the scheme then. This is represented by Unit Capital in the Balance Sheet. Thus, as of now, the net assets worth Rs.385.7 cr are to be divided amongst 30 crs. units. This means the scheme has a Net Asset Value or NAV of Rs.12.86.

The important point that the investor must focus here is that the Rs. 300 crs. garnered by the scheme has increased to Rs.387 crs., which translates into a 29.23% gain, whereas, the return for the investor is 28.57% ($12.86 - 10 / 10 = 28.57\%$).

Formula for NAV

$$\text{NAV} = \frac{\text{Market Value of investments} + \text{receivables} + \text{accrued income} + \text{other assets} - \text{accrued expenses} - \text{other payables} - \text{other liabilities}}{\text{No. of units outstands as of valuation date}}$$

Concept Clarifier – Fund Fact Sheet

After an investor has entered into a scheme, he must monitor his investments regularly. This can be achieved by going through the Fund Fact Sheet. This is a monthly document which all mutual funds have to publish.

This document gives all details as regards

- the AUMs of all its schemes
- top holdings in all the portfolios of all the schemes
- loads, minimum investment
- performance over 1, 3, 5 years and also since launch
- Comparison of scheme's performance with the benchmark index (most mutual fund schemes compare their performance with a benchmark index such as the Nifty 50) over the same time periods
- fund managers outlook
- portfolio composition
- expense ratio
- portfolio turnover
- risk adjusted returns
- equity/ debt split for schemes
- YTM for debt portfolios and other information which the mutual fund considers important from the investor's decision making point of view.

In a nutshell, the fund fact sheet is the document which investors must read, understand and keep themselves updated with.

4.22 What are expenses incurred in relation to a scheme?

There are two types of expenses incurred by a scheme

- ❖ **Initial issue expenses** – these expenses are incurred when the NFO is made. These need to be borne by the AMC.
- ❖ **Recurring expenses** – These expenses are incurred regularly. These include
 - o fees paid to trustees, custodians, auditor, registrar and transfer agents
 - o selling and commission expenses
 - o listing fees and depository fees
 - o expenses related to investor communication
 - o service tax

SEBI has clearly laid down limits for expenses that can be charged to the scheme.

The limits for schemes other than index schemes are as follows:

Net Assets (Rs crs.)	Equity Schemes	Debt Schemes
Upto Rs.100 crs.	2.50%	2.25%
Next Rs.300 crs.	2.25%	2.00%
Next Rs.300 crs.	2.00%	1.75%
Excess over Rs.700 crs.	1.75%	1.50%

- The above percentages are to be calculated on the average daily net assets of the scheme. The expense limits (including management fees) for index schemes (including Exchange Traded Funds) is 1.5% of average net assets.
- In case of a fund of funds scheme, the total expenses of the scheme including weighted average of charges levied by the underlying schemes shall not exceed 2.50 per cent of the average daily net assets of the scheme.

In addition to the limits specified, the following costs or expenses may be charged to the scheme, namely

- brokerage and transaction costs which are incurred for the purpose of execution of trade and is included in the cost of investment, not exceeding 0.12% in case of cash market transactions and 0.05% in case of derivatives transactions
- expenses not exceeding of 0.30% of daily net assets, if the new inflows from such cities as specified by the Board from time to time are at least - (i) 30 per cent of gross new inflows in

the scheme, or; (ii) 15 per cent of the average assets under management (year to date) of the scheme, whichever is higher: Provided that if inflows from such cities is less than the higher of sub-clause (i) or sub-clause (ii), such expenses on daily net assets of the scheme shall be charged on proportionate basis

- additional expenses not exceeding 0.20 per cent of daily net assets of the scheme

Any expenditure in excess of the limits specified above shall be borne by the asset management company or by the trustee or sponsors.

Mutual funds/AMCs shall launch new schemes under a single plan and ensure that all new investors are subject to single expense structure. Investors, who have already invested as per earlier expense structures based on amount of investment, will be subject to single expense structure for all fresh subscription.

4.23 What is Expense Ratio?

Among other things that an investor must look at before finalising a scheme, is that he must check out the **Expense Ratio**.

Concept Clarifier – Expense Ratio
Expense Ratio is defined as the ratio of expenses incurred by a scheme to its Average Weekly Net Assets. It means how much of investors' money is going for expenses and how much is getting invested. This ratio should be as low as possible. Assume that a scheme has average weekly net assets of Rs 100 cr. and the scheme incurs Rs.1 cr. as annual expenses, then the expense ratio would be $1/100 = 1\%$. In case this scheme's expense ratio is comparable to or better than its peers then this scheme would qualify as a good investment, based on this parameter only. If this scheme performs well and its AUM increases to Rs. 150 cr in the next year whereas its annual expenses increase to Rs. 2 cr, then its expense would be $2/150 = 1.33\%$. It is not enough to compare a scheme's expense ratio with peers. The scheme's expense ratio must be tracked over different time periods. Ideally as net assets increase, the expense ratio of a scheme should come down.

Investors today have an option of investing through direct plans. Since the direct plans do not entail distributor commissions, they may have a lower expense ratio.

4.24 What is Portfolio Turnover?

Fund managers keep churning their portfolio depending upon their outlook for the market, sector or company. This churning can be done very frequently or may be done after sufficient time gaps. There is no rule which governs this and it is the mandate of the scheme and the fund managers' outlook and style that determine the churning. However, what is important to understand is that a very high churning frequency will lead to higher trading and transaction costs, which may eat into investor returns. **Portfolio Turnover** is the ratio which helps us to find

how aggressively the portfolio is being churned.

While churning increases the costs, it does not have any impact on the Expense Ratio, as transaction costs are not considered while calculating expense ratio. Transaction costs are included in the buying & selling price of the scrip by way of brokerage, STT, cess, etc. Thus the portfolio value is computed *net* of these expenses and hence considering them while calculating Expense Ratio as well would mean recording them twice – which would be incorrect.

Concept Clarifier – Portfolio Turnover

Portfolio Turnover is defined as 'Lesser of Assets bought or sold/ Net Assets'. A scheme with Rs.100 cr as net assets sells Rs.20 cr. of its investments. Thus its Portfolio Turnover Rate would be $20/100 = 20\%$.

If this scheme's net assets increase to Rs.120 cr and the fund manager decides to churn the entire portfolio by exiting all stocks, then the Portfolio Turnover would be $120/120 = 100\%$.

If the fund manager churns the entire portfolio twice in a single year then we would say that the Portfolio Turnover rate is 200% or that the portfolio is churned once every 6 months. Liquid funds have very high portfolio turnover due to less maturity of the paper. Once the paper matures, the fund manager has to buy another security, thus churning the portfolio.

4.25 How does AUM Affect Portfolio Turnover?

The scheme's size i.e. the AUM can also have an impact on the performance of the scheme. In case the scheme performs well and thereby attracts a lot of money flow, it may happen that the fund manager may not be able to deploy that extra money successfully as he may not find enough opportunities. Thus an increased fund size may result in lower returns. If the fund manager tries to acquire significantly large quantities of a stock, the buying pressure may lead to higher stock prices, thereby higher average cost for the scheme. Also, if the holdings by the scheme in any stock are huge, then exit may be difficult as selling from the scheme itself can put pressure on the prices. Thus the first share may be sold at a higher price and as the supply increases the prices may fall, and the last share may get sold at a lower price.

A scheme with a very small AUM does not face these problems but has its own set of problems. The Expense Ratio of such a scheme will be very high as expenses are calculated as a percent of Average Weekly Net Assets. As the fund size increases, the Expense Ratio tends to go down.

Similarly Portfolio Turnover will be magnified as the denominator (Average Net Assets) is small and hence the turnover appears to be very high.

Thus, the investor must look at AUM for the previous few months, say last 12 months and compare the same with that of the industry and also similar schemes. If it is found that the scheme's performance is in line or better than its peers consistently, even though the AUM is increasing, then it can be a fair indicator that increased AUM is not a problem for the fund manager.

4.26 How to Analyse Cash Level in Portfolios?

The next logical point of focus must be the **Cash Level** in the scheme. The Cash level is the amount of money the mutual fund is holding in Cash, i.e. the amount not invested in stocks and bonds but lying in cash.

If the scheme is having higher than industry average cash levels consistently, more so in a bull market, it will lead to a inferior performance by the scheme than its peers. However, in a falling market, it is this higher cash level that will protect investor wealth from depleting. Hence whenever one is analyzing cash levels, it is extremely important to see why the fund manager is holding high cash levels. It may be so that he is expecting a fall therefore he is not committing large portions of monies. It may be so in a bull market or a bear market. The strategy could be to enter once the prices correct. High cash levels can also be seen as a cushion for sudden redemptions and in large amounts.

4.27 What are Exit Loads?

Exit Loads, are paid by the investors in the scheme, if they exit one of the scheme before a specified time period. Exit Loads reduce the amount received by the investor. Not all schemes have an Exit Load, and not all schemes have similar exit loads as well. Some schemes have Contingent Deferred Sales Charge (CDSC). This is nothing but a modified form of Exit Load, where in the investor has to pay different Exit Loads depending upon his investment period.

If the investor exits early, he will have to bear more Exit Load and if he remains invested for a longer period of time, his Exit Load will reduce. Thus the longer the investor remains invested, lesser is the Exit Load. After some time the Exit Load reduces to nil; i.e. if the investor exits after a specified time period, he will not have to bear any Exit Load.

Earlier there was a difference between the sale price and the NAV, the difference being the 'entry load'. However SEBI has banned entry loads since May 2009. Further exit loads / CDSC have to be credited back to the scheme immediately i.e. they are not available for the AMC to bear selling expenses. Upfront commission to distributors will be paid by the investor directly to the distributor, based on his assessment of various factors including the service rendered by the distributor. Currently for equity funds / bonds funds redeemed within 1 year are charged 1% exit load. However liquid funds and money market funds normally have zero exit loads.

POINTS TO REMEMBER

A variety of schemes are offered by mutual funds. It is critical for investors to know the features of these products, before money is invested in them. These include the following:

- 1) **Equity funds** – funds that primarily invests in equity shares of companies.
- 2) **Debt funds** - funds which invest in debt instruments such as short and long term bonds, government securities, t-bills, corporate paper, commercial paper, call money etc.
- 3) **Hybrid funds** - These are funds which invest in debt as well as equity instruments
- 4) **Gold ETF** – An exchange traded fund that buys and sells gold.
- 5) **Real estate funds** – These funds invest in properties

There are other types of funds within these broad categories, which the investor must be aware of. They include the following:

- Index Funds invest in stocks comprising indices, such as the Nifty 50, which is a broad based index comprising 50 stocks.
- Large cap funds restrict their stock selection to the large cap stocks
- Midcap funds, invest in stocks belonging to the mid cap segment of the market.
- Funds that invest in stocks from a single sector or related sectors are called Sectoral funds.
- Other equity funds ELSS and Fund of funds

Investments in new fund offers is through the offer documents as issued the mutual funds. These offer documents have two parts:

- Scheme Information Document (SID), which has details of the scheme
- Statement of Additional Information (SAI), which has statutory information about the mutual fund, that is offering the scheme.

The Key Information Memorandum (KIM) is a summary of the SID and SAI. As per SEBI regulations, every application form is to be accompanied by the KIM.

Another importance concept to be kept in mind is the NAV of the scheme. The NAV or Net Assets Value of a scheme is the market value of assets of the scheme less all scheme liabilities. . NAV i.e. net asset value is calculated by dividing the value of Net Assets by the outstanding number of Units.

After an investor has entered into a scheme, he must monitor his investments regularly. This can be achieved by going through the Fund Fact Sheet.

There are two types of expenses incurred by a scheme

Initial issue expenses – these expenses are incurred when the NFO is made. These need to be borne by the AMC.

Recurring expenses – These expenses are incurred regularly.

Expense Ratio is defined as the ratio of expenses incurred by a scheme to its Average Weekly Net Assets. It means how much of investors' money

Portfolio Turnover is the ratio which helps us to find how aggressively the portfolio is being churned.

Exit Loads, are paid by the investors in the scheme, if they exit one of the scheme before a specified time period. Exit Loads reduce the amount received by the investor. Not all schemes have an Exit Load, and not all schemes have similar exit loads as well.

Exchange Traded Funds (ETFs) are mutual fund units which investors buy/ sell from the stock exchange, as against a normal mutual fund unit, where the investor buys / sells through a distributor or directly from the AMC.

Practically any asset class can be used to create ETFs. Globally there are ETFs on Silver, Gold, Indices (SPDRs, Cubes, etc), etc. In India, we have ETFs on Gold, Indices such as Nifty 50, Bank Nifty etc.).

An index ETF is one where the underlying is an index, say Nifty 50.

An Exchange Traded Fund (ETF) is essentially a scheme where the investor has to buy/ sell units from the market through a broker (just as he/ she would buy a share).

An investor can approach a trading member of NSE and enter into an agreement with the trading member. Buying and selling ETFs requires the investor to have demat and trading accounts.

Gold ETFs (G-ETFs) are a special type of ETF which invests in Gold and Gold related securities.

APs are like market makers and continuously offer two way quotes (buy and sell). They earn on the difference between the two way quotes they offer. This difference is known as bid-ask spread. They provide liquidity to the ETFs by continuously offering to buy and sell ETF units.

UNIT-5 : ETFs, Debt and Liquid Funds

5.1 Introduction to Exchange Traded Funds

Exchange Traded Funds (ETFs) are mutual fund units which investors buy/ sell from the stock exchange, as against a normal mutual fund unit, where the investor buys / sells through a distributor or directly from the AMC. ETF as a concept is relatively new in India. It was only in early nineties that the concept gained in popularity in the USA.

ETFs have relatively lesser costs as compared to a mutual fund scheme. This is largely due to the structure of ETFs. While in case of a mutual fund scheme, the AMC deals directly with the investors or distributors, the ETF structure is such that the AMC does not have to deal directly with investors or distributors. It instead issues units to a few designated large participants, who are also called as Authorised Participants (APs), who in turn act as market makers for the ETFs.

The Authorised Participants provide two way quotes for the ETFs on the stock exchange, which enables investors to buy and sell the ETFs at any given point of time when the stock markets are open for trading. ETFs therefore trade like stocks. Buying and selling ETFs is similar to buying and selling shares on the stock exchange. Prices are available on real time and the ETFs can be purchased through a stock exchange broker just like one would buy / sell shares.

Due to these lower expenses, the Tracking Error for an ETF is usually low. Tracking Error is the acid test for an index fund/ ETF. By design an index fund/ index ETF should only replicate the index return. The difference between the returns generated by the scheme/ ETF and those generated by the index is the tracking error.

Assets in ETFs

Practically any asset class can be used to create ETFs. Globally there are ETFs on Silver, Gold, Indices (SPDRs, Cubes, etc), etc. In India, we have ETFs on Gold, Indices such as Nifty 50, Bank Nifty etc.).

Index ETF

An index ETF is one where the underlying is an index, say Nifty 50. The APs deliver the shares comprising the Nifty, in the same proportion as they are in the Nifty, to the AMC and create ETF units in bulk (These are known as Creation Units). Once the APs get these units, they provide liquidity to these units by offering to buy and sell through the stock exchange. They give two way quotes, buy and sell quote for investors to buy and sell the ETFs. ETFs therefore have to be listed on stock exchanges. There are many ETFs presently listed on the NSE. For further details please check NSE website <http://www.nseindia.com>

Below path Home>>Products>>Equities>>Exchange Traded Funds

5.2 Salient Features

- An Exchange Traded Fund (ETF) is essentially a scheme where the investor has to buy/ sell units from the market through a broker (just as he/ she would by a share).
- An investor must have a demat account for buying ETFs (For understanding what is demat please refer to NCFM module 'Financial Markets : A Beginners' Module).
- An important feature of ETFs is the huge reduction in costs. While a typical Index fund would have expenses in the range of 1.5% of Net Assets, an ETF might have expenses around 0.75%. In fact, in international markets these expenses are even lower. In India too this may

be the trend once more Index Funds and ETFs come to the market and their popularity increases. Expenses, especially in the long term, determine to a large extent, how much money the investor makes. This is because lesser expenses mean more of the investor's money is getting invested today and over a longer period of time, the power of compounding will turn this saving into a significant contributor to the investors' returns.

Scheme	A	B
Investment (Rs.)	10000	10000
Expense Ratio	1.50%	0.75%
Term (Years)	25	25
Compounded Average Growth Rate (CAGR)	12%	12%
Amount (Rs.)	116508.16	140835.93
Difference (Rs.)	24327.77	

If an investor invests Rs.10,000 in 2 schemes each, for 25 years, with both the schemes delivering returns at a CAGR of 12% and the only difference being in the expenses of the schemes, then at the end of the term, while scheme A would have turned the investment into Rs.1.16 Lakhs, scheme B would have grown to Rs.1.40 Lakhs – a difference of Rs.24,327.77. Post expenses, scheme A's CAGR comes out to be 10.32%, while scheme B's CAGR stands at 11.16%.

Concept Clarifier – Buying/ Selling ETFs
An investor can approach a trading member of NSE and enter into an agreement with the trading member. Buying and selling ETFs requires the investor to have demat and trading accounts. The procedure is exactly similar to buying and selling shares. The investor needs to have sufficient money in the trading account. Once this is done, the investor needs to tell the broker precisely how many units he wants to buy/ sell and at what price. Investors should take care that they place the order completely. They should not tell the broker to buy/ sell according to the broker's judgement. Investors should also not keep signed delivery instruction slips with the broker as there may be a possibility of their misuse. Placing signed delivery instruction slips with the broker is similar to giving blank signed cheques to someone.

5.3 What are REITs?

REITs or Real Estate Investment Trusts are similar to mutual funds. They invest in real estate assets and give returns to the investor based on the return from the real estate. Like a mutual fund, REITs collect money from many investors and invest the same in real estate properties like offices, residential apartments, shopping malls, hotels, warehouses). These REITs are listed on stock exchanges. The investors can directly buy and sell units from the stock exchanges.

REITs are actually trusts and hence their assets are in the hands of an independent trustee, held on behalf of the investor. The trustee is bound to ensure compliance with applicable laws and protect the rights of the unit holders.

Income takes the form of rentals and capital gains from property which is distributed to investors as dividends. Money is raised from unit holders through IPO (Initial Public Offer).

5.4 Why Gold ETF?

Gold ETFs (G-ETFs) are a special type of ETF which invests in Gold and Gold related securities. This product gives the investor an option to diversify his investments into a different asset class, other than equity and debt.

Traditionally, Indians are known to be big buyers of Gold; an age old tradition. Gold as an asset class is considered to be safe This is because gold prices are difficult to manipulate and therefore enjoy better pricing transparency. When other financial markets are weak, gold gives good returns. It also enjoys benefit of liquidity in case of any emergency.

We buy Gold, among other things for children's marriages, for gifting during ceremonies etc. Holding physical Gold can have its' disadvantages:

1. Fear of theft
2. Payment Wealth Tax
3. No surety of quality
4. Changes in fashion and trends
5. Locker costs
6. Lesser realisation on remoulding of ornaments

G-ETFs can be said to be a new age product, designed to suit our traditional requirements. G-ETFs score over all these disadvantages, while at the same time retaining the inherent advantages of Gold investing.

In case of Gold ETFs, investors buy Units, which are backed by Gold. Thus, every time an investor buys 1 unit of G-ETFs, it is similar to an equivalent quantity of Gold being earmarked for him some w here. Thus his units are 'as good as Gold'.

Say for example 1 G-ETF = 1 gm of 99.5% pure Gold, then buying 1 G-ETF unit every month for 20 years would have given the investor a holding of 240gm of Gold, by the time his child's marriage approaches (240 gm = 1 gm/ month * 12 months * 20 Years). After 20 years the investor can convert the G-ETFs into 240 gm of physical gold by approaching the mutual fund or sell the G-ETFs in the market at the current price and buy 240 gms. of gold.

Secondly, all these years, the investor need not worry about theft, locker charges, quality of Gold or changes in fashion as he would be holding Gold in paper form. As and when the investor needs the Gold, he may sell the Units in the market and realise an amount equivalent to his holdings at the then prevailing rate of Gold ETF. This money can be used to buy physical gold and make

ornaments as per the prevailing trends. The investor may also simply transfer the units to his child's demat account as well. Lastly, the investor will not have to pay any wealth tax on his holdings. There may be other taxes, expenses to be borne from time to time, which the investor needs to bear in mind while buying / selling G-ETFs.

5.5 Working

The G-ETF is designed as an open ended scheme. Investors can buy/ sell units any time at then prevailing market price. This is an important point of differentiation of ETFs from similar open ended funds. In case of open ended funds, investors get units (or the units are redeemed) at a price based upon that day's NAV. In case of ETFs, investors can buy (or sell) units at a price which is prevailing at that point of time during market hours. Thus for all investors of open ended schemes, on any given day their buying (or redemption) price will be same, whereas for ETF investors, the prices will vary for each, depending upon when they bought (or sold) units on that day.

The way Gold ETFs work is as under:

5.5.1 During New Fund Offer (NFO)

- ♦ AMC decides of launching G-ETF
- ♦ The SID, SAI and KIM are prepared as per SEBI guidelines
- ♦ Investors invest in the fund and the AMC gives units to investors in return

AMC buys Gold of specified quality at the prevailing rates

5.5.2 On an ongoing basis

- ♦ Authorised Participants (typically large institutional investors) give money/ Gold to AMC
- ♦ AMC gives equivalent number of units bundled together to these authorized participants (AP)
- ♦ APs split these bundled units into individual units and offer for sale in the secondary market
- ♦ Investors can buy G-ETF units from the secondary markets either from the quantity being sold by the APs or by other retail investors
- ♦ Retail investors can also sell their units in the market

The Gold which the AP deposits for buying the bundled ETF units is known as 'Portfolio Deposit'. This Portfolio Deposit has to be deposited with the Custodian. A custodian is someone who handles the physical Gold for the AMC. The AMC signs an agreement with the Custodian, where all the terms and conditions are agreed upon. Once the AP deposits Gold with the custodian, it is the responsibility of the custodian to ensure safety of the Gold, otherwise he has to bear the liability, to the extent of the market value of the Gold.

The custodian has to keep record of all the Gold that has been deposited/ withdrawn under the G-ETF. An account is maintained for this purpose, which is known as 'Allocated Account'. The custodian, on a daily basis, enters the inflows and outflows of Gold bars from this account. All details such as the serial number, refiner, fineness etc. are maintained in this account. The transfer of Gold from or into the Allocated Account happens at the end of each business day. A report is submitted by the custodian, no later than the following business day, to the AMC.

The money which the AP deposits for buying the bundled ETF units is known as 'Cash Component'. This Cash Component is paid to the AMC. The Cash Component is not mandatory and is paid to adjust for the difference between the applicable NAV and the market value of the

Portfolio Deposit. This difference may be due to accrued dividend, management fees, etc. The bundled units (which the AP receives on payment of Portfolio Deposit to the custodian and Cash Component to the AMC) are known as Creation Units. Each Creation Unit comprises of a pre-defined number of ETFs Units (say 25,000 or 100 or any other number).

Thus, now it can be said that **Authorised Participants pay Portfolio Deposit and/ or Cash Component and get Creation Units in return.**

Each Creation Unit consists of a pre-defined number of G-ETF Units. APs strip these Creation Units (which are nothing but bundled G-ETF units) and sell individual G-ETF units in the market. Thus retail investors can buy/ sell 1 unit or it's multiples in the secondary market.

5.6 Sovereign Gold Bonds

- The Government of India in October 2015 launched the Sovereign Gold Bonds Scheme
- SGB scheme offer investors returns that are linked to gold price and provides benefits similar to investment in physical gold
- SGBs are issued by the Reserve Bank of India on behalf of the Government of India and distributed through Agents like banks, designated post offices and Stock Holding Corp.
- Exchanges to be appointed as Agents from Tranche IV onwards
- SGBs are issued on payment of rupees and denominated in grams of gold and can be held in demat and paper form
- SGBs can be used as collateral for loans and can be traded on stock exchanges
- Can be bought initially through Stock brokers / Mutual Fund Distributors
- Commission would be 99bps.

5.6.1 Product Details of Sovereign Gold Bonds

SI. No.	Item	Details
1	Product name	Sovereign Gold Bond 2016-17 – Series ***
2	Issuance	To be issued by Reserve Bank India on behalf of the Government of India.
3	Eligibility	The Bonds will be restricted for sale to resident Indian entities including individuals, HUFs, Trusts, Universities and Charitable Institutions.
4	Denomination	The Bonds will be denominated in multiples of gram(s) of gold with a basic unit of 1 gram.

SI. No.	Item	Details
5	Tenor	The tenor of the Bond will be for a period of 8 years with exit option from 5th year to be exercised on the interest payment dates.
6	Minimum size	Minimum permissible investment will be 1 grams of gold.
7	Maximum limit	The maximum amount subscribed by an entity will not be more than 500 grams per person per fiscal year (April-March). A self-declaration to this effect will be obtained.
8	Joint holder	In case of joint holding, the investment limit of 500 grams will be applied to the first applicant only.
9	Issue price	Price of Bond will be fixed in Indian Rupees on the basis of simple average of closing price of gold of 999 purity published by the India Bullion and Jewellers Association Limited for the week (Monday to Friday) preceding the subscription period.
10	Payment option	Payment for the Bonds will be through cash payment (upto a maximum of Rs. 20,000) or demand draft or cheque or electronic banking.
11	Issuance form	Government of India Stock under GS Act, 2006. The investors will be issued a Holding Certificate. The Bonds are eligible for conversion into demat form.
12	Redemption price	The redemption price will be in Indian Rupees based on previous week's (Monday-Friday) simple average of closing price of gold of 999 purity published by IBJA.
13	Sales channel	Bonds will be sold through banks, Stock Holding Corporation of India Limited (SHCIL), designated post offices as may be notified and recognised stock exchanges viz., National Stock Exchange of India Limited and Bombay Stock Exchange, either directly or through agents.
14	Interest rate	The investors will be compensated at a fixed rate of 2.75 per cent per annum payable semi-annually on the initial

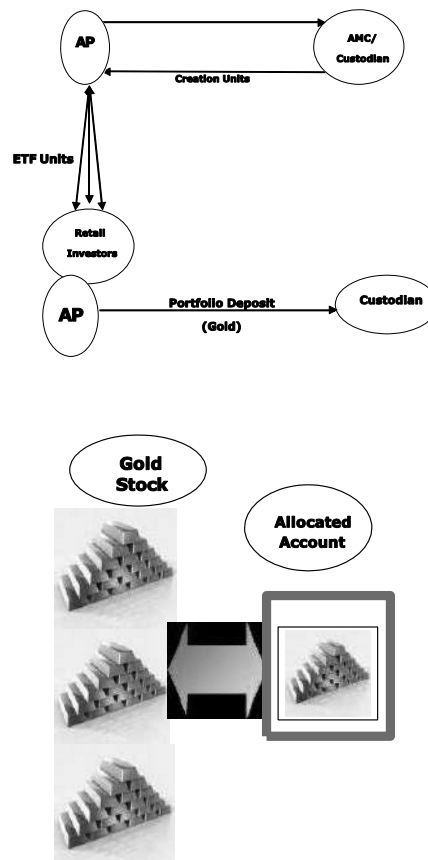
SI. No.	Item	Details
		value of investment.
15	Collateral	Bonds can be used as collateral for loans. The loan to-value (LTV) ratio is to be set equal to ordinary gold loan mandated by the Reserve Bank from time to time.
16	KYC Documentation	Know-your-customer (KYC) norms will be the same as that for purchase of physical gold. KYC documents such as Voter ID, Aadhaar card/PAN or TAN /Passport will be required.
17	Tax treatment	The interest on Gold Bonds shall be taxable as per the provision of Income Tax Act, 1961 (43 of 1961). The capital gains tax arising on redemption of SGB to an individual has been exempted. The indexation benefits will be provided to long term capital gains arising to any person on transfer of bond
18	Tradability	Bonds will be tradable on stock exchanges/NDS-OM from a date to be notified by RBI.
19	SLR eligibility	The Bonds will be eligible for Statutory Liquidity Ratio purposes.
20	Commission	Commission for distribution of the bond shall be paid at the rate of 1% of the total subscription received by the receiving offices and receiving offices shall share at least 50% of the commission so received with the agents or sub agents for the business procured through them.

5.7 Market making by Aps

APs are like market makers and continuously offer two way quotes (buy and sell). They earn on the difference between the two way quotes they offer. This difference is known as bid-ask spread. They provide liquidity to the ETFs by continuously offering to buy and sell ETF units.

If the last traded price of a G-ETF is Rs 1000, then an AP will give a two way quote by offering to buy an ETF unit at Rs 999 and offering to sell an ETF unit Rs. 1001. Thus whenever the AP buys, he will buy @ 999 and when he sells, he will sell at 1001, thereby earning Rs. 2 as the difference. It should also be understood that the impact of this transaction is that the AP does not increase/decrease his holding in the ETF. This is known as earning through Dealer Spreads. APs also play an important role of aligning the price of the unit with the NAV. This is done by exploiting the arbitrage opportunities.

It should be understood that it is not only APs who can sell ETF units in the market. Retail investors get liquidity by selling their units as well. So it is not always that the buyer of units is necessarily buying from APs – the seller at the other end may be a retail investor who wishes to exit.



As explained earlier, the custodian maintains record of all the Gold that comes into and goes out of the scheme's Portfolio Deposit. The custodian makes respective entries in the Allocated Account thus transferring Gold into and out of the scheme at the end of each business day. The custodian has no right on the Gold in the Allocated Account.

The custodian may appoint a sub-custodian to perform some of the duties. The custodian charges fee for the services rendered and has to buy adequate insurance for the Gold held. The premium paid for the insurance is borne by the scheme as a transaction cost and is allowed as an expense under SEBI guidelines. This expense contributes in a small way to the tracking error.

The difference between the returns given by Gold and those delivered by the scheme is known as Tracking Error. It is defined as the variance between the daily returns of the underlying (Gold in this case) and the NAV of the scheme for any given time period.

Gold has to be valued as per a specific formula mandated by regulations. This formula takes into account various inputs like price of Gold in US \$/ ounce as decided by the London Bullion Markets Association (LBMA) every morning, the conversion factor for ounce to Kg, the prevailing USD/ INR exchange rate, customs duty, octroi, sales tax, etc.

5.8 Creation units, Portfolio Deposit and Cash Component (an example):

Let us look at the following example to understand Creation Units, Portfolio Deposit and Cash Component in detail.

Assumption: 1 ETF unit = 1 gm of 99.5% pure Gold

During New Fund Offer (NFO)

Amount Invested (Rs.): 5000

Price of 1 gm of Gold (Rs.): 1000

Since 1 ETF unit = 1 gm of Gold

Issue Price (Rs.) = 1000

Units Allotted (Number = Investment/ Issue Price): 5

Creation Units

1 Creation Unit = 100 ETF units

NAV (Rs.) = 1050

Price of 1 gm of Gold (Rs.): 1000

So, 100 Units will cost (Rs.) = $1050 \times 100 = 1,05,000$

100 ETF will be equal to 100 gm of Gold

Therefore, value of Portfolio Deposit (Rs.) = $1000 \times 100 = 1,00,000$

Hence Cash Component (Rs.) = $1,05,000 - 1,00,000 = 5,000$

Thus it can be seen by depositing Gold worth Rs.1,00,000 as Portfolio Deposit and Rs. 5,000 as Cash Component, the Authorised Participant has created 1 Creation Unit comprising of 100 ETF units.

Let us now see how the Authorised Participant ensures parity between the NAV and market price of the ETFs.

As can be well understood, the price of ETF will be determined by market forces, and although it is linked to the prices of Gold, it will not mirror the exact movements at all given points of time. This will happen due to excess buying or selling pressure on the ETFs, due to which prices may rise or fall more than the Gold price. Such exaggerated movements provide opportunity for arbitrage, which the APs exploit and make risk less gains. This process also ensures that prices of ETF remain largely in sync with those of the underlying.

Consider a case where the demand for ETFs has increased due to any reason. A rise in demand will lead to rise in prices, as many people will rush to buy the units, thereby putting an upward pressure on the prices.

This can be explained by the following example

Price of Gold (Rs. / gm) = 1000

NAV (Rs.) = 1050

CMP of ETF units (Rs.) = 1200

In such a situation an AP will buy Creation Units and sell ETFs in the market.

To purchase 1 Creation Unit, he will have to deposit Gold worth Rs 1,00,000 (Price of Gold * number of ETF units in Creation Units * gm per ETF) as Portfolio Deposit with the custodian and balance Rs. 5,000 as Cash Component with the AMC.

Once he has the Creation Unit, he will sell individual ETF units in the market at Rs. 1200/ unit, thereby making a profit of Rs. 150 (1200 - 1050) per unit.

As he buys physical Gold the price of Gold will increase. Similarly as he sells fresh ETF units in the market, the supply of ETFs will increase. These two actions will lead to increase in Gold prices and reduction in ETF prices, thereby removing the anomaly in the prices of the ETF units and the underlying.

Similarly, if ETF prices fall way below the price of Gold, APs will buy ETF units cheap and redeem them in Creation Unit lot size. Such an action will reduce supply of ETFs from the market and increase the supply of physical Gold (Gold held with Custodian will come into the market). Both these actions will help align prices of underlying and ETF units as ETF prices will increase due to buying (and subsequent cutting of supply) and price of physical Gold will reduce due to fresh supply in the market.

5.9 Salient Features

Debt funds are funds which invest money in debt instruments such as short and long term bonds, government securities, t-bills, corporate paper, commercial paper, call money etc. The fees in debt funds are lower, on average, than equity funds because the overall management costs are lower. The main investing objective of a debt fund is usually preservation of capital and generation of income. Performance against a benchmark is considered to be a secondary consideration. Investments in the equity markets are considered to be fraught with uncertainties and volatility. These factors may have an impact on constant flow of returns. Which is why debt schemes, which are considered to be safer and less volatile have attracted investors.

Debt markets in India are wholesale in nature and hence retail investors generally find it difficult to directly participate in the debt markets. Not many understand the relationship between interest rates and bond prices or difference between Coupon and Yield. Therefore venturing into debt market investments is not common among investors. Investors can however participate in the debt markets through debt mutual funds.

One must understand the salient features of a debt paper to understand the debt market.

Debt paper is issued by Government, corporates and financial institutions to meet funding requirements. A debt paper is essentially a contract which says that the borrower is taking some money on loan and after sometime the lender will get the money back as well as some interest on the money lent.

Concept Clarifier – Face Value, Coupon, Maturity
Any debt paper will have Face Value, Coupon and Maturity as its standard characteristics. Face Value represents the amount of money taken as loan. Thus when an investor invests

Rs.100 in a paper, at the time of issuing the paper, then the face value of that paper is said to be Rs. 100. For our understanding point of view, Face Value is that amount which is printed on the debt paper. The borrower issues this paper; i.e. takes a loan from the investor as per this Face Value. So, if the Face Value is Rs. 100, the borrower will take a loan of Rs.100 from the investor and give the paper to the investor.

Next question is what the investor will earn from this investment. This can be found by looking at the 'Coupon' of the paper. The Coupon represents the rate of interest that the borrower will pay on the Face Value. Thus, if the Coupon is 8% for the above discussed paper, it means that the borrower will pay Rs.8 ($8/100 \times 100$) every year to the investor as interest income. It must be understood that the Face Value and the Coupon of a debt paper never change. There are some papers where the Coupon changes periodically, but again, for the moment we will ignore such paper. Since the investor will earn a fixed income (8% on Rs.100 or Rs.8 per year in our example), such instruments are also known as Fixed Income securities.

Finally the question arises, for how long the borrower has taken a loan. This can be understood by looking at the 'Maturity'. So if the paper in our example says that the maturity of the paper is 10 years, it means that for 10 years the investor will receive Rs.8 as interest income and after 10 years, he will get his Principal of Rs.100 back.

Thus now we can say, about the paper in our example that the borrower has taken a Rs.100 loan, for a period of 10 years, and he has promised to pay 8% interest annually.

This is the most basic form of debt paper. There can be modifications made to the issue price, coupon rate, frequency of coupon payment, etc., but all these modifications are out of these basic features.

Interest rates can either be fixed or floating. Under fixed interest rates, the interest rate remains fixed throughout the tenure of the loan. Under floating rate loans, the rate of interest is a certain percentage over the benchmark.

Example

A Ltd. has borrowed against a debt instrument, the rate be G-Sec plus 3%. Therefore if the G-Sec moves up, the rate of interest moves up and if the G-Sec moves down the interest rate moves down.

Prima facie debt instruments looks risk free. However two important questions need to be asked here:

1. What if interest rates rise during the tenure of the loan?
2. What if the borrower fails to pay the interest and/ or fails to repay the principal?

In case interest rates rise, then the investor's money will continue to grow at the earlier fixed rate of interest; i.e. the investor loses on the higher rate of interest, which his money could have earned. In case the borrower fails to pay the interest it would result in an income loss for the investor and if the borrower fails to repay the principal, it would mean an absolute loss for the investor. A prospective debt fund investor must study both these risks carefully before entering debt funds.

5.10 What is Interest Rate Risk?

The first risk which we discussed is known as the **Interest Rate Risk**. This can be reduced by adjusting the maturity of the debt fund portfolio, i.e. the buyer of the debt paper would buy debt

paper of lesser maturity so that when the paper matures, he can buy newer paper with higher interest rates. So, if the investor expects interest rates to rise, he would be better off giving short-term loans (when an investor buys a debt paper, he essentially gives a loan to the issuer of the paper). By giving a short-term loan, he would receive his money back in a short period of time. As interest rates would have risen by then, he would be able to give another loan (again short term), this time at the new higher interest rates. Thus in a rising interest rate scenario, the investor can reduce interest rate risk by investing in debt paper of extremely short-term maturity.

Concept Clarifier – Interest Rate Risk

In our example, we have discussed about a debt paper which has a maturity of 10 years and a coupon of 8%. What will happen if interest rates rise after 2 years to 10%? The investor would have earned Rs.8 for 2 years and will earn Rs.8 yet again in the 3rd year as well. But had he got the Rs.

100 with him (which he had invested 2 years ago), instead of investing at 8%, he would have preferred to invest @ 10%. Thus by investing in a long term paper, he has locked himself out of higher interest income.

The best way to mitigate interest rate risk is to invest in papers with short-term maturities, so that as interest rate rises, the investor will get back the money invested faster, which he can reinvest at higher interest rates in newer debt paper.

However, this should be done, only when the investor is of the opinion that interest rates will continue to rise in future otherwise frequent trading in debt paper will be costly and cumbersome.

Alternatively the interest rate risk can be partly mitigated by investing in floating rate instruments. In this case for a rising interest rate scenario the rates move up, and for a falling interest rate scenario the rates move down.

5.11 What is Credit Risk?

The second risk is known as **Credit Risk or Risk of Default**. It refers to the situation where the borrower fails to honour either one or both of his obligations of paying regular interest and returning the principal on maturity. A bigger threat is that the borrower does not repay the principal. This can happen if the borrower turns bankrupt. This risk can be taken care of by investing in paper issued by companies with very high **Credit Rating**. The probability of a borrower with very high Credit Rating defaulting is far lesser than that of a borrower with low credit rating. Government paper is highest in safety when it comes to credit risk (hence the description 'risk free security').

Concept Clarifier – Credit Risk or Risk of Default

Different borrowers have different levels of credit risks associated and investors would like to know the precise risk level of a borrower. This is done by a process known as **Credit Rating**. This process is carried by professional credit rating agencies like CRISIL, ICRA etc. In India, credit rating agencies have to be registered with SEBI and are regulated by SEBI (Credit Rating) Regulations, 1999.

These credit rating agencies analyse companies on various financial parameters like profitability, cash flows, debt, industry outlook, impact of economic policies, etc. based on which instruments are classified as investment grade and speculative grade. Looking at these ratings, the borrower comes to know the risk level associated with the corporate.

Some of CRISIL's rating symbols are given below:

AAA – These are the safest among corporate debentures. This rating implies investors can safely expect to earn interest regularly as well as the probability of default of their principal is as good as nil.

BBB – These instruments are safe, however, in case environment changes, there is a probability that the coupon payment and principal repayment ability may be hampered.

The above 2 ratings represent the topmost and lowest rating of investment grade securities. Anything less than BBB is termed as speculative grade. The rating grade 'D' represents default. Such companies are already in default and only liquidation of assets will result in realization of principal and/ or interest.

5.13 How is a Debt Instrument Priced?

Debt fund investing requires a different analysis, and understanding of basic bond market concepts is essential. There exist some relationships between yields and bond prices, between years to maturity and impact of change in interest rates, between credit risk and yields, and so on. We need to understand each of these relationships before we can start investing in debt funds.

The price of an instrument (equity / bond) is nothing but the present value of the future cash flows. (for understanding the meaning of present value, please refer to NCFM module 'Financial Markets : A Beginners Module'). In case of bonds, there is no ambiguity about future cash flows, as is the case of equities. Future cash flows in case of bonds are the periodic coupon payments that the investor will receive. Future cash flows for equities are the dividends than the investor may receive. Bond coupon payments are known right at the beginning, whereas there is no surety about a share paying dividends to an investor. Thus different investors/ analysts have different earning projections for equities, and hence each participant has a different view on the present value of a share. Bond cash flows being known, there is no confusion about what the present value of each future cash flow should be.

Concept Clarifier – Compounding & Discounting

Suppose an investor invests Rs.100 (initial investment) in a bank FD @ 8% for 10 years, then to calculate the amount that he will receive after 10 years, we will use the compound interest formula given below –

$$A = P * (1 + r)^t$$

Substituting $P = 100$, $r = 8\%$ and $t = 10$ years, we get the value for A as Rs. 215.89.

This process is known as compounding.

Instead of calculating the final amount after 10 years, if the investor says he needs Rs.215.89 after 10 years and we know that a bank FD is offering 8% per annum, we need to calculate how much money he should invest today to reach a value of Rs. 215.89 after 10 years.

Again we use the same formula, but slightly tweaked. Here we solve for P (initial investment), as against for A in the previous example.

$$P = A / (1 + r)^t$$

Substituting $A = 215.89$, $r = 8\%$ and $t = 10$ years, we can find the value of P as Rs. 100.

This process is the exact opposite of compounding and this is known as discounting. This is the process used in bond markets to find the price of a bond. We add the present values (PV) of all future cash flows to arrive at the price of the bond. The r is substituted by the Yield To Maturity (YTM) while calculating the PV of bond's future cash flows.

An important factor in bond pricing is the **Yield to Maturity (YTM)**. This is rate applied to the future cash flow (coupon payment) to arrive at its present value. If the YTM increases, the present value of the cash flows will go down. This is obvious as the YTM appears in the denominator of the formula, and we know as the denominator increases, the value of the ratio goes down. So here as well, as the YTM increases, the present value falls.

Concept Clarifier – YTM

Yield To Maturity (YTM) is that rate which the investor will receive in case:

1. He holds a bond till maturity and
2. He reinvests the coupons at the same rate

It is a measure of the return of the bond. **Yield to maturity** is essentially a way to measure the total amount of money one would make on a bond, but instead of expressing that figure as a Rupee amount, it is expressed as a percentage—an annual rate of return. For example, Company - ABC International Ltd.:

1. Bond purchased for Rs.950. Coupon rate 8%. Bond maturity 3 years
2. Its par value (the amount the issuer will refund you when the bond reaches maturity) is Rs.1000.

3. Current earning = Rs.50 (Rs.1000 – Rs.950).

4. The coupon rate is the annual interest rate paid yearly by the issuer.

The YTM is calculated as follows:

The above has been computed by using XIRR formula in MS Excel.

In the explanation for compounding, we have assumed that the interest earned after 1 year, gets reinvested in the FD for the remaining 9 years @ 8%. Similarly the interest earned after 2 years (Interest on the initial investment plus the interest earned on the interest reinvested after 1 year) is again reinvested in the FD at the same rate of 8% for the remaining 8 years, and so on. The second point mentioned above means exactly this.

This may be true for bank FDs, where we get the benefit of cumulative interest, however, for bonds; the coupon (interest income) is a cash outflow every year and not a reinvestment as in case of FDs. So there is no reinvestment here. Even if the investor receives the coupon as a cash outflow, and intends to reinvest the same, there is no guarantee that for 10 years he will be able to reinvest the coupon, each year @ 8%.

Thus, YTM is based upon some assumptions (i.e. you will be reinvesting the interest earned at the coupon rate), which may not always be true. In spite of its shortcomings, YTM is an important indicator to know the total return from a bond.

As mentioned earlier, price of a bond is the present value of future cash flows. Thus if all the present values go down (due to increase in YTM), then their sum will also go down.

This brings us to an important relation – **As interest rates go up, bond prices come down.** Let us try and understand this!

Let us say a bond is issued with a term to maturity of 3 years, coupon of 8% and face value of Rs.100. Obviously, the prevailing interest rates during that time have to be around 8%. If the prevailing rates are higher, investors will not invest in a 8% coupon bearing bond, and if rates are lower, the issuer will not issue a bond with 8% coupon, as a higher coupon means higher interest payments for the issuer.

The cash flows for the bond and the Present Values (PVs) of these cash flows are as given below –

@ 8 % discounting	Year 0	Year 1	Year 2	Year 3
	Pays 100			
Present Value of Rs.8 : Rs.7.41		To Receive Rs.8		
Present Value of Rs.8 : Rs.6.86			To Receive Rs.8	
Present Value of Rs.108 : Rs. 85.73				To Receive Rs.108

Price = 7.41 + 6.86 + 85.73 = 100 (This is the Present Value of all the future cash flows in Year 1, Year 2 and Year 3)

By using the discounting formula we can find the PVs of all the 3 cash flows. The investor will get Rs.8 as interest payment each year, whereas in the final year, the investor will also get the Rs.100 principal back (along with Rs.8 as the last interest). Here we will use 8% as the rate of discounting. This means that the investor will have to invest Rs.7.41 today @ 8% per annum for the next 1 year to get Rs.8. Similarly, he will have to invest Rs.6.86 today @ 8% per annum for the next 2 years to get Rs.8 after 2 years and finally he will have to invest Rs.85.73 @ 8% per annum for the next 3 years to get Rs. 108 after 3 years.

Adding all the PVs, we get the CMP of the bond as Rs.100. (in this example we assume interest rates prevalent in the market have remained at 8% and investors are happy earning 8% by investing in this bond).

Now, if interest rates in the market rise immediately to 9% after the bond is issued, we will have to use 9% as the rate of discounting (investors would like to earn 9% from this bond). In that case the cash flows and their PVs will be :

@ 9% discounting	Year 0	Year 1	Year 2	Year 3
	Pays Rs. 97.47			
Present Value of Rs. 8 : Rs. 7.34		To Receive Rs.8		
Present Value of Rs. 8 : Rs. 6.73			To Receive Rs.8	
Present Value of Rs. 8 : Rs. 83.40				To Receive Rs.108
Price = 7.34 + 6.73 + 83.40 = 97.47 (This is the Present Value of all the future cash flows in Year 1, Year 2 and Year 3)				

As can be seen, the investor *will invest less today*, i.e. the price of the bond will go down as the interest rates in the markets have increased. When interest rates rise in the economy, it *does not translate into the coupon rate changing*. As can be seen here, the investor will continue to get Rs.8; i.e. 8% of the FV of Rs.100. However, he will try to earn 9% return by adjusting his initial investment. The bond price in the market will therefore fall as the interest rates in the market goes up. **Thus we can say that bond prices and interest rates move in opposite directions.**

Relationship between interest rates and debt mutual fund schemes : As interest rates fall, the NAV of debt mutual funds rise, since the prices of the debt instruments the mutual fund is holding rises.

As interest rates rise, the NAV of debt mutual funds fall, since the prices of the debt instruments the mutual fund is holding falls.

Therefore it is paramount to consider interest rate movements and security maturity

prior to investing in any debt instrument.

5.13 Debt Mutual Fund Schemes

5.13.1 Fixed Maturity Plans (FMP)

FMPs have become very popular in the past few years. FMPs are essentially close ended debt schemes. The money received by the scheme is used by the fund managers to buy debt securities with maturities coinciding with the maturity of the scheme. There is no rule which stops the fund manager from selling these securities earlier, but typically fund managers avoid it and hold on to the debt papers till maturity. Investors must look at the portfolio of FMPs before investing. If an FMP is giving a relatively higher 'indicative yield', it may be investing in slightly riskier securities. Thus investors must assess the risk level of the portfolio by looking at the credit ratings of the securities. Indicative yield is the return which investors can expect from the FMP. Regulations do not allow mutual funds to guarantee returns, hence mutual funds give investors an idea of what returns can they expect from the fund. An important point to note here is that indicative yields are pre-tax. Investors will get lesser returns after they include the tax liability.

5.13.2 Capital Protection Funds

These are close ended funds which invest in debt as well as equity or derivatives. The scheme invests some portion of investor's money in debt instruments, with the objective of capital protection. The remaining portion gets invested in equities or derivatives instruments like options. This component of investment provides the higher return potential. It is beyond the scope of this book to explain how Options work. For that you may need to refer to NCFM modules 'Financial Markets: A Beginners' Module' or 'Derivatives Markets (Dealers) module'. It is important to note here that although the name suggests 'Capital Protection', there is no guarantee that at all times the investor's capital will be fully protected.

5.13.3 Gilt Funds

These are those funds which invest only in securities issued by the Government. This can be the Central Govt. or even State Govts. Gilt funds are safe to the extent that they do not carry any Credit Risk. However, it must be noted that even if one invests in Government Securities, interest rate risk always remains.

5.13.4 Balanced Funds

These are funds which invest in debt as well as equity instruments. These are also known as hybrid funds. Balanced does not necessarily mean 50:50 ratio between debt and equity. There can be schemes like MIPs or Children benefit plans which are predominantly debt oriented but have some equity exposure as well. From taxation point of view, it is important to note how much portion of money is invested in equities and how much in debt. This point is dealt with in greater detail in the chapter on Taxation.

5.13.5 MIPs

Monthly Income Plans (MIPs) are hybrid funds; i.e. they invest in debt papers as well as equities. Investors who want a regular income stream invest in these schemes. The objective of these schemes is to provide regular income to the investor by paying dividends; however, there is no guarantee that these schemes will pay dividends every month. Investment in the debt portion provides for the monthly income whereas investment in the equities provides for the extra return

which is helpful in minimising the impact of inflation.

5.13.6 Child Benefit Plans

These are debt oriented funds, with very little component invested into equities. The objective here is to capital protection and steady appreciation as well. Parents can invest in these schemes with a 5 – 15 year horizon, so that they have adequate money when their children need it for meeting expenses related to higher education.

5.14 Salient Features

Liquid funds carry an important position as an investment option for individuals and corporates to park their short term liquidity. y Corporates can get a better return that they would in a bank account for a relatively acceptable level of risk.

Concept Clarifier – Money Markets

Term to maturity of a debt paper is one of the most important characteristic of a debt paper. Debt papers can have term to maturity of as high as 20 years and more or as low as 90 days and less. The market for short term paper; i.e. paper with less than 1 year maturity attracts numerous participants , volumes and money. This is because the demand for short term money by corporates, financial institutions and Government is huge. At the same time, there is a class of investors with which there is an availability of short term funds.

Due to this constant demand and ready investors, the volumes in trades of this short-term paper have increased so much that this segment is classified as a separate segment in the debt markets and is known as Money Markets.

Money Market refers to that part of the debt market where paper with with a short term maturity1 year is traded. Commercial Papers, Certificate of Deposits, Treasury Bills, Collateralised Borrowing & Lending Obligations (CBLOs), Interest Rate Swaps (IRS), etc. are the instruments which comprise this market.

Liquid mutual funds are schemes that make investments in debt and money market securities with maturity of up to 91 days only.

In case of liquid mutual funds cut off time for receipt of funds is an important consideration. As per SEBI guidelines the following cut-off timings shall be observed by a mutual fund in respect of purchase of units in liquid fund schemes and the following NAVs shall be applied for such purchase:

- where the application is received up to 2.00 p.m. on a day and funds are available for utilization before the cut-off time without availing any credit facility, whether, intra-day or otherwise – the closing NAV of the day immediately preceding the day of receipt of application
- where the application is received after 2.00 p.m. on a day and funds are available for utilization on the same day without availing any credit facility, whether, intra-day or otherwise – the closing NAV of the day immediately preceding the next business day
- irrespective of the time of receipt of application, where the funds are not available for utilization before the cut-off time without availing any credit facility, whether, intra-day or

otherwise – the closing NAV of the day immediately preceding the day on which the funds are available for utilization.

This is relevant since corporates park their daily excess cash balances with liquid funds.

5.15 VALUATION OF SECURITIES

- 1) All money market and debt securities, including floating rate securities, with residual maturity of up to 60 days shall be valued at the weighted average price at which they are traded on the particular valuation day. When such securities are not traded on a particular valuation day they shall be valued on amortization basis.
- 2) All money market and debt securities, including floating rate securities, with residual maturity of over 60 days shall be valued at weighted average price at which they are traded on the particular valuation day. When such securities are not traded on a particular valuation day they shall be valued at benchmark yield/ matrix of spread over risk free benchmark yield obtained from agency(ies) entrusted for the said purpose by AMFI.
- 3) The approach in valuation of non traded debt securities is based on the concept of using spreads over the benchmark rate to arrive at the yields for pricing the non traded security.
 - a. A Risk Free Benchmark Yield is built using the government securities as the base.
 - b. A Matrix of spreads (based on the credit risk) are built for marking up the benchmark yields.
 - c. The yields as calculated above are Marked up/Marked-down for ill-liquidity risk
 - d. The Yields so arrived are used to price the portfolio.

Concept Clarifier – Interest accrual

Suppose a 90 Day Commercial Paper is issued by a corporate at Rs. 91. The paper will redeem at Rs. 100 on maturity; i.e. after 90 days. This means that the investor will earn $100 - 91 = \text{Rs. } 9$ as interest over the 90 day period. This translates into a daily earning of $9/90 = \text{Rs. } 0.10$ per day. (assuming zero coupon)

It is important to note here that although we said that the investor will earn 10 paise every day, there is no cash flow coming to the investor. This means that the interest is only *getting accrued*.

Now if the investor wishes to sell this paper after 35 days in the secondary market, what should be the price at which he should sell? Here we add the total accrued interest to the cost of buying and calculate the current book value of the CP. Since we are adding interest accrued to the cost, this method is known as Cost Plus Interest Accrued Method.

If 10 paise get accrued each day, then in 35 days, $35 * 0.10 = \text{Rs. } 3.5$ have got accrued.

The cost of the investor was Rs. 91 and Rs. 3.5 have got accrued as interest, so the current book value is $91 + 3.5 = \text{Rs. } 94.5$

5.16 FLOATING RATE SCHEME

These are schemes where the debt paper has a Coupon which keeps changing as per the changes in the interest rates. Thus there is no price risk involved in such paper. We know when rates go up, bond prices go down. However, if the rates increase and so also the coupon changes and increases to the level of the interest rates, there is no reason for the price of the paper to fall, as the investor is compensated by getting higher coupon, in line with the on going market interest rates. Investors prefer Floating Rate funds in a rising interest rate scenario.

5.17 WHAT IS PORTFOLIO CHURNING IN LIQUID FUNDS?

A liquid fund will constantly change its portfolio. This is because the paper which it invests in is extremely short term in nature. Regularly some papers would be maturing and the scheme will get the cash back. The fund manager will use this cash to buy new securities and hence the portfolio will keep changing constantly. As can be understood from this, Liquid Funds will have an extremely high portfolio turnover.

Liquid Funds see a lot of inflows and outflows on a daily basis. The very nature of such schemes is that money is parked for extremely short term. Also, investors opt for options like daily or weekly dividend. All this would mean, the back end activity for a liquid fund must be quite hectic – due to the large sizes of the transactions and also due to the large volumes.

As in equities, we have different index for Large caps, Midcaps & Small caps, similarly in bonds we have indices depending upon the maturity profile of the

constituent bonds. These indices are published by CRISIL e.g. CRISIL long term bond index, CRISIL liquid fund index etc.

5.18 STRESS TESTING OF ASSETS¹

It is important for mutual funds to ensure sound risk management practices are applied to ensure that the portfolio of liquid funds and money market funds is sound and any early warnings can be identified:

- AMCs should have stress testing policy in place which mandates them to conduct stress test on all Liquid Fund and MMMF Schemes. The stress test should be carried out internally at least on a monthly basis, and if the market conditions require so, AMC should conduct more frequent stress test.
- The concerned schemes shall be tested on the following risk parameters, among others deemed necessary by the AMC:
- Interest rate risk
- Credit risk
- Liquidity & Redemption risk
- While conducting stress test, it will be required to evaluate impact of the various risk parameters on the scheme and its Net Asset Value (NAV). The parameters used and the methodology adopted for conducting stress test on such type of scheme, should be detailed in the stress testing policy, which is required to be approved by the Board of AMC.
- This policy should be reviewed by the Board of the AMC and Trustees.

¹ CIR/IMD/DF/03/2015 April 30, 2015

POINTS TO REMEMBER

Debt funds are funds which invest money in debt instruments such as short and long term bonds, government securities, t-bills, corporate paper, commercial paper, call money etc.

Any debt paper will have Face Value, Coupon and Maturity as its standard characteristics.

Interest rates can either be fixed or floating.

The interest rate risk be reduced by adjusting the maturity of the debt fund portfolio.

Credit Risk or Risk of Default refers to the situation where the borrower fails to honour either one or both of his obligations of paying regular interest and returning the principal on maturity.

The price of an instrument (equity / bond) is nothing but the present value of the future cash flows.

An important factor in bond pricing is the Yield to Maturity (YTM). This is rate applied to the future cash flow (coupon payment) to arrive at its present value.

An important relation to remember is that: As interest rates go up, bond prices come down.

Fixed Maturity Plans are essentially close ended debt schemes. The money received by the scheme is used by the fund managers to buy debt securities with maturities coinciding with the maturity of the scheme.

Capital protection funds are close ended funds which invest in debt as well as equity or derivatives.

Balanced funds invest in debt as well as equity instruments. These are also known as hybrid funds.

Monthly Income Plans (MIPs) are also hybrid funds; i.e. they invest in debt papers as well as equities. Investors who want a regular income stream invest in these schemes.

Child Benefit Plans are debt oriented funds, with very little component invested into equities. The objective here is to capital protection and steady appreciation as well.

Liquid funds carry an important position as an investment option for individuals and corporates to park their short term liquidity.

Liquid mutual funds are schemes that make investments in debt and money market securities with maturity of up to 91 days only.

In case of liquid mutual funds cut off time for receipt of funds is an important consideration.

Valuation of securities is done by various methods as enumerated above in the chapter.

Floating Rate Schemes are schemes where the debt paper has a Coupon which keeps changing as per the changes in the interest rates.

Portfolio churning in liquid schemes happens more often due the short term nature of securities invested in.

It is important for mutual funds to ensure sound risk management practices are applied to ensure that the portfolio of liquid funds and money market funds is sound and any early warnings can be identified

- Mutual funds are collective investment schemes that pool together investors' money and invest with a common objective.
- While India is traditionally a nation of savers and investors in gold and fixed deposits, mutual funds is now gaining popularity as an investment avenue due to the various options and products offered.
- Mutual funds take the form of trusts, They have a three tier structure with a sponsor, an asset management company and a trust. While the sponsor floats the AMC, the trust ensures that the operations are as per the stated objective. The AMC professionally manages the money and invests the same. The assets of the mutual fund are held by a custodian.
- The registrars and transfer agent handle the investor records of the mutual funds.
- An NFO is a new fund offer, where an investor can invest in the new scheme launched by the mutual fund. The investor fills the form with the registrar or online and this is submitted to the mutual fund, which then allots the units to the investor. The investor should read the offer document carefully before investing.
- Investors have certain rights and obligations which they should be aware of before investing in a mutual fund.

UNIT -6 : Taxation and Regulations

Taxation in case of Mutual Funds must be understood, primarily, from Capital

Gains, Securities Transaction Tax (STT) and Dividends point of view. Tax rules differ for equity and debt schemes and also for Individuals, NRIs, OCBs and corporates.

Investors also get benefit under section 80C of the Income Tax Act if they invest in a special type of equity scheme, namely, Equity Linked Savings Scheme.

6.1 Capital Gains Taxation

1. Equity mutual funds

Long Term Capital Gains (More than 12 months holding period)	0%
Short Term Capital Gains (Less than or equal to 12 months holding period)	15% basic tax plus surcharge plus other cess that may be applicable

To understand Capital Gains Taxation, definitions of equity and debt schemes must be understood; similarly difference between Long Term and Short Term must also be understood.

1. Equity schemes

- As per SEBI Regulations, any scheme which has **minimum 65% of its average weekly net assets invested in Indian equities**, is an equity scheme.
- If the mutual fund units of an equity scheme are sold / redeemed / repurchased after 12 months, the profit is exempt.
- However if units are sold before 12 months it results in short term capital gain. The investor has to pay 15% as short term capital gains tax.
- While exiting the scheme, the investor will have to bear a Securities Transaction Tax (STT) @ 0.001% of the value of selling price.

Investors in all other schemes have to pay capital gains tax, either short term or long term. In case a scheme invests 100% in foreign equities, then such a scheme is not considered to be an equity scheme from taxation angle and the investor has to pay tax even on the long term capital gains made from such a scheme.

2. Mutual fund schemes (other than equity) i.e. debt funds, liquid schemes, gold ETF, short term bond funds etc.

	All other funds (other than equity)
Long Term Capital Gains (More than 36 months holding period)	Residents – 20% with indexation benefit
	FII – 10% without indexation benefit
Short Term Capital Gains (Less than or equal to 36 months holding period)	Marginal Rate of Tax Profit added to income

- In case such units are sold within 36 months, the gain is treated as short term capital gains. The same is added to the income of the tax payer and is taxed as per the applicable tax slab including applicable surcharge and cess depending on the status of the tax payer. This is known as taxation at the marginal rate.
- Long term capital gains arise when the units are sold beyond 36 months. Here the taxation rules are
 - o For resident investor - 20% (plus surcharge and cess as applicable) (with indexation)
 - o For FII - 10% basic tax (plus surcharge and cess as applicable) on long term capital gains (without indexation)

6.2 Indexation Benefit

Indexation is a procedure by which the investor can get benefit from the fact that inflation has eroded his returns.

Indexation works on the simple concept that if an investor buys a unit @ Rs. 10 and sells it @ Rs. 30 after 5 years, then his profit of Rs. 20 per unit needs to be adjusted for the inflation increase during the same time period. This is because inflation reduces purchasing power. What Rs. 100 could have bought when he bought the unit @ Rs.10, would now have increased in price due to inflation. Thus he can now buy less for the same Rs. 100.

If during the same time, inflation has increased by 12%, then the adjusted cost of the unit purchased (at today's price) would be $\text{Rs. } 10 * (1 + 12\%) = \text{Rs. } 11.2$.

So his profit would not be Rs. 20, but $\text{Rs. } 30 - \text{Rs. } 11.2 = \text{Rs. } 18.8$.

The cost inflation index is notified by the Central Government (from 1981 up to 2015-16). The same is used by the tax payer for calculating long term capital gains.

Example

An investor purchased mutual fund units in January 2006 of Rs.10,000. The same was sold in the previous year for Rs.25,000. Long term capital gains applicable is as follows:

- ✓ **FII** - Without availing indexation benefit - Pay 10% on Rs.15,000 ($\text{Rs. } 25,000 - \text{Rs. } 10,000$) = Rs.1,500
- ✓ **Resident** - Calculate indexed cost of acquisition ($\text{Rs. } 10,000 \times \frac{1081}{497}$) = Rs.21,751, Capital gains = $\text{Rs. } 25,000 - \text{Rs. } 21,751 = \text{Rs. } 3,249$, Tax@20% on Rs.3249 = Rs.650

6.3 Dividend Distribution Tax

The dividend declared by mutual funds in respect of the various schemes is exempt from tax in the hands of investors. In case of debt mutual funds, the AMCs are required to pay Dividend Distribution Tax (DDT) from the distributable income. This ensures ease in tax collection. However, in case of equity funds no DDT is payable.

The rates for DDT are as follows:

- ✓ For individuals and HUF – 25% (plus surcharge and other cess as applicable)
- ✓ For others – 30% (plus surcharge and other cess as applicable)
- ✓ On dividend distributed to a non-resident or to a foreign company by an Infrastructure Debt Fund – 5% (plus surcharge and other cess as applicable)

6.4 Why Fmps Are Popular?

A fixed maturity plan is a close ended debt fund for a specified period. The maturity of the papers invested in is matched with the duration of the plan.

Consider a case where Investor A invests Rs.100,000 in a bank fixed deposit @9% for 3 years and Investor B invests Rs.100,000 in a 3 year FMP. The indicative yield of the FMP is assumed also to be at 9%. We shall analyze the tax benefit of investing in an FMP.

For Investor A, the interest income per annum is $100,000 \times 9\% = \text{Rs.}9,000$. Each year the investor would have to pay tax of Rs.2,700 (30%, assuming he is taxed at the maximum marginal rate). Total tax payable in 3 years is Rs.8,100.

For Investor B, since the investment is over 36 months, it would qualify as long term capital gains.

When the investor entered the fund, the cost inflation index was at 939 and when he exited at maturity the cost inflation index had risen to 1081.

Thus the new indexed cost of acquisition will become $\text{Rs.}100,000 \times 1081/939 = \text{Rs.}115,122$

Now the profit will be equal to $115,122 - 100,000 = \text{Rs.}15,122$

Since we have taken the benefit of indexation, the applicable tax rate will be 20%, (surcharge / cess excluded for calculation)

So the tax payable will be equal to $15,122 \times 20\% = \text{Rs.}3,024$.

The point to be observed here is that FMP is giving a higher return (post tax) as compared to a bank FD. This is true only if the investor is in the 30% tax bracket.

However Bank fixed deposit offer premature withdrawal facility; hence they offer better liquidity as compared to FMP.

Under section 10(23D) of the Income tax Act, 1961, income earned by a Mutual Fund registered with SEBI is exempt from income tax.

6.5 Overview

Regulations ensure that schemes do not invest beyond a certain percent of their NAVs in a single security. Some of the guidelines regarding these are given below:

- No scheme can invest more than 10% of its NAV in rated debt instruments of a single issuer wherein the limit is reduced to 10% of NAV which may be extended to 12% of NAV with the prior approval of the Board of Trustees and the Board of Asset Management Company.²
- No scheme can invest more than 10% of its NAV in unrated paper of a single issuer and total investment by any scheme in unrated papers cannot exceed 25% of the NAV.
- No mutual fund scheme shall invest more than 30% in money market instruments of an issuer: Provided that such limit shall not be applicable for investments in Government securities, treasury bills and collateralized borrowing and lending obligations.
- No fund, under all its schemes can hold more than 10% of company's paid up capital carrying voting rights.
- No scheme can invest more than 10% of its NAV in equity shares or equity related instruments of any company of a single company. Provided that, the limit of 10% shall not be applicable for investments in case of index fund or sector or industry specific scheme.

² SEBI/HO/IMD/DF2/CIR/P/2016/35

- ♦ If a scheme invests in another scheme of the same or different AMC, no fees will be charged. Aggregate inter scheme investment cannot exceed 5% of net asset value of the mutual fund.
- ♦ No scheme can invest in unlisted securities of its sponsor or its group entities.
- ♦ Schemes can invest in unlisted securities issued by entities other than the sponsor or sponsor's group. Open ended schemes can invest maximum of 5% of net assets in such securities whereas close ended schemes can invest upto 10% of net assets in such securities.
- ♦ Schemes cannot invest in listed entities belonging to the sponsor group beyond 25% of its net assets.
- ♦ Total exposure of debt schemes of mutual funds in a particular sector (excluding investments in Bank CDs, CBLO, G-Secs, T Bills, short term deposits of scheduled commercial banks and AAA rated securities issued by Public Financial Institutions and Public Sector Banks) shall not exceed 25% of the net assets of the scheme. An additional exposure to financial services sector not exceeding 5% of the net assets of the scheme shall be allowed only by way of increase in exposure to Housing Finance Companies (HFCs) for HFCs rated AA and above and registered with National Housing Bank (NHB).
- ♦ Total exposure of debt schemes of mutual funds in a group (excluding investments in securities issued by Public Sector) shall not exceed 20% of the net assets of the scheme. Such investment limit may be extended to 25% of the net assets of the scheme with the prior approval of the Board of Trustees.³

There are many other mutual fund regulations which are beyond the purview of this module. Candidates are requested to refer to AMFI-Mutual Fund (Advisors) Module for more information.

6.6 What is the name of Industry Association for the Mutual Fund Industry?

AMFI (Association of Mutual Funds in India) is the industry association for the mutual fund industry in India which was incorporated in the year 1995.

6.7 What are the Objectives of AMFI?

The Principal objectives of AMFI are to:

- 1) Promote the interests of the mutual funds and unit holders and interact with regulators- SEBI/RBI/Govt./Regulators.
- 2) To set and maintain ethical, commercial and professional standards in the industry and to recommend and promote best business practices and code of conduct to be followed by members and others engaged in the activities of mutual fund and asset management.
- 3) To increase public awareness and understanding of the concept and working of mutual funds in the country, to undertake investor awareness programmes and to disseminate information on the mutual fund industry.
- 4) To develop a cadre of well-trained distributors and to implement a programme of training and certification for all intermediaries and others engaged in the industry.

³ SEBI/HO/IMD/DF2/CIR/P/2016/35 February 15, 2016

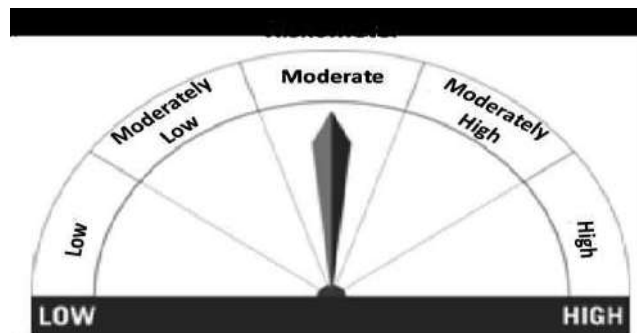
6.8 Product Labelling in Mutual Funds – Riskometer⁴

The product labeling in mutual funds shall be based on the level of risk which shall be as under:

- Low- principal at low risk
- Moderately Low - principal at moderately low risk
- Moderate - principal at moderate risk
- Moderately High - principal at moderately high risk
- High - principal at high risk

There shall be pictorial depiction of risk named 'riskometer' which shall appropriately depict the level of risk in any scheme.

The following depicts a scheme having moderate risk



Mutual funds may 'product label' their schemes on the basis of the best practice guidelines issued by Association of Mutual Funds in India (AMFI) in this regard.

6.9 Advantages of Mutual Funds

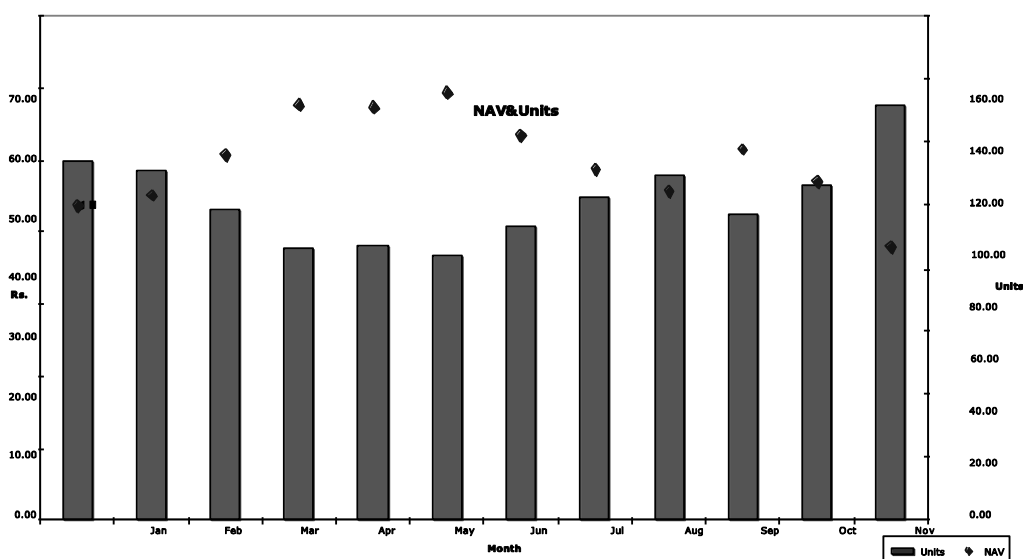
- Mutual Funds give investors best of both the worlds. Investor's money is managed by professional fund managers and the money is deployed in a diversified portfolio. Retail investors cannot buy a diversified portfolio for say Rs.5000, but if they invest in a mutual fund, they can own such a portfolio. Mutual Funds help to reap the benefit of returns by a portfolio spread across a wide spectrum of companies with small investments.
- Investors may not have resources at their disposal to do detailed analysis of companies. Time is a big constraint and they may not have the expertise to read and analyze balance sheets, annual reports, research reports etc. A mutual fund does this for investors as fund managers, assisted by a team of research analysts, scan this data regularly.
- Investors can enter / exit schemes anytime they want (at least in open ended schemes). They can invest in an SIP, where every month, a stipulated amount automatically goes out of their savings account into a scheme of their choice. Such hassle free arrangement is not always easy in case of direct investing in shares.
- There may be a situation where an investor holds some shares, but cannot exit the same as there are no buyers in the market. Such a problem of illiquidity generally does not exist in case of mutual funds, as the investor can redeem his units by approaching the mutual fund.
- As more and more AMCs come in the market, investors will continue to get newer products

⁴ CIR/IMD/DF/4/2015 April 30, 2015

and competition will ensure that costs are kept at a minimum. Initially mutual fund schemes could invest only in debt and equities. Then they were allowed to invest in derivative instruments. Gold ETFs were introduced, investing in international securities was allowed and recently real estate mutual funds were also in the process of being cleared. We may one day have commodity mutual funds or other exotic asset classes oriented funds. Thus it is in investor's best interest if they are aware of the nitty gritty of MFs.

- Investors can either invest with the objective of getting capital appreciation or regular dividends. Young investors who are having a steady regular monthly income would prefer to invest for the long term to meet various goals and thus opt for capital appreciation (growth or dividend reinvestment options), whereas retired individuals, who have with them a kitty and would need a monthly income would like to invest with the objective of getting a regular income. This can be achieved by investing in debt oriented schemes and opting for dividend payout option. Mutual funds are therefore for all kinds of investors.
- An investor with limited funds might be able to invest in only one or two stocks / bonds, thus increasing his / her risk. However, a mutual fund will spread its risk by investing in a number of sound stocks or bonds. A fund normally invests in companies across a wide range of industries, so the risk is diversified.
- Mutual Funds regularly provide investors with information on the value of their investments. Mutual Funds also provide complete portfolio disclosure of the investments made by various schemes and also the proportion invested in each asset type.
- Mutual Funds offer investors a wide variety to choose from. An investor can pick up a scheme depending upon his risk/ return profile.
- All the Mutual Funds are registered with SEBI and they function within the provisions of strict regulation designed to protect the interests of the investor.

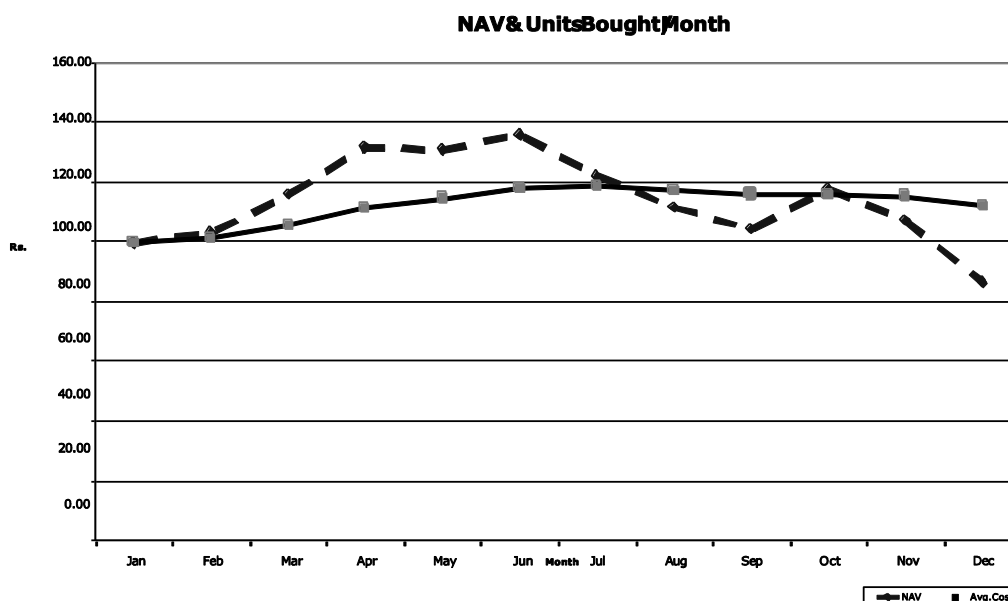
6.10 What is a Systematic Investment Plan (SIP)?



The above chart shows how the NAV of a scheme has moved in a given year. There was no way the investor could have known that in May the peak will be formed, after which the NAV will slide

for the rest of the year. The investor, by deciding to invest Rs.5000 regularly each month automatically got the benefit of the swings. As can be seen, he got least number of units in the months of Mar, Apr and May, whereas when the NAV continued its downward journey subsequently, he accumulated higher number of units.

This is the benefit of disciplined investing. Many a times it is seen that in bear markets, when the NAVs are at their rock bottom, investor are gripped by panic and either stop their SIPs or worse, sell their units at a loss. Due to the in-built mechanism of SIP, investors average cost reduces as can be seen from the chart below:



Averaging works both ways. Thus, when the NAV moves sharply in either direction, the impact of averaging is clearly witnessed as the change in average cost for the investor is only marginal.

Here it can be seen that although the NAV has swung in a range of Rs.80 to Rs.140, the average cost for the investor has remained in the narrow range of Rs.100 to Rs.120. This is the impact of averaging.

As can be seen, SIP helps in averaging cost of acquiring units; however STP can prove to be even better than SIP.

There are a small section of investors like domestic staff, drivers and other employees earning low incomes and who may not have PAN cards or other documentation required for investing in mutual funds. They are advised by their employers to invest in SIPs. SEBI, in order to facilitate their investments, has withdrawn the requirement of PAN for SIPs where investments are not over Rs.50,000/- in a financial year. Such installments are called micro SIPs.

6.11 What is Systematic Transfer Plan (STP)?

In SIP investor's money moves out of his savings account into the scheme of his choice. Let's say an investor has decided to invest Rs 5,000 every month, such that Rs. 1,000 gets invested on the 5th, 10th, 15th, 20th and 25th of the month. This means that the Rs.5000, which will get invested in stages till 25th will remain in the savings account of the investor for 25 days and earn interest @ 4-6%, depending on the bank.

If the investor moves this amount of Rs.5000 at the beginning of the month to a Liquid Fund and transfers Rs.1000 on the given dates to the scheme of his choice, then not only will he get the

benefit of SIP, but he will earn slightly higher interest as well in the Liquid Funds as compared to a bank FD. As the money is being invested in a Liquid Fund, the risk level associated is also minimal. Add to this the fact that liquid funds do not have any exit loads. This is known as STP.

6.12 What is Systematic Withdrawal Plan (SWP)?

SWP stands for Systematic Withdrawal Plan. Here the investor invests a lump sum amount and withdraws some money regularly over a period of time. This results in a steady income for the investor while at the same time his principal also gets drawn down gradually.

Say for example an investor aged 60 years receives Rs.20 lakh at retirement. If he wants to use this money over a 20 year period, he can withdraw $\text{Rs. } 20,00,000 / 20 = \text{Rs. } 1,00,000$ per annum. This translates into Rs.8,333 per month. (The investor will also get return on his investment of Rs.20 lakh, depending on where the money has been invested by the mutual fund). In this example we have not considered the effect of compounding. If that is considered, then he will be able to either draw some more money every month, or he can get the same amount of Rs.8,333 per month for a longer period of time.

The conceptual difference between SWP and MIP is that SWP is an investment style whereas MIP is a type of scheme. In SWP the investor's capital goes down whereas in MIP, the capital is not touched and only the interest is paid to the investor as dividend.

6.13 Choosing between dividend payout, dividend reinvestment and growth options – which one is better for the investor?

Investors often get confused between the above mentioned (Dividend Payout, Dividend Reinvestment and Growth Options) three options which he has to choose while investing in mutual fund's units. These options have to be selected by the investor at the time of purchasing the units and many a times investors feel that the dividend reinvestment option is better than growth as they get more number of units. Let's understand the three options :

6.13.1 Growth Option

Growth option is for those investors who are looking for capital appreciation. Say an investor aged 25 invests Rs.1 lakh in an equity scheme. He would not be requiring a regular income from his investment as his salary can be used for meeting his monthly expenses. He would instead want his money to grow and this can happen only if he remains invested for a long period of time. Such an investor should go for Growth option. The NAV will fluctuate as the market moves. So if the scheme delivers a return of 12% after 1 year, his money would have grown by Rs.12,000. Assuming that he had invested at a NAV of Rs.100, then after 1 year the NAV would have grown to Rs.112.

Notice here that neither is any money coming out of the scheme, nor is the investor getting more units. His units will remain at 1,000 ($1,00,000 / 100$) which he bought when he invested Rs.1 lakh @ Rs. 100/ unit.

6.13.2 Dividend Payout Option

In case an investor chooses a Dividend Payout option, then after 1 year he would Receive Rs. 12 as dividend. This results in a cash outflow from the scheme. The impact of this would be that the NAV would fall by Rs.12 (to Rs. 100 after a year. In the growth option the NAV became Rs. 112) . Here he will not get any more number of units (they remain at 1,000), but will receive Rs.12,000

as dividend (Rs.12 per unit * 1,000 units).

Dividend Payout will not give him the benefit of compounding as Rs.12,000 would be taken out of the scheme and will not continue to grow like money which is still invested in the scheme.

6.13.3 Dividend Reinvestment Option

In case of Dividend Reinvestment option, the investor chooses to reinvest the dividend in the scheme. So the Rs.12, which he receives as dividend gets invested into the scheme again @ Rs.100. This is because after payment of dividend, the NAV would fall to Rs.100.

Thus the investor gets Rs.12,000/ Rs. 100 = 120 additional units. Notice here that although the investor has got 120 units more, the NAV has come down to Rs.100.

Hence the return in case of all the three options would be same. For Growth Option, the investor will have 100 units @ 112, which equals to Rs.1,12,000 while for Dividend Reinvested Option the investor will have 1120 units @ Rs. 100 which again amounts to Rs. 1,12,000. Thus it can be seen that there is no difference in either Growth or Dividend Reinvestment Plan.

It must be noted that for equity schemes there is no Dividend Distribution Tax, however for debt schemes, investor will not get Rs.12 as dividend, but less due to Dividend Distribution Tax. In case of Dividend Reinvestment Option, he will get slightly lesser number of units and not exactly 120 to the extent of Dividend Distribution Tax.

In case of Dividend Payout option the investor will lose out on the power of compounding from the second year onwards.

Concept Clarifier – Power of Compounding

Compound Interest refers to interest earned on interest. The formula for Compound Interest is:

$$A = P * (1 + r)^t$$

Where,

A = Amount

P = Principal invested

r = rate of interest per annum t= Number of Years

As can be seen, the three variables that affect the final Amount are Principal, rate of interest and time for which money is invested.

It is time which acts as the biggest determinant as it pulls up the value in an exponential manner. Hence it is important to invest for the long term to get the benefit of compounding.

POINTS TO REMEMBERS

Taxation in case of Mutual Funds must be understood, primarily, from Capital

Gains, Securities Transaction Tax (STT) and Dividends point of view. Tax rules differ for equity and debt schemes and also for Individuals, NRIs, OCBs and corporates.

Investors also get benefit under section 80C of the Income Tax Act if they invest in a special type of equity scheme, namely, Equity Linked Savings Scheme.

Capital gains tax must be paid on all mutual fund schemes except equity schemes.

Indexation is a procedure by which the investor can get benefit from the fact that inflation has eroded his returns.

The dividend declared by mutual funds in respect of the various schemes is exempt from tax in the hands of investors. In case of debt mutual funds, the AMCs are required to pay Dividend Distribution Tax (DDT) from the distributable income.

Regulations ensure that schemes do not invest beyond a certain percent of their NAVs in a single security.

AMFI (Association of Mutual Funds in India) is the industry association for the mutual fund industry in India which was incorporated in the year 1995.

The product labeling in mutual funds shall be based on the level of risk which is represented pictorially.

Mutual funds have various advantages like professional management, expert fund managers, investment through small amounts, etc.

Systematic investment plans helps the investor invest a certain sum of money every month. This helps in regular saving as well as evens out the market differences over the period of investment

SEBI, in order to facilitate investments in SIPs by small investors, has withdrawn the requirement of PAN for SIPs where investments are not over Rs.50,000/- in a financial year. Such instalments are called micro SIPs.

Transfer of funds from one mutual fund scheme to another at regular intervals is referred to as systematic transfer plan.

In a Systematic Withdrawal Plan the investor invests a lump sum amount and withdraws some money regularly over a period of time.

Investors must understand clearly the various options like dividend payout, dividend reinvestment and growth options in mutual fund schemes and choose the one that helps them achieve their goal.

ABBREVIATIONS:

NSE- National Stock Exchange of India Ltd.
SEBI - Securities Exchange Board of India
NCFM - NSE's Certification in Financial Markets
NSDL - National Securities Depository Limited
CSDL - Central Depository Services (India) Limited
NCDEX - National Commodity and Derivatives Exchange Ltd.
NSCCL - National Securities Clearing Corporation Ltd.
FMC - Forward Markets Commission
NYSE- New York Stock Exchange
AMEX - American Stock Exchange
OTC- Over-the-Counter Market
LM - Lead Manager
IPO- Initial Public Offer
DP - Depository Participant
DRF - Demat Request Form
RRF - Remat Request Form
NAV - Net Asset Value
EPS - Earnings Per Share
DSCR - Debt Service Coverage Ratio
IISL - India Index Services & Products Ltd
CRISIL- Credit Rating Information Services of India Limited
CARE - Credit Analysis & Research Limited
ICRA - Investment Information and Credit Rating Agency of India
ISC - Investor Service Cell
IPF - Investor Protection Fund
SCRA - Securities Contract (Regulation) Act
SCRR - Securities Contract (Regulation) Rules
NSC – National Savings Certificate
PPF – Public Provident Fund
MCX – Multi Commodity Exchange of India
NCDEX – National Commodities and Derivatives Exchange
DP – Depository Participant
DEA – Department of Economic Affairs
DCA - Department of Company Affairs
ETF – Exchange Traded Funds
IPO – Initial Public Offering
NAV – Net Asset Value
ROC – Registrar of Companies

ASBA – Applications Supported by Blocked Amounts
GDR – Global Depository Receipts
ADR – American Depository Receipts
FCCB – Foreign Currency Convertible Bonds
SCORES – SEBI Complain Redressal System
ADS – American Depository Share
NEAT – National Exchange for Automated Trading
NYSE – New York Stock Exchange
NASDAQ - National Association of Securities Dealers Automated Quotation System
AMEX – American Stock Exchange
OTC – Over the Counter
SBTS – Screen Based Trading system

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