NISM CERTIFICATION EXAMINATION WORK BOOK

XII

Securities Markets Foundation

National Institute of Securities Markets
A Capacity Building Initiative of SEBI

Workbook for

NISM-Series-XII: Securities Markets Foundation

Certification Examination

National Institute of Securities Markets

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This workbook has been developed to assist candidates in preparing for the National Institute of Securities Markets (NISM) Certification Examination for Securities Markets Foundation.

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Foreword

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The NISM certification programs aim at enhancing the quality and standards of professionals employed in various segments of the financial sector. NISM develops and conducts certification examinations and Continuing Professional Education (CPE) programs that aim at ensuring that professionals meet the defined minimum common knowledge benchmark for various critical securities market functions.

NISM certification examinations and educational programs service different securities market intermediaries focusing on varied product lines and functional areas. NISM certifications have established knowledge benchmarks for various market products and functions such as equities, mutual funds, derivatives, compliance, operations, advisory and research. NISM certification examinations and training programs provide a structured learning plan and career path to students and job aspirants, wishing to make a professional career in the securities markets.

NISM supports candidates by providing lucid and focused workbooks that assist them in understanding the subject and preparing for NISM Examinations. The book covers all important topics to impart basic knowledge of the Indian securities markets to the participants and the related rules and regulations. These include the basics of the Indian Securities Markets, processes involved in Primary and Secondary Markets and the schemes and products in Mutual Funds and Derivatives Markets in India. The book also covers the essential steps in financial planning process. It will be immensely useful to all those who want to learn about the various aspects of securities markets.

Sashi Krishnan
Director, NISM

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While the NISM Certification examination will be largely based on material in this workbook, NISM does not guarantee that all questions in the examination will be from material covered herein.

Acknowledgement

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NISM gratefully acknowledges the contribution of the Examination Committee for NISM Series XII: Securities Markets Foundation Certification Examination consisting of industry experts.

About NISM Certifications

NISM is engaged in developing and administering Certification Examinations and Continuing Professional Education (CPE) Programmes for professionals employed in various segments of the Indian securities markets. These Certifications and CPE Programmes are being developed and administered by NISM as mandated under Securities and Exchange Board of India (Certification of Associated Persons in the Securities Markets) Regulations, 2007.

The skills, expertise and ethics of professionals in the securities markets are crucial in providing effective intermediation to investors and in increasing the investor confidence in market systems and processes. NISM seeks to ensure that market intermediaries meet defined minimum common benchmark of required functional knowledge through Certification Examinations and CPE Programmes on Mutual Funds, Equities, Derivatives, Securities Operations, Compliance, Portfolio Management etc.

These Certifications create quality market professionals and catalyzes greater investor participation in the markets. They also provide structured career paths to students and job aspirants in the securities markets.

About the Certification Examination for Securities Markets Foundation

The NISM-Series-XII: Securities Markets Foundation Certification Examination is for entry level professionals, who wish to make a career in the securities markets. This certification examination will also be useful to all those individuals who are interested in acquiring a basic knowledge of the Indian Securities markets, including:

- Entry level professionals in the securities markets
- Employees of intermediaries functioning in the securities industry
- Professionals in other industries interested in gaining knowledge of the securities markets
- Students
- Homemakers
- Teachers

The purpose of this exam is to impart basic knowledge of the Indian securities markets to the participants and related rules and regulations.

This examination is a voluntary examination.

Examination Objectives

On successful completion of the examination, the candidate should:

- Know the basics of the Indian Securities Markets.
- Know the various processes involved in Primary and Secondary Markets
- Understand the schemes and products in Mutual Funds and Derivatives Markets in India.

Assessment Structure

The examination consists of 100 questions of 1 mark each and should be completed in 2 hours. The passing score on the examination is 60%. There shall be no negative marking.

How to register and take the examination

To find out more and register for the examination please visit *www.nism.ac.in*

Important

- Please note that the Test Centre workstations are equipped with either Microsoft Excel or OpenOffice Calc. Therefore, candidates are advised to be well versed with both of these softwares for computation of numericals.

- The sample questions and the examples discussed in the book are for reference purposes only. The level of difficulty may vary in the actual examination.

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Syllabus Outline and Weightages

Chapter No.	Chapter Name	Weightage (%)
1	Understanding Securities Markets and Performance	10
2	Securities: Types, Features and Concepts of Asset Allocation and Investing	20
3	Primary Markets	20
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6	Derivative Markets	10
	Total Weightage	**100**

CHAPTER 1: UNDERSTANDING SECURITIES MARKETS AND PERFORMANCE

LEARNING OBJECTIVES:

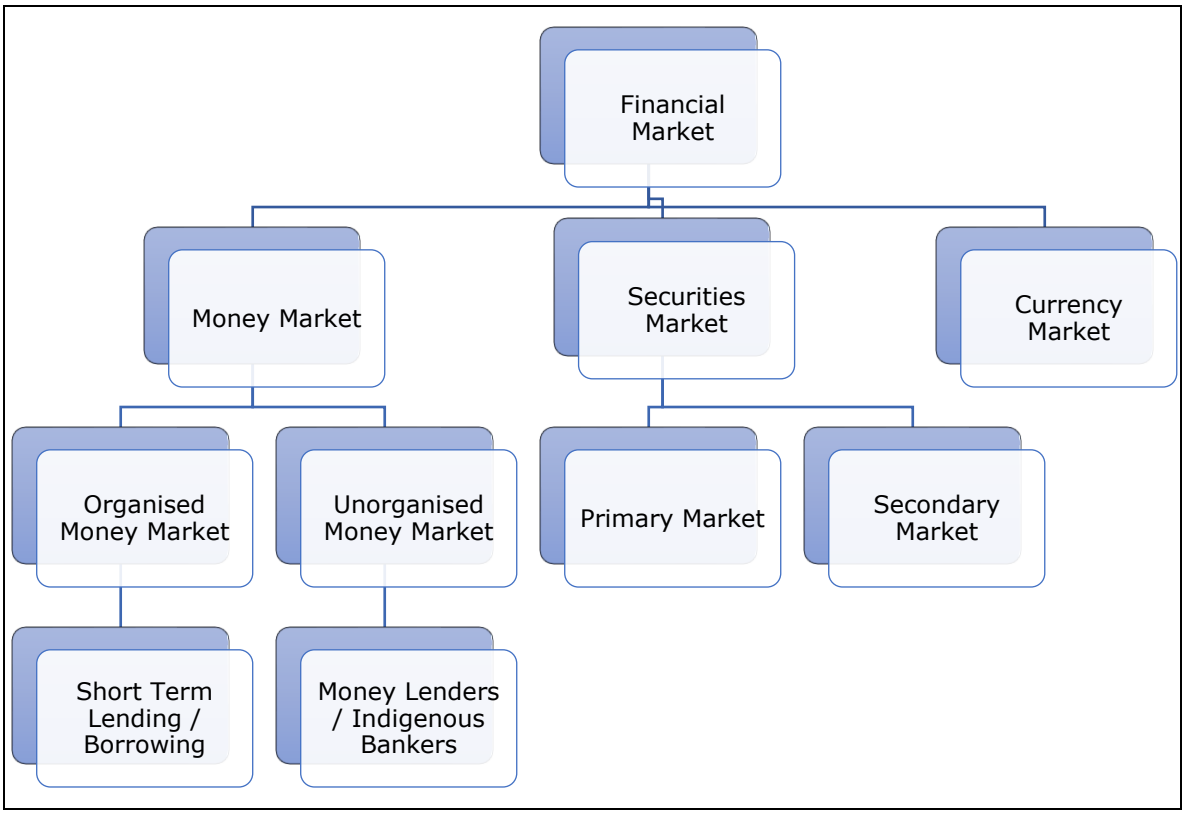
After studying this chapter, you should know about:

- Securities markets and the definition of securities
- Structure of securities markets and its participants
- Role of securities markets in allocation of capital
- Recent technological advances related to cyber security and regulatory sandbox

1.1 Securities Markets

Financial market consists of various types of markets (money market, debt market, equity market); investors (buyers of securities), issuers of securities (users of funds), intermediaries and regulatory bodies (SEBI, RBI etc.). The components of the Indian financial market can be illustrated through Figure 1.1. In this book, the focus will be on the securities markets.

Figure: 1.1 Components of Indian Financial Markets



The securities markets provide a regulated institutional framework for an efficient flow of capital (equity and debt) from investors to businesses in the financial market system. It provides a channel

for allocation of savings to investments. Thus, the savings of households, business firms and government can be channelized through the medium of securities market to fund the capital requirements of a business enterprise and government.

Savings are linked to investments by a variety of intermediaries through a range of complex financial products called "securities". Securities are financial instruments issued by companies, financial institutions or the government to raise funds. These securities are purchased by investors who in turn convert their savings into financial assets.

1.2 Securities

The term "securities" has been defined in Section 2 (h) of the Securities Contracts (Regulation) Act, 1956. The Act defines securities to include:

a) shares, scrips, stocks, bonds, debentures, debenture stock or other marketable securities of a like nature in or of any incorporated company or a pooled investment vehicle or other body corporate;

b) derivative[1];

c) units or any other instrument issued by any collective investment scheme to the investors in such schemes;

d) 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;

e) units or any other such instrument issued to the investors under any mutual fund scheme (securities do not include any unit linked insurance policy or scrips or any such instrument or unit, by whatever name called which provides a combined benefit risk on the life of the persons and investment by such persons and issued by an insurer refer to in clause (9) of section 2 of the Insurance Act, 1938(4 of 1938));

f) units or any other instrument issued by any pooled investment vehicle;

g) any certificate or instrument (by whatever name called), issued to an investor by any issuer being a special purpose distinct entity which possesses any debt or receivable, including mortgage debt, assigned to such entity, and acknowledging beneficial interest of such investor in such debt or receivable, including mortgage debt, as the case maybe;

h) government securities;

[1] As per SCRA, derivative includes (i) a security derived from a debt instrument, share, loan, whether secured or unsecured, risk instrument or contract for differences or any other form of security; (ii) a contract which derives its value from the prices, or index of prices, of underlying securities; (iii) commodity derivatives; and (iv) such other instruments as may be declared by the Central Government to be derivatives.

i) such other instruments as may be declared by the Central Government to be securities (including onshore rupee bonds issued by multilateral institutions like the Asian Development Bank and the International Finance Corporation, electronic gold receipts[2], zero coupon zero principal instruments[3]);

j) rights or interest in securities.

1.2.1 Features of Securities:

- A security represents the terms of exchange of money between two parties. Securities are issued by companies, financial institutions or the government and are purchased by investors who have the money to invest.[4] The broader universe of savers with surplus to invest is available to the issuers of securities; a universe of wider options is available to savers to invest their money in.
- Security issuance allows borrowers to raise money at a reasonable cost while security ownership allows investors to convert their savings into financial assets which provide a return. Thus, the objectives of the issuer and the investor are complementary, and the securities market provides a platform to mutually satisfy their goals.
- The business enterprises issue securities to raise money from the entity with surplus funds through a regulated contract. The enterprise lists these securities on a stock exchange to ensure that the security is liquid (can be sold when needed) and provides information about its activities and financial performance to the investing entity.
- The issuer of the security provides the terms on which the capital is being raised.
- The investor in the security has a claim to the rights represented by the securities. These rights may involve ownership, participation in management or claims on assets.
- Securities can be broadly classified into equity and debt. The terms of issue, rights of investors, risk and return for these two classes of securities varies widely. Return refers to the benefits that the investor will receive from investing in the security. Risk refers to the possibility that the expected returns may not materialise. For example, a company may seek capital from an investor by issuing a bond. A bond is a debt security, which means it represents a borrowing of the company. The security will be issued for a specific period, at the end of which the amount borrowed will be repaid to the investor. The return will be in the form of interest, paid periodically to the investor, at a rate and frequency specified in

[2] Vide Gazette notification dated December 24, 2021, Central Government has declared 'Electronic Gold Receipt' as securities. Electronic Gold Receipt means an electronic receipt issued on the basis of deposit of underlying physical gold in accordance with SEBI regulations.

[3] Vide Gazette notification dated July 16, 2022, Central Government has declared 'Zero Coupon Zero Principle Instrument' as securities. Zero Coupon Zero Principle Instrument means an instrument issued by not-for-profit organisations registered with Social Stock Exchanges.

[4] Derivatives are created by exchanges.

the security. The risk is that the company may fall into bad times and default on the payment of interest or return of principal or both.

- An investor has the right to seek information about the securities in which he invests. For example, when investors buy the bond, they can seek information about the company, ask for evaluation of its ability to repay the borrowed amount, seek the rights to claim their dues if the company shuts down, and also have the benefit of a liquid market in which they can sell off the security if they do not like to bear the risks. Thus, the institutional structure of securities markets enables assuming risks in exchange for returns, evaluating the risks and return based on information available about the security, and transferring of risk when the investor sells the security to another investor who may be willing to bear the risk, for the expected return.

Those who need money can source it from those who have it, primarily through two means:

a. A one-to-one transaction, whose terms are determined and agreed to mutually
b. A standard security, whose terms are accepted by both parties

What is the difference between these two choices? Assume that a bank accepts a 1-year deposit from a customer. This is a transaction between the bank and its customer. The bank has borrowed the money; the customer has lent the money. The bank will repay the deposit only to the customer. The interest rate is fixed when the deposit is accepted. The deposit has to be kept for a 1-year period. If the customer needs money earlier than that, the deposit can be broken but may be subject to penalties. The bank may issue a fixed deposit receipt to the customer, but that receipt is not transferable.

Assume instead that, the bank issues a certificate of deposit (CD), which is a security. The CD is also for 1-year and carries the same interest rate as the deposit. But the similarities end there. The customer can either hold the CD till its maturity or can transfer it to another customer before the maturity date. The investor who holds the CD on the date of its maturity submits it to the bank and collects the maturity value. When the CD transfers from one investor to another, the price is determined based on what both agree as the market rate at that time.

When a monetary transaction between two parties is structured using a security, the flexibility to both parties is higher. Bank deposits, inter-corporate deposits, company fixed deposits, deposits with housing finance and other finance companies, chit funds and benefit funds are all not securities. Insurance policies are also contracts and are not securities. Investment in provident funds or pension funds is also not investment in securities. All these are financial arrangements between two parties that are not in the form of transferable securities.

1.3 Securities Markets: Structure and Participants

Structure

The market in which securities are issued, purchased by investors, and subsequently transferred among investors is called the securities market. The securities market has two interdependent and inseparable segments, viz., the primary market and the secondary market.

The primary market, also called the new issue market, is where issuers raise capital by issuing securities to investors. The secondary market, also called the stock/securities exchange, facilitates trade in already-issued securities, thereby enabling investors to exit from an investment. The risk in a security investment is transferred from one investor (seller) to another (buyer) in the secondary markets. Thus, the primary market creates financial assets, and the secondary market makes them marketable.

Participants

Investors and issuers are the main building blocks of a securities market. Issuers supply securities and create a demand for capital and investors buy the securities and thereby provide the supply of capital. Interaction between investors and borrowers is facilitated through financial intermediaries who are the third component of the market. The entire process of issuance, subscription and transaction in securities is subject to regulatory control and supervision.

There are several major players in the primary market. These include the merchant bankers, mutual funds, financial institutions, foreign portfolio investors (FPIs), insurance companies, individual investors, bankers to the issue, brokers, and depository participants; the issuers include companies, bodies corporate. The role of stock exchanges in the primary market is limited to the extent of listing of the securities.

The constituents of secondary market are stock exchanges, stock brokers (who are members of the stock exchanges), asset management companies (AMCs), financial institutions, foreign portfolio investors (FPIs), investment companies, individual investors, depository participants and banks.

The Registrars and Transfer Agents (RTAs), custodians and depositories are capital market intermediaries, which provide important infrastructure services to both the primary and secondary markets.

Investors

Investors are individuals or organisations with surplus funds which can be used to purchase securities. The chief objective of investors is to convert their surplus and savings into financial assets that earn a return. Based on the size of the investment and sophistication of investment strategies, investors are divided into two categories--retail investors and institutional investors.

Retail investors are individual investors who invest money on their personal account. Institutional investors are organizations that invest large sum of money and employ specialised knowledge and investment skills.

For instance, if A saves Rs.5000 from her salary every month and uses it to buy mutual fund units, she is a retail investor, whereas an institution like ABC Mutual Fund which buys 50,000 shares of XYZ Industries Ltd., is an institutional investor.

Institutional investors are companies, banks, government organisations, mutual funds, insurance companies, pension trusts and funds, associations, endowments, societies and other such organisations that may have surplus funds to invest.

Some of the institutions such as mutual funds are institutional investors by objective i.e. their primary business is to invest in securities. Other institutions may be into some other primary business activities, but may have surplus funds to be invested in securities markets. Some other institutions such as banks and financial institutions may operate in the financial markets in various capacities, but also have an actively managed treasury department that efficiently deploys money in the securities markets to earn a return. Institutional investors manage their returns and risk through formal processes for (a) evaluating and selecting the securities they buy; (b) reviewing and monitoring what they hold, and (c) formally managing the risk, return and holding periods of the securities they hold.

Issuers

Issuers are organizations that raise money by issuing securities. They may have short-term and long-term need for capital and they issue securities based on their need, their ability to meet the obligations to the investors, and the cost they are willing to pay for the use of funds.

Issuers of securities have to be authorised by appropriate regulatory authorities to raise money in the securities markets. The following are common issuers in the securities markets:

a. **Companies** issue securities to raise short-term and long-term capital for conducting their business operations.
b. **Central and State Governments** issue debt securities to meet their requirements for short term and long term funds to finance their deficits. (Deficit is the extent to which the expenses of the government are not met by its income from taxes and other sources).
c. **Local governments and municipalities** may also issue debt securities to meet their development needs. Government agencies do not issue equity securities.
d. **Financial institutions and Banks** may issue equity or debt securities for their capital needs beyond their normal sources of funding from deposits and government grants.

e. **Public Sector Companies** which are owned by the government may issue securities to public investors as a part of the disinvestment program of the government i.e. when the government decides to offer its holding of these securities to public investors.
f. **Mutual Funds** issue units of a scheme to investors to mobilise money and invest them on behalf of investors in securities.
g. **Investment Trusts** such as REITs, InvITs, AIFs, issue units of a scheme to investors to mobilise money and invest them as per the stated investment objectives.

The securities are issued in the name and under the common seal of the issuer and the primary responsibility of meeting the obligations are with the issuer. Earlier securities were issued in the paper form as certificates. Since the mid-1990s securities are issued in electronic form. Previously issued share certificates also were converted into electronic form by the issuers. This process is called dematerialisation.

Intermediaries

Intermediaries in the securities markets are agents responsible for coordinating between investors (lenders) and issuers (borrowers), and organising the transfer of funds and securities between them. Without the services provided by intermediaries, it would be quite difficult for investors and issuers to locate each other and carry out transactions.

According to the SEBI (Intermediaries) Regulations, 2008, following are the intermediaries of securities markets:

- Asset Management Companies
- Portfolio managers
- Merchant bankers
- Underwriters
- Stock brokers
- Authorized Persons
- Clearing members of a clearing corporation
- Trading members of the derivative segment of a stock exchange
- Bankers to an issue
- Registrars of an issue
- Share transfer agents
- Depository participants
- Custodians of securities
- Trustees of trust deeds
- Credit rating agencies
- Investment advisers

- KYC registration agencies

Asset management companies and **portfolio managers** are investment specialists who offer their services in selecting and managing a portfolio of securities.[5] Asset management companies are permitted to offer securities (called units) that represent participation in a pool of money, which is used to create the portfolio. Portfolio managers do not offer any security and are not permitted to pool the money collected from investors. They act on behalf of the investor in creating and managing a portfolio. Both asset managers and portfolio managers charge the investor a fee for their services, and may engage other security market intermediaries such as brokers, registrars, and custodians in conducting their functions.

Merchant bankers, also called as issue managers, investment bankers, or lead managers, engage in the business of issue management either by making arrangements regarding the selling, buying or subscribing to securities or acting as manager, consultant, adviser or corporate advisory service in relation to such issue management. They evaluate the capital needs, structure an appropriate instrument, get involved in pricing the instrument, and manage the entire issue process until the securities are issued and listed on a stock exchange. They engage other intermediaries such as registrars, brokers, bankers, underwriters and credit rating agencies in managing the issue process.

Merchant bankers also perform the underwriting activities i.e. they promise to pick up that portion of an offer of securities which may not be bought by investors. They provide the issuer the comfort that if the securities being offered do not elicit the desired demand, they will step in and buy the securities. Such specialist intermediaries performing underwriting activities in the government bond market are called primary dealers.

Stock brokers are registered trading members of stock exchanges. They facilitate new issuance of securities to investors. They put through the buy and sell transactions of investors on stock exchanges. All secondary market transactions on stock exchanges have to be conducted through registered brokers.

Authorized persons (AP) are agents of the brokers (previously referred to as sub-brokers) and are registered with the respective stock exchanges. APs help in reaching the services of brokers to a larger number of investors. Several brokers provide various services such as research, analysis and recommendations about securities to buy and sell, to their investors. Brokers may also enable screen-based electronic trading of securities for their investors, or support investor orders over phone. Brokers earn a commission for their services.

Clearing members and trading members are members of the stock exchange where securities are listed and traded. Trading members put through the trades for buying and selling, either on their

[5] Portfolio is the term used to describe a group of securities.

own behalf, or on behalf of customers. Clearing members receive funds and securities for completed transactions and settle the payment of money and delivery of securities.

Bankers to an issue are selected bankers who are appointed during a new issue of securities, to collect application forms and money from investors who are interested in buying the securities being offered. They report the collections to the lead managers, send the applications and investor details to the registrars and transfer the funds mobilised to the bank accounts of the issuer.

Registrars & Share Transfer Agents maintain the records of investors for the issuer. Every time the owner of a security sells it to another, the records maintained by the issuer needs to incorporate this change. Only then the benefits such as dividends and interest will flow to the new owners. In the modern securities markets, the securities are held in a dematerialised form in the depository. The changes to beneficiary names are made automatically when a security is sold and delivered to the buyer. Investor records are maintained for legal purposes such as determining the first holder and the joint holders of the security, their address, bank account details and signatures, and any nominations they may have made about who should be receiving the benefits from a security after their death.

Depository participants enable investors to hold and transact securities in the dematerialised form. Demat securities are held by depositories, where they are admitted for dematerialisation after the issuer applies to the depository and pays a fee. Depository participants (DPs) open investor accounts, in which they hold the securities that they have bought in dematerialised form. Brokers and banks offer DP services to investors. DPs help investors receive and deliver securities when they trade in them. While the investor-level accounts in securities are held and maintained by the DP, the company level accounts of securities issued is held and maintained by the depository. In other words, DPs act as agents of the Depositories.

Custodians typically work with institutional investors, holding securities and bank accounts on their behalf. They manage the transactions pertaining to delivery of securities and money after a trade is made through the broker and also keeps the accounts of securities and money. They may also account for expenses and value the portfolio of institutional investors. Custodians are usually large banks.

Trustees are appointed when the beneficiaries may not be able to directly supervise whether the money they have invested is being managed in their best interest. Mutual fund trustees are appointed to supervise the asset managers; debenture trustees are appointed to ensure that the lenders interests are protected.

Credit rating agencies evaluate a debt security to provide a professional opinion about the ability of the issuer to meet the obligations for payment of interest and return of principal as indicated in the security. They use rating symbols to rank debt issues, which enable investors to assess the default risk in a security.

Investment advisers work with investors to help them make a choice of securities that they can buy based on an assessment of their needs, time horizon, return expectations and their ability to bear risk. They also create financial plans for investors, where they define the goals for which investors need to save money and propose appropriate investment strategies to meet the defined goals.

KYC registration agency (KRA) provides a centralised system wherein the KYC information are uploaded by the securities markets intermediaries. SEBI has mandated a uniform KYC procedure for mutual funds, brokers, depository participants, portfolio managers and venture capital funds. The investors can undergo the KYC process with any of the above intermediaries. KYC once completed, is valid across all SEBI-registered intermediaries (i.e. across capital market). KYC information is maintained by KYC Registration Agencies (KRA). SEBI has mandated that KRAs to share data and information with other KRAs through inter-operability process (IOP) and in turn to all SEBI registered intermediaries (SRIs) so that retail investors are not inconvenienced in the KYC documentation.

Further KRAs may share information with other market regulators such as RBI, IRDAI, PFRDA, if the respective regulators notify so. SEBI has also allowed KRAs to independently validate records of clients whose KYC have been completed using Aadhaar. KRAs shall validate the clients' details through (a) UIDAI for Aadhaar, (b) OTP for mobile number and email id (wherever quoted by the investor) or based on successful delivery status of Email/SMS and (c) Income Tax database for PAN. On successful completion of KYC validation, the KYC status is updated.

The role and responsibilities of intermediaries are laid down in SEBI (Intermediaries) Regulations, 2008. In addition, specific guidelines have been prescribed for each intermediary. All intermediaries operating in the securities market are required to be registered with SEBI. In providing services to investors and issuers, intermediaries are required to follow a SEBI-mandated code of conduct. The key points of this code are protection of investor interests, providing fair, professional and skilled services, avoiding collusion with other intermediaries to the detriment of investors, providing adequate and timely information to clients, and maintaining appropriate financial and physical infrastructure to ensure sound service.

Regulators of Securities Markets

The responsibility for regulating the securities market is shared by the Securities and Exchange Board of India (SEBI), the Reserve Bank of India (RBI), the Department of Economic Affairs (DEA) of the Ministry of Finance and the Ministry of Corporate Affairs (MCA). There are other regulators who look after different sectors.

Securities and Exchange Board of India (SEBI)

The Securities and Exchange Board of India (SEBI), a statutory body appointed by an Act of Parliament (SEBI Act, 1992), is the chief regulator of securities markets in India. SEBI functions under the Ministry of Finance. The main objective of SEBI is to facilitate growth and development of the capital markets and to ensure that the interests of investors are protected.

Some of the functions of SEBI have been explained in detail:

- SEBI has been assigned the powers of recognising and regulating the functions of stock exchanges. The Securities Contracts (Regulation) Act, 1956 is administered by SEBI. This Act provides for the direct and indirect control of virtually all aspects of securities trading and the running of stock exchanges. The requirements for granting recognition to a stock exchange include representation of the Central Government on each of the stock exchange by such number of persons not exceeding three as the Central Government may nominate on this behalf. Stock exchanges have to furnish periodic reports to the regulator and submit bye-laws for SEBI's approval. Stock exchanges are required to send daily monitoring reports.
- SEBI has codified and notified regulations that cover all activities and intermediaries in the securities markets.
- SEBI also oversees the functioning of primary markets. Eligibility norms and rules to be followed for a public issue of securities are detailed in the SEBI (Issuance of Capital and Disclosures Requirements) Regulations, 2018. The SEBI (ICDR) Regulations lay down general conditions for capital market issuances like public and rights issuances, Qualified Institutions Placement (QIP) etc; eligibility requirements; general obligations of the issuer and intermediaries in public and rights issuances; regulations governing preferential issues, qualified institutions placements and bonus issues by listed companies; Issue of Indian Depository Receipts (IDRs). SEBI (ICDR) Regulations also has detailed requirements pertaining to disclosures and process requirements for capital market transactions by listed and unlisted companies which are in the process of listing. The listing agreement that companies enter into with the stock exchange has clauses for continuous and timely flow of relevant information to the investors, corporate governance and investor protection. As a part of its efforts to develop a robust regulatory framework for debt securities, SEBI notified the SEBI (Issue and Listing of Non-Convertible Securities) Regulations, 2021.[6]
- SEBI makes routine inspections of the intermediaries functioning in the securities markets to ensure that they comply with prescribed standards. It can also order investigations into the

[6] Vide August 9, 2021, SEBI notified the SEBI (Issue and Listing of Non-Convertible Securities) Regulations, 2021, pursuant to merger and repeal of the SEBI (Issue and Listing of Debt Securities) Regulations, 2008 and SEBI (Issue and Listing of Non-Convertible Redeemable Preference Shares) Regulations, 2013.

operations of any of the constituents of the securities market for activities such as price manipulation, artificial volume creation, insider trading, violation of the takeover code or any other regulation, public issue related malpractice or other unfair practices. SEBI has set up surveillance mechanisms internally as well as prescribed certain surveillance standards at stock exchanges, to monitor the activities of stock exchanges, brokers, depository, R&T agents, custodians and clearing agents and identify unfair trade practices.

- SEBI has the powers to call for information, summon persons for interrogation, examine witnesses and conduct search and seizure. If the investigations so require, SEBI is also empowered to penalize violators. The penalty could take the form of suspension, monetary penalties and prosecution.
- SEBI has laid down regulations to prohibit insider trading, or trading by persons connected with a company having material information that is not publicly available. SEBI regulations require companies to have comprehensive code of conduct to prevent insider trading. This includes appointing a compliance officer to enforce regulations, ensuring periodic disclosure of holding by all persons considered as insiders and ensuring data confidentiality and adherence to the requirements of the listing agreement on flow of price sensitive information. If an insider trading charge is proved through SEBI's investigations, the penalties include monetary penalties, criminal prosecution, prohibiting persons from securities markets and declaring transaction(s) as void.

Reserve Bank of India (RBI)

The Reserve Bank of India regulates the money market and foreign exchange market segments. As the manager of the government's borrowing programs, RBI is the issue manager for the government. It controls and regulates the government securities market. RBI is also the regulator of the Indian banking system and ensures that banks follow prudential norms in their operations. RBI also conducts the monetary, forex and credit policies, and its actions in these markets influences the supply of money and credit in the system, which in turn impact the interest rates and borrowing costs of banks, government and other issuers of debt securities.

Ministry of Corporate Affairs (MCA)

The Ministry of Corporate Affairs regulates the functioning of the corporate sector. The Companies Act is the primary regulation which defines the setting up of companies, their functioning and audit and control. The issuance of securities by companies is also subject to provisions of the Companies Act.

Ministry of Finance (MoF)

The Ministry of Finance through its Department of Financial Services regulates and overseas the activities of the banking system, insurance and pension sectors. The Department of Economic Affairs regulates the capital markets and its participants. The ministry initiates discussions on reforms and overseas the implementation of law.

Insurance Regulatory and Development Authority of India (IRDAI)

The IRDAI is the regulator for the insurance industry and was set up as an autonomous, statutory body under the Insurance Regulatory and Development Authority Act, 1999. Its main function is to promote efficiency in the conduct of insurance business and protect the interests of policyholders. With these aims, IRDAI enjoys the powers of registering new applicants and modifying, suspending or cancelling registrations of existing insurers or re-insurers. Its functions include specifying the necessary qualifications, code of conduct or practical training for insurance intermediaries and agents and regulating various aspects of the insurance business.

Pension Fund Regulatory and Development Authority of India (PFRDA)

The PFRDA is the authority established under the Pension Fund Regulatory and Development Authority Act, 2013 to promote old age income security by establishing, developing and regulating pension funds, to protect the interest of subscribers of schemes of pension funds. The PFRDA regulates NPS and the pension schemes not regulated by any other enactment, defines the eligibility norms for intermediaries, registers and regulates the intermediaries and establishes the mechanism for protecting the interests of the subscribers through various regulations and guidelines issued from time to time.

Insolvency and Bankruptcy Board of India (IBBI)

The IBBI was established in 2016 under the Insolvency and Bankruptcy Code for overseeing the insolvency proceedings under the Code. It is the regulator for entities like Insolvency Professional Agencies, Insolvency Professionals and Information Utilities. The members of the Board include representatives from the Ministry of Finance, Ministry of Corporate Affairs and the RBI.

International Financial Services Centres Authority (IFSCA)

The International Financial Services Centres Authority, headquartered at GIFT City, Gandhinagar, was established in 2020 under the International Financial Services Centres Authority Act, 2019. The IFSCA is a unified authority for the development and regulation of financial products, financial services and financial institutions in the International Financial Services Centre (IFSC) in India. It plays a crucial role of a unified regulator, to promote ease of doing business in the IFSC and provide a world-class regulatory environment. The main objective of the IFSCA is to develop a strong global

connect and focus on the needs of the Indian economy as well as to serve as an international financial platform for the entire region and the global economy as a whole.

1.4 Role of Securities Markets

Securities markets enable efficient allocation of financial capital. A well-developed securities market is usually associated with strong economic growth. The important links between market segments and their role as allocator of capital are as follows:

Orderly channel for transfer of funds

The primary markets channelize savings from millions of investors to borrowers in an organised and regulated manner. Prior to the emergence of securities markets, this function was traditionally performed by banks who were the main intermediaries in the financial system. The expansion of securities markets has contributed to the process of financial disintermediation. For example, a company may find it more cost-efficient to raise funds by issuing commercial paper or bonds rather than obtaining a traditional line of credit or term loan from the bank. Thus, the securities market allows borrowers to raise capital at an efficient price, and investors to minimize the risk of being defrauded. It is an orderly platform for transfer of capital to earn a return.

Generate productive investments

Through securities investment, individual savings of many households can be mobilised into generating productive capacity for the country. This facilitates long-term growth, income and employment. For example, consider the setting up of a large steel plant that is expected to generate jobs and growth for many years. An individual or a single household would not be able to set up the plant, but a company that issues securities to raise funds from many investors would be able to do so. By investing in the plant, investors would benefit from the growth and revenue created by it.

Liquidity

Secondary markets provide liquidity to securities, by allowing them to be sold and converted to cash. The ability to buy and sell securities is a big advantage because not only does it permit investors to invest and disinvest as necessary, but also allows them to profit from price movements. For example, an investor has purchased 100 shares of XYZ Ltd. at Rs.25 per share. After one year the price of the share is quoting at Rs.45 in the market. The investor can opt to sell his shares and earn Rs.20 per share, or a total of Rs.2000 from the sale. By ensuring liquidity via secondary markets, the security market gives investors the confidence to block their funds in long-term investments such as equity shares and long-term government and corporate bonds.

Price discovery

The securities market enables buyers and sellers of tradeable securities to come together, interact and arrive at a consensus about the 'fair price' of the security. Thus, prices are determined by the actions of millions of buyers and sellers in the securities market, rather than being dictated by the regulator or the government. This process is known as 'price discovery' and is one of the main functions of the securities market.

Information signaling through prices

Information about the issuer of the security or its assets is reflected quickly in secondary market prices. This is particularly useful for small investors who tend to have limited access to company or industry information. For example, a poor monsoon has a negative impact on agricultural inputs such as fertilizers and seeds, so prices of securities issued by fertilizer manufacturing companies may go down if rains are expected to be inadequate. The declining prices signal that sales and profits of the issuing company are likely to decline.

1.5 Technological advancements in the securities market

Securities markets in the 19th century were primitive and unorganized. Stock brokers met at designated places such as the famous banyan tree in front of the Mumbai Town Hall and transacted business in the streets of the Fort area in Mumbai. In the 1990s the stock market switched to electronic trading and the earlier system of 'pit trading' or 'open outcry' trading was replaced by screen-based trading. Initially, both retail and institutional clients in equity and debt markets would dictate their buy or sell orders to brokers, who would then enter the same in their trading terminals. With technological progress, telephone-based orders were replaced by online trading and mobile trading. However, the boom in electronic and internet trading over the past twenty years has exposed stock exchanges and intermediaries like stock brokers, banks and depositories to the risk of cyber-attacks.

1.5.1 Cyber Security and Cyber Resilience Framework (CSCRF)

Recognizing the increased importance of cyber security as a major source of operational risk, SEBI designed a framework on Cyber Security and Cyber Resilience and issued several circulars in this regard. Stock Exchanges, Depositories and Clearing Corporations are systemically important Market Infrastructure Institutions (MIIs) and must have a robust cyber security framework in order to provide the critically important facilities related to trading, clearing and settlement. Other intermediaries such as Mutual Funds or Asset Management Companies (AMCs), Depository Participants (DPs) and Stock Brokers also need to function within a robust cyber security and cyber resilience framework. Accordingly, SEBI has issued separate circulars for compliance of cyber

security guidelines for MIIs, AMCs, stock brokers/ DPs, Qualified Registrars and Transfer Agents (QRTAs) and KYC Registration Agencies (KRAs).

SEBI recently has notified a detailed CSCRF for the SEBI Regulated Entities (REs) that shall come into effect, in phased manner, (superseding the existing circulars).[7] The key objective of CSCRF is to address evolving cyber threats, to align with the industry standards, to encourage efficient audits, and to ensure compliance by SEBI Res. As per the CSCRF, the following REs are constituted as the Market Infrastructure Institutions (MIIs):

a. Stock Exchanges
b. Depositories
c. Clearing Corporations
d. KYC Registration Agencies (KRAs)
e. Qualified Registrars and Transfer Agents (QRTAs)

Cyber Security encompasses all tools, measures and processes intended to prevent cyber-attacks. Cyber Resilience measures the ability of an organization to prepare and respond to a cyber-attack, continue functioning during and recover from such an attack. The Cyber Security and Cyber Resilience Framework is based on 5 cyber resiliency goals:

i. **Anticipate**: Maintain a state of informed preparedness from adversary attacks.

ii. **Withstand**: Continue essential business functions at times of adversary attacks.

iii. **Contain**: In the event of cyber-attacks, localise containment of crisis and isolate trusted functions from untrusted ones to continue business operations.

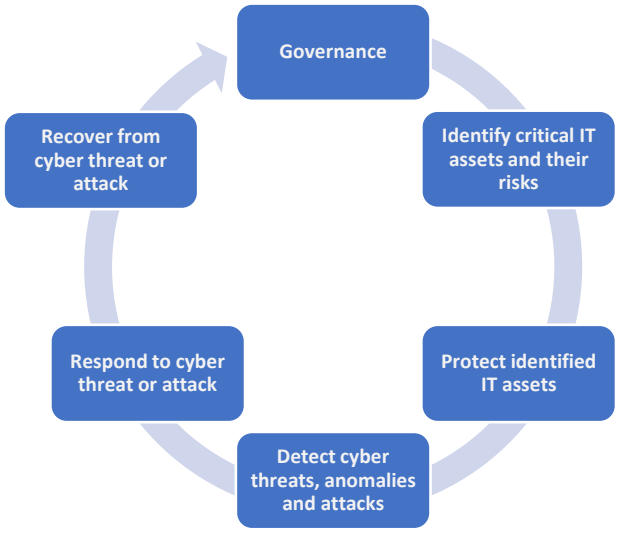
iv. **Recover**: Restore business functions to the maximum extent, subsequent to adversary attacks.

v. **Evolve**: To change business functions and its supporting cyber capabilities to minimize adverse impacts of adversary attacks (actual or predicted).

As per the CSCRF, these cyber resiliency goals have been mapped to the various cybersecurity functions spanning from governance measures to operational controls. The cybersecurity functions can be depicted in Figure 1.2.

[7] SEBI Circular Nos.: SEBI/HO/ITD-1/ITD_CSC_EXT/P/CIR/2024/113 dated August 20, 2024, SEBI/HO/ITD-1/ITD_CSC_EXT/P/CIR/2024/184 dated December 31, 2024 and SEBI/HO/ITD-1/ITD_CSC_EXT/P/CIR/2025/45 dated March 28, 2025 on Cybersecurity and Cyber Resilience Framework (CSCRF) for SEBI Regulated Entities (REs).

Figure 1.2: Cyber Security Functions



The Cyber Security and Cyber Resilience Framework notified by SEBI for its Regulated Entities are summarized below:

- **Cyber Resilience Goal: Anticipate | Cybersecurity Function: Governance**

  REs are required to prepare a comprehensive cybersecurity and cyber resilience policy document and implement the same with the approvals of Board/ Partner/ Proprietor. REs shall establish, communicate and enforce cybersecurity risk management roles, responsibilities, and authorities to foster accountability and continuous improvement. REs shall be solely accountable for all aspects related to third-party services and ensuring compliance with laws, regulations, circulars, etc. issued by SEBI/ Government of India.

- **Cyber Resilience Goal: Anticipate | Cybersecurity Function: Identify**

  REs shall identify and classify critical systems based on sensitivity and criticality of the business operations. The Board/Partner/Proprietor shall approve the list of critical systems. The RE must identify the cyber risks that may be faced by such assets and the likelihood and impact of such threats.

- **Cyber Resilience Goal: Anticipate | Cybersecurity Function: Protect**

  All access to systems, applications, networks, databases etc. should be for a defined purpose and period and not simply by virtue of a person's rank in the organization. Security measures such as strong password controls, two-factor security and maintenance of logs of user access should be implemented. There should be stringent supervision, monitoring and access restrictions for outsourced and vendor staffs. Other security measures include restriction of physical access to critical systems, establishing standards

for Network Security Management, usage of strong Full-disk Encryption along with File-based Encryption methods, deployment of hardened hardware and software, policies for disposal of storage media and regular conducting of vulnerability assessment of IT environment. Periodic audits should be conducted by a CERT-In empanelled Information Security (IS) auditing organization to audit the implementation and ensure compliance with guidelines under CSCRF.

- **Cyber Resilience Goal: Anticipate | Cybersecurity Function: Detect**

  There should be systems and processes for continuous monitoring of security events and detection of any anomalies, unauthorized or malicious activities, unauthorized access or copying or transmission of data.

- **Cyber Resilience Goal: Withstand & Contain | Cybersecurity Function: Respond**

  All cybersecurity incidents should be reported in a timely manner through the SEBI incident reporting portal. All REs should establish a comprehensive Incident Response Management plan along with corresponding SOPs and formulate an up-to-date Cyber Crisis Management Plan (CCMP). Res should also conduct Root Cause Analysis in the event of an incident. For detailed investigation of any cybersecurity incident, forensic analysis should be undertaken.

- **Cyber Resilience Goal: Recover | Cybersecurity Function: Recover**

  There should be plans for timely restoration of systems affected by a cyber-threat or security breach. There should be arrangements for providing alternate systems or services to customers. The response plan should clearly define the responsibilities of employees and outsourced staff in the event of a cyber-attack. Actions taken during recovery process should be informed to all the relevant stakeholders.

- **Cyber Resilience Goal: Evolve**

  Adaptive and evolving controls to tackle identified vulnerabilities and to reduce attack surfaces shall be created and incorporated into the RE's cybersecurity and cyber resilience strategy.

- **Reporting:** REs are required to submit compliance reporting for CSCRF in the standardized format specified by SEBI.

- **Vendor-managed systems:** In case the systems of Res are managed by vendors, the SEBI guidelines must be adhered to by the vendors.

- **Cyber Audit:** All REs are mandated to conduct cyber audit at specified periodicity under CSCRF.

1.5.2 Innovations in Financial Technology (FinTech) and Regulatory Sandbox

Innovation Sandbox

Regulators across the globe have realized the importance of encouraging innovations in the FinTech and financial inclusion space. In light of this, SEBI introduced a framework for an industry-wide Innovation Sandbox, wherein FinTech firms, start-ups and entities, not regulated by SEBI, including individuals, are permitted to use the Innovation Sandbox for offline testing of their proposed solutions in isolation from the live market. SEBI has also notified a detailed framework of the operational aspects of the Innovation Sandbox, supervised by a Steering Committee comprising of representatives from the enabling organizations i.e. Stock Exchanges, Depositories and Qualified RTAs.[8]

Regulatory Sandbox

The Global Financial Crisis of 2008 emphasized the need for better regulation of financial services firms. Thus, there has been constant friction between the regulators and the financial services providers. The concept of 'Regulatory Sandbox' aims at resolving this friction. In addition to the introduction of Innovation Sandbox, SEBI also introduced a framework for Regulatory Sandbox.[9]

It is a framework established by a financial sector regulator to allow 'live testing' of financial innovations by private entities on a small scale in a controlled environment and under the supervision of the regulator. The term 'Regulatory Sandbox' was coined by the UK Financial Conduct Authority in 2015 and since then regulators from more than 20 countries have adopted this concept.

SEBI released its framework for Regulatory Sandbox, to provide SEBI-regulated entities the facilities to experiment with FinTech solutions in a live environment with a limited set of customers for a limited period of time. SEBI has specified strict eligibility criteria for the SEBI registered market participants interested in availing facilities under Regulatory Sandbox. For this purpose, the SEBI registered entity may either on its own or engage the services of a FinTech firm. The proposed innovation should be genuine and add value to existing offerings in the Indian market. There should be a genuine need for live testing of the innovation. The proposed innovation should not pose any risks to the financial system. After screening applications on these criteria SEBI will appoint a designated officer to oversee the project. FinTech applicants are required to inform their clients about the risks involved in testing the product.

In order to reduce the regulatory burden for the innovators SEBI may grant partial or comprehensive relaxation from certain regulatory requirements during the testing period.

[8] SEBI Circular No. SEBI/HO/ITD/ITD/CIR/P/2021/16 dated February 2, 2021 on Revised Framework for Innovation Sandbox.

[9] SEBI Circular No.: SEBI/HO/MRD-1/CIR/P/2020/95 dated June 5, 2020 on Framework for Regulatory Sandbox.

However, no exemption will be granted from the investor protection, Know-Your-Customer (KYC) and Anti-Money Laundering (AML) rules. On completion of the testing, SEBI will decide whether the innovation should be permitted to be introduced in the market on a large scale.

Chapter 1: Sample Questions

1. **A mutual fund that collects money from investors and invests in the market is an example of a/an _____.**
   a. Issuer
   b. Intermediary
   c. Regulator
   d. Institutional Investor

2. **The group of market participants that collectively facilitate interaction between investors and issuers is known as _____.**
   a. Regulators
   b. Custodians
   c. Bankers
   d. Intermediaries

3. **The financial results of a company show that it has suffered losses due to declining market share. The price of its equity share drops in the market. This is an example of the role of the market as: _____.**
   a. Provider of liquidity
   b. Orderly channel for transfer of funds from investors to issuers
   c. Generator of productive investments
   d. Information Signalling through prices

4. **The securities that are already issued are available for subsequent purchases and sales at: _____.**
   a. Office of the registrar and transfer agent
   b. Follow on public offer of the issuer
   c. Stock exchanges where they are listed
   d. Depositories where they are held

5. **The Reserve Bank of India regulates the money market and foreign exchange market segments. State whether True or False.**
   a. True
   b. False

CHAPTER 2: SECURITIES: TYPES, FEATURES AND CONCEPTS OF ASSET ALLOCATION AND INVESTING

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Different types of equity and debt securities and its features
- Difference between equity and debt financing
- Equity Investing: meaning, equity analysis and valuation; risk and return
- Debt Investing: meaning, instruments, terminology and risk and return
- Hybrid Instruments
- Investment vehicles such as Mutual Funds
- Alternative asset classes such as commodities, structured products and Distressed Securities
- Derivatives

2.1 Securities available in the securities market

Securities markets enable investors to deploy their surplus funds in investment instruments that are pre-defined for their features, are issued under regulatory supervision, and in most cases are liquid in the secondary markets. There are two broad types of securities that are issued by seekers of capital from investors:

- Equity
- Debt

When a business needs capital to fund its operations and expansion, it makes a choice between these two types of securities.

Equity capital is available for the company to use as long as it is needed; debt capital will have to be returned after the specified time. Equity investors do not enjoy any fixed return or return of principal invested; debt investors earn a fixed rate of interest and return of principal at maturity. Equity investors are owners of the business; debt investors are lenders to the business. Equity investors participate in the management of the business; debt investors do not.

Due to these fundamental differences in equity and debt securities, they are seen as two distinct asset classes between which investors make a choice. Equity represents a risky, long-term, growth-oriented investment that can show a high volatility in performance, depending on how the underlying business is performing. There is no assurance of return to the equity investor, since the value of the investment is bound to fluctuate. Debt represents a relatively lower risk, steady, short-term, income-oriented investment. It generates a steady rate of return, provided the

business remains profitable and does not default on its payments. Since all residual benefits of deploying capital in a profitable business go to the equity investor, the return to equity investor is likely to be higher than that of the debt investor.

For example, if a business borrows funds at 12 percent and is able to earn a return of 14 percent on the assets created by such borrowing, the debt investor receives only 12 percent as promised. But the excess 2 percent earned by the assets, benefits the equity investor. The downside also hurts the equity investor, who may not earn anything if the return is lower than the borrowing cost and if the business is failing.

Choosing between equity and debt is a trade-off. Investors desiring lower risk, and willing to accept a lower stable return choose debt; if they seek a higher return, they may not be able to earn it without taking on the additional risk of the equity investment. Most investors tend to allocate their capital between these two choices, depending on their expected return, their investing time period, their risk appetite and their needs. This process of distributing their investible surplus between equity and debt is called asset allocation.

Apart from debt and equity there are some other products or asset classes available for investments which include:

- **Hybrid securities:** These are instruments that have the characteristics of both debt and equity. These are discussed in detail in a later section of this Unit.
- **Commodities:** These are investments in real assets such as gold, silver, copper, agricultural produce etc. as opposed to financial assets like stocks and bonds. Commodity investment can be in the physical form but is generally in the form of financial products such as commodity mutual funds and exchange-traded funds (ETFs) and commodity derivatives. Commodity ETFs and mutual funds are suitable for retail investors.
- **Derivatives:** These are contracts to buy or sell the underlying asset or exchange cash flows according to predetermined terms and conditions as to price, quantity and maturity date. Derivatives have emerged as the most heavily traded investment products over the past twenty years but are ideally suitable for sophisticated investors who can understand their risk-return profile.
- **Mutual funds:** These are investment vehicles that pool together the funds collected from a large number of investors and invest these funds in debt, equity or other asset classes according to a specific mandate. Mutual funds are best suited for retail investors.
- **Structured products:** These are pre-packaged instruments essentially linked to a traditional investment product such as a bond or currency but with embedded derivatives such as options or swaps. The embedded derivative can enhance the return on the traditional asset, and this makes the structured product a more attractive investment.

Structured products are also designed on asset classes such as commodities which retail investors find difficult to invest in. Structured products are complex to design and are highly customized products. As such they are illiquid and hence, they are generally suitable for high net worth investors with high risk appetite for such investments.

- **Distressed securities:** These are securities issued by a company that is on the verge of or has entered bankruptcy or has seen a massive fall in its credit rating. Such securities include equities, bonds and even trade debt of the company. Whenever a company is in financial distress, traditional investors like banks, mutual funds and insurance companies generally exit their investments in such a company even at low prices because there are regulatory limits on their investments in low-rated companies. As a result, the securities of distressed companies often trade at a steep discount to their face value. This makes distressed securities an attractive investment opportunity for investors such as hedge funds who are not subject to the same regulations as traditional investors and hence can take on higher risks. Distressed securities, as an asset class, are suitable for sophisticated investors who can properly analyse the risk-return trade-off from such securities.
- **Electronic Gold Receipts (EGRs):** These represents gold in electronic form with trading, clearing and settlement features. EGRs provide assurance to its investors in quality of gold. In connection to the same, SEBI introduced the framework of Gold Exchange where EGRs can be traded. The entire process includes: (a) creation of EGRs, (b) trading of EGRs on the Gold Exchange and (c) conversion of EGRs into physical gold. SEBI (Vault Managers) Regulations, 2022 along with standard operating guidelines for vault managers and depositories have also been issued to ensure smooth functioning of the EGR ecosystem.[10]
- **Zero Coupon Zero Principal (ZCZP) Instrument:** ZCZPs are issued by a Not for Profit Organization (NPO) for specific social development projects/activities. Unlike conventional bonds, these instruments do not offer any returns, but promise a social return to the funder. Such a promise carries some probability of being defaulted upon non-delivery of the social impact that is promised to be created. ZCZPs are listed on the Social Stock Exchange (SSE) segment of a recognized Stock Exchange.

2.2 Choice between Equity and Debt Financing for Issuers

A company or a sovereign government needs to raise funds for two reasons: (a) to meet its needs for working capital and (b) to meet its needs for long term capital.

A company is required to pay its suppliers of raw materials and services, its employees and extend credit to its customers; government also requires funds for the daily working of its various

[10] SEBI Circular No.: SEBI/HO/CDMRD/DMP/CIR/P/2022/07 dated January 10, 2022 on Framework for operationalizing the Gold Exchange in India.

ministries and departments, for payment of salaries and other operating expenses. These are all short-term requirements and can be met by issuing short-term debt securities.

Companies require capital for long-term investments such as setting up of manufacturing plants or acquiring other businesses. Governments need long-term funds for building infrastructure in the form of roads, railways, ports etc. Long-term capital can be raised either by issuing equity or debt securities. However, governments issue only debt capital with varying tenor to meet their capital requirements.

The implications of raising equity or debt capital are evaluated by the business before the decision is made. The following are the key factors to consider for such a decision:

a. **Ability to pay periodic interest:**
   If a business generates stable profit, such that it is able to pay interest on a regular basis then in such cases, the businesses can consider raising debt capital. Banks fund most of their loans with deposits, which are borrowed funds. Depositors are willing to lend to the bank based on its ability to grow a steady loan book that earns higher interest than deposit rates. Business that does not generate steady and regular profits may choose equity over debt capital.

b. **Willingness to dilute ownership in the company:**
   Equity capital represents ownership and confers voting rights to holders. Raising fresh equity capital reduces the proportion of the business holding and therefore the profits that accrue to the existing equity holders. If existing equity holders do not want a reduced stake in the business, then they may consider raising debt capital to equity capital.

c. **Ability to give collateral as security:**
   Lenders or debt financers prefer secured borrowings and the ability to access the assets of the business in case of its failure. If a business is services-based and not asset-based then it may not have adequate assets to offer as collateral to borrow debt capital. In such cases, equity financing is preferred to debt financing.

d. **Time period for which capital is required:**
   If capital is required to tide over short-term capital requirements, a firm may choose debt capital for such needs. It is common for businesses to borrow from banks or issue debt instruments to fund working capital. If there is a long-term need and if debt investors are unwilling to take the risk, a firm issues equity capital.

2.3 Characteristics and role of equity capital

2.3.1 Features of Equity Capital

- **Nature**

Equity capital refers to the capital provided by owners of the business, who are willing to take the risk that the business may take time to generate profits. They also accept that these profits may not be fixed or remain unchanged over time.

- **Denomination**

Equity capital is denominated in equity shares, with a face value. Face value in India is typically Re.1, Rs.2, Rs.5 or Rs.10 per share. Investors buy equity shares (also called stocks) issued by the company to become shareholders that jointly own the company. This is also why companies that are funded by equity are known as "joint stock companies."

- **Inside and Outside Shareholders**

Equity capital can be provided by two types of shareholders. The first are the inside-shareholders or promoters who start the company with their funds and entrepreneurial skills. Large institutional investors such as venture capitalists may subscribe to equity in early stages and become inside investors. The second set of owners are outside-shareholders, or members of the public, who invest in the company's equity shares at a later stage in order to fund its subsequent expansions and operations.

- **Part Ownership**

If a company issues 10,000 equity shares of face value Rs. 10 each, then its equity capital is worth Rs. 100,000 (10,000 multiplied by 10). If the face value of the same equity share was Rs. 2, then the company's equity capital would be worth Rs. 20,000 (10,000 multiplied by 2). An equity share grants ownership of the company to the shareholders in proportion to the extent of their holding. This proportionate share is also called a stake. For example, if promoters own 5100 of the 10000 shares issued by a company, they are said to have a 51 percent stake, or a majority stake. Some companies offer employee stock option programs (ESOPs) that enable employees to own a small stake in the share capital of the company, as an incentive to participate in making the business successful.

- **Variable return and residual claim**

Equity capital is raised for perpetuity and not returned during the life of the business. Equity investors are paid a periodic dividend, which is not pre-determined. The rate of dividend depends on the profitability of the business and the availability of surplus for paying dividends after meeting

all costs, including interest on borrowings and tax. Shareholders are ranked last both for profit sharing as well as for claiming a share of the company's assets (residual claim). If a business were to fail, the proceeds from liquidation of assets are first paid to other claimants such as government, lenders and employees, and any residual amount, if at all, is paid to equity shareholders, after paying out preference shareholders, if any.

- **Net Worth**

Companies are not obliged to payout dividends every year, nor are dividend rates fixed or pre-determined. If companies are growing rapidly and have large investment needs, they may choose to forego dividend and instead retain their profits within the company. The share of profits that is not distributed to shareholders is known as retained profits. Retained profits become part of the company's reserve funds. Reserves also belong to the shareholders, though it remains with the company until it is distributed as dividend. Reserves represent retained profits that have not been distributed to the rightful owners of the same, namely the equity investors. They enhance the net worth of a company and the value of the equity shares. Equity capital is also called risk capital because these investors are willing to take the risk that the business may succeed or fail, without expecting a fixed rate of regular return. They invest with the view to participate in the success of the business resulting in a higher value for the equity shares that they hold.

- **Management and Control**

Promoters of a business are the initial shareholders of a company. They may directly control the management of the company. As the company expands and seeks capital from the public, ownership and management get separated. It is not feasible for thousands of shareholders holding a small proportion of capital each, to be involved in managing the company. Large publicly held companies are managed by their board of directors and the management teams report to the board. Large shareholders with a significant shareholding may be represented in the board. Publicly held companies also have professional independent directors who represent the interest of common small shareholders. All shareholders however get voting rights. Each share has a vote, and several important decisions require shareholder approval expressed through their vote in a general meeting or through a postal ballot or through e-voting facility.

2.3.2 Types of Equity Capital

Equity capital can be raised either by issuing ordinary shares with full voting rights or equity shares with differential voting rights or preference shares.

- **Equity shares with differential voting rights (DVR)** are innovative instruments that separate the shareholder's right to participate in the profits of the company from the right to vote. Investors in DVR generally enjoy a higher rate of dividend but have proportionately lower voting rights as compared to investors in ordinary equity shares. Issuing DVR shares allows promoters to raise risk capital without diluting their ownership stake and control.
- **Preference shares** are a special kind of equity shares which pay a pre-defined rate of dividend. The dividend is payable after all other payments are made, but before dividend is declared to equity shareholders. Preference shares have some features of equity and some of debt instruments. They resemble debt instruments because they offer pre-determined rate of dividend. Preference shares differ from debt securities on the following points:
    - An investor in preference shares is a shareholder of the company. A debenture holder is a creditor of the company.
    - A debenture is usually secured on the assets of the company. A preference share is not secured since it is not a borrowing.
    - The coupon interest on the debenture is an expense to be paid by the company before calculating the profits on which tax has to be paid. Dividends on preference shares are paid from the residual profits of the company after all external liabilities, including tax, have been paid.

However, unlike common equity, preference shares do not offer voting rights or a right over the assets of the company. They have a preference in the payment of dividend over ordinary equity shares and in the return of capital, if the company is wound up.

Preference shareholders are paid dividend only if the company has sufficient profits. The unpaid dividend may be carried forward to the following year(s) and paid if there are profits to pay the dividends, if the terms of issue of the shares so allow. Such shares are called cumulative preference shares. The returns for the preference shares are only from the dividend the company pays. These shares are usually not listed and there is not much scope for capital appreciation. This is because these shares do not participate in the profits of the company. Their value is not affected by the over-performance or under-performance of the company.

2.3.3 Risks and Returns from investing in Equities

Investing in equity shares of a company means investing in the future earning capability of a business. The returns to an equity investor are in two forms: a) dividend that may be periodically paid out and b) increase in the value of the investment in the secondary market.

The returns to an equity investor depend on the future residual cash flows of the company, or the profits remaining after every other claim has been paid. A company may use such surplus to pay dividends, or may deploy them in the growth of the business by acquiring more assets and expanding its scale. This means, an investor buys equity shares with an eye on the future benefits in terms of dividends and appreciation in value. The return to an investor depends on the price he pays to participate in these benefits, and the accruing future benefits as expected.

The risk to an equity investor is that the future benefits are not assured or guaranteed, but have to be estimated based on dynamic changes in the business environment and profitability of the business.

Equity returns are essentially volatile and price movements of equity shares in the stock markets tend to be 'noisy.' This is because a large number of players simultaneously act on new information about stocks, and re-align their positions based on their expectations about the stock's future performance. Since this process is dynamic and tries to incorporate all available information about a stock's performance into the price, a stock with stable and consistent growth and profits appreciates in price; a stock whose performance is deteriorating, depreciates in price. Prices move up when buyers are willing to acquire a stock even at higher and higher prices; prices move down when sellers accept lower and lower prices for a stock. The stock prices thus mirror the performance of the stocks, and are a good barometer of how well a company, a sector, or the economy as a whole is functioning.

2.4 Characteristics and role of Debt securities

Debt capital refers to the capital provided by the lenders who are keen to be compensated regularly in the form of a pre-specified fixed rate of interest. They also expect the money they have lent to be returned to them after an agreed period of time.

- **Instrument types**

Debt capital may be raised by issuing various types of debt instruments such as debentures, bonds, commercial papers, certificates of deposit or pass-through certificates. Each of these instruments is defined for its tenor (the time period to maturity) and the rate of interest it would pay. As a practice, the rate of interest on debt instruments is represented as percent per annum on the face value of a debt security.

- **Floating rate of interest**

Some debt instruments may pay a floating rate of interest. This means, the amount of periodic interest payment will vary, depending on the level of a pre-decided interest rate benchmark. The benchmark is usually a market interest rate such as the MIBOR (Mumbai Interbank Offer Rate). The lender and borrower agree to refer to the benchmark at a specific reset frequency, say once in six months, and set the rate until the next reset date, based on the level of the benchmark.

- **Credit rating**

Lenders may not have access to complete information about how a business is performing, since they are outsiders to the company. The company appoints a credit rating agency to evaluate its ability to service a debt security being offered, its ability to meet interest and principal repayment obligations. The rating agency assigns a credit rating for the debt instrument, indicating the ability to service debt. This rating is used in the borrowing program to assure lenders that an external professional evaluation has been completed.

- **Priority**

Interest to lenders is paid before taxes and before any distribution to equity investors. Interest payment is an obligation, which if not met will be seen as a default. A default in payment of interest and/or principal will hurt the credit rating of the borrower and make it tough for them to raise further capital. If there is a failure of the business, lenders will receive their settlement before other stakeholders such as employees and equity investors.

- **Security**

Lenders to a business do not participate in the management of the company, nor do they get directly involved with the decisions of the company. They however like to protect their rights to receive a regular interest and timely return of the principal amount. For this the lenders may ask for security before lending. Several borrowings are secured by a mortgage on the assets of the business. These are called secured borrowings, where the lenders can press for sale of the asset to recover their dues, if the business is unable to pay them.

- **Control**

Though lenders do not directly control the management of a company, they may place certain restrictions on the Board of the Company, with respect to the decisions that may harm their interests as lenders. They may prevent a company from unrelated diversification or expansion; they may require restrictions on further borrowings; they may prevent a second-charge on assets; or they may ask the owners to bring more equity capital as a cushion against losses.

- **Conversion**

Lenders may seek a conversion of their debt into equity. This can be done either through the issue of convertible debentures by means of which the outstanding debt will be converted into equity at a specific date, price and time. It should be noted that interest payments are made to the lenders till the date of conversion, after which the holdings are treated as equity shares with all rights associated with them, and there are no more rights as lenders.

2.4.1 Features of Debt Instruments

Debt capital can be created by borrowing from banks and other institutions or by issuing debt securities. For example, if a company wishes to borrow Rs.100 crore, it has two options. If it takes a bank loan for the total amount, then the bank is the sole lender to the company. Alternately, it can access a larger pool of investors by breaking up the loan amount into smaller denominations. If it issues one crore debt securities, each with a face value of Rs.100, then an investor who brings in Rs.1000 would receive 10 securities. The lending exposure of each investor is limited to the extent of his investment.

A debt security denotes a contract between the issuer (company) and the lender (investor) which allows the issuer to borrow a sum of money at pre-determined terms. These terms are referred to as the features of a debt security and include the principal, coupon and the maturity of the security.

- **Principal**

  The principal is the amount borrowed by the issuer. The face value of the security is the amount of the principal that is due on each debt security. Each investor, therefore, is owed a portion of the principal represented by his investment.

- **Coupon**

  The coupon is the rate of interest paid by the borrower. The interest rate is usually specified as a percentage of face value, and depends on factors such as the risk of default of the issuer, the credit policy of the lender, debt maturity and market conditions. The periodicity of interest payment (quarterly, semi-annually, annually) is also agreed upon in the debt contract.

- **Maturity**

  The maturity of a bond refers to the date on which the contract requires the borrower to repay the principal amount. Once the bond is redeemed or repaid, it is extinguished and ceases to exist.

Examples of debt securities include debentures, bonds, commercial papers, treasury bills and certificates of deposits. In the Indian securities markets, a debt instrument denoting the borrowing of a government or public sector organization is called a bond and that of the private corporate sector is called debenture. Some have also argued that debentures are secured debt instruments, while bonds are unsecured. These differences have vanished over time. The terms, bonds and debentures are usually used interchangeably these days.

All debt securities grant the investor the right to coupon payments and principal repayment as per the debt contract. Some debt securities, called secured debt, also give investors rights over the assets of the issuing company. If there is a default on interest or principal payments, those assets can be sold to repay the investors. Investors with unsecured debt do not enjoy this option.

Some debt securities are listed on stock exchanges such as the National Stock Exchange or the Bombay Stock Exchange, so they can be traded in the secondary market. Unlisted securities have to be held until maturity.

2.4.2 Types and structures of Debt instruments

The basic features of a debt security can be modified to meet the specific requirements of the issuer or lender. The simplest form of debt is known as a plain vanilla bond and requires interest to be paid at a fixed rate periodically, and principal to be returned when the bond matures. The bond is usually issued at its face value, say Rs. 100, and redeemed at par, the same Rs.100.

The plain vanilla bond structure allows slight variations such as higher or lower than par redemption price; or varying the frequency of interest between monthly, quarterly and annual payments. However, there are other ways in which bond structures can be altered so that they are no longer in the plain vanilla category.

1. Varying Coupon Structures

- ***Zero Coupon Bond***

A zero coupon bond does not pay any coupons during the term of the bond. The bond is issued at a discount to the face value, and redeemed at face value. The effective interest earned is the difference between face value and the discounted issue price. A zero coupon bond with a long maturity is issued at a very big discount to the face value. Such bonds are also known as deep discount bonds.

In some cases, the bond may be issued at face value, and redeemed at a premium. The effective interest earned by an investor is the difference between the redemption value and the face value. The defining characteristic is that there should be no intermediate coupon payments during the term of the bond. Box 2.1 illustrates the structure of a zero coupon bond.

Box 2.1: Zero Coupon Bond

In October 20Y1, ABC Communications Holdings Ltd. raised Rs. 4,280 crore through an issue of zero coupon bonds. The bonds were launched in two separate series of slightly differing maturities.

Issuer:	ABC Communications Holdings Ltd
Security:	Zero coupon bond, secured by receivables
Issue Date:	October 20Y1
Maturity Date:	Series 1 in July 20Y3, Series 2 in December 20Y3.
Maturity value:	Rs.100
Issue price:	Series 1- Rs. 85.80
	Series 2- Rs. 82.55

- ***Floating Rate Bond***

Floating rate bonds are instruments where the interest rate is not fixed, but re-set periodically with reference to a pre-decided benchmark rate. For instance, a company can issue a 5-year floating rate bond, with the rates being reset semi-annually at 50 basis points above the 1- year yield on central government securities. Every six months, the 1-year benchmark rate on government securities is ascertained from the prevailing market prices. The coupon rate the company would pay for the next six months is calculated as this benchmark rate plus 50 basis points.

Floating rate bonds are also known as variable rate bonds and adjustable rate bonds. These terms are generally used in the case of bonds whose coupon rates are reset at longer time intervals of a year and above. These bonds are common in the housing loan market.

Some of other structures are: (a) deferred interest bonds, where the borrower could defer the payment of coupons in the initial 1 to 3-year period; (b) Step-up bonds, where the coupon is stepped up periodically, so that the interest burden in the initial years is lower, and increases over time.

2. Other Variations in Bond Structures

- ***Callable Bonds***

Callable bonds allow the issuer to redeem the bonds prior to their original maturity date. Such bonds have a call option in the bond contract, which lets the issuer alter the tenor of the security.

For example, a 10-year bond may be issued with call options at the end of the 5th year such as in the illustration in the Box 2.2 below. Such options give issuers more flexibility in managing their debt capital. If interest rates decline, an issuer can redeem a callable bond and re-issue fresh bonds at a lower interest rate. The investor in a callable bond, however, loses the opportunity to stay invested in a high coupon bond, if the call option is exercised by the issuer.

Box 2.2: XYZ Bonds 20YY Series 3

Issuer	XYZ Bank
Credit Rating	Care AAA
Face Value	Rs.10,000
Issue Price	Rs.10,000
Interest Payment	Annual
Coupon	9.75%
Tenor	10 years
Call Option	XYZ has the option to redeem outstanding principal and interest due after 5 years and one day from the date of allotment.

- ***Puttable Bonds***

A puttable bond gives the investor the right to seek redemption from the issuer before the original maturity date. For example, a 7-year bond may have a put option at the end of the 5th year. If interest rates have risen, puttable bonds give investors the ability to exit from low-coupon bonds and re-invest in higher coupon bonds.

- ***Amortizing Bonds***

Amortizing bonds are those in which the principal is not repaid at the end/maturity, but over the life of the bond. Thus, the periodic payments made by the borrower include both interest and principal. Auto loans, consumer loans and home loans, in which each installment paid has both interest and principal components, are examples of amortizing bonds. The maturity of the amortizing bond refers only to the last payment in the amortizing schedule, because the principal is repaid over time.

2.4.3 Classification of Debt Instruments

Debt instruments can be classified in two broad ways.

- ***By type of borrower***: Securities can be divided into those issued by governments, and those issued by non-government agencies like banks, corporations and other such entities.
- ***By tenor/maturity of the instrument***: Securities can be classified as short-term, medium term and long term. Securities with maturities up to one year are issued and traded in the money market. Longer maturities are considered to be part of the capital markets.

These are not mutually exclusive segments. The government issues treasury bills in the money market, and long-term bonds in the capital market to meet its requirements for various periods. Private sector companies issue commercial papers in the money market and bonds in the long-term capital market.

Government securities include central government bonds, as well as quasi-government bonds issued by local governments, state governments and municipal bodies. Securities issued by the central government are considered to be free of credit or default risk. This is because the government can unilaterally increase taxes to repay its obligations, borrow easily from other entities, or print notes to repay debt in the extreme case.

Corporate bond markets are dominated by short-term commercial papers and long-term bonds. Banks issue short-term debt securities called certificates of deposit. The rate at which corporates, banks and institutions borrow depends upon the credit quality of the borrower. The credit or default risk of the borrower is measured by the credit rating of the bond. Higher the credit rating, lower the risk of default.

Companies also raise fixed deposits from the retail investors to meet their borrowing requirements. Such deposits are for a fixed term and carry a pre-defined interest rate. Company deposits are credit rated but unsecured borrowings of companies. Since these are deposits and not a security, there is no liquidity. The investors hold the deposits to maturity.

Money Market Securities

Money market securities include instruments for raising and investing funds for periods ranging from one day up to one year. Money market securities consist of repos/reverse repos, certificates of deposits, treasury bills, and commercial papers. All these securities are issued at a discount and redeemed at par, and are zero coupon in structure. Money markets also include *inter-bank call markets* that are overnight lending transactions between banks; *terms markets* that are long term deposits between banks, and inter-corporate deposits, which are short term lending between companies. These transactions do not involve creation of a debt security and are therefore not included here.

The participants in the money market include banks, primary dealers, financial institutions, mutual funds, provident and pension funds, companies and the government. The purpose of the money

market is to enable institutions and companies to meet short-term funding needs by borrowing and lending from each other.

- ***Repos/reverse repos***

A repo is a transaction in which one participant borrows money at a pre-determined rate against the collateral of eligible security for a specified period of time. A reverse repo is a lending transaction; a repo in the books of the borrower is a reverse repo in the books of the lender. Eligible collateral for repos and reverse repos are central and state government securities and select corporate bonds.

- ***Tri-party Repo***

While a repo/ reverse repo transaction is directly entered into between the borrower and the lender, a tri-party repo transaction takes place on the electronic platform of the Clearing Corporation of India (CCIL) or the Exchanges. Tri-party repo trades, thus, are cleared and settled through a Central Counterparty, unlike the regular repo trades which are settled bilaterally by the counterparties. The central counterparty provides settlement guarantee for tri-party repo trades in return for which it collects margins.

- ***Certificates of Deposits (CDs)***

Certificates of Deposits (CDs) are short term tradable deposits issued by banks to raise funds. CDs are different from regular bank deposits because they involve creation of securities. This makes the CD transferable before maturity. However, actual trading in CDs is extremely limited with most investors preferring to hold them to maturity.

- ***Treasury Bills***

The central government borrows extensively in the money market for its daily operations through the issue of short-term debt securities called Treasury bills (T-bills). T-bills are issued for maturities of 91 days, 182 days and 364 days. They are issued through an auction process managed by the RBI and listed soon after issue. Banks, mutual funds, insurance companies, provident funds, primary dealers and Financial Institutions bid in these auctions.

- ***Commercial Papers***

Companies and institutions raise short-term funds in the money market through the issue of commercial paper (CP). Though CPs are required to have a credit rating, they are unsecured corporate loans with a limited secondary market. They can be issued for various maturities of up to 364 days, but the 90-day CP is the most popular.

Government Securities

Government securities (G-secs), also called treasury bonds, are predominantly issued to fund the fiscal deficit of the government. G-secs are issued through an electronic auction system managed by the Reserve Bank of India (RBI). The RBI publishes a half-yearly issuance calendar that gives market participants information about the amount and tenor of G-secs to be auctioned in that year, along with approximate auction times. Government securities may have tenors ranging from one year to 40 years.

Fixed coupon bonds, commonly referred to as dated securities, are the most common instrument in the G-sec market. These bonds have a fixed coupon rate, with semi-annual interest payments and are redeemed at par. Other instruments used for government borrowing include treasury bills, floating rate bonds, zero coupon bonds and inflation-indexed bonds.

The interest rate on G-secs sets the benchmark for pricing corporate bonds of varying maturities. Since government borrowing is considered to be free of credit risk, all other borrowers in the system borrow at a spread over the relevant G-sec benchmark rate. For example, if the 10-year G-sec rate is 8.4 percent, then a company that issues 10 year bonds will pay a higher rate than this benchmark. This premium reflects the additional credit risk faced by investors in corporate debt.

G-Secs are mandated to be listed as soon as they are issued. They constitute the most liquid segment of the Indian long-term debt market. Over 90 percent of the trading activity in this market is accounted by G-secs. However, trading tends to be concentrated in a few securities, known as benchmark securities (1 year, 5 year, 10 year, 15 year and 30 year G-secs are some examples).

Sovereign Gold Bonds (SGBs) are a recent innovation of the government. These are government securities denominated in grams of gold. The SGBs are issued by the RBI on behalf of the government in regular tranches. Investors buying the bonds pay a price that is linked with the price of gold. The tenor of the bonds is 8 years. Investors receive a fixed semi-annual coupon of 2.5 per cent on the initial investment. The amount receivable on the maturity date of the bond is again linked to the market price of gold on the redemption date. Thus, an investment in SGBs is simply a substitute for owning physical gold with the added attraction of interest on the investment. SGBs are a safer alternative to holding physical gold because the bonds can be issued in demat form and hence there is no risk of loss due to theft or mutilation. Investment in SGBs also enables an investor to avoid the storage cost associated with physical gold. The SGBs have a provision of early encashment after the fifth year for investors who seek premature redemption. Since the bonds are listed on the stock exchanges, an investor holding these bonds in demat form can also exit his holding by selling on the exchange.

Corporate Bonds and Debentures

The market for long term corporate debt is made up of two segments:

i. Bonds issued by public sector units (PSU), including public financial institutions, and

ii. Bonds issued by the private corporate sector

PSU bonds can be further categorized as taxable and tax-free bonds. Tax-free bonds are mainly issued by PSUs in the infrastructure sector. The government may authorize specific PSUs to issue tax-free bonds. Interest income earned from tax-free bonds is not taxable for the investor. Another category of PSU bonds, called capital gains bonds, are issued by National Highway Authority of India (NHAI), NABARD and National Housing Bank and such specifically notified entities. Investment in capital gain bonds allows investors to save tax on long-term capital gains under Section 54 EC of the Indian Income Tax Act.

PSU and institutional bonds dominate overall issuance in the corporate bond market. In terms of sectors, the financial sector accounts for around 70 percent of total bond issuance, and the manufacturing sector accounts for the remaining 30 percent.

Corporate bonds are issued at a spread to the G-sec yield. The difference between the two yields is called credit spread. Credit spread depends on the credit rating and the expected default probability associated with the issuing company, its industry of operation as well the overall credit and liquidity situation in the economy. Higher the credit rating is, lower is the credit spread and the rate at which bonds can be issued.

Corporate bonds with embedded options, floating-rate interest, conversion options and a variety of structured obligations are issued in the market. Issues that are retailed may offer varying interest options and bond structures in the same issue (see Box 2.3).

Box 2.3: Bond Structure

Issuer: LMN Transport Finance Corporation

Security: Non-convertible debentures (NCD) of Rs. 500 crore with option to retain over subscription of up to Rs. 3000 crore

Issue open date: July 2, 20YY

Issue close date: July 22, 20YY

Credit Rating: AA/ Stable from CRISIL

Minimum Application: Rs. 10,000 (10 NCDs)

Series	I	II	III	IV	V

Tenure (years)	3	5	7	5	3
Interest Payout Frequency	Annual	Annual	Annual	Monthly	Cumulative
Coupon Rate	9.85%	10%	10.15%	9.57%	**

** Redemption amount Rs. 1368.02 against face value of Rs.1000

Masala bonds are corporate bonds issued outside India by Indian companies and are denominated in Indian rupees. Foreign investors are eligible to invest in masala bonds. These bonds are advantageous to the Indian issuer because payments of coupon and principal are to be made in rupees and not in the currency of the foreign investors. As a result, the risk of a fall in the rupee against the foreign currency is borne by the foreign investors and not by the Indian issuer. The first masala bond was issued by the International Finance Corporation (IFC) and was listed on the London Stock Exchange.

Green debt securities, as defined by SEBI, are debt securities issued to raise funds to be utilized for sustainable projects and assets such as renewable and sustainable energy, clean transportation, climate change adaptation, efficient and green buildings, biodiversity conservation etc.[11] Issuance of such green bonds have gained traction across the globe to accomplish sustainable development goals. Green Bonds thus form part of Environmental Social Governance (ESG) investing.

In the Union Budget FY 2022-2023 speech, the Finance Minister has announced the issuance of Sovereign Green Bonds for mobilization of resources into green infrastructure to reduce carbon footprint.

Bharat Bond ETF is an exchange-traded fund (ETF) which tracks the Nifty Bharat Bond Index. The Nifty Bharat Bond index is an index of AAA-rated bonds of Public Sector Undertakings (PSUs). The Bharat Bond ETF has a defined tenure. One of the series has a tenor of 5 years and the other of 11 years. This is intended to cater to the needs of short-term and long-term investors. This ETF has a very low expense ratio. Since the ETF invests in bonds of PSUs with the highest credit rating and these PSUs enjoy de facto government backing, investment in this ETF has a high degree of safety. The ETF is taxed in the same manner as ordinary debt funds.

Repo and reverse repo are borrowing and lending transactions in the money market and typically use collateral in the form of government securities. While repo transactions are purely over-the-counter (OTC) trades, exchanges have a '**tri-party repo market**' platform and act as a tri-party

[11] Vide SEBI (Issue and Listing of Non-Convertible Securities) Regulations, 2021 w.e.f. August 9, 2021.

agent. The tri-party repo platform is designed to facilitate repo trades using corporate bonds as collateral. It is an online, web-based, anonymous, order-matching and multilateral trading platform for tri-party repo on corporate debt securities. Market participants can place borrowing and lending orders on this platform which would be matched by the exchange. Exchanges offer a basket repo contract with a tenor ranging from 1 day to 7 days. The contracts allow borrowing and lending against a basket of multiple securities. The securities eligible for the tri-party repo contract are selected by the Clearing Corporation.

2.4.4 Benefits and Risks of Investing in Debt Securities

Benefits of investing in debt securities

- ***Fixed Income***

The issuer of debt commits to pay a pre-decided coupon rate to the investor at the time of issuance. The periodic interest payments are promised under the debt contract, and the investor has a legal right to receive them. This feature of debt makes it less risky than the variable return securities (such as equity). For some categories of investors, such as retired persons, the fixed income from debt is ideal as it provides safe and certain returns on investment.

- ***Fixed Tenor***

Debt is held for the tenor of the instrument. Once principal has been repaid to the investor, the security is extinguished. As a result, capital is tied up only for a limited period of time.

Risks of Investing in Debt Securities

a. Inflation/purchasing power risk

Though returns from investment in debt securities may be fixed and quite predictable in absolute terms, they may be lower and riskier after adjusting for inflation. For example, a bond that promises 8 percent coupon over a 5 year tenor is a good investment only if inflation is below 8 percent over that period. If inflation is higher than 8 percent, then real return from the bond will turn negative. Investment in debt securities is especially vulnerable to high inflation, because, unlike equity, coupons are fixed and cannot be increased to match inflation.

b. Default/credit risk

Default or credit risk refers to the risk that debt issuers may default on interest and/or principal payments. Government securities are free of default risk, but all other debt is exposed to it.

Usually, the credit rating of an instrument is a good indicator of credit risk. The higher coupons offered by lower-rated debt may tempt investors but it must be remembered that these bonds

are riskier. Default risk is lower for secured debt, because the investor has recourse to the assets of the issuing company in case of actual default. That is why unsecured debt such as corporate fixed deposits pay higher rates than secured bonds.

c. Reinvestment risk

Debt securities often allow investors to choose between (i) periodic interest payments and (ii) cumulating and re-investing interest. If investors opt to pull out interest, they face reinvestment risk unless they can reinvest the coupons at the same or higher rate. If they opt for the cumulative option, they implicitly reinvest at the same rate as the debt security.

Investors tend to prefer regular interest payouts instead of re-investment of interest, even though they may not need the cash for consumption. But this tendency exposes their investment to re-investment risk.

d. Call risk

Call risk exists in callable debt securities. The investor may have planned to stay invested until bond maturity, but the issuer may exercise the option to call the security earlier. Usually securities are called back when interest rates decline because issuers want to retire high-cost debt and re-issue fresh debt at lower rates. As a result, investors are forced to reinvest at lower rates.

e. Liquidity risk

The limited liquidity in the secondary markets and the dominance of institutional players makes it difficult for most buyers of bonds, particularly smaller investors, to sell what they have bought. Most investors end up holding a bond to maturity. The limitations of this approach are:

- If market rates move down, price of the bond will rise. Investors may not be able to sell and profit from the price rise.
- If rates move up, investors cannot easily switch into higher coupon bonds to increase their interest income.
- Any drop in credit quality during the tenor of the bond increases their credit risk.

2.5 Choosing between Debt and Equity Investment Avenues

The factors that investors in equity or debt capital consider, before making a choice are as follows:

a. Need for regular income v/s growth:

Debt securities are income-oriented; equity securities are growth-oriented. Investors requiring a steady source of income to augment their earnings or a regular source of cash flow for their

needs (as may be the case with retired investors) prefer debt securities. Investors, who are willing to accept irregular and smaller dividend income for growth in value of their investments over time, prefer equity.

b. Time horizon

Debt instruments are issued for maturity periods from 7 days to 30 years. The most commonly issued debt instruments in Indian markets are in the 90-day to 7-year segment. Investors with the need to invest their money for short periods of time choose debt. Investors, who have a long-term orientation and are saving for the long haul, may benefit from the growth that equity investment provides. In the short-term, investment in equity can be a riskier proposition as the market value of the equity shares frequently move up and down.

c. Risk appetite

Debt instruments are relatively more stable in value, and are structured to return the principal invested on the maturity date. However, these instruments carry with them the risk of default in paying interest or principal or both on time. In the case of equity investments, the amount and frequency of dividend are unknown, and if the business does not make adequate profits, dividends may not be paid at all. There is also no assurance of return of the principal invested. If the company grows into a stable and sustainable profit making business, the value of equity shares moves up. If the business fails to live up to its promise, the amount invested may be completely lost. Investing in equity needs a higher appetite for risk than investing in debt.

d. Frequency of review

Investors who like an active management of their risk, in which they review how their investments are doing and take actions, prefer equity. Equity shares are listed and traded in secondary markets, and provide an avenue for active investor to sell underperforming investments and buy other equity shares. Though debt instruments are also listed, most investors in debt tend to buy and hold a debt security to maturity.

2.6 Hybrid Instruments

2.6.1 Convertible Debentures

Convertible debentures are debt instruments that can be converted into equity shares of the company at a future date. The security has features of both debt and equity. It pays periodic coupon interest just like any other debt instrument.

At the time of redemption of the debenture, the investors can choose to receive shares of the company instead of return of principal invested. The issuer specifies the details of the conversion at the time of making the issue. This will include:

- The date on which the conversion will be made
- The ratio of conversion i.e. the number of shares that the investor will be eligible to get for each debenture
- The price at which the shares will be allotted to the investor on conversion. Usually this is at a discount to the market price
- The proportion of the debenture that will be converted into equity shares.

Debentures may be fully convertible debentures (FCD) where the entire face value of the debenture is converted into equity shares or they may be partly convertible debentures (PCD) where a portion of the debenture is converted into equity. The non-convertible portion will continue to remain as debentures, earn interest income and will be repaid on redemption. Optionally convertible debentures (OCDs) are convertible into equity shares at the discretion of the debenture holders. They may choose to convert into equity, or continue to hold the instrument as debt depending on their need, and the terms of conversion.

The advantage to the issuer of convertible debenture lies in the fact that convertible debentures usually have a lower coupon rate than pure debt instruments. This is because the yield to the investor in such debenture is not from the coupon alone but also the possibility of capital appreciation in the investment once the debentures are converted into equity. Moreover, the issuer does not have to repay the debt on maturity since shares are issued in lieu of repayment. The disadvantage to this is that stakes of the existing shareholders get diluted when fresh shares are issued on conversion. As more shareholders come in, the proportionate holding of existing shareholders will fall.

The investors in a convertible debenture have the advantage of equity and debt features. They earn coupon income in the initial stages, usually when the company's project is in its nascent stage. Once the debenture is converted into shares, the investor may benefit from the appreciation in the value of the shares.

2.6.2 Depository Receipts

Depository receipts (DRs) are financial instruments that represent shares of a local company but are listed and traded on a stock exchange outside the country. DRs are issued in foreign currency, usually dollars.

To issue a DR, a specific quantity of underlying equity shares of a company are lodged with a custodian bank, which authorizes the issue of depository receipts against the shares. Depending on the country of issue and conditions of issue, the DRs can be converted into equity shares.

DRs are called American Depository Receipts (ADRs) if they are listed on a stock exchange in the USA such as the New York Stock Exchange (NYSE). If the DRs are listed on a stock exchange outside the USA, they are called Global Depository Receipts (GDRs). The listing requirements of stock exchanges can be different in terms of size of the company, state of its finances, shareholding pattern and disclosure requirements.

When DRs are issued in India and listed on stock exchanges here with foreign stocks as underlying shares, these are called Indian Depository Receipts (IDRs).

The shares of a company that form the basis of an ADR/GDR/IDR issue may be existing shares i.e. shares that have already been issued by the company. These shareholders now offer the shares at an agreed price for conversion into DRs. Such a DR issue is called a sponsored issue.

The company can also issue fresh shares which form the underlying for the ADR/GDR issue. The funds raised abroad have to be repatriated into India within a specified period, depending on the exchange control regulations that will be applicable.

The company whose shares are traded as DRs get a wider investor base from the international markets. Investors in international markets get to invest in shares of company that they may otherwise have been unable to do because of restrictions on foreign investor holdings. Investors get to invest in international stocks on domestic exchanges. Holding DRs give investors the right to dividends and capital appreciation from the underlying shares, but not the voting rights.

The steps in issuing DRs are the following:

- The company has to comply with the listing requirements of the stock exchange where they propose to get the DRs listed.
- The company appoints a depository bank which will hold the stock and issue DRs against it.
- If it is a sponsored issue, the stocks from existing shareholders are acquired and delivered to the local custodian of the depository bank. Else the company issues fresh shares against which the DRs will be issued.
- Each DR will represent certain number of underlying shares of the company.

Once the custodian confirms that the shares have been received by them, the depository bank in the foreign country will issue the depository receipts to the brokers to trade in the chosen stock exchange where the DRs have been listed. DRs may feature two-way fungibility, subject to regulatory provisions. This means that shares can be bought in the local market and converted into DRs to be traded in the foreign market. Similarly, DRs can be bought and converted into the underlying shares which are traded on the domestic stock exchange.

SEBI has laid down the guidelines to be followed by companies for IDRs. This includes the limit on the money raised by a company in India, lock-in on the conversion of IDRs to shares, the availability of IDRs to only resident Indian investors and not to FPIs.

2.6.3 Foreign Currency Convertible Bonds (FCCBs)

FCCBs are foreign currency (usually dollar) denominated debt raised by companies in international markets but which have the option of converting into equity shares of the company before they mature.

The payment of interest and repayment of principal is in foreign currency. The conversion price is usually set at a premium to the current market price of the shares. FCCBs allow companies to raise debt at lower rates abroad. Also, the time taken to raise FCCBs may be lower than what takes to raise pure debt abroad.

An Indian company that is not eligible to raise equity capital in the domestic market is not eligible to make an FCCB issue either. Unlisted companies that have raised capital via FCCB in foreign markets are required to list the shares on the domestic markets within a stipulated time frame.

FCCBs are regulated by RBI notifications under the Foreign Exchange Management Act (FEMA). The Issue of Foreign Currency Convertible Bonds and Ordinary Shares (Through Depository Receipt Mechanism), 1993 lays down the guidelines for such issues.

The issue of FCCBs should be within the limits specified by RBI from time to time. Public issue of FCCB is managed by a lead manager in the international markets. Private placement of FCCBs is made to banks, financial institutions, foreign collaborators etc.

The maturity of FCCB shall be not less than five years.

The expenses shall be limited to 4 percent of the issue size in case of public issue and 2 percent in the case of private placement.

2.6.4 Warrants

Share warrants are options issued by a company that give the holder of the warrant the right but not the obligation to subscribe to a specific number of equity shares of the company at a predetermined price and on or after a predetermined date. Warrants are basically like stock options which most investors are familiar with. The differences are that while stock options are issued by the stock exchange and have a short life of 1 to 3 months, warrants are issued by the company and have a longer life. According to SEBI rules, investors are required to pay 25 per cent of the amount of consideration upfront, i.e. when the warrants are issued. If the investors choose to exercise the warrants on the exercise date, they are allotted equity shares in the company

according to the prescribed formula and have to pay the balance amount of consideration. If the investors decide against exercising the warrants, they forfeit the amount already paid.

For example, shares of ABC Ltd are traded at Rs.180. The company issues 400,000 warrants at an issue price of Rs.220 to institutional investors on August 31, 20Y1. These warrants have an exercise date of August 31, 20Y2. The investors are required to pay an amount of Rs.2.20 crore (i.e. 25%*(400000*220)) when they receive the warrants. The remaining amount will be paid if the promoters decide to exercise their warrants on the exercise date.

Warrants are beneficial for a company when the exercise price is higher than the current share price. If the company issues equity shares immediately it receives the current valuation. If the business prospects and profitability are expected to improve in the near future the company can issue warrants at an exercise price that is higher than the current price. Thus, the company can capture the benefit of price appreciation. Warrants permit an investor to lock in a predetermined price for buying the shares on the future date by paying only 25 per cent of the total price. The investor benefits in case of share price appreciation.

2.7 Characteristics and role of Commodities as an asset class

We have thus far discussed equity and debt as the main investment avenues available to an investor. Both these are financial assets. Unlike financial assets, commodities are 'real' assets or assets which are consumed or used in the manufacturing process. Hence commodities often react to a changing macroeconomic environment in a direct manner than equities and debt securities. Commodities can be classified into different categories such as: (a) Soft commodities which are mainly agricultural commodities such as sugar, tea, coffee, cocoa, corn, wheat, soya-bean etc. (b) Bullion which includes gold and silver (c) Base metals which include copper, zinc, aluminium, nickel and other metals used for industrial purposes and (d) Energy which includes crude oil and natural gas.

2.7.1 Features of commodities as an investment

- ***Storage and insurance costs:*** Unlike equity and debt securities investment in physical forms of commodities involves storage and insurance costs. Such costs can be very high and make commodity investments out of reach of ordinary investors. The financialization of commodity investments can enable greater participation from retail investors.
- ***Specialized knowledge:*** In addition to knowledge of macroeconomic conditions and geopolitical risks, investment in commodities requires the investor to track fundamental factors affecting demand and supply of commodities. These include changes in weather patterns such as temperature, rainfall, snowfall, level of inventories of commodities, changes in consumer preferences etc.

2.7.2 Role of commodities

- ***Protection against inflation:*** Inflation is defined as the rise in price level of goods and services. Commodity prices are usually higher during periods of rising inflation. As a result, having an exposure to commodities in an investment portfolio serves as a hedge or protection against inflation.
- ***Low correlation to equity and debt:*** Equity and debt investments tend to underperform during inflationary periods. Debt securities, being in the nature of fixed income products, are adversely affected by rising inflation. Rising inflation erodes the present value of cash flows from equity shares and thus reduces the attractiveness of equities. Because of their inflation-hedging property, commodities have a low correlation with equity and debt investments. This makes commodities an efficient means of diversification for a portfolio purely invested in equity and debt securities.

Investors have traditionally gained exposure to commodities by investing in equity shares of commodity producing companies. Such investment is not a pure play on the underlying commodity because the exposure to the commodity is combined with exposure to company-specific or idiosyncratic risks. For instance, an investment in equity shares of a steel producing company enables an investor to enjoy the upside from rising steel prices. However, the investment is subject to company-specific risks such as risks from high debt-equity exposure of the company, competition from foreign steel producers, changes in the steel import policies of the government etc. These factors may lead to a decline in the share price of the company even in a scenario of rising global steel prices. Direct investment in commodities is possible by investing in commodity exchange-traded funds (ETFs), commodity mutual funds or by trading in commodity derivatives.

2.8 Derivatives

Derivatives are financial instruments whose value depend upon or are derived from the value of other, more basic underlying variables. These are traded both in the OTC market and on exchanges. The exchange-traded derivatives in India are futures and options. Futures contracts are agreements between a buyer and seller to buy or sell the underlying asset at a predetermined price and quantity on a predetermined date. Options are contracts that give the holder of the option the right (but not the obligation) to buy or sell the underlying asset at a predetermined price and in a specified quantity at or before a predetermined date. There are two kinds of options: options that allow the holder the right to buy the underlying asset are known as ‘call’ options; Options that allow the holder the right to sell the underlying asset are known as ‘put’ options. The predetermined price at which the asset can be bought or sold by the option holder is known as the ‘exercise’ or ‘strike’ price. Both futures and option contracts are settled on a predetermined

date known as 'expiry' date. Thus, derivatives have a short shelf life and as investments they are primarily meant for investors with a short investment horizon. Exchange-traded derivatives are now available for trading on the entire spectrum of assets encompassing equity, debt, currencies and commodities.

Some of the salient features of exchange-traded derivatives are as under:

- Exchange-traded derivatives are contracts to buy or sell the underlying asset and these contracts are designed by the Exchanges on which they are listed. The contract specifications are approved by the regulator.
- Contract specifications include size of the contract, quotation unit, tick size, contract grade, trading hours, trading cycle, expiration date, delivery terms, daily price limits etc. These are explained for equity, currency and commodity derivatives in the next section.
- Derivatives are under-funded instruments. Assuming a position in a derivative contract merely requires deposit of an upfront margin with the broker. The margin is very often a small percentage of the entire value of the underlying asset.
- Derivatives are leveraged instruments. The holder of a derivative contract obtains an exposure to the entire value of the underlying asset by depositing only a fraction of its value by way of margin. For example, if the stock price of ABC Ltd is Rs.100 and the margin for a derivative contract on ABC Ltd stock is 10 per cent of its value, then a margin deposit of Rs.100 can allow a trader to gain exposure to 10 shares. Outright purchase of 10 shares would have required a cash investment of Rs.1000. Thus, the derivative contract allows the trader to gain a leverage of 10 times his initial investment.
- Derivatives markets are often more liquid than the spot markets or cash markets. This can be explained by the unfunded nature of the instruments which makes it easier for trading. Traded volumes of derivatives markets are often observed to be several times the volumes in the cash markets.
- Derivatives are risky instruments. The risk stems from the leveraged nature of the instrument. The small initial investment in the form of margin often tempts investors to assume large positions that are not commensurate with their risk-bearing capacity. While the leverage can lead to large gains for the investor, it can also magnify the losses.

2.8.1 Role of derivatives

- Derivatives facilitate the process of 'price discovery'. As explained earlier, this is the process of determining the fair price of an asset with the interaction of a large number of

buyers and sellers. Since the derivatives markets are more liquid than the cash market, they are better at establishing a fair price for the underlying asset.

- Derivatives allow the transfer of risk from those who wish to avoid risk to those who have the ability and willingness to bear the risk for a price. Derivatives are thus useful hedging tools.
- Derivatives permit efficient diversification of a traditional debt plus equity portfolio by enabling retail investors to participate in alternative asset classes such as currencies and commodities.

2.8.2 Features of equity derivatives

Equity derivatives traded in India comprise futures and options contracts on stock indices and individual stocks. SEBI has laid down strict eligibility criteria that an index or stock must satisfy in order to be included in the futures and options segment. Equity futures and options can be traded on stock indices such as Nifty and Bank Nifty and on specified individual stocks. The clearing and settlement and risk management of these contracts are done by the Clearing Corporation of the exchange. Index futures and options are settled in cash on the expiry date. Individual stock futures and options are settled by physical delivery of the underlying stock. Equity derivatives mainly enable users to hedge the systematic risk of their equity portfolio and to speculate on the direction and volatility of equity prices.

2.8.3 Features of currency derivatives

Currency futures and options are available both on Indian rupee (INR) pairs (USDINR, EURINR, GBPINR and JPYINR) and cross-currency pairs (EURUSD, GBPUSD and USDJPY). All INR and cross-currency contracts are cash-settled in Indian rupees. These contracts are useful for hedging currency risk.

2.8.4 Features of commodity derivatives

Futures and options on commodities such as gold, industrial metals, crude oil and agri-commodities are traded on nation-wide commodity derivatives exchanges in India. Contract specifications differ according to the underlying commodity. Commodity options are traded as options on futures contracts and not as options on the spot commodity. This is because the commodity futures market is regulated by SEBI while the commodity spot markets are regulated by the State governments. When the option contract is finally settled on the expiration date it devolves into a futures position in the underlying commodity. Commodity derivatives allow the user to hedge the risk of fluctuations in commodity prices as well as to speculate on the changes in commodity prices.

2.8.5 Features of interest rate derivatives

Interest rate futures (IRF) are currently available on specified government securities, treasury bills and MIBOR, which is the Mumbai inter-bank offered rate. Interest rate options (IRO) are available on government securities. These contracts are settled in cash on the expiry date. They enable the user to hedge against interest rate risk and also to speculate on the direction and volatility of interest rates.

2.9 Asset Allocation and Diversification

2.9.1 Benefits of asset allocation and diversification

An individual creates a portfolio of investments to meet their various goals. The investments selected have to balance the required return with an appropriate level of risk for each goal. Assets and investments differ on their features of risk, return, liquidity and others.

An investor will have different requirements from their portfolio depending upon the goals they are saving for. They may need growth for long-term goals, liquidity for immediate needs and regular payouts to meet recurring expense. No one investment can meet all the requirements for growth, liquidity, regular income, capital protection and adequate return. The investor will have to create a portfolio of securities that has exposure to different assets which will cater to these diverse needs.

Investment Objective	Suitable Investment
Growth and appreciation in value	Equity shares and equity funds, Real estate, Gold
Regular income	Deposits, Debt instruments and debt funds, Real estate
Liquidity	Cash, Bank deposits, Short-term mutual fund schemes
Capital preservation	Cash, bank deposits, Ultra-short term funds

Consider the impact of the following investment decisions:

- Jayesh invests only in real estate. He has an urgent need for funds but finds that he is not able to sell or take a loan quickly enough.
- Kamal leaves all his money in his savings bank account which earns a very low interest. He finds that he is not able to accumulate enough money required to meet his expenses.

- Latika invests all her money in equities. She finds that the value of her investments keeps fluctuating and she is not sure if she will have the required funds when she needs it.
- Harmeet has most of her money in gold jewellery. She finds that she is not able to generate the income from her investments to meet her regular monthly expenses.
- Gayatri has invested her money in bank fixed deposits. She is not able to manage her expenses from the interest she receives because the interest is fixed but her expenses keep on increasing.

The risk to the investors in the cases described above comes from the concentration of their portfolio in one type of investment. When equity markets go down, Latika will find that her entire investment portfolio has gone down in value. If the real estate markets crash, Jayesh's investment value will decline as will Harmeet's investments when the price of gold falls. Instead, if they were holding some portion of the portfolio in different assets, a fall in one will be cushioned by a rise in another since not all asset values rise or fall together. This process of dividing the portfolio among different assets so that the overall portfolio's return is protected from the effect of a fall in one or few assets is called asset allocation.

The asset allocation that is suitable for a person will depend upon their specific situation. For example, a person close to retirement will have a higher allocation to safer investments such as debt and lower allocation to equity. On the other hand, an individual earning a high income and whose financial goals are far away will prefer to earn higher returns with assets such as equity rather than lower risk assets with lower returns. The suitable asset allocation is a function of the investment period available to the investor and their ability to take risk.

Asset allocation leads to different asset categories being included in a portfolio. This brings diversification to the portfolio. Diversification means having a combination of investments in a portfolio in such a way that a fall in the value of one or few will be made up by other investments that are doing well. The benefit of diversification will be available to a portfolio only if the selection of investments is done with care so that they do not rise and fall together.

Allocating between different asset classes, such as equity, debt, gold, real estate, is the first level of diversification. At the next level, within an asset category looking for investments that will not move together will benefit the portfolio. For example, while investing in equity, if shares of companies in different industries are selected then the diversification benefits are higher since the fall in prices will not be identical across all industries. Asset allocation and diversification reduces the risk of loss in a portfolio and stabilizes the returns that the portfolio generates.

2.10 Understanding the factors underlying the investment process

2.10.1 Managing Return and Risk Requirements

The ideas of asset allocation and diversification are important tools in financial planning that help an investor reach their financial goals. Building up a suitable investment portfolio requires decisions to be made on where to invest to ensure that financial goals are met and manage the risk in investing through diversification. Investments such as mutual funds are an easy way for investors to diversify their investments even with a small investment amount. They can get exposure to different asset classes and sub-categories through such managed funds.

2.10.2 Aligning investment horizon to selection of investment products/ asset class

The selection of the investment product or asset class for inclusion in a portfolio should be aligned with the investment horizon of the investor. For example, returns from equity investing tend to be much more volatile over the short term as compared to returns from debt securities. However, equities can be expected to outperform debt securities over a reasonably long investment horizon. Thus, the allocation towards debt and equity should be dictated by the investment horizon of the investor. Typically, the age and liquidity needs of the investor are used as guiding factors. Younger investors with no immediate liquidity needs should ideally invest a larger portion of their funds in equities as compared to older investors as the former can sit tight through the volatile periods in the equity market.

2.10.3 Aligning Portfolio Features to Investor Needs

An individual's portfolio may require focus on growth, income and liquidity at different stages in the investing life of the investor. For example, saving for retirement will require the portfolio to be focused on growth in the years when the funds are being accumulated. Once retirement is reached, the retirement portfolio will be inclined towards income. It must be easy to rebalance the investments to be aligned to the current needs.

2.10.4 Ease of Investments and Exits

Saving for financial goals will typically be done periodically over time. Investment used for financial planning must be convenient such that it enables investors to invest periodically as and when they generate savings and surpluses.

There may be a need to exit an investment either as part of the plan or in an emergency. For example, money being accumulated for a holiday will require the investment to be sold when

the funds are required or when there is a need to rebalance the portfolio. Investments must be capable of being liquidated easily whenever the investor may need to do so.

2.10.5 Flexibility in Investments

Investments should be flexible to allow investors to structure returns to suit their specific requirements. For example, a low risk investor may choose a mutual fund Monthly Income Plan (MIP) as a lower risk debt-oriented fund even though regular income may not be required. A growth option in the fund is a convenient way to invest in it without having to take periodic dividend when income is not required.

2.10.6 Information and Updates

Investors must be able to get information about the investment regularly so that they can assess the performance and suitability of the investment. Securities are issued under specific regulations which typically require the investors to be provided with adequate information.

Securities provide the flexibility and ease of investments to implement a financial plan for an investor to meet their financial needs.

2.11 Various aspects of investing in Equity: Price and Value

The price of the equity shares in the secondary markets, where it is listed and traded, primarily reflects the prospects of the business. Many people engage in active day trading in stocks, purely led by the price movements. What differentiates equity investing from gambling is the fact that stock prices are anchored in their intrinsic value and it may not be possible for prices to mindlessly deviate from fair value for long periods of time. In finance terminology, the intrinsic value of an equity share is the discounted value of its future benefits to the investor. Investing in equity is about estimating this intrinsic value, and paying a price to earn the future value. The intrinsic value of an equity share is the estimate of the future earnings that it is expected to generate for the owner of the share.

In equity investing, therefore, there are two distinct notions of value and price. Intrinsic value is the estimated value per equity share, based on the future earning potentials of a company. Market price is the price at which the share trades in the stock market, considering several factors including various estimates of intrinsic value. This value may be equal to, less than or more than the market price at any point in time. Equity markets help in gathering intrinsic value estimates of all the investors about a company to arrive at an equilibrium market price. The market price

reflects all the information related to the company. In this price discovery process, estimates of value are tested, rewarded and penalized by the market forces of demand and supply.

Equity is priced in the market with episodes of inefficiency. Equity prices reflect underlying information through a chaotic process. As a result, equity markets are not perfectly efficient, so prices may not always reflect the underlying intrinsic value of the share. If the intrinsic value is perceived to be more than market value, the scrip is said to be undervalued. If intrinsic value is perceived to be less than market value, the scrip is said to be overvalued. The goal of investment strategies is to buy undervalued shares, and sell overvalued ones. But it remains tough to make these evaluations correctly and consistently, as what is being priced is the unknown future of the company. Equity investing requires identifying and exploiting inefficiencies and is not amenable to mathematical formulation.

2.12 Equity Investing Process

Investing in equity involves the following:

a. Security selection

Several businesses compete for investor attention. They either issue equity shares in the primary markets, or are available for buying at the secondary markets. Selecting the right stock to invest in, requires understanding the business, its future prospects, its profit forecasts, expansion plans and several factors that impact the future value of the stock.

b. Market timing

All equity shares may not be attractive at all times. Investing in equity requires periodic reviewing for selling the low-return stocks and buying shares with potential higher returns. All firms undergo economic cycles (based on the macroeconomic environment) that impact their profits. For example, in a slowing economy, steel and construction sectors may relatively slow down more than businesses which are into FMCG products.

Items of regular consumption may be bought even if the economy is slowing down, while consumption of non-regular items may be reduced.

Businesses also have multiple growth phases, in which their earnings and revenues may grow at different rates. An early stage business may enjoy a high growth in revenue and profits, from its innovative and near monopoly position. As it grows, it may attract competition; give up some of the early advantages, and settle down to a long term stable, but lower rate of growth.

c. Sector and segment weighting

The choice of which group of shares to invest in, i.e. large or small, new or established, growth-oriented or dividend-paying stocks, determines how the equity portfolio may perform in terms

of risk and return. Combining various segments of the equity market into a portfolio requires careful consideration of how these components come together in terms of risk and return.

2.12.1 Commonly Used Terms in Equity Investing

- **Price Earnings Multiple**

The price-earnings ratio or the PE multiple is a valuation measure that indicates how much the market values per rupee of earning of a company. It is computed as:

Market price per share divided by Earnings per share

Earnings per share (EPS) are the profit after taxes divided by the number of shares outstanding. It indicates the amount of profit that company has earned, for every share it has issued.

PE is represented as a multiple. When one refers to a stock trading at 12x, it means the stock is trading at twelve times its earnings. If it is expected that earnings of a firm will grow then the market will be willing to pay a higher multiple per rupee of current earnings. The focus is therefore on 'prospective' PE or how much the current price is, discounting the future earnings. If the growth in EPS is likely to be high, then the current high PE based on historical numbers may not be the right one to look at.

It is common to look at the PE multiple of the index to gauge if the market is overvalued or undervalued. The PE multiple moves high when prices run ahead of the earnings numbers and the market is willing to pay more and more per rupee of earnings. Many would consider a market PE of 22x or above as an overvalued zone. When markets correct and uncertainty about future earnings increases, the PE multiple also drops. A PE of 12x or lower is considered an undervalued zone.

Analysts also compare the PE of one company with another, to check the relative value. The PE multiple at which a stable, large and well known company would trade in the market, is likely to be higher than the PE multiple the market is willing to pay for another smaller, less known, and risky company in the same sector.

- **Price to Book Value (PBV)**

The PBV ratio compares the market price of the stock with its book value. It is computed as:

Market price per share divided by the Book Value per share

The book value is the accounting value per share, in the books of the company. It represents the net worth (capital plus reserves) per share. An important limitation of this number is that most assets on the books of the company are shown at cost less depreciation, and are not inflation

adjusted. Therefore, the realizable value of the assets is not reflected in the book value. Since the book value considers the net worth of a company, it is an important number in fundamental analysis.

If the market price of the stock were lower than the book value and the PBV is less than one, the stock may be undervalued. In a bullish market when prices move up rapidly, the PBV would move up, indicating rich valuation in the market.

- **Dividend Yield**

Dividend is declared as a percentage of the face value of the shares. A 40 percent dividend declared by a company will translate into a dividend of Rs. 4 per share with a face value of Rs. 10 (i.e. 10*40% =4). If the share was trading in the stock market for a price of Rs. 200 per share, this means a dividend yield of 2 percent (i.e. 4/200*100 = 2%).

The dividend declared by a company is a percentage of the face value of its shares. When the dividend received by an investor is compared to the market price of the share, it is called the dividend yield of the share. It is computed as:

Dividend per share divided by Market price per share

The dividend yield of a share is inversely related to its share price. If the price of equity shares moves up, the dividend yield comes down, and vice versa. Some companies have a history of growing and consistent dividends. They are sought by investors who seek a regular income. Public sector units, especially PSU banks, in India tend to have a higher dividend yield.

Dividend yields are also used as broad indicators of the market cycles. A bull market will be marked by falling dividend yields, as prices move up. A bear market will have a relatively higher and increasing dividend yields as prices tend to fall.

2.12.2 Equity Research

Equity research is a specialized pursuit that requires skills in financial analysis and valuation. Investors use equity research reports to select stocks to invest in. There are two types of equity research.

Buy-side research is done by institutional investors, who manage portfolios with the objective of generating active returns that are higher than benchmarks. Buy side research analysts tend to be generalists than specialists, covering more sectors and stocks. They focus on questioning the model and business case to understand downside risks and work closely with sell-side analysts.

Sell side research is done by broking houses, who engage specialists to track sectors and stocks.

Analysts create earning models for companies and sectors and track them to generate sector and stock reports and dynamically update them. They also interact with management, peers, suppliers and customers of businesses. They may arrange analyst and management meetings for buy-side clients and create special event-based reports and analysis.

2.12.3 Equity Analysis and Valuation

There are two parts to evaluating a stock for investment:

- Equity analysis to establish the fundamental reasons for investing in a particular stock.
- Equity valuation and assessment of market price, to determine whether to buy or sell a stock at a given price.

There are two approaches to such evaluation:

a. **Fundamental analysis** is a study of the financial statements and information pertaining to a stock, to estimate the future potential. Fundamentals of a stock refer to the information that is relevant to estimate the earning potential and therefore the intrinsic value.
b. **Technical analysis** involves studying the price and volume patterns to understand how buyers and sellers are acting on existing price information. Technical analysis integrates the historical price and volume data of traded stocks into price charts, points of support and resistance and price trends. Technical indicators are constructed with price data and used to judge the buying and selling interest in the markets. Technical analysis views price as an aggregate indicator of all information about a stock.

Equity analysis requires an understanding of the fundamental factors that affect the earnings of the company such as current trends and future potential trends in business, financial analysis, industry features, estimation of the company's revenue, costs and earnings and comparison with other companies in the same peer group. Financial analysis is done using the published financial statements. Ratio analysis, cash flow analysis, profitability and revenue estimates are all done for a company, using its historical data and estimates and forecasts for the future. Comparisons within the same industry, analysis of industry and management factors and analysis of the macro-economic framework are done, to sharpen the outputs of financial analysis.

Equity analysis involves studying a range of variables, factors and numbers and their implications for the future potential of a stock. The economy-industry-company (EIC) framework is a simple description of the process of analysis.

It is done in two principal ways:

- Top down approach begins at macro factors and identifies sectors and stocks based on the identification of macro trends.

- Bottom up approach begins at stock selection based on the business potential and its ratification by examining industry and macro indicators.

Information for equity analysis is gathered from the following sources:

- Audited financial statements
- Analyst meetings, plant visits and interactions with the management
- Industry reports, analytics and presentations
- Government and regulatory publications

Valuation of equity shares involves using extensive information that enables estimating future cash flows, modeling these variables into a logical valuation framework, and understanding the sources of risk to the estimates of valuation. There are several sophisticated models for equity valuation, many of them are commercially available, easing the complex mathematical calculations involved.

There are two broad approaches to valuation:

- Discounted cash flow models
- Relative valuation models

Discounted cash flow models are theoretical constructs that are based on the understanding that value can be estimated by looking into information about the business itself, its earnings, growth and dividends.

Relative valuation models try and find the pricing of something similar to the asset being valued. Using the peer group averages, sector averages and other such commonalities that enable one to compare an equity with another, or a group, relative valuation models make assessment of fair value of an equity share.

Relative valuation models help in identifying both undervalued and overvalued stocks since it include market variables, more importantly the price of a stock. The relative valuation model is easier to understand and tweak. At the same time, this is also a limitation as they may include valuation errors that may be included in market prices. While the use of relative valuation model is widespread, some of the assumptions regarding comparable stocks, peer groups or averages may be generalized and prone to error.

Discounted cash flow (DCF) models are rigorous models requiring clearly specified assumptions and a focus on the core factors that drive the valuation of a stock. One set of assumption is about the cash flow estimates; the others are about the discounting rate, the proxy for risk. There can be differences in DCF valuation estimates depending on the above two factors, which tend to vary quite significantly across analysts who value stocks.

2.13 Various aspects of investing in Debt securities

2.13.1 Concepts and Terms Relating to Debt Securities

- **Time Value of Money**

A rupee in hand today is more valuable than a rupee obtained in future. For example, let us compare receiving Rs. 1,000 today, and receiving it after 2 years. If today's Rs.1000 is placed in a 2-year bank deposit earning simple interest of 8 percent p.a., then it will be worth Rs.1160 (principal 1000 + interest 160) at the end of 2 years. This makes today's Rs.1000 more valuable than the future Rs.1000. Clearly, the value of currently available funds over funds received in the future is more valuable due to the return that can be earned by investing the current available funds. If cash flows that are receivable at different points in time have to be compared, the time value of money has to be considered.

As a simple rule, today's money is capable of growing at a given rate. So, it should be compounded before being compared to an amount receivable on a future date. Money receivable on a future date should be discounted at a given rate before being compared to today's money.

A debt instrument typically features future cash flows in the form of interest and principal returned on maturity. A sum of money is paid today to receive these benefits in the future. To evaluate a debt instrument, the future cash flows are discounted at a rate (known in the debt markets as yield) representing the current fair rate for that tenor and credit quality. These discounted cash flows are summed to arrive at today's value of the future cash flows (also called the present value of the debt instrument). This is the theoretical fair value of the debt instrument.

There are two important concepts around time value used in valuing debt instruments:

- The further ahead in future the cash flow is, the lower its present value. If a bond pays 10 percent interest every year, for the next 10 years, the present value of the interest income of Rs.10 receivable in first year will be higher than the present value of the same Rs.10 receivable in the 10th year, even if the discount rate applied is the same.
- The higher the discount rate or yield, the lower the present value. Assume that a bond pays 10 percent interest for the next 10 years, and the market yield for a comparable bond has moved up to 12 percent. The future cash flows of this bond will now be discounted at 12 percent and the bond will be worth much lesser. Alternatively, if the same cash flows are discounted at 8 percent, the value of the bond will be higher.

There are four steps in calculating the price of a debt instrument:

1. Calculate coupon payments accruing to the investor.
2. Calculate redemption price at maturity.
3. Discount each inflow (from step1 and step 2) by the current market yield, for appropriate number of years and credit quality.

4. Add the discounted cash flows to arrive at the fair value of the bond.

Illustration

Amit buys a 5-year bond issued at face value of Rs.100 and redeemable at par. Coupon rate is 10 percent, payable annually. What is the value of the bond if the market yield is 8 percent?

Face value Rs.100

Coupon Rs.10 each for 5 years

Redemption value Rs.100

Year (n)	**Nature of Cash Inflow**	**Cash inflow (Rs)**	**Discounting Factor [1/(1+8%)^n]**	**Discounted Cash flows (Rs.) [Cash inflow x Discounting Factor]**
1	Coupon	10	0.9259	9.26
2	Coupon	10	0.8573	8.57
3	Coupon	10	0.7938	7.94
4	Coupon	10	0.7350	7.35
5	Coupon + Principal	110	0.6806	74.86
	Sum of the discounted cash flows (PV of the bond)			**Rs. 107.98**

- **Yield and Price**

The bond price is the present value of cash inflows from the bond, discounted by the market yield. So, bond price, coupon rate and yield are all connected. Given any two, the third can be easily calculated.

In the bond markets, it is the price of a bond that is known and quoted. Information on coupon rate and redemption are also available. Given the bond price and its coupon, the yield can be computed.

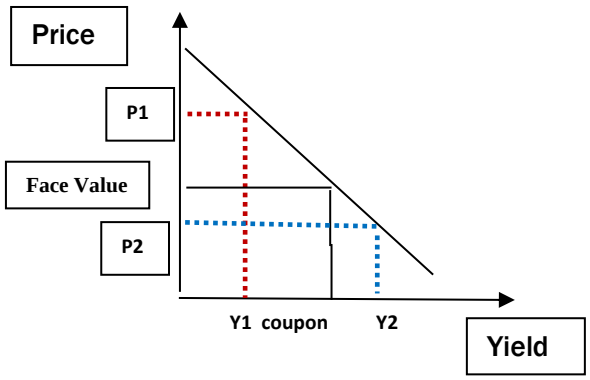
The yield is the actual measure of the return to the investor at a point of time. The coupon rate merely helps in computing the cash flows that would accrue periodically to the investor. The yield

can be higher or lower than the coupon rate. The difference between yield and coupon arises because an investor can buy or sell a bond at a price different from the face value in the secondary market.

If the investor purchases the bond at a price lower than the face value, then he has acquired it at a cheaper price than the original issued price. As a result, yield will be higher than the coupon rate. If the investor purchases the bond at a price higher than the face value, then he has acquired it at a higher price than the original face value, so his yield will be lower than the coupon rate.

There is an inverse relationship between yield and price of a bond. As bond price falls, the yield to the investor goes up. This is because as the discounting rate (or yield) is increased, the final present value (price) reduces (Refer figure 2.1).

Figure 2.1: Relationship between Yield and Price of Bond



- **Current Yield**

Current yield simply compares the coupon of a bond with its market price.

Current yield = Coupon rate/ Market price

If the market price is below the face value, then current yield is higher than the coupon. If market price is higher than the face value, then current yield is lower than the coupon.

For example, if a bond paying an annual coupon of 12 percent is trading in the markets for Rs. 109.50, we compute the current yield as: (12/109.5)*100 =10.95 percent

- **Yield to Maturity (YTM)**

The rate which equates the present value of future cash flows from a bond with the current price of the bond is called the Yield to Maturity (YTM) of the bond. As the bond price changes, the YTM

also changes. Thus, YTM is the discount rate implied in the bond value at a point in time. YTM is a popular and widely used method for computing the return on a bond investment. Yield quotations in the debt market usually refer to YTM.

2.14 Debt Investing Process

The process of debt investing is similar to that of equity investments. However, knowledge of macroeconomic fundamentals plays a larger role in debt investing.

a. **Security selection:** The selection of the investment product largely depends upon the risk appetite and liquidity needs of the investor. For instance, retail investors prefer to invest in bank fixed deposits, postal savings certificates, money market mutual funds and short-term debt mutual funds as these instruments are highly liquid and generally have a high degree of safety. Institutional investors such as mutual funds and insurance companies have the choice of investing in money market instruments, government securities and corporate bonds. While money market instruments and government securities fulfill the need for liquidity, corporate bonds satisfy the need for high returns. Institutional investors are in a better position to understand the risks of investing in long-dated government securities and corporate bonds.

b. **Market timing**: Debt investments need to be timed properly in the same manner as equity investments. Market timing requires an understanding of the interest rate outlook and credit outlook. This outlook depends upon macroeconomic factors like oil prices, fiscal deficit, impact of government policies etc. For example, it is well understood that there is an inverse relationship between the market yield and bond prices. Bond prices tend to be low when the market yield is high and vice versa. Hence it makes sense to invest in long-dated government securities when the interest rate cycle has peaked. This would enable the investor to lock in high yields on his debt portfolio. Knowledge of the credit outlook is essential for investing in corporate bonds. Yields on corporate bonds are always higher than yields of government bonds with the same maturity. This difference in yields is known as the credit spread. The credit spread is generally narrow when the economy is booming because the market is optimistic about the prospects of the corporate sector. However, the credit spread tends to widen during a recessionary phase because corporate revenues and profits are adversely affected during such phases. This increases the risk perception of corporate bonds and hence their yields surge during recessionary periods. During such phases, an investor can find opportunities to invest in bonds of highly rated companies at attractive yields.

c. **Determining the weights of each debt investment product:** Having selected the debt securities for investment, an investor must decide the proportion of funds to be invested

in each type of product. This choice would again depend upon the risk appetite and liquidity needs of the investor. Assume that an investor has decided to invest in debt securities purely through the mutual fund route. He could decide to invest roughly 20 per cent of his total debt allocation in liquid mutual funds. If the interest rate cycle has peaked, the investor might choose to allocate a larger part of his funds to gilt funds which invest mainly in long-dated government securities. This is because the prices of government securities would have bottomed out at the peak of the interest rate cycle and hence can be expected to start rising. However, investment in credit risk funds should be kept to the lowest during such recessionary phases. Investors who lack the expertise of understanding movements in interest rates should simply invest in dynamic bond funds.

Chapter 2: Sample Questions

1. **Which of the following is ranked last both in terms of profit sharing and receiving liquidation proceeds?**
   a. Lenders
   b. Employees
   c. Government Creditors
   d. Equity Shareholders

2. **The reserves of a company rightfully belong to _____.**
   a. Equity Shareholders
   b. Institutional lenders
   c. Promoters
   d. Employees

3. **Analysts estimate that the intrinsic value of an equity share is Rs.50. The share is quoting for Rs.35 in the market. Then we can say that the share is _____.**
   a. Undervalued
   b. Overvalued
   c. Fairly Priced

4. **A bond is issued at a face value of Rs.100 and a coupon of 10 percent p.a. The interest rates in the market have increased subsequently. This bond is likely to quote _____.**
   a. At a price above face value
   b. At the face value
   c. At a price that reflects its credit risk
   d. At a price below face value

5. **Top down approach begins at macro factors and identifies sectors and stocks based on the identification of macro trends. State whether True or False.**
   a. True
   b. False

CHAPTER 3: PRIMARY MARKETS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Meaning of Primary markets and its functions
- Issuers in Primary market and its regulatory framework
- Types of issues and its process: public issue, rights issue and private placement
- Public Issue: Types, pricing, process

3.1 Primary Market: Definition and Functions

3.1.1 Nature and Definition

The primary market refers to the market where equity or debt capital is raised by issuers from public investors through an offer of securities. It is called the primary market because investors purchase the security from the issuer. It is also called the "new issue market" where securities are issued for the first time. The process of expanding the ability of an issuer to raise capital from public investors, who may not have been associated with the initial stages of the business, is also known as "going public." The issuance of securities in the primary markets expands the reach of an issuer and makes long-term capital available to the issuer from a larger number of investors.

Raising capital for a company may also be conducted through a syndicate of institutional investors who buy equity or debt securities through a private placement. This is also a primary market activity but the investors in these securities are a few pre-identified institutional investors. These investors may also seek sale of their holdings, conversion of debt to equity, or may offload their holdings in a public issue on a later date. Private placement of debt is similar to private equity or venture capital deals, except that the security issued is debt in the former and equity in the latter case.

An issuer who seeks capital through the primary market has to work with a merchant banker. The merchant banker gauges the readiness of the business to raise fresh capital, structures the instrument to be issued, enables pricing the issue, identifies the investors to whom the securities will be offered and manages the entire capital mobilization process. The merchant banker earns fee for such services. Primary market issues may also need arrangements such as a syndicate of investors to buy a portion of the issue, or avail underwriting services by specified intermediaries for a fee, to subscribe to the securities being offered if the issue fails to garner the required response. Securities offered in the primary market are distributed through a network of brokers to prospective investors. The security issuance process varies depending on the nature of the issue, the size and the target investors.

The ability of a company to raise funds from such external sources will depend upon the performance of the company in the past and the expected performance in the future. Outside investors will also require protection against a possible default on getting their dues or their rights getting diluted. This protection is available to them when they fund the company through investing in securities rather than one-on-one agreement with the promoters. This is because securities are issued under regulatory overview, which also imposes obligations on the issuer of securities, to honor the commitments made at the time of raising funds. Investors may also require the flexibility to review their investment and exit the investment if need be. A security provides this facility as it is listed on the exchanges, where key information about the company has to be periodically disclosed. The expectation for its performance reflects in the prices at which its securities tend to trade.

The primary market for equity shares is regulated by SEBI. Companies can make a public offer of equity shares or a private placement of shares to their promoters or institutional investors. Issuers have to meet the eligibility norms and disclosure requirements laid down by SEBI. A number of market intermediaries are involved in the primary market and all these are regulated by SEBI.

The primary market for debt securities has two regulators. The primary market for government securities is regulated by the RBI. It acts as the treasury manager for the government. It issues government securities to eligible participants such as banks and primary dealers through the auction method. There is a predefined auction calendar according to which the government borrowing takes place. The primary market for corporate bonds is regulated by SEBI. Companies can issue bonds either through the public offer or private placement process.

The primary market for depository receipts (ADRs/GDRs) is regulated by SEBI. SEBI has laid down detailed eligibility criteria for Indian companies that desire to issue and list ADRs/GDRs on foreign stock exchanges. The issue of such depository receipts must comply with the limits on foreign holding of Indian securities under FEMA regulations.

3.1.2 Functions of the Primary Market

The primary markets serve the following functions:

- ***Tap larger markets for capital***

By involving other investors in raising money for an issuer, the primary market enables tapping a larger market for its capital requirements. When an Indian company issues a global depository receipt (GDR) in the Euro markets, it reaches out to institutional and retail investors in those markets who may find investing in a growing Indian enterprise an attractive proposition. For raising capital, the primary market enables a company to shift from the known sources of funding

(i.e. from its promoters, interested parties, banks and such close-knit arrangements) to the new investors who can potentially subscribe to the company's capital.

- ***Fosters Competitive Process***

Securities are issued for public subscription at a price that is determined by the demand and supply conditions in the market. The rate of interest a debt instrument will have to offer and the price at which an equity share will be purchased are dependent on the pricing mechanisms operating in the primary market. For example, government securities, which are issued by RBI on behalf of the government, are priced through an auction process. Banks and institutional investors are the main buyers of government securities, and they bid the rates they are willing to accept and the final pricing of the instrument depends on the outcome of the auction. This enables fair pricing of securities in the primary market.

- ***Diversify Ownership***

As new subscribers of equity capital come in, the stakes of existing shareholders reduce and the ownership of the business become more broad-based and diversified. As the company expands and seeks capital from the public, ownership and management gets separated. Since it is not feasible for thousands of shareholders holding a small proportion of capital each, to be involved in managing the company, professional managers work in the broad interest of a large group of diverse shareholders. Publicly held companies also have professional independent directors who represent the interest of common small shareholders which enhances the governance standards of the companies. Thus, the primary market facilitates diversification of ownership which in turn strengthens governance norms.

- ***Better Disclosures***

A business that seeks to raise capital from new investors (who may not be familiar with the history and working of the enterprise) has to meet higher standards of disclosure and transparency. Investors need to have adequate, relevant, accurate and verifiable financial and other information about the business before buying the securities being offered. Thus, the primary market brings about transparency between the businesses and the investors through means of disclosures by various firms raising capital.

- ***Evaluation by Investors***

The information provided by the issuer company is evaluated by a large number of prospective investors. Thus, investor evaluation forms another layer of scrutiny of the operations and performance of the company, apart from its auditors and regulators. Apart from these groups (investors, auditors and regulators), the publicly disclosed financial statements, reports, prospectus and other information are scrutinized and discussed by the analysts, researchers,

activists, and media. Thus, evaluation by various groups helps the investors to make informed decisions.

- ***Exit for Early Investor***

Promoters, private and inside investors who subscribed to the initial capital requirements (early requirements for capital of a business) are able to seek an exit in the primary markets by selling their stakes fully or partly as required. They invest in early-stage business with the intent to nurture the business to a level at which public and other investors would be interested. A primary market offer of securities provides them the opportunity to exit their investments at a profit.

- ***Liquidity for Securities***

When capital is held by a few inside investors, the equity and debt securities held are not liquid, unless sold in a chunk to another set of interested investors. A primary market issue distributes the securities to a large number of investors and it is mandatory to list a public issue of securities in the stock exchange. This opens up the secondary market where the securities can be bought and sold between investors, without impacting the capital raised and used by the business.

- ***Regulatory Supervision***

Inviting outside investors to subscribe to the capital or buy securities of an issuer comes under a comprehensive regulatory supervision. The issue process, intermediaries involved, the disclosure norms, and every step of the primary issue process is subject to regulatory provisions and supervision. The objective is to protect the interest of investors who contribute capital to a business which they may not directly control or manage. While there is no assurance of return, risk, safety or security, regulatory processes are designed to ensure that fair procedures are used to raise capital in the primary market, adequate and accurate information is provided, and rights of all parties is well defined, balanced and protected.

3.2 Primary Vs Secondary Markets

Securities are listed on the stock exchange after the public issue, so they can be traded between investors who may like to buy or sell them. The stock market is also called the secondary market, because investors purchase and sell securities among themselves, without engaging with the issuer. While the primary market enables the issuer to raise capital, the secondary market enables liquidity for securities bought by investors to subscribe to such capital. Secondary markets also enable new investors to purchase securities from the existing investors, who may like to sell the securities. Activities in the secondary market do not modify the capital available to the issuer. The prices of stocks in the secondary market, for the issuer and the peer group as well as the overall trends in the secondary market, are used as signals in pricing primary market issues.

Primary market issues tend to depend on the cycles in the secondary market. In a bull market when secondary market activity is high and prices are on a general upswing, the number of primary issues is also higher, cashing in on the buying interest among investors. Pricing of primary issues is also higher and favourable to issuers during such phase. A bear market, when activity in secondary markets is lower and prices are also low due to lack of buying interest, is a tough time for primary issues when adequate subscription to new issues of securities is difficult to manage.

3.3 Intermediaries in Primary Market

The different intermediaries that function in the primary market for equity and debt securities include:

- Merchant bankers – These are entities that provide services connected with the management of a primary issue of securities. Such services include advising the issuer regarding the pricing of the issue, preparation of the issue document, application for listing of securities, advertising the issue, finalizing the allotment and generally managing all aspects of the issue process. Merchant bankers also act as the underwriters to the issue i.e. they provide a commitment to subscribe to the issue of securities in the event of failure of the issue to get full subscription from the public. They receive a commission for providing such commitment. Their obligations are defined in their agreement.
- Book Running Lead Managers (BRLM) – An issuer may appoint several merchant bankers for managing a primary issue of securities. One of these merchant bankers is known as the Book Running Lead Manager (BRLM). The BRLM is specifically responsible for some activities such as the due diligence of the issuer's operations, drafting and vetting of the prospectus and other issue documents, compliance with requirements of SEBI, stock exchanges and other laws and the marketing of the issue. Key post-issue responsibilities of the BRLM include finalizing the basis of allotment, managing the money in the escrow account and coordinating the activities of the other intermediaries such as bankers to the issue and registrars to the issue.
- Registrar and Transfer Agents (RTA) – Registrars are entities that maintain a record of applications and money received from investors in a primary issue. They assist the issuer in determining the basis of allotment of securities. After the allotment is finalized, registrars are responsible for processing and despatching allotment communications/ letters, refund orders etc. Share Transfer Agents maintain records of holdings of securities. They handle matters relating to transfer and redemption of securities and act as DPs.

- Bankers to the issue–These are banks that are specifically appointed by the issuer for managing the sale proceeds of the issue of securities. They are engaged in acceptance of applications for securities along with application money from investors and also refund of application money to unsuccessful applicants. They are required to maintain daily records regarding number of applications and application money received and refunds made.
- Brokers to the issue–These are stock brokers that are responsible for procuring subscription to the issue. They serve as the link between prospective investors and the issuer.
- Depositories and Depository Participants–A depository holds securities in electronic form and enables processing of securities transactions by means of a book entry. The process of conversion of physical securities to electronic form is known as dematerialization. The depository becomes the registered owner of securities that are dematerialized while the investor remains the beneficial owner. A Depository Participant (DP) is an agent of the depository through which it interfaces with the investor and provides depository services. The actual process of dematerialization is undertaken by the DP.
- Debenture Trustees– These are appointed to safeguard interests of debenture holders. They are required to be appointed before an issue of debt securities. They must exercise due diligence to ensure that the secured assets are sufficient to discharge claims of debenture holders. They must ensure calling of a meeting of all debenture holders when it is required by at least one-tenth of debenture holders or in the event of any default by the issuer.
- Portfolio Managers–These are entities that advise clients regarding investments or manage a portfolio of investments on behalf of the client in accordance with an agreement. Portfolio managers can be categorized as discretionary or non-discretionary. A discretionary portfolio manager manages the funds of each client in an independent manner but in accordance with the needs of the client. A non-discretionary portfolio manager manages the funds in accordance with the directions of the client.
- Primary Dealers – These are entities that are licensed by the RBI to act as underwriters for securities issued by the RBI on behalf of the government. Primary dealers have an agreement with the RBI which defines their underwriting obligations. They receive an underwriting commission in return for their commitment. Primary dealers subscribe to government securities in auctions announced by the RBI and then resell these securities in the secondary market.

All these intermediaries (except the primary dealers) must be registered with SEBI to function as intermediaries. Each intermediary is required to follow the Code of Conduct framed under the applicable SEBI regulations. Primary dealers are authorized by the RBI to act as such.

3.4 Types of Issues

All primary market issues need not be public issues. A primary issue of securities is made to promoters when a company is set up and equity shares are issued to them; if bonds are issued to institutions that lend to a company, that is also a primary issue, but issued privately only to a select set of investors. It is common for companies in early stages to issue equity capital to venture capitalists and private equity investors, who help the business to grow in size and scale. When an issuer does not choose any specific group of investors, but offers securities inviting anyone interested in buying the securities of the business, we have a public issue.

Issuance of capital in the primary market can be classified under four broad heads:

a. **Public issue:** Securities are issued to the members of the public, and anyone eligible to invest can participate in the issue.

b. **Private placement:** Securities are issued to a select set of institutional investors and other eligible investors, who can bid and purchase the securities on offer. This is primarily a wholesale issue of securities to institutional investors.

c. **Preferential issue:** Securities are issued to an identified set of investors, on preferential terms, along with or independent of a public issue or private placement. This may include promoters, strategic investors, employees and such specified preferential groups.

d. **Rights and bonus issues:** Securities are issued to existing investors as on a specific cut-off date, enabling them to buy more securities at a specific price (rights) or get an allotment of additional shares without any consideration (bonus).

When a public issue is made, it is common to have a portion issued preferentially, or as rights, and for a portion to be privately placed to institutional investors, before the issue is open for subscription by retail investors. The investment banker who is responsible for the issue will work out how much has to be offered to whom and at what prices, within the framework of regulation and in consultation with the issuing company.

3.5 Types of Issuers

An issuer in the primary market is the entity seeking capital through the issue of securities. The securities are part of the equity or debt capital of the entity, on its balance sheet. The primary responsibility to meet obligations associated with the security being issued rests on the issuer. For example, an issuer of bonds is responsible for paying interest and returning the principal on maturity; an issuer of equity shares is responsible to pay dividends as and when declared and notify equity shareholders about resolutions being brought for their approval through voting in the annual general meeting.

The following is a summary of issuers in the primary markets for securities:

Issuer	Type of Securities	Specific Needs and Structures
Central, State and Local Governments	Bonds (G-secs) Treasury bills Sovereign Gold Bonds (SGB)	• Do not issue equity capital • Only Central Government issues T-bills • Instruments carry government guarantee • Issued only in domestic markets in India
Public Sector Units	Equity shares Bonds	• May offer equity held by the Government to the public as disinvestment • Bonds may have special tax concessions
Private Sector Companies	Equity shares Preference shares Bonds Convertible bonds Commercial Paper Securitized paper	• High dependence on securities markets for raising capital • May issue equity and debt instruments in international markets
Banks, Non-banking Finance Companies, and Financial Institutions	Equity shares Preference shares Bonds Convertible bonds Securitized paper Commercial paper Certificates of deposit	• Banks have low dependence on securities market due to access to public deposits • May offer long-term bonds and preference shares as Tier-2 capital • Issues may have special tax concessions • May issue in international markets
Mutual Funds	Units	• Capital is raised for specifically defined schemes • Schemes may be issued for a fixed tenor (closed-end) or as open ended schemes

Issuer	Type of Securities	Specific Needs and Structures
		• Issues are only made in domestic markets
Investment Trusts (such as REITs, InvITs)	Units	• Capital is raised for specifically defined schemes

3.6 Types of Investors

Both retail and institutional investors participate in primary market issues. The debt markets are dominated by institutional investors; equity markets have a higher level of retail investor participation. The following are the various categories of investors who buy securities in the primary markets:

- Association of Persons
- Banks
- Companies
- Limited Liability Partnerships (LLP)
- Financial Institutions
- Mutual Funds
- Insurance companies
- Foreign Portfolio Investors (FPIs)
- Hindu Undivided Family (HUF)
- Minors through Guardians
- Non-Resident Indians (NRI)
- Persons of Indian Origin (PIO)
- Registered societies and clubs
- Resident individuals
- Partnership firms
- Trusts

Individual investors are further categorized based on the amount invested as:

- Retail Individual Investors who invest not more than Rs.2 lakhs in a single issue and;
- Non-Institutional Buyers (NIBs) who invest more than Rs. 2 lakhs in a single issue.

The other category of investors is the institutional investors and is also known as Qualified Institutional Buyers (QIBs). In case of institutional investors, an internal approval for making investment is required by their respective governing bodies. Specifically identified personnel of

institutional investors may be authorized to transact in the primary markets to buy securities on behalf of the institutional investors.

The foreign investors may use foreign currency to buy securities, but their purchase and sale is subject to the foreign exchange rules and regulations in force.

Some securities may be available only to specific categories of investors. The information about who can purchase securities being offered is provided in the offer document.

3.7 Regulatory Framework for Primary Markets

The primary markets are regulated by the Companies Act, 2013, Securities Contracts (Regulation) Act, 1956, SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2018, the Government Securities Act, 2006 and the Government Securities Regulations, 2007.

The Companies Act provides detailed guidelines on raising capital through issue of securities by a company.

Government securities are issued by RBI on behalf of the government and are subsequently listed on stock exchanges. The primary issue of government securities does not come under the regulatory purview of SEBI, but is governed by the Government Securities Act, 2006 and the Government Securities Regulations, 2007. Instruments such as certificates of deposit and commercial paper are money market securities, whose issuance is also governed by RBI.

The provisions of these aforementioned Acts and Regulations regulate the following with respect to public issues:

- Eligibility to make public issue
- Information to be provided to the public and regulators
- Reservation for different categories of investors
- Methods of making the offer to investors
- Timelines for the public issue process
- Usage of funds raised in issues
- Continued involvement and accountability of promoters and other inside investors
- Provision for investors to continuously evaluate the investment and execute investment and exit decisions.

Regulatory framework for the types of Issuers

a. The business enterprise seeking capital cannot be a sole proprietorship, partnership or association of persons. It has to have a legal structure approved by law as suitable for raising money from the members of the public.

b. A business enterprise seeking equity capital has to structure itself as a limited company. This requires registration with the Ministry of Corporate Affairs and compliance with requirements of the Indian Companies Act.
c. Banks, financial institutions and non-banking finance companies (NBFCs) who raise money from the public through deposits have to be approved by the RBI and permitted to borrow in the securities markets.
d. Companies, governments, municipalities, government organisations and other entities issuing bonds, debentures and any other instrument evidencing a borrowing, will have to comply with the relevant regulation that governs them.
e. Mutual funds have to be registered with SEBI to be able to raise unit capital from the public.

Types of Instruments

All securities issued to the public will have to be structured as securities, as defined under the Securities Contracts (Regulation) Act (SCRA), 1956 or deposits as defined by the Banking Regulation Act, 1949 or the Companies (Acceptance of Deposits) Rules, 1975. The definition of securities under section 2(h) of the SCRA is detailed out in Chapter 1, section 1.2 of this workbook.

3.7.1 Regulations pertaining to Public Issue of Shares

Eligibility

1. An issuer may make an initial public offer only if it has:
    - Net tangible assets of at least Rs. 3 crores, calculated on a restated and consolidated basis, in each of the preceding three full years (of 12 months each) of which not more than 50 percent are held in monetary assets. Provided that if more than 50 percent of the net tangible assets are held in monetary assets, the issuer has utilised or made firm commitment to utilise such excess monetary assets in its business or project. Provided further that the limit of 50 percent on monetary assets shall not be applicable in case the initial public offer is made entirely through an offer for sale.
    - An average operating profit of atleast Rs. 15 crores, calculated on a restated and consolidated basis, during the preceding 3 years (of 12 months each) with operating profit in each of these preceding 3 years.
    - A net worth of at least Rs. 1 crore in each of the preceding 3 full years (of 12 months each), calculated on a restated and consolidated basis.
    - Changed its name within the last 1 year, at least 50 percent of the revenue, calculated on a restated and consolidated basis, for the preceding 1 full year has been earned by it from the activity indicated by its new name.

2. An issuer not satisfying the conditions stipulated in (1) above shall be eligible to make an initial public offer only if the issue is made through the book-building process and the issuer undertakes to allot, at least 75 percent of the net offer to the qualified institutional buyers (QIB) and to refund the full subscription money if it fails to do so.

3. If an issuer has issued SR equity shares to its promoters/founders, the issuer shall be allowed to make an initial public offer of only ordinary shares for listing on the Main Board subject to compliance with provisions and clauses as per SEBI (ICDR) Regulations, 2018.[12][13]

Promoters' Contribution

SEBI's regulations ensure the continued participation of the promoters in a company by requiring a minimum contribution by promoters in all public issues of shares.

In an initial public offer, the promoters' contribution shall be not less than 20 percent of the post-issue capital of the company. In case the post-issue shareholding by the promoters is less than 20 percent then the alternative investment funds or foreign venture capital investors or scheduled commercial banks or public financial institutions or insurance companies registered with IRDAI or any non-individual public shareholder holding at least 5 percent of the post issue capital or any entity (individual or non-individual) forming part of promoter group other than promoters may contribute for meeting the shortfall in minimum contribution specified for the promoters, subject to a maximum of 10 percent of the post-issue capital without being identified as promoter(s).[14] Further, that the requirement of minimum promoters' contribution shall not apply in case an issuer does not have any identifiable promoter.

The promoter shall contribute either by way of equity shares, including SR equity shares held, if any, or by way of subscription to convertible securities. The minimum promoters' contribution including contribution made by the alternative investment funds or foreign venture capital investors or scheduled commercial banks or public financial institutions or insurance companies registered with IRDAI or any non-individual public shareholder holding at least 5 percent of the post issue capital or any entity (individual or non-individual) forming part of promoter group other than promoters will be locked-in for a period of 18 months from the date of allotment in the IPO. In case the majority of the issue proceeds (excluding the portion of offer for sale) is proposed to be utilized for capital expenditure, then the same will be locked in for a period of 3 years from the date of allotment in the IPO.

[12] SEBI (ICDR) Regulations, 2018 vide its third amendment dated July 29, 2019 has introduced the criteria for issuers who had issued SR equity shares before making an IPO. SR equity share means the equity share of an issuer having superior voting rights compared to all other equity shares issued by that issuer.

[13] SEBI (ICDR) Regulations, 2018 defines main board as a recognized stock exchange having nationwide trading terminals, other than SME exchange.

[14] Vide SEBI (ICDR) (Amendment) Regulations, 2024 w.e.f. May 18, 2024.

Promoters' holding in excess of the minimum promoters' contribution will be locked-in for a period of 6 months from the date of allotment in the IPO. In case the majority of the issue proceeds (excluding portion of offer for sale) is proposed to be utilised for capital expenditure, the lock-in period will be 1 year from the IPO allotment date. [15][16]

Minimum Offer to Public

A company coming out with a public issue must make a net offer to the public of:

a) At least 25 percent of each class or kind of equity shares or debenture convertible into equity shares issued by the company, if the post-issue capital of the company calculated at offer price is less than or equal to Rs.1,600 crore.

b) At least such percentage of each class or kind of equity shares or debentures convertible into equity shares issued by the company equivalent to the value of Rs.400 crore, if the post issue capital of the company calculated at offer price is more Rs.1,600 crore but less than or equal to Rs.4,000 crore.

c) At least 10 percent of each class or kind of equity shares or debentures convertible into equity shares issued by the company, if the post issue capital of the company calculated at offer price is above Rs.4,000 crore but less than or equal to Rs. 1 lakh crore.[17]

   Provided that the company referred to in (b) or (c) above shall increase its public shareholding to at least 25 percent within a period of 3 years from the date of listing of the securities as specified by SEBI.

   Also, the company who has issued equity shares having superior voting rights to its promoters or founders and is seeking listing of its ordinary shares for offering to the public shall mandatorily list its equity shares having superior voting rights at the same recognized stock exchange along with the ordinary shares being offered to the public.[18]

Period of Subscription

(a) A public issue will be open for a minimum of 3 working days and a maximum of 10 working days.

(b) In case of a revision in the price band, the issuer shall extend the bidding (issue) period disclosed in the red herring prospectus, for a minimum period of 3 working days, subject to the maximum limit stated in (a) above.

[15] Vide SEBI (ICDR) (Third Amendment) Regulations, 2021, w.e.f August 13, 2021.

[16] Capital expenditure includes civil work, miscellaneous fixed assets, purchase of land, building and plant and machinery, etc.

[17] Vide Securities Contracts (Regulation) (Amendment) Rules, 2021, w.e.f. June 18, 2021.

[18] The provision was introduced to the Securities Contracts (Regulation) Rules, 1957 vide amendment dated March 19, 2020.

(c) In case of force majeure, banking strike or similar unforeseen circumstances, the issuer may, for reasons to be recorded in writing, extend the bidding (issue) period disclosed in the red herring prospectus (in case of a book built issue) or the issue period disclosed in the prospectus (in case of a fixed price issue), for a minimum period of 1 working day, subject to the maximum limit stated in (a) above.[19]

Underwriting

SEBI's regulations on public issues and the Companies Act require that an issue should receive subscription of a minimum of 90 percent of the net offer to the public, failing which the company has to refund the entire subscription amount received to the applicants not later than 4 days from the closure of the issue.[20] To protect against this, Companies enter into an underwriting agreement with institutions prior to filling of the prospectus for public offer of shares to subscribe to the shares of the company if they remain unsubscribed by the investors. For undertaking this commitment, the underwriters are paid a commission.

Underwriting for a fixed price issue is discretionary. Any issuer making an IPO, other than through the book-building process, if desires to have its issue underwritten, should appoint SEBI registered Merchant Bankers or Stock Brokers to act as underwriters. However, in the case of a book built issue, underwriting is mandatory by the lead managers and syndicate members. Under book-built issue, the issuer is required to allot at least 75 percent of the net offer to Qualified Institutional Buyers (QIB) to meet the eligibility criteria; however, such QIB portion cannot be underwritten.[21]

Dematerialization of Shares

SEBI's regulations require a company making a public issue of shares to enter into an agreement with all the depositories to dematerialize its shares.

Grading of IPO

Companies making a public offer of shares may get the IPO graded by one or more credit rating agency registered with SEBI. The grading is done based on the prospects of the industry, the competitive strength of the company and risks in the business. The grade assigned based on the evaluation is an assessment of the fundamentals of the issuer and is not a commentary on the issue price or a recommendation to subscribe to the issue. The grade ranges from 1 to 5, with 5 indicating strong fundamentals and 1 poor fundamental. A company graded by multiple agencies has to publish all the grading it has received.

3.8 Types of Public Issue of Equity Shares

Public issue of equity shares can be categorized as follows:

- Initial Public Offer (IPO)

[19] Vide SEBI (ICDR) (Amendment) Regulations, 2024 w.e.f. May 18, 2024.
[20] Vide SEBI (ICDR) (Amendment) Regulations, 2022 w.e.f. January 14, 2022.
[21] Vide SEBI (ICDR) (Second Amendment) Regulations, 2023 w.e.f. May 23, 2023.

  - Fresh Issue
  - Offer for Sale (OFS)
- Further Public Offer (FPO)

3.8.1 Initial Public Offer (IPO)

The first public offer of shares made by a company is called an Initial Public Offer (IPO). When a company makes an IPO the shares of the company become widely held and there is a change in the shareholding pattern. The shares which were initially held by promoters are now held by the retail investors and institutions. An IPO can be in the form of (a) fresh issue of shares by the company or it can be (b) an offer for sale to the public by any of the existing shareholders, such as the promoters or financial institutions.

a. Fresh Issue of Shares

In case of fresh issue of shares, new shares are issued by the company to public investors. This results in an increase in issued share capital of the company. The percentage holding of existing shareholders in the expanded capital base of the company will come down due to the issuance of new shares.

b. Offer for Sale (OFS)

Existing shareholders such as promoters or financial institutions offer a part of their holdings to the public investors. The share capital of the company does not change since the company is not issuing new shares. The proceeds from the IPO go to the existing shareholders who sell their stake or shares and not to the company. The holding of such existing shareholders in the share capital of the company will reduce.

Example

A company has issued 1000 shares of a face value of Rs. 10 each. The shares are equally held by the two promoters X and Y.

A. The company decides to make a fresh issue of 500 shares.
B. The company decides to offer 250 shares of each promoter to the public.

The fresh issue of shares in the IPO (A) will result in the following post-IPO situation:

- The issued capital of the company will now be 1500 shares with a face value of Rs. 10 each.
- Promoters X and Y continue to hold 500 shares each. The percentage holding of each of the promoters in the share capital of the company will change from 50 percent (500 shares out of 1000 shares issued by the company) to 33.33 percent (500 shares out of 1500 shares issued by the company).

- The money raised in the IPO will go to the company and the share capital of the company will increase.

The offer for sale in the IPO (B) will result in the following post-IPO situation:

- The capital of the company will remain at Rs.10,000 of 1000 shares with a face value of Rs.10 each.
- The holding of the promoters will decrease to 250 shares each from 500 shares each pre-issue. They now hold 25 percent each of the share capital; 50 percent is held by the public.
- The money raised in the IPO will go to the promoters who have sold the shares and not to the company.

The disinvestment of shares by the government in PSUs is an example of an offer for sale. The government offers a portion of its shares to the public in an IPO. The proceeds collected go the government which is selling the shares and not to the company. There will be no change in the share capital of the company. However, there will be a change in the list of shareholders as new investors buy the shares and a reduction in the government's holding in the company.

An IPO may also be a combination of an offer for sale and a fresh issue of shares by the issuing company.

3.8.2 Further Public Offer

A further public offer is made by an issuer that has already made an IPO in the past and now makes a further issue of securities to the public.

An issuer may make a further public offer if it has not changed its name within the last 1 year immediately preceding the date of filing the offer document.[22] In the case of a change in the name in the last 1 year at least 50 percent of the revenue for the preceding 1 full year should have been earned by it from the activity indicated by the new name.

If it does not satisfy the above condition, then it may make a further public offer only if the issue is made through the book-building process and the issuer undertakes to allot at least 75 percent of the net offer to the qualified institutional buyers and to refund full subscription money if it fails to make the said minimum allotment to qualified institutional buyers.

When a company wants additional capital for growth or to redo its capital structure by retiring debt, it raises equity capital through a fresh issue of capital in a further public offer. A further public offer may also be through an offer for sale. This usually happens when it is necessary to increase the public shareholding to meet the requirements laid down in the listing agreement

[22] Vide SEBI (ICDR) (Amendment) Regulations, 2022 w.e.f. January 14, 2022.

between the company and the stock exchange; or promoters may dilute their holdings in the company after the lock-in imposed at the time of the IPO is over.

3.9 Pricing a Public Issue of Shares

SEBI regulations allow an issuer to decide the price at which the shares will be allotted to investors in a public issue. This can either be fixed by the issuer in consultation with the managers of the issue or it can be determined by a process of bidding by investors. Based on the method used to determine the price, a public issue can be categorized as:

- Fixed Price Issue
- Book Built Issue

3.9.1 Fixed Price Issue

In a fixed price issue of shares to the public, the company in consultation with the lead manager (who is the merchant banker in-charge of the issue) would decide on the price at which the shares will be issued. The company justifies the price based on the expected performance of the company and consequent increase in the share price. This information is made available to the investors when the issue is announced so that investors know the price at which the shares will be allotted to them at the time of making the application.

3.9.2 Book Built Issue

The objective of a book building process is to identify the price that the market is willing to pay for the securities being issued by the company. The company and its issue managers will specify either a floor price or a price band within which investors can bid. When the issue opens, investors will put in bid applications specifying the price and the number of securities (or total amount) bid at that price. The price bid should be above the floor price or within the price band, as applicable. Retail investors can revise the bids in the period when the issue is open. The issuer, in consultation with the book running lead manager will decide on the cut-off price which is the price at which the issue gets subscribed. All allottees who bid at or above the cut-off price are successful bidders and are eligible for allotment in the respective categories.

For example, a company wants to issue 5000 shares through a book built offer within a price band of Rs 120 to Rs 144. Bids are received as follows:

Sl. No.	Price	No. of Shares	Total Demand
1.	Rs. 144	1000	1000
2.	Rs. 140	1500	2500

3.	Rs. 135	2500	5000
4.	Rs. 130	1000	6000
5.	Rs. 120	500	6500

The offer is filled up at the cut-off price of Rs. 135. All investors who bid at this price and higher are eligible for allotment in their respective categories. The company may decide the cut-off price at a price lower than the price at which the issue is subscribed for the benefit of the investors. Book built issues may also have a clause which allows allotment to retail investors at a price that is at a discount to the cut off price which cannot however exceed 10 percent of the price at which shares are allotted to the other category of investors.

In a book built offer, where the issuer fulfills the eligibility criteria regarding net tangible assets, average operating profit, networth etc. the allocation pattern in the net offer shall be as follows:

- not less than 35 percent to the retail individual investors,
- not less than 15 percent to non-institutional investors and
- not more than 50 percent to the QIBs of which 5 percent shall be reserved for mutual funds.

However, in a book-built offer, where an issuer does not satisfy the criteria regarding net tangible assets, net worth and profitability track record, the allocation pattern shall be as follows:

- not more than 10 percent to the retail individual investors,
- not more than 15 percent to non-institutional investors and
- not less than 75 percent to the QIBs of which 5 percent shall be reserved for mutual funds.

In a book-built issue, the allocation in the non-institutional investors' category shall be as follows:[23]

- one -third of the portion available to non-institutional investors shall be reserved for applicants applying for amounts more than Rs. 2 lakhs and up to Rs. 10 lakhs; and
- the remaining, i.e., two-thirds of the portion shall be reserved for applicants with application size of more than Rs. 10 lakhs.

For issue made other than through book-built offer, following shall be the allocation pattern in the net offer:

[23] Vide SEBI (ICDR) (Amendment) Regulations, 2022 w.e.f. April 1, 2022.

- minimum 50 percent to retail individual investors and
- remaining to (i) individual applicants other than retail individual investors and (ii) other investors including corporate bodies or institutions, irrespective of the number of specified securities applied for.

3.10 Public Issue Process of Equities

A company making an initial issue of shares has to go through certain internal and external steps. Internally, the company needs to get the approval of the board of directors and the existing shareholders for the issue. The company then must appoint a lead manager of the issue to be in charge of the issue process. The lead managers are also known as investment bankers, merchant bankers or issue managers. They are involved in every aspect of the issue from the pre-issue period till the issue is listed and all regulatory compliances are completed. Large issues may have more than one lead manager. They appoint all other constituents in consultation with the issuer and oversee their activities.

The following are the steps in making a public issue:

- The company (issuer) passes a board resolution and shareholders resolution for the issue of shares and related activities.
- The issuer appoints the lead manager who will manage the regulatory and operational aspects of the public offer of shares.
- The lead manager in consultation with the issuer appoints R&T agents, bankers, brokers and underwriters to the issue. The pricing of the issue is decided between the issuer and the lead manager.
- In-principle approval of the stock exchange where the shares are proposed to be listed is obtained.
- The IPO may be graded by an approved credit rating agency.
- The issuer in consultation with the lead manager enters into agreements with depositories for the admission of the securities in both the depositories.
- The draft prospectus is filed with SEBI.
- Changes, if any, to the prospectus as suggested by SEBI has to be made and the prospectus has to be filed with the Registrar of Companies.
- The lead manager signs the due diligence that all the regulatory requirements are complied with.
- Marketing activities such as advertisements, analysts and broker meetings are conducted to promote the issue.
- The issuer publishes advertisements in national papers as required by regulations.

- The printing and dispatch of prospectus and application forms and other issue material is arranged. Every application form has to be accompanied by an abridged prospectus.
- During the period the issue is open to the public for bidding, the applicants may approach the stock brokers of the stock exchange/s through which the securities are offered under on-line system, self-certified syndicate bank(s), registrar and share transfer agents or depository participants, as the case may be, to place their bids.
- Every stock broker, self-certified syndicate bank, registrar and share transfer agent and depository participant shall accept bids using only applications supported by blocked amount (ASBA) facility.[24] Retail investors also have the facility to use UPI in ASBA for applying in a public issue.
- Once the issue opens, the collection banks and R&T agents collect and reconcile the forms received on a daily basis and give a final collection certificate.
- In case of a book built offer the bids are collated and the cut-off price is determined.
- The basis of allotment is finalised in consultation with the stock exchange.
- Shares are credited to the depository account of successful allottees and amounts are unblocked where the applications are rejected.
- The shares are listed on the stock exchange and trading commences in the shares.

3.10.1 Constituents in a Public Issue

A public issue of shares by a company involves detailed activity, co-ordination and compliance with regulatory requirements. The issuer appoints the lead manager to the issue who is primarily responsible for the issue process. The lead manager appoints other entities who are assigned the responsibility of marketing of the issue and distribution of application forms, collection of funds and application, collating details for price discovery and allotment and collecting and providing information to the issuer and regulators. These entities, called constituents or intermediaries, include the registrar and transfer agents, bankers and brokers to the issue. The role and responsibility of each constituent is laid out by SEBI. All constituents who are involved with an issue have to be registered with SEBI under the relevant regulations.

Registrar and Transfer Agents

The Registrar and Transfer Agents (RTA) are appointed by the lead manager to the issue in consultation with the issuer.

Pre-issue work of the RTA includes work related to designing of application forms and other issue material and finalization of the procedure to be followed during the issue for bidding, collection

[24] Investors can apply for any public issue only through ASBA (Application Supported by Blocked Amount) facility. ASBA means an application for subscribing to a public issue or rights issue, along with an authorisation to self-certified syndicate bank to block the application money in a bank account. “Self-certified syndicate bank” means a banker to an issue registered with the Board, which offers the facility of ASBA. SEBI has mandated the ASBA facility for all public issues.

and reporting of numbers and information. Issue work includes collecting and reporting information on the daily collections/bid information to the lead manager, providing statutory reports, collating bid information to identify cut-off price in a book built offer and reconciling funds and applications received.

Post-issue work includes scrutinizing the application forms and rejecting those that are incomplete or incorrect, finalizing the basis of allotment if the issue is oversubscribed in consultation with the lead manager, issuer and stock exchange, make allotments and send rejection communications, and provide all statutory information to the regulators.

Bankers to the Issue

The bankers to the issue are appointed by the lead managers to manage the collection of funds in the issue. The bankers to an issue must have collection branches in the mandatory centers as specified by the regulations. They are responsible for giving updates on the collection figures to the managers of the issue based on which the decision to close the issue will be taken.

Brokers to the Issue/Syndicate Members

Brokers to the issue are appointed to facilitate the collections of application forms and bids. They are members of stock exchanges. They are responsible for collecting the bid/application forms and ensure that it is accompanied by an authorisation to block the application money in a bank account. They are paid a commission for their role depending upon their collection.

Underwriters

The issuers enter into an underwriting agreement with institutions at the time of a public offer of shares to subscribe to the shares of the company if they remain unsubscribed by the investors. For undertaking this commitment, the underwriters are paid a commission.

Underwriting for a fixed price issue is discretionary. However, in the case of a book-built issue underwriting is mandatory. For an issue that is underwritten, SEBI's minimum subscription requirement is 90 percent of the net public offer including the subscription by the underwriters. Stock brokers and merchant bankers perform the function of underwriting.

3.11 Prospectus

The prospectus is a document, which contains all the information relevant to an investor to make an investment in a fixed price public issue of shares. The content and format of the prospectus is prescribed by SEBI and the Companies Act. The prospectus shall have the following information:

- Details of the issuer including information on the company, promoters, board of directors, key employees, industry and business overview.
- Objective of the public issue.

- Details of the issue such as opening and closing dates, information on the lead manager, RTA and bankers to the issue, listing details.
- Terms of the public issue including details of the shares offered, method of offering, procedure for application, allotment and refund procedures.
- Financial statements, capital structure and accounting policies of the company.
- Regulatory and statutory disclosure to provide all information of interest to a shareholder.
- Risk factors specific to the company and industry and generic to the type of issue.

A company making a public issue of shares files a draft prospectus with SEBI through the lead manager of the issue. SEBI may require clarifications or changes to be made to the draft prospectus.

Red Herring Prospectus

This is the document of information made according to SEBI guidelines for a public issue of shares made through a book building exercise. The upper and lower band of the price and the number of shares may be disclosed or the issue size may be mentioned. This is because the price at which the shares are being issued will be determined based on the bids received in a book-building offer which will be known only after the issue closes.

A preliminary red herring prospectus is filed with SEBI before the issue opens and the observations made by SEBI, if any, are incorporated into it. Once the price is discovered, it is included in the offer document along with the number of shares if not already mentioned and the prospectus signed and dated is filed with the regulator.

A draft offer document filed with SEBI may be rejected if:

- the promoter's contribution is not in compliance with the regulations,
- the document does not clearly lay out the usage of the issue proceeds or if does not result in the creation of tangible assets for the company,
- the business model is misleading,
- there are inconsistencies in the financial statements or
- there are litigation issues which may put the business at risk.

Information provided in the prospectus has to be updated on an annual basis by the issuer and made available to the public.

3.12 Applying to a Public Issue

The prospectus or offer document lays down the process of applying to a public issue of securities. Information about a forthcoming public issue is typically available from the mandatory

advertisements that the company issues and from the coverage that IPOs get in the press. The soft copies of the offer document are available on the SEBI website and on the websites of the lead manager to the issue.

A public issue is open for subscription during a limited period as notified by the company. The date on which the issue will open for subscription and the earliest closing date are mentioned in the announcements about the issue. Investors have to make their application during this period. The application forms are available with the brokers and syndicate members and with collection banks appointed as constituents to the issue.

The NSE and the BSE provide an online bidding system for the book building process for IPOs. It is a screen-based system in which investors enter the bids through the trading terminals of broker-members. This is a lower cost option for reaching out to a large number of investors electronically. This segment is called the IPO market and is operated from 10 a.m. to 5 p.m. during the IPO period. The lead manager can seek an extension of bidding time on the closing date.

From the year 2013, all public issues are provided with the e-IPO facility under which investors bid for IPOs using the electronic trading facility of any broker of the exchange, whether or not the broker is appointed as such for the issue.

The price band is announced at least 2 working days before the issue opens. This enables the investors to evaluate the issue and decide the price that they are willing to bid for.

In a book-built offer, investors must place bids for the minimum bid lot specified by the issuer so that the minimum application value adheres to the SEBI prescribed range of Rs.10,000 to Rs. 15,000. Investors can either specify the bidding price or they may choose to bid at the cut-off. Bidding at the cut-off implies that the price they would accept is the price determined by the bidding process. Since all applications which bid at this price and higher price will be successful, bidding at the cut-off ensures that the investor's application is always accepted.

Investors who bid a price can revise/modify their bid at any time (before the issue closing date) using the revision form attached to the application form or by using the online modification facility.

Payment for applications made in a public issue must be made using the ASBA (application supported by blocked amount) facility. ASBA is an application for subscription to an issue containing an authorization to the investors' bank to block the application money in the bank account and releasing the funds only on allotment. All the investors applying in a public issue use only Application Supported by Blocked Amount (ASBA) facility for making payment, hence upon finalisation of allotment, funds are debited or unblocked from the investors' bank account as the case may be. ASBA applications are submitted to the Self-Certified Syndicate Bank with which the investor holds their bank account.

SEBI as a part of its continuing efforts to streamline the public issue process, has introduced the use of Unified Payment Interface (UPI) as a payment mechanism with Application Supported by Blocked Amount (ASBA) for applications in public issues by retail individual investors through intermediaries (Syndicate members, Registered Stock Brokers, Registrar and Transfer agent and Depository Participants) in a phased manner from January 1, 2019. SEBI further notified a circular stating that all individual investors applying in public issues where the application amount is upto Rs. 5 lakhs should use UPI, effective from May 1, 2022.[25] Banks and UPI apps are now required to send SMS alerts to investors for blocking and unblocking of application amounts.

SEBI has also introduced additional channels for making subscription and/or paying call money in respect of partly paid specified securities through SCSBs and intermediaries. Such additional channels are:[26]

- Online ASBA: This facility can be availed through an online portal of SCSB. The SCSB will send the application to the RTA and block funds in shareholders account.
- Physical ASBA: This can be availed physically at a SCSB branch. The SCSB will send the application to the RTA and block funds in shareholders account.
- Additional Online mode: This mode is availed through the linked online trading-demat-bank account provided by some brokers.

Once the issue closes, the cut-off price is determined based on the bids received. All investors who bid at the cut-off price or higher are successful bidders and receive allotment at the cut-off price. The blocked application amount is released for investors who bid lower than the cut-off price.

The issue may be over-subscribed, which means that the bids made at the cut-off price and higher were for a higher number of shares than what was offered. In an over-subscribed issue, the shares will be allotted to an investor on a proportionate basis. There will be a refund made to the extent that the shares allotted are lesser than the shares applied for. If subscriptions are lower than the offered number of shares, it is undersubscribed and all investors who have applied at or above the cut-off price will receive allotments. The issuer credits the shares to the beneficiary demat account of the successful applicants.

3.12.1 Basis of Allotment

Basis of allotment is the process of deciding the number of shares that each investor is entitled to be allotted. If the number of shares that have been subscribed for is equal to or less than the number of shares offered by the company, then each investor will get the same number of shares

[25] SEBI Circular No.: SEBI/HO/CFD/DIL2/CIR/P/2022/45 dated April 5, 2022 on Revision of UPI limits in public issue of equity shares and convertibles.

[26] SEBI Circular No.: SEBI/HO/CFD/DIL1/CIR/238/2020 dated December 8, 2020 regarding availability of additional payment mechanism.

he applied for. If the issue is over-subscribed, then the number of shares allotted to each investor will be in proportion to the oversubscription.

Once the issue closes, the applications are collated under various categories such as retail investors, HNIs, QIBs and firms for the purpose of allotment. The number of shares applied for is compared with the shares reserved for each category and the oversubscription ratio is calculated as the ratio of number of shares on offer to number of shares applied for. This ratio is applied to each application, under each category to determine the shares to be allotted. The basis of allotment is then approved by the board of directors of the company and published in national newspapers.

Assume that the retail portion of an issue was over-subscribed 1.52 times. The successful bids will be categorized on the basis of number of shares applied for, to arrive at the allotment. The oversubscription ratio will be applied to each category as follows:

Category (No. of shares bid for)	Applications	Total no. of shares applied for	No. of shares allotted (Category/1.52)	Total No. of Shares allotted
20	100	2000	13	1300
30	150	4500	20	3000
40	200	8000	26	5200
50	160	8000	33	5280

Investors who bid for 20 shares will be allotted 13 shares and will receive a refund for 7 shares and so on for each category of bidders. The basis of allotment for each category of investors in the public issue, such as retail investors and non-institutional buyers will be done separately since the over-subscription in each investor category is likely to be different. The minimum allotment will be the minimum application size as disclosed by the issuer.

3.12.2 Green Shoe Option

The Green Shoe Option (GSO) in a public offer is used by companies to provide stability to price of the share in the secondary market immediately on listing. A company, which opts for Green Shoe option can allot additional shares not exceeding 15 percent of the issue size, to the general public who have subscribed to the issue. The proceeds from this additional allotment will be kept in a

separate bank account and used to buy shares in the secondary markets once the shares are listed, in case the price falls below the issue price. This is expected to provide support to the price of the shares. This price stabilization activity will be done by an entity appointed for this purpose. Usually, the lead manager of the issue will be assigned the responsibility. The intervention in the secondary market will be done only for a period of 30 days from the day of listing.

3.13 Listing of Shares

A company making a public issue of shares has to arrange for the shares to be listed on a stock exchange after allotment. To get the shares listed, the company must enter into a listing agreement with the stock exchange, pay listing fees and agree to abide by the rules regarding notification and disclosure of price sensitive information, investor services and corporate governance, among others.

Once the shares are listed, they are available for trading by investors on the stock exchange using the trading and settlement mechanism provided by the exchange. Listing a share brings liquidity to the investment made by the investor and enables discovery of the fair price of the share based on the company's performance.

The price in the stock market may be above or below the issue price in the IPO.

Company	Issue Price (Rs.)	Current Price (Rs.)	Gain/Loss
ABC Infra	15	44.90	199.33%
XYZ Retail	10	16.60	66%
MNP Microfinance	985	565.80	-42.56%
DEF Restaurants	150	157	4.67%

3.14 Rights Issue of Shares

Whenever a company makes a fresh issue of shares, it has an impact on the existing shareholders since their proportionate holding in the share capital of the company gets diluted. For example, a company may have 10 lakhs shares of Rs.10 each, amounting to an issued and paid-up capital of Rs. 1 crore. If it issues another 10 lakhs shares, to increase its capital, the proportion held by existing shareholders will come down by half, as the issued and paid-up capital has doubled. This is called as dilution of holdings. To prevent this, the Companies Act requires that a company which wants to raise more capital through an issue of shares must first offer them to the existing shareholders. Such an offer of shares is called a rights issue.

The rights shares are offered to the existing shareholders in a proportion as approved by the board of a company. For example, the company may choose to issue rights at 1 for 1, to double its capital. This means each existing shareholders will get one equity share for every one equity share that they already hold. The issued and paid-up capital will double, but proportionate holdings will not change. Ratio of rights issues need not always be one. They can be 1:2, 2:3, 2:5 and so on, depending on the decision of the board of the company.

A rights issue of shares must follow all SEBI regulations on issue of shares. A listed company making a rights issue shall fix a record date to determine the eligibility to the rights. The company must issue a letter of offer giving details of the issue including the purpose for which funds are being raised. The draft letter of offer must be filed with SEBI. An abridged letter of offer must be dispatched to all investors at stipulated time before the issue opens. Investors can also apply on a plain paper if they do not receive the application form. The rights issue is kept open for a period not less than 7 days and not exceeding 30 days during which investors can subscribe to the shares.[27] The rights entitlements are credited to the demat account of the investor.

Rights Issue process has undergone significant changes. Payments of all applications in a rights issue have to be through Applications Supported by Blocked Amount (ASBA) facility only. Also, email delivery of entitlement form and offer document is permitted which makes it convenient for investors who have registered their email ID with Depository Participants (DP) or Registrar and Transfer Agents (RTA) to receive it electronically.

Investors can also choose to decline the offer or sell their entitlement to another. This is called renouncing the rights. Rights entitlements are traded on the stock exchange during the period. The entitlement will be traded distinct from the equity share of the company. The trading in the entitlement will cease before the period of the rights issue ends, which gives the investors who bought the entitlement the time to apply for the shares.[28]

3.15 Regulatory requirements for a Public Issue of Debt Securities

A company can make a public issue of debt securities, such as debentures by making an offer through a prospectus. The issue of debt securities is regulated by the provisions of the Companies Act and SEBI (Issue and Listing of Non-Convertible Securities) Regulations, 2021 (SEBI (NCS) Regulations).[29] The company will appoint a lead manager who will ensure compliance with all the regulatory requirements for the issue.

Eligibility

[27] Vide SEBI (ICDR) (Amendment) Regulations, 2022 w.e.f. January 14, 2022

[28] SEBI Circular No.: SEBI/HO/CFD/DIL2/CIR/P/2020/13 dated January 22, 2020 on Streamlining the process of Rights Issue.

[29] SEBI notified the SEBI (Issue and Listing of Non-Convertible Securities) Regulations, 2021 in August 9, 2021 pursuant to merger and repeal of earlier regulations namely, SEBI (Issue and Listing of Debt Securities) Regulations, 2008 and SEBI (Issue and Listing of Non-Convertible Redeemable Preference Shares) Regulations, 2013.

A public issue of debt securities is possible by a company registered as a public limited company under the Companies Act, 2013. An unlisted company, in other words a company that has not made an initial public offer of its shares, can make a public issue of debentures and list them on a stock exchange. Issuer as per the SEBI (NCS) Regulations means any company, public sector undertaking or statutory corporation or Trusts registered with SEBI as Real Estate Investment Trusts (REIT) or Infrastructure Investment Trusts (InvIT) which are authorized to issue and seek to list non-convertible securities and/or commercial papers on any recognized stock exchange(s).

Offer Document

A company making a public issue of debt securities must file a draft offer document with the stock exchanges where the issue is proposed to be listed through its lead managers. The offer document contains all the material information necessary for the investor to evaluate the offer. The document will be available for public comments for a stipulated time period after which the final offer document will be filed with the Registrar of Companies (RoC). Prior to filing the final offer document with RoC, the lead manager is required to furnish a due diligence certificate to SEBI. The final offer document will be available for download from the websites of the stock exchange, issuer and lead manager prior to the issue opening.

Shelf Prospectus

Eligible entities are permitted to file a shelf prospectus with the Registrar of Companies for public issuance of their debt securities and make multiple issues under this document through tranche prospectus. Eligible entities include Public Financial Institutions, scheduled banks, entities allowed by the Central Board of Direct Taxes (CBDT) to issue tax free secured bonds, Infrastructure Debt Funds, listed entities, Non-Banking Finance Companies (NBFCs) and Housing Finance Companies meeting requirements on networth, profitability and credit rating etc. The issuer, who has filed a shelf prospectus, should also file a copy of tranche prospectus with the stock exchanges, SEBI and RoC.[30]

Listing of Securities

The debentures issued under a public offer must mandatorily be listed on a stock exchange. An application has to be made to a stock exchange to list the debentures and an in-principle approval obtained before the draft offer document is filed with the stock exchange.

Credit rating

[30] A tranche prospectus contains details of the issue and material changes, if any, in the information including the financial information provided in the shelf prospectus or the earlier tranche prospectus, as applicable.

Credit rating has to be obtained from at least one credit rating agency registered with SEBI and the rating has to be disclosed in the offer document. If the rating has been obtained from more than one rating agency, all the ratings have to be disclosed.

Minimum Subscription

The minimum subscription in a public issue of debt securities should not be less than 75 percent of the base issue size or as specified by SEBI. If the minimum subscription is not received then the entire blocked application monies will be unblocked within the stipulated timeframe from the date of the closure of the issue. Any delay in unblocking of funds will attract interest for the delayed period by the issuer.

However, the issuer issuing tax free bonds as specified by CBDT is exempted from the minimum subscription limit.

Dematerialization

The issuer has to enter into an agreement with a depository for dematerialization of the securities proposed to be issued.

Debenture Trustees

Debenture trustees have to be appointed to oversee the interests of the investors. Trustees are banks and financial institutions who are registered with SEBI to act as debenture trustees. If the debentures are secured, they ensure that the property charged as security is adequate to meet the obligations to the debenture holders at all times.

Debenture Redemption Reserve

For the redemption of the debt securities issued by a company, the issuer must create a debenture redemption reserve and transfer a portion of profits into it each year till the redemption of the debentures.

Creation of Security

The Companies Act states that the Central Government may prescribe the procedure, for securing the issue of debentures. As per the SEBI (Issue and Listing of Non-Convertible Securities) Regulations, 2021, the proposal to create a charge or security in respect of secured debt securities has to be disclosed in the offer document along with its implications. The issuer has to provide an undertaking in the offer document that the assets on which the charge is created are free from any encumbrances and if the assets are already encumbered, the permissions or consent to create second or *pari passu* charge on the assets of the issuer have been obtained from the earlier creditor.

The issue of an unsecured debenture will be treated as deposits raised by the company and will require adherence to the Companies (Acceptance of Deposits) Rules.

Coupon Rate

The issuer in consultation with the lead manager may fix the coupon payable on the debenture. The coupon may be determined through a book building process also.

3.16 Public issue process for debt securities

A company making a public offer of debt securities must follow the same process as that for a public issue of equity shares. The primary requirement is that the issuer should not be declared as a willful defaulter and has not been barred from accessing the capital market. The important steps in the public issue of debt securities are listed below.

- Board resolution for issue of debt securities authorized by shareholders' resolution.
- Submission of draft prospectus to stock exchanges and SEBI.
- Submission of final offer document to Registrar of Companies after addressing any comments from stock exchanges or SEBI or the public.
- Application to the exchanges for listing of the debt securities.
- Application to the depositories for dematerialization of the debt securities.
- Issuing advertisements regarding the proposed public issue.
- Execution of Debenture Trust Deed.

- Obtaining a credit rating for the issue.
- Compliance with SEBI regulations relating to issue and listing of securities, disclosure requirements and provisions of the Companies Act, 2013 and other applicable regulations.
- Deciding the basis of allotment, allotment of securities and unblocking of funds in case of not receiving the minimum subscription.
- Listing of securities on the stock exchanges.

3.16.1 Process of issue for government securities

The process explained above relates to a public issue of corporate debt securities. Government securities are issued by the RBI on behalf of the government. The RBI conducts periodic auctions through which these securities are sold to investors. Auctions are held according to a calendar which is typically announced by the RBI every six months. Scheduled Commercial Banks and primary dealers are the main participants in an auction and bid for securities through a process of competitive bidding. Competitive bidding is open only to participants such as banks and primary dealers that maintain a current account and a subsidiary general ledger account with the RBI. Investors such as co-operative banks, non-banking finance companies, mutual funds, pension funds, companies etc. who lack these facilities and may not have the technical knowledge and expertise for direct participation in auctions can participate in non-competitive bidding. Non-competitive bidders receive allotment of securities at the weighted average price or yield that emerges in the auction on the basis of competitive bidding. In order to encourage participation of retail investors in the government securities market, RBI has now allowed retail investors to participate in the primary market for government securities through stock exchanges via the non-competitive bidding route.[31] As a result, retail investors can now bid in the auctions of government securities and treasury bills through a stock exchange. Brokers can enter bids on behalf of retail investors till the specified cut-off time on the auction day. The stock exchange will aggregate the orders received from retail investors and submit a single consolidated bid for the aggregate amount on a non-competitive basis. The exchange will make the investor-wise allocation of securities based on the consolidated allocation received from the RBI. This facility is aimed at enabling retail investors including individual investors to participate in the primary market for government securities.

[31] RBI Circular No.: IDMD.1080/08.01.001/2017-18 dated November 23, 2017 on Auction of Government Securities: Non-Competitive Bidding Facility to retail investors.

3.17 Private Placements in Equity and Debt

A private placement of securities is an offer made by a company to a select group of investors such as financial institutions, banks, mutual funds and other eligible investors. The advantage of private placement as a way to issue securities and raise funds comes from the following:

- Investors are better informed and there are less regulatory compliances in issuances to them.
- Issuing securities is less time consuming and cost-efficient since there are fewer procedures.

According to the Companies Act, 2013, an offer to subscribe to securities is made to not more than 50 persons is called private placement of securities. The requirements of SEBI's regulations with respect to a public issue will not apply to a private placement. An offer for a private placement of securities shall be made by name to identified persons and the details of the offer made shall be filed with the Registrar of Companies. The payment by investors for subscription to a private placement shall only be through banking channels and not by cash. The company is not allowed to advertise the issue or use any marketing or distribution channels to inform the public about such an issue. A privately placed security can seek listing on a stock exchange provided it meets the listing requirements of SEBI and the stock exchange. A private placement of securities can be done by a company irrespective of whether it has made a public offer of shares or not.

A private placement of shares or debt securities that can be converted into shares at a future date, such as fully convertible and partly convertible debentures and warrants, made by a listed company is called a preferential allotment of securities.

- Preferential allotment requires a resolution to be passed by the existing shareholders.
- Pricing of the securities will be done according to the formula laid down by SEBI.
- Preferential allotment made to the promoters or promoter group will be locked in for a period as stipulated by the regulation.

These regulations aim at ensuring that promoters and large investor groups do not take any action that may be detrimental to the interests of the public investors.

3.17.1 Qualified Institutions Placement

SEBI (ICDR) Regulations, 2018, defines Qualified Institutions Placement (QIP) as an issue of eligible securities by a listed issuer to Qualified Institutional Buyers (QIBs) on a private placement basis and includes an offer for sale of specified securities by the promoters and/or promoter group on a private placement basis.[32] QIBs include financial institutions, mutual funds and banks among others.

[32] "Eligible securities" include equity shares, non-convertible debt instruments along with warrants and convertible securities other than warrants. [SEBI (ICDR) Regulations, 2018]

To be eligible to make such a placement the company should:

(a) Pass a special resolution approving the QIP by its shareholders

(b) List its shares on the stock exchange for a period of at least 1 year before notice of such issue is given.

The promoters or promoter group of the company may make an offer for sale through QIP for the purpose of achieving minimum public shareholding in terms of the Securities Contracts (Regulation) Rules, 1957. As prescribed by SEBI, companies to be listed on the stock exchanges have to adhere to the listing requirement of a minimum public shareholding of 25 percent.

Investors must bid using the ASBA facility only and the bids made cannot be revised downward or withdrawn after the closure of the issue. A minimum of 10 percent of the eligible securities will be allotted to mutual funds, provided that any unsubscribed portion of the said minimum percentage may be allotted to other QIBs.

QIPs are made at a price derived from the share prices according to the formula prescribed by SEBI. Shares allotted in a QIP can be sold by the allottee within 1 year of allotment only on a recognized stock exchange.

3.17.2 Electronic system for book-building in debt securities

Companies in India prefer the private placement method of issuing debt securities to the public issue route. This is because private placement is more cost-effective and less time-consuming as compared to a public issue. In order to bring about greater transparency and efficiency in the private placement process and to further reduce the cost and time required, SEBI has set up a framework for electronic bidding of debt securities on private placement basis.[33] Use of electronic bidding is compulsory for:

a. Private placement of debt issues if,

   i. a single issue, for an amount equal to or greater than Rs. 50 crore (inclusive of green shoe option);

   ii. a shelf issue, consisting of multiple tranches, cumulatively amounting to Rs. 50 crore or more, in a financial year; and

[33] SEBI Circulars Nos: SEBI/HO/DDHS/CIR/P/2018/05 dated January 5, 2018 and SEBI/HO/DDHSP/CIR/2021/613 dated August 10, 2021 on operational guidelines for issue and listing of non-convertible securities.

iii. a subsequent issue, where all previous issues by an issuer in a financial year aggregating to Rs. 50 crore or more.

b. Private placement of debt securities by issuers in existence for less than 3 years and

c. Issuance of debt securities being non-equity regulatory instruments forming part of the capital of a bank or NBFC.[34]

The electronic Book Provider platform (EBP) is provided by the stock exchanges. The main features of this facility are:

- An issuer going for a private placement of debt securities and all other participants in the private placement process such as the arranger of the issue, the qualified institutional investors, custodians are required to register with the exchange to access the electronic bidding facility.
- The issuing company must upload the issue documents like the private placement memorandum, term sheet etc. on the electronic bidding platform (EBP) at least 2 working days prior to the issue opening date. It must inform the market about the details of issue and green shoe option, date of opening and closing of the bids, the mode of bidding (open or closed), manner of allotment (uniform price/yield or multiple price/yield), the manner of settlement and the settlement cycle etc. Issuer issuing securities for the first time through EBP must provide the above information at least 5 working days prior to the issue opening date.
- Participants must enroll with the EBP prior to entering the bidding process. EBP should ensure that eligible participants have access to the issue-related information and the bidding portal of the exchange.
- The EBP should not provide preferential access to any bidder on a selective basis.
- The issuer must make the bidding announcement on EBP at least 1 working day before initiating the bidding process.
- An eligible participant cannot bid for an amount more than Rs.100 crore or 5 percent of the base issue size, whichever is lower, through arranger(s) on the EBP platform. Foreign Portfolio Investors (FPIs) may bid through their custodians.

[34] SEBI Circular No.: SEBI/HO/DDHS/DDHS_Div1/P/CIR/2022/00139 dated October 10, 22 on Review of provisions pertaining to Electronic Book Provider platform.

- The cut-off price/yield must be calculated by the system after completion of the bidding process.
- Once the issue is accepted by the issuer, the EBP system must determine the successful bids on the basis of price-time priority (in the case of coupon specified by the issuer) or yield-time priority (in the case of coupon discovered during bidding) and inform the bidders about the status of their bids. Successful bidders must be notified electronically about the total amount payable and details of pay-in.
- The EBP must disseminate information regarding the bidding and allotment to the market as per SEBI guidelines.

Chapter 3: Sample Questions

1. **A retail investor in a public issue is an investor _____.**
    a. Who is not an institutional investor
    b. Who invests not more than Rs. 2 lakhs
    c. Who applies for atleast 100 shares
    d. Who does not have a demat account

2. **In an offer for sale, the funds raised by the issue _____.**
    a. Increases the share capital of the company
    b. are settled through the stock markets
    c. are the sale proceeds for the existing shareholders

3. **Which of the following categories of shares have to be mandatorily listed on a stock exchange?**
    a. All shares issued by a company
    b. All shares issued to non-promoters
    c. All shares depending upon the terms of the issue
    d. All shares issued through a public offer

4. **If a public issue is heavily over-subscribed, _____.**
    a. The issue price will be lower
    b. The number of shares allotted to each investor will be lower
    c. The listing price will be higher
    d. The amount raised will be higher

5. **Which of the following is essential for the public issue of a debt security?**
    a. The shares must be listed on the stock exchange.
    b. The debt instruments must be credit rated.
    c. The promoters must stand guarantee for the payment of principal and interest.
    d. The instruments do not require minimum coupon specified.

CHAPTER 4: SECONDARY MARKETS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Secondary Market: Role, function, market structure and participants
- Brokers and Client Acquisition
- Trade Execution
- Settlement of trades
- Risk Management
- Investor Grievance Redressal

4.1 Role and Function of the Secondary Market

The secondary market is where securities once issued are bought and sold between investors. The instruments traded in secondary markets include securities issued in the primary market as well as those that were not issued in the primary market, such as privately placed debt or equity securities and derivatives of primary securities created and traded by financial intermediaries.

Transactions in the secondary market do not result in additional capital to the issuer as funds are only exchanged between investors. The role of secondary market is to support the capital raising function of the primary market by providing liquidity, price identification, information-signalling, and acting as a barometer of economic activity.

- ***Liquidity***

Secondary markets provide liquidity and marketability to existing securities. If an investor wants to sell off equity shares or debentures purchased earlier, it can be done in the secondary market. Alternately, if new investors want to buy equity shares or debentures that have been previously issued, sellers can be found in the secondary market. Investors can exit or enter any listed security by transacting in the secondary markets.

A liquid market enables investors to buy perpetual securities such as equity that are not redeemed by the issuer; risky securities whose future performance is unknown; and long-term securities maturing far into the future. Investors can sell their securities at a low cost and in a short span of time, if there is a liquid secondary market for the securities that they hold. The sellers transfer ownership to buyers who are willing to buy the security at the price prevailing in the secondary market.

- ***Price Discovery***

Secondary markets enable price discovery of traded securities. Each buy or sell transaction reflects the individual assessment of investors about the fundamental worth of the security. The collective

opinions of various investors are reflected in the real time trading information provided by the exchange. The continuous flows of price data allow investors to identify the market price of equity shares. If an issuing company is performing well or has good future prospects, many investors may try to buy its shares. As demand rises, the market price of the share will tend to go up. The rising price is a signal of expected good performance in the future. If an issuing company is performing poorly or is likely to face some operating distress in the future, there are likely to be more sellers than buyers of its shares. This will push down its market price. Market prices change continuously and they reflect market judgement about the security.

Market valuation benefits issuers when they have to raise further capital from the market, by giving an indication of the price at which new capital could be issued. For example, consider a company with equity shares of face value of Rs.10, which are being traded for around Rs.100 in the market. If the company wants to raise additional capital by issuing fresh equity shares, it could issue the new shares at a price close to Rs.100, which is the value determined by investors in the market.

- ***Information Signaling***

Market prices provide instant information about issuing companies to all market participants. This information-signalling function of prices works like a continuous monitor of issuing companies, and in turn forces issuers to improve profitability and performance. Efficient markets are those in which market prices of securities reflect all available information about the security. A large number of players trying to buy and sell based on information about the listed security tend to create a noisy and chaotic movement in prices, but also efficiently incorporate all relevant information into the price. As new information becomes available, prices change to reflect it.

- ***Indicating Economic Activity***

Secondary market trading data is used to generate benchmark indices that are widely tracked in the country. A market index is generated from market prices of a representative basket of equity shares. Movements in the index represent the overall market direction. The S&P BSE-Sensex and the NSE-Nifty50 are the most popularly watched indices in India. A stock market index is viewed as a barometer of economic performance. A sustained rise in key market indices indicate healthy revenues, profitability, capital investment and expansion in large listed companies, which in turn implies that the economy is growing strongly. A continuous decline or poor returns on indices is a signal of weakening economic activity.

- ***Market for Corporate Control***

Stock markets function as markets for efficient governance by facilitating changes in corporate control. If management is inefficient, a company could end up performing below its potential. Market forces will push down share prices of underperforming companies, leading to their undervaluation. Such companies can become takeover targets. Potential acquirers could acquire a significant portion of the target firm's shares in the market, take over its board of directors, and improve its market value by providing better governance. An actual takeover need not happen; even the possibility of a takeover can be an effective mechanism to ensure better governance.

Stock markets are subject to bull and bear cycles. A bull market is when buyers are willing to pay higher and higher prices, as the overall optimism for better future performance of stocks is high. This happens when businesses are expanding, growing at an above average rate, face favourable and growing demand for their products and services, and are able to price them profitably. The returns to equity investors go up as stock prices appreciate to reflect this optimism. But a bull market can overdo its exuberance. As buyers pay a higher and higher price for a stock, prices move beyond what can be justified by the underlying intrinsic value. Also, businesses tend to overarch themselves, borrowing to fund expansion based on optimistic forecasts. Input costs for raw materials and labour and interest costs for capital increase as the bull market reaches its peak. Unrealistic expansion in prices tends to correct itself with a crash.

The bull market paves way to a bear market when stock prices fall and correct themselves. A downturn in economic cycles can lead to stress for several businesses, when they face lower demand for their products and services, higher input and labour costs, lower ability to raise capital, and in many cases risks of survival. When the economic conditions change, several businesses that began profitably may come under stress and begin to fail. Bear markets in equity reflect this pessimism, stocks prices fall. Sellers quit in despair, accepting a lower price and a loss on their stocks. As prices may fall well below intrinsic values, buyers who find the valuation attractive will start coming into stocks that now are priced reasonably, or lower. Lower interest rates lead to investment, and slowly the bear cycle gives way to the next bull cycle.

4.2 Types of secondary markets for different securities

- ***Secondary market for equities:*** The platform for trading of equity shares in the secondary market is provided by stock exchanges. A stock exchange is classified as a market infrastructure institution (MII) and is regulated by SEBI. Stock exchanges allow trading of those securities that are listed on the exchange. The clearing corporation of a stock exchange acts as the central counterparty for a securities transaction. By interposing itself between the buyer and the seller of securities, the clearing corporation provides a

guarantee or assurance that the transaction will be settled even in case of a default by one of the parties to the transaction. Under the interoperability framework, introduced by SEBI, market participants are allowed to clear and settle their trades at a clearing corporation different from the clearing corporation of the exchange at which the trades were executed. Therefore, stock exchanges now have multi-partite agreements with different clearing corporations so as to facilitate interoperability. Pay-in and pay-out of funds and securities between the buyers and sellers are arranged by the clearing corporation of the stock exchange along with the clearing banks, depository participants and clearing members. The facility of online trading on the stock exchanges has substantially improved the liquidity of equity shares. The exchanges publish both intra-day and end-of-day data regarding the price and traded volume of all securities traded on the exchange. This has brought about transparency in the pricing of equity shares. By removing the problem of default risk and arranging for the clearing and settlement of secondary market trades according to a regular schedule, stock exchanges ensure that secondary market transactions are conducted in a safe and efficient manner.

- ***Secondary market for debt securities:*** The secondary market for debt securities can be classified into the government securities (G-sec) market, which is regulated by the RBI, and the corporate bond market, which is regulated by SEBI. Prior to 2005, the G-sec market was mainly an over-the-counter (OTC) market. Buy and sell orders were placed telephonically through approved G-sec brokers. Deals were settled bilaterally, without the presence of any central counterparty. Trades were executed by exchanging a physical document called the Subsidiary General Ledger (SGL) form and payment of the purchase consideration was by means of a cheque. This system was slow, inefficient and prone to operational and default risks. The Clearing Corporation of India Ltd (CCIL) was set up in 2001 by banks and financial institutions at the behest of the RBI with the objective of improving the clearing and settlement process and to broaden and deepen the G-sec market. The CCIL runs and manages the Negotiated Dealing System-Order Matching system (NDS-OM) which is an anonymous, electronic, screen-based, order-driven system for trading of G-secs and owned by the RBI. Market participants can submit bid and ask quotes in an anonymous manner on the NDS-OM platform and these are electronically matched by the system. The CCIL provides guaranteed settlement of G-sec transactions and has mitigated the counterparty and operational risk in the G-sec market. The NDS-OM has greatly improved the liquidity and efficiency in the G-sec market by bringing in transparency in the trading process. While trading on the NDS-OM is restricted to institutional investors, all types of investors can trade G-Sec on the stock exchange platforms. SEBI has taken several measures to streamline the functioning of the secondary market for corporate bonds. These include mandatory reporting of OTC corporate bond

trades on the stock exchanges, creation of a centralized database of corporate bonds, compulsory clearing and settlement of corporate bond trades by clearing corporations of exchanges and introduction of a dedicated debt segment on stock exchanges. These have been discussed in detail in later section of this Unit.

- ***Secondary market for commodities:*** The spot market for commodities is regulated by individual state governments. Agricultural Produce Market Committees (APMC) are set up by state governments to regulate the sale of agricultural produce by farmers. The objective is to prevent exploitation of farmers by large retailers. 'Mandis' or market yards are established at various places in the state where farmers sell their agricultural produce through auction. Only licensed traders can buy the produce at such auctions. The government launched electronic National Agricultural Market (e-NAM) in 2016. The objective of e-NAM is to provide an online market platform for agricultural produce by creating a unified network of existing mandis. The vision of e-NAM is 'One Nation, One Market'. The e-NAM platform provides a bidding platform for farmers and buyers located at distant places away from the local mandi. It also provides an electronic payment facility so that farmers can receive their payment without having to visit a bank. The e-NAM platform also provides information about commodity arrivals and quality assaying services. The e-NAM initiative aims to bring greater transparency in pricing of agricultural produce which can mainly benefit farmers.

4.3 Market Structure and Participants

The secondary market consists of the following participants:

- Stock exchanges – entities which provide infrastructure for trading in securities
- Clearing Corporations – entities which provide clearing and settlement guarantees in trading
- Investors –individuals and institutions that buy and sell securities
- Issuers-companies/ government that issue securities
- Financial intermediaries –firms that facilitate secondary market activity
- Regulator –authority that oversees activities of all the participants in the market

4.3.1 Stock Exchange

The core component of any secondary market is the stock exchange. The stock exchange provides a platform for investors to buy and sell securities from each other in an organised and regulated manner. Stock exchanges stipulate rules for members who are permitted to transact on the exchange, and for listing companies whose securities are permitted to be traded. The three national level stock exchanges in India are the Bombay Stock Exchange (BSE), the National Stock

Exchange (NSE) and the Metropolitan Stock Exchange of India Ltd (MSEI). The trading terminals of these exchanges are present across the country.

- **Members**

Investors can trade in the secondary markets only through members of a stock exchange. The trading members of stock exchanges are also called stock brokers; and their agents are called Authorized Persons. They bring the buyers and sellers to the stock exchange platform, thus enabling trading in securities. Members will be admitted to an exchange only if they fulfil minimum requirements for capital, qualification, net worth and other criteria for admission. Stock exchange members can be trading members, or clearing members, or play both roles. Stock exchanges monitor members for their positions, capital, and compliance. Members' obligations towards their clients (investors) are also clearly laid down.

4.3.2 Investors

If investors buy and sell shares among themselves, such trades are called "off-market" and do not enjoy the benefits of regulatory and redressal provisions of the law. In order to get a competitive price and a liquid market in which transactions can be completed efficiently, investors come to the stock exchange through their brokers. Investors complete a KYC (know your customer) process with a registered broker-member and receive a unique client code (UCC). Institutional investors are supported by a distinct arm of the broker-member since they transact in large volumes. Banks, insurance companies, mutual funds, foreign portfolio investors are all large investors who may have their own dealers interacting with member-brokers who put their transactions on the exchange. Brokers also support investors with market information, updates, research reports, analytical tools and other facilities that help in buying and selling securities.

4.3.3 Issuers

Issuers are companies and other entities that seek admission for their securities to be listed on the stock exchange. Equity shares, corporate bonds and debentures as well as securities issued by the government (G-secs and treasury bills) are admitted to trade on stock exchanges. There are specific eligibility criteria to list securities on the stock market. These can be in terms of size, extent of public shareholding, credit rating, ownership pattern, etc. Issuers must pay a listing fee and comply with requirement for disclosure of information that may have a bearing on the trading prices of the listed securities.

4.3.4 Intermediaries involved in Trading, Clearing and Settlement

Secondary market transactions have three distinct phases: trading, clearing and settlement. To trade in shares is to buy and sell them through the stock exchanges. Stock exchanges in India feature electronic order-matching systems that facilitate efficient and speedy execution of trades.

After the trade is executed, the buyer has a payment obligation, and the seller has a delivery obligation. In order to facilitate efficient trading, the execution of trades and the settlement of obligation are separated in modern stock exchanges.

Clearing is the process of identifying what is owed to the buyer and seller in a trading transaction; and settlement is the mechanism of settling the obligations of counter parties in a trade. All stock exchanges in India follow a common settlement system. Earlier, trades done on a particular day (say, T) were settled after two business days after the trading day (i.e. T+2). SEBI, in order to further shorten the settlement cycle, has reduced the settlement cycle to T+1 day.[35] With advancement of technology and to shorten clearing and settlement process timelines bringing cost and time efficiency, SEBI introduced optional T+0 rolling settlement cycle in addition to the existing T+1 cycle.[36]

- ***Risk Management***

Stock exchanges have risk management systems to insure against the event that members of the exchange may default on payment or delivery obligations. Strategies such as maintenance of adequate capital assets by members and regular imposition of margin payments on trades ensure that damages through defaults are minimised. Exchanges thus enable two distinct functions: high liquidity in execution of trades and guaranteed settlement of executed trades.

4.3.5 Clearing Corporation

In the modern structure of secondary markets, clearing corporations are set up as independent fully-owned subsidiaries of stock exchanges. They function as counter-parties for all trades executed on the exchange they are affiliated with. So all buyers pay funds to the clearing corporation, and all sellers deliver securities to the clearing corporation. Specialised intermediaries called clearing members complete these transactions. The clearing corporation completes the other leg of the settlement by paying funds to sellers and delivering securities to buyers.

The framework for interoperability among Clearing Corporations allows the market participants to consolidate their clearing and settlement functions at a single Clearing Corporation, irrespective of the stock exchange on which the trade is executed. This helps in reduction of trading cost and better execution of trades. The interoperability framework is applicable to all the recognized

[35] SEBI Circular No. SEBI/HO/MRD2/DCAP/P/CIR/2021/628 dated September 7, 2021 on Introduction of T+1 rolling settlement on an optional basis.

[36] SEBI Circular Nos.: SEBI/HO/MRD/MRD-PoD-3/P/CIR/2024/20 dated March 21, 2024 and SEBI/HO/MRD/POD-3/P/CIR/2024/172 dated December 10, 2024.

clearing corporations (excluding those operating in the International Financial Services Centre) and all the products available for trading on the stock exchanges (except commodity derivatives).[37]

Some of the Clearing Corporations are: NSE Clearing Ltd., Indian Clearing Corporation Ltd. (ICCL) and Metropolitan Clearing Corporation of India Ltd. (MCCIL).

4.3.6 Depositories and Depository Participants (DPs)

For a security to be eligible to trade in the secondary markets, it should be held in electronic or dematerialised form. Issuers get their securities admitted to the depositories, where they are held as electronic entries against investor names, without any paper certificate. National Securities Depository Ltd (NSDL) and Central Depository Services (India) Ltd (CDSL) are the two depositories in India.

Investors have to open demat accounts with depository participants (DPs), who are banks, brokers or other institutional providers of this service, to be able to trade in their securities. Demat accounts are similar to bank accounts in securities. Since the entries are electronic, transfer of securities from buyer to seller is easily completed by paper or electronic instruction to the DP. Settlement of securities transactions is done through the demat account held with the DP, who in turn notifies the depositories of the change in ownership of the securities. Payments are made and received through specifically identified clearing banks.

4.3.7 Custodians

Custodians are institutional intermediaries, who are authorised to hold funds and securities on behalf of large institutional investors such as banks, insurance companies, mutual funds, and foreign portfolio investors (FPIs). They settle the secondary market trades for institutional investors. Several custodians are also clearing members and clearing banks of the exchange and manage both funds and securities settlement.

4.3.8 Regulator

Secondary markets are regulated under the provisions of the Securities Contracts (Regulation) Act, 1956 and Securities Contracts (Regulation) Rules, 1957. SEBI is authorised by law to implement the provisions of this act and its rules. It has empowered stock exchanges to administer portions of the regulation pertaining to trading, membership and listing. All the intermediaries in the secondary markets are subject to regulatory overview of SEBI and are required to register and comply with the rules as may be stipulated. The primary function of SEBI is to safeguard the interests of investors and develop and regulate the securities markets.

[37] Vide SEBI Circular No.: CIR/MRD/DRMNP/CIR/P/2018/145 dated November 27, 2018 on the interoperability among Clearing Corporations.

Government of India has also setup International Financial Services Centre (IFSC) to provide Indian companies access to global financial markets and promote development and is regulated by IFSC Authority (IFSCA). (see Box: 4.1)

Box 4.1: International Financial Services Centre (IFSC)

An IFSC deals with flows of finance, financial services and products to and from offshore customers, i.e. those outside the jurisdiction of the domestic economy. London, New York, Singapore and recently Dubai and Shanghai are counted as the major IFSCs in the world. Several regulatory restrictions have prevented foreign investors from actively trading in Indian financial markets. As a result, active trading in Indian stock, index and currency derivatives is conducted outside in India, in IFSCs like Singapore and Dubai. This translates into loss of revenues and employment opportunities for the Indian economy. In order to attract these trading activities back to India, the government took steps to set up an IFSC in India. Gujarat International Finance Tec-City (GIFT city) has become India's first IFSC set up in Gandhinagar.

NSE IFSC and India International Exchange (IndiaINX) are international stock exchanges set up by NSE and BSE respectively, in the GIFT city. Both exchanges aim to provide trading in equity shares of companies incorporated outside India, depository receipts, debt securities, foreign currencies, interest rate and commodities derivatives and all exchange-traded products that are available for trading in foreign stock exchanges which are compliant with IOSCO and FATF regulations. Index and stock futures and options on Indian companies are traded on these exchanges but denominated in dollars. Participants on these exchanges enjoy exemption from securities transaction tax, commodities transaction tax, capital gain tax and income tax. The aim is to broaden and deepen the Indian financial markets by attracting foreign capital.

International Bullion Exchange (IBE) in the IFSC deals in bullion spot trading and bullion depository receipts. All bullion imports for domestic consumption are routed through the IBE ecosystem for efficient price discovery, assurance in the quality of gold etc.

Since July 2023, the derivatives contracts on Nifty, which used to be traded on the Singapore Exchange (SGX Nifty derivatives) are being traded exclusively on the NSE IFSC and SGX Nifty has been delisted. This is part of the Government's push to ensure that derivatives trading on Indian stocks and indices is shifted back to Indian exchanges from foreign exchanges.

As stock exchanges, clearing corporations and depositories are Market Infrastructure Institutions (MIIs), SEBI had issued procedural norms on recognition, ownership and governance for stock exchanges and clearing corporations vide its circular in December 2012. In order to assess the adequacy of the existing norms and to identify areas for improvement, SEBI constituted a Committee under the chairmanship of Shri R. Gandhi, former Deputy Governor, RBI. The Gandhi Committee submitted its report in March 2018. The Committee made certain recommendations that include: (i) Ownership of MIIs should be widely held (ii) Term of Managing Director of a MII should be renewed only after a rigorous performance review by the Board (iii) Undertaking of unrelated activities by the MII should need prior permission of SEBI (iv) Key Management

Personnel (KMP) should be identified by the Nomination and Remuneration Committee or Board of the MII and their remuneration should be aligned with international principles for compensation. (v) There should be transparency in disclosure of compensation paid to KMPs (vi) There should be rationalization of the mandatory committees at MIIs to prevent overlapping of their functions. Accordingly, all MIIs are required to constitute functional committees that include: (a) Member Committee (b) Grievance Redressal Committee and (c) Nomination and Remuneration Committee and (d) Oversight Committees. Oversight committees include: (a) Standing Committee on Technology (b) Advisory Committee (c) Regulatory Oversight Committee and (d) Risk Management Committee. Public Interest Directors are required to chair each committee at the MIIs. SEBI has mandated each MII to have a Business Continuity Plan (BCP) and Disaster Recovery Site (DRS) to maintain data and transaction integrity.

4.4 Brokers and Client Acquisition

4.4.1 Brokers and Authorized Persons

A broker is a member of a recognised stock exchange who is registered with SEBI and permitted to trade on the screen-based trading system of stock exchanges. An Authorized Person (AP) is an agent of the broker (previously referred to as sub-brokers) and is registered with the respective stock exchanges. Both brokers and APs can be individuals, partnership firms, private or public limited companies, including subsidiaries of banks and financial institutions. Registered members of the stock exchange are required to prominently display their membership details at their front offices to enable investors to verify that they are dealing with a registered entity.

Trades must be routed only through the trading terminals of registered members of an exchange, to be accepted and executed by the system. Broker-members of exchanges can complete transactions on the exchange only electronically. Brokers can trade on their own account too, using their own funds. Such transactions are called proprietary trades.

SEBI registration to a broker is granted based on factors such as the broker's eligibility to be a member of a stock exchange; availability of adequate office space, equipment and manpower to effectively carry out his activities; past experience in securities trading. SEBI ensures the capital adequacy of brokers by requiring them to deposit a base minimum capital with the stock exchange; and limiting their gross exposures to a multiple of their base capital.

Brokers receive a commission for their services, which is known as brokerage. Maximum brokerage chargeable is fixed by individual stock exchanges.

The responsibilities of a broker include the following:

- Maintain record of client transactions and operate separate trading account for clients and for proprietary trades.
- Maintain funds of clients in a separate account.

- Issue of contract note to clients within 24 hours of the execution of the order.
- Collect funds or securities from client prior to the pay-in day in the settlement cycle of the relevant exchange.
- Make delivery or payment to the client within 24 hours of pay–out from the stock exchange.
- Appoint compliance officer who will be responsible for monitoring compliance with rules and regulations applicable to the functions of a broker and for redressal of investors' grievances.

4.4.2 Client Acquisition Process

A trading member must complete the know your customer (KYC) formalities and in-person verification (IPV) before opening client accounts. The account opening form contains a KYC form that captures basic details about the investor such as:

- Personal details: Name, gender, marital status, permanent account number (PAN), residential status, UID number; along with proof of identity.
- Address details: Postal address, phone number, e-mail, other permanent address; along with proof of address.
- Other details: Income, occupation, net worth.
- Details of bank accounts and depository accounts.
- Details of action taken on the client by any regulatory authority in the last three years.

Apart from the KYC, a trading member is also required to issue the following documents to the Clients:

- Document stating the Rights and Obligations of stock broker and client for trading on exchanges (including additional rights and obligations in case of internet / wireless technology based trading).
- Uniform Risk Disclosure Document.
- Guidance Note detailing Do's and Don'ts for trading on Exchanges.
- Index of documents giving details of various documents for client account opening process.
- A tariff sheet specifying various charges, including brokerage, payable by the client to avoid any disputes at a later date.
- The information on contact details of senior officials within the stock broking firm and investor grievance cell in the stock exchange, so that the client can approach them in case of any grievance.

The trading member is required to formulate several policies and procedures for the information/ benefits of the clients, and issue them to the clients and also publish the same on its website. Details of such policies are as under:

- Inactive accounts policy, covering definition of the term 'inactive accounts', time period for declaring account as inactive, return of clients' assets, procedure for reactivation.
- Setting up client's exposure limits.
- Applicable brokerage rate.
- Imposition of penalty / delayed payment charges by either party, specifying the rate and the period.
- Right to sell clients' securities or close clients' positions, without giving notice to the client on account of non-payment of client's dues.
- Shortage of obligations arising out of internal netting of trades.
- Conditions under which a client may not be allowed to take further position or the broker may close the existing position of a client.
- Temporarily suspending or closing a client's account at the client's request and
- Deregistering a client.

The trading member is also required to display set of standard client registration documents and information pertaining to client's position, statement of accounts etc. and provide secured access to clients by way of user id and password.

Brokers are expected to diligently comply with KYC norms and check all supporting documents. The uniform KYC norms notified by SEBI applies to stock brokers too apart from depository participants, mutual funds, portfolio managers and other securities market intermediaries.

A Unique Client Code (UCC) has to be generated by the broker for each client. The UCC has to be submitted while placing orders or carrying out trades in the exchange.

Several brokers offer 3-in-1 accounts that securely link bank and demat accounts with the trading account of the client with the broker. Others operate these accounts on behalf of the client using a power of attorney. When clients sign account opening forms, they need to understand the specific arrangement the broker is proposing to ensure timely settlement of trade obligations.

4.4.3 3-in-1 Account

The 3-in-1 account allows an investor to merge the savings bank, demat and trading accounts. If a bank provides a 3-in-1 account the bank account and depository services are offered by the banks. The trading account is usually held through its subsidiary which is a registered broking firm. If a broking firm offers a 3-in-1 account, the broking and depository services are offered by the broking firm (in some case through another DP) and the bank account is held in with a bank. A 3-in-1 account uses a trading platform as its front end, with the bank and demat account linked in the background.

An investor can open all the three accounts with the same bank or broker using a single account opening form and common KYC. By integrating the three accounts, investors can carry out

seamless online transactions across them. The 3-in-1 account features a log-in and password and does not enable operating the underlying bank account or demat account for any other purposes than settling trades completed on the trading account.

The advantages of a 3-in-1 account are:

- It reduces manual paperwork involving cheques, fund transfers, contract notes, account statements, order placement and hassles of branch banking transactions.
- More convenient as investor does not need to physically co-ordinate with the bank, broker and depository participant.
- It enables efficient trading as the trading platform is linked through the broker's terminals to the live market, enabling access to real-time information on prices and market activity.

4.4.4 Power of Attorney

Power of Attorney (PoA) is a voluntary delegation of power by the investor to a broker or depository participant (DP) to facilitate the delivery and receipt of shares and funds to settle the obligations arising out of a trade or transaction. In order to prevent fraudulent practices, SEBI had issued detailed guidelines for execution of PoA with regard to trading accounts. Though PoA was not mandatory for opening a trading account with a broker, it was required when an online 3-in-1 account was opened. This is because PoA was needed for automatic debit from the client's bank account upon purchase of shares and automatic debit from the client's demat account upon sale of shares. SEBI clarified that the PoA was to be used by the broker only for (a) transferring securities from the client's Beneficial Owner account towards securities pay-in obligation of the client and (b) for pledging/repledging of securities in favour of the broker for meeting the client's margin obligations towards the broker.

However, over the past few years, many brokers were found to be forcing their clients to execute a PoA in their favour, although such PoA was not mandatory as per SEBI requirements. There were also instances of brokers misusing the PoA to misappropriate the client's securities.

To mitigate the risk of misuse of PoA, SEBI has now required stock exchanges, clearing corporations and depositories to put in place a separate system of Demat Debit and Pledge Instruction (DDPI). According to this system, the client may use the DDPI to authorize his broker to access his beneficial owner account for the limited purpose of meeting the client's obligations towards securities pay-in and margins. After implementation of DDPI, PoA can no longer be executed for the above purposes. The client has the authority to revoke or cancel the DDPI at any time.

4.5 Trade Execution

To trade is to step into the stock market to buy or sell shares. Buyers and sellers converge at the stock markets to execute their trades using the electronic trading platform. Trades can be put through by brokers on their own behalf (proprietary trades) or on behalf of their client (client trades).

4.5.1 Trading System

Stock exchanges offer two types of trading systems: open outcry and online trading. Under the open outcry system traders gather physically on trading floor and shout or signal their bid and offer prices. Online systems allow traders to trade electronically by connecting to the system without being physically located at the exchange. Trading in India at BSE, NSE and MSEI is carried out through online screen-based systems.

The fully automated computerised mode of trading on BSE is known as BOLT (BSE Online Trading); on NSE is called NEAT (National Exchange Automated Trading) System; and on MSEI it is called TWS (Trader Work Station). Buy and sell orders placed by investors (client orders) or transactions of trading members on their own account (proprietary trades) are routed to the trading system to be executed through electronic matching.

Mobile trading: This refers to placing orders and trading through mobile trading applications on devices such as smart-phones and tablets. The switch from desktop trading to mobile trading is largely because of the ease of placing orders and checking order status and the facility of live market updates and notification alerts. Mobile trading is especially preferred by the younger generation of retail investors who are more familiar with mobile trading apps. The key problems with mobile trading are poor mobile connectivity, especially in remote locations or hilly areas, small screen size and slow speed.

Algorithmic trading: Algorithmic or algo trading is a broad concept that refers to trading with a computer program that places buy and sell orders on the basis of predefined rules and conditions. For example, the algorithm may contain a condition such as – ''buy stock of ABC Ltd when the stock price rises above its 10-day moving average and sell the stock when the price dips below its 10-day moving average''. The algorithm then fires buy and sell orders for the stock as soon as these conditions are fulfilled. The algorithm also allows the user to define multiple conditions or a matrix of different parameters for the triggering of the order. Institutional investors often use algorithms to break up a large buy or sell order into multiple small orders to minimize the market impact of a large order. This allows efficient and timely execution of small orders without significantly affecting the prevailing market price. The main benefit of algo trading is speed and accuracy of execution because the order is placed instantly and accurately as soon as the required conditions are met. Another important benefit is that the use of computers to place orders prevents human emotions from interfering with trading decisions. This also reduces the chances

of human errors due to emotional and psychological factors. Algo trading is widely prevalent in developed markets such as the US and is also catching up in India. A major problem with algo trading is that there could be an error in the design of the algorithm such that wrong conditions or parameters might have been set by the user. Testing of algorithms is required by the exchanges but if some errors are not uncovered during testing, it may lead to wrong execution by the algorithm.

High-frequency trading (HFT): This refers to automated trading used mainly by large investment banks, hedge funds and sophisticated institutional investors. It is a subset of algorithmic trading. HFT requires huge investments in very fast computer architecture and state-of-the-art software that can enable the execution of literally millions of orders across multiple exchanges and other trading venues within seconds. The typical features of HFT have been defined by the Securities and Exchange Commission of the USA as: (a) use of fast and sophisticated computer programs for placing, routing and executing orders (b) very small holding periods, typically minutes or seconds (c) firing of huge number of orders per second and instantly removing them before they are executed, which typically results in very high order-to-trade ratios (d) ensuring that most of the trading positions are closed by end of the day so that there are no significant overnight positions. HFT trading typically involves use of co-location facilities provided by exchanges in order to reduce their latency. It can be said that HFT concentrates on very short-term trading opportunities that disappear within milliseconds. Algorithmic trading focuses on trade execution strategies with the objective of minimizing the cost of execution within certain constraints imposed by risk and timing of the trade.

Co-location: This refers to the facility provided by a stock exchange to its brokers to locate their computer servers at the premises where the exchange's own computer servers are located. This is especially important to high-frequency traders as it allows them to reduce their latency. Latency is the lapse of time from the moment a signal is sent to its receipt. In the trading lexicon latency refers to the time that elapses between the placement of a buy or sell order by the trader and actual receipt of the order by the exchange. One of the most important factors that affect latency is the distance travelled by the data signal which depends upon the length of the data cable that carries data from one point to another. Thus, traders whose computer servers are located right next to the exchange's own computer servers enjoy much lower latency as compared to other traders whose servers are located farther away. Co-location services are offered by exchanges to their members for a fee and are an important source of revenue for the exchanges.

The sequence of trade execution is as follows:

a. Placing of an order to buy or sell with the broker
b. Routing of order by broker to trading system
c. Display of order on the trading screen
d. Matching of order electronically

e. Confirmation of trade
f. Generation of contract note

4.5.2 Orders

An order is an instruction to buy or sell a specific quantity of shares in the stock market.

- Buy 2000 shares of ABC Industries Ltd.
- Sell 4000 shares of XYZ Ltd.

These are examples of orders. An order is complete only if it correctly indicates the name of the listed company, whether to buy or sell, and the number of shares. An order may or may not indicate the price at which the trade needs to be done. An order has to be clearly communicated to and confirmed by the broker to be valid. These days most of the orders are placed on the trading terminal of the broker and confirmed electronically. Orders can also be placed on paper, on phone, or on order forms created by brokers. Brokers do not accept orders from unknown investors; it is mandatory for an order to be identified by the unique client code (UCC) of the investor.

Each security listed on an exchange has a securities symbol and a unique International Securities Identification Number (ISIN). The symbol is usually an abbreviation of the issuing company name. The ISIN is a unique 12-digit number that identifies a security in the depository system. For example, the equity shares of Hindalco Industries Ltd. have the security symbol HINDALCO and the ISIN code INE038A01020. While placing an order, an investor must ensure that the security that is to be bought or sold is correctly identified.

The following are the various types of orders that can be placed:

Limit Order

Limit orders are the most common type of orders placed in the market. The buyer or seller specifies the price. A limit order is placed when an investor wants a trade to get executed only if the desired price becomes available in the market. Unexecuted limit orders lapse and get cancelled at the end of the day.

Example: Buy order with limit price

- Buy 1000 shares of ABC Bank at Rs.2500.
- The current price of the stock is Rs.2600.
- Since the order specifies the price, it is a limit order.
- Investor is willing to buy the stock, only if the price reaches Rs. 2500 or lower.

The order will get executed at a price of Rs.2500 or lower until the order quantity of 1000 shares is fulfilled.

Example: Sell order with limit price

- Sell 1000 shares of ABC Bank at Rs.2500
- The current price of the stock is Rs.2400
- Since the order specifies the price, it is a limit order.
- Investor is willing to sell the stock, only if the price is Rs. 2500 or higher.

The order will get executed at a price of Rs.2500 or higher until the order quantity of 1000 shares is fulfilled.

Market Order

A market order is placed when the investor is willing to accept whatever the current price in the market is and wants to ensure that the stocks are either bought or sold immediately. Market orders are executed at the current price prevailing in the market, which is usually at or close to the last traded price, if the stock is liquid and actively traded. It is rare for a market order to remain unexecuted at the end of the trading day, unless the stock is very illiquid and the quantity demanded is high and not completely filled up.

Immediate or Cancel Order

An Immediate or Cancel (IOC) order allows the user to buy or sell a security as soon as the order is released into the system, failing which the order is cancelled from the system. If the order is filled only partially on an immediate basis, the unexecuted portion of the order is cancelled immediately.

Stop-Loss order

Stop-loss means acting when prices move in the direction opposite to what was desired. It is always placed along with an order to buy or sell. A buyer expects the price to go up after he has bought. But if the price falls instead, he suffers a loss as the value of the share he has bought has fallen and he can sell only at a lower price than his purchase price. To avoid such a loss, he may place a stop-loss order along with his buy order.

Example: Buy with stop-loss

A trader places a limit order for buying 1000 shares of XYZ Industries at Rs 1000.

He places a stop-loss sell order at a trigger price of Rs 990.

If the stock reaches 1000, the buy order will be executed.

After the buy order, during the trading day, if the price falls to Rs.990, the sell order is triggered to close the position.

Example: Sell with stop-loss

A trader places a limit order for selling 1000 shares of XYZ Industries at Rs 1000.

He places a stop-loss buy order at a trigger price of Rs 1010.

If the stock reaches Rs 1000, the sell order will be executed.

After the sell order, during the trading day, if the price rises to Rs.1010, the buy order is triggered to close the position.

Stop-loss is used primarily in intra-day trading where a buyer hopes to sell at a profit and close his position before the end of the day. If the price goes down, the position begins to lose money. The stop-loss closes the position and limits the loss. Similarly, a seller hopes to buy back the shares he sold at a lower price before the end of the trading day. If the price moves up instead, his position begins to lose money. The stop-loss closes the position when the price moves up. Stop-loss orders are limit orders where a position is created on one side, and on reaching the trigger price as indicated, a limit order on the opposite side is executed.

All stop-loss orders are kept in a separate book (stop loss book) in the system until they are triggered. Unexecuted stop-loss orders are cancelled at the end of the trading day.

Disclosed Quantity Order

A large institutional investor may not want the market to know that they are placing orders to buy or sell a large quantity of shares. Large buy orders can take the price up, thus increasing the average price for buying; and large sell orders can take the price down, thus reducing the average price realised on sale. An order can be specified for total quantity and disclosed quantity. The dealer of the institutional investor may indicate the total quantity to the broker, with specific instructions to disclose the quantity in phases and not let other market participants know the actual number of shares they intend to buy or sell. Only the broker knows the break-up between the total and disclosed quantity.

Day Orders and GTC Orders

A day order is valid only until the end of the trading day on which it is placed. A good till cancelled (GTC) order remains in the system until it is executed. Indian exchanges do not permit GTC orders therefore all pending orders of any type at the end of a trading day are cancelled. They have to be re-entered on the next trading day. Brokers may offer their large customers a GTC facility with clear instructions and the facility to modify limit prices on the next trading day. The brokers place the orders so carried forward on the next trading day.

Modification of Orders

Orders once placed in the system can be modified or cancelled till they are matched. The screen available to a trading member displays icons that represent functions such as order modification and order cancellation. Brokers can modify or cancel orders according to the instructions of the client. Once order matching is complete, no modification or cancellation is possible.

4.5.3 Electronic Trading and Order Execution

Trading on stock exchanges is conducted from Monday to Friday, from 9.15 am to 3.30 pm. Different timings may be adopted for non-equity segments. For example, trading on the Debt Market segment on NSE starts at 9.00 am and closes at 5.15 pm. There are no trades on Saturdays, Sundays and public holidays.

A pre-open session is held for equity, generally 15 minutes before trading starts for the day. The equity pre-open session is divided into three parts. The first 7 or 8 minutes are for order placing, modification or cancellation. The order entry period is randomly stopped between the 7th and 8th minute. The next four minutes are for order matching and trade confirmation. The last three minutes of buffer time are used to transition to the regular trading session. A pre-open session determines the opening price of a security and reduces the huge rush of orders that would otherwise be placed in the opening minutes of the regular session.

Trading members may deploy separate front-end software that enables them and their clients to enter orders and to generate independent reports and MIS for their own use. These softwares are typically linked to the trading system of the stock exchange to route the orders to the exchange trading platform. Broker members also have dealing desks and client trading portals where orders are entered into the system, which is connected to the stock exchange's trading system.

When an investor places an order to buy a share, it is called a bid. When a sell order is placed, it is known as ask. The electronic system matches bid and ask prices in such a way that a buyer gets a price equal to or less than his bid price, and a seller gets a price equal to or more than his asking price. If such a match is not possible, the transaction does not take place.

The important features of an electronic trading system are:

- The system is order-driven. This means that there are no intermediaries that introduce buyers to sellers, the price and quantity of orders are matched by the computer.
- All bid and ask prices (called quotations in the market) can be seen on the screen, so the system is transparent.
- There is complete anonymity of trading. All bids and asks are accepted without revealing the identity of the investor.
- A **price-time priority** is followed while matching orders. All orders are arranged in order of prices, and orders placed at the same price are arranged by time. For example, suppose two buyers are bidding to buy shares of a company at prices of Rs.280 and Rs.285 respectively. The higher price (Rs.285) will get the first priority to be matched with a seller. If both buyers had bid the same price of Rs.280, then the order that came in earlier into the system would get priority over the later. Each order placed in the system is given a unique order number, based on which a complete audit trail can be generated. This allows the exchange to determine how the transaction was carried out and is very useful for resolving disputes.

Example:

The box below is a snapshot of the market for XYZ Company on April 3, 20YY:

Buy Qty.	Buy Price	Sell Price	Sell Qty.
4	131.95	132.05	1437
8169	131.90	132.10	4046
6180	131.85	132.15	4885
6698	131.80	132.20	10997
9201	131.75	132.25	32151

The first column shows the buying interest (bid quantity) in the stock. The next column shows the limit order price for each of the quantities. As you can see, the highest price is at the top. This order will get picked up first. The buyer who is willing to pay the highest price is the most attractive in the market.

The first two columns are also called the bidding schedule; it shows the various prices being bid and the quantities that buyers are willing to buy at that price. At a price of 131.95 there is a bid to buy 4 shares. At a price of 131.75 buyers are willing to buy (bid) 9,201 stocks.

Sellers' quotes are in the columns sell price and sell quantity. They are demanding (ask) 132.05 in the least and 132.25 at best. These orders are not matched yet, because sellers are asking a price which is higher than the bid of the buyer. At this point in the market, the bid-ask for XYZ Co is 131.95 – 132.05. For the order to be executed either the buyer should bid a bit higher; or the sellers should ask a bit lower.

While placing a limit order, the investor should consider where the market is, so that the order can be executed. For example, if the investor is a buyer and offers 131, or is a seller and offers 132, his order is unlikely to be matched. Orders can be modified or cancelled after they are placed, but before they are executed.

After an order is placed on the system, it searches for a matching order. If no matches are found, the order stays in the system until the end of the trading day, or until it is cancelled.

When an order is executed, a trade confirmation slip is generated. This gives details of the trade number, the price and quantity at which the trade was carried out, the time of trade, and the unique order number corresponding to the trade. The slip enables investors to confirm that the

trade has taken place, and ensure that the price and quantity correspond to their instructions. A market order may be executed at various prices until the quantity ordered is fulfilled.

Active and passive orders

Active orders are orders to buy or sell at the prevailing market price. These orders immediately get matched with existing orders in the order book. Market orders are thus active orders. Passive orders are orders which are lying unmatched in the order book. These are buy orders with prices below and sell orders with prices above the prevailing market price. The farther the order price is from the prevailing market price, the more passive is the order. Limit orders are thus passive orders. For example, if the last traded price of stock of ABC Ltd is Rs.105.10, a buy order at 102.45 and a sell order at 107.70 are passive orders.

Active and passive orders differ in their impact on market liquidity. Passive orders add to the liquidity in the market. A passive order, until it is modified or cancelled, is a commitment to buy or sell at the order price. These are 'proactive' orders. Passive orders create new levels in the order book and thus add to the depth of the order book. Active orders are 'reactive' orders because they respond to existing orders lying in the order book. Active orders thus drain liquidity from the market because they get immediately matched with existing orders.

Direct Market Access (DMA): SEBI has permitted brokers to allow Direct Market Access to their institutional clients since 2008. DMA is one of the methods used by institutional investors to tackle the problem of latency. The steps typically involved in order routing and execution are: (a) order entry by the client through an online order platform (b) receipt of order by the broker's computer server (c) routing of the order to the exchange's server after necessary risk management checks at the broker's end (d) order becomes part of the electronic order book of the exchange and is ranked according to the price-time priority rule. Any delay in the first two stages can cause delayed receipt of the client's order at the exchange and result in poor order execution. DMA connects the institutional client's orders directly to the exchange's order book. Thus, an institutional client can enter its orders directly with the exchange by bypassing the broker's server. This eliminates the time required for the order to travel from the broker's server to the exchange's server and thus enable faster order execution for the client. It also reduces risks associated with manual order entry by the broker and lowers overall transaction costs for the client. The broker has to specifically authorize its clients for availing the DMA facility after conducting due diligence and fulfilling the Know-Your-Customer (KYC) requirements.

4.5.4 Block deals and Bulk deals

A **bulk deal** includes all transactions in a stock listed on a stock exchange where the total quantity of equity shares bought or sold exceeds 0.50 percent of the total number of equity shares of that company listed on the exchange. The limit of 0.50 percent could be reached through a single or

multiple transactions during the trading day in the normal market segment. The broker who facilitates the bulk deal is required to report details of the same immediately to the exchange. The details include the name of the scrip, name of the client, the quantity bought or sold and the traded price. The exchange is required to disseminate this information to the general public on the same day after market hours. Bulk deals take place in the normal trading window at any time during trading hours and are visible to all market participants.

Block deals are trades of large size that are executed through a single transaction in a special trading window. Buyers and sellers usually negotiate the price and quantity of large deals outside the exchange and then enter the orders for execution on the exchange platform. However, execution of large orders in the open market could lead to distortion in the market price and result in the order getting filled on unfavourable terms to the buyer or seller. Hence such deals are not executed in the open market so that the parties can preserve the confidentiality of the deal. The exchanges provide a special trading window for transacting such large deals. The deals entered in the special window are not visible to market participants using the normal trading window.

The minimum order size for a block deal is Rs.10 crore. Exchanges open two special trading windows for transacting block deals: the morning window is from 8.45 am to 9.00 am and the afternoon window from 2.05 pm to 2.20 pm. The previous day's closing price becomes the reference price for the morning window; the reference price for the afternoon window is calculated by the exchange as the volume -weighted average price of trades executed in the stock from 1.45 pm to 2.00 pm. The difference between the order price for a block deal and the reference price should not be more than +/(-) 1 percent. All block deals are required to be settled by actual delivery and cannot be squared off or reversed. Stock exchanges are required to disseminate all details of block deals to the general public after the market hours on the same trading day.

4.5.5 Circuit Breakers

A circuit breaker is a pre-determined value in percentage terms, which triggers an automatic halt in trading whenever there is a rapid movement in an index or any security, either in the upward or downward direction. If there is an abnormal percentage change in the price of a stock, the exchange can suspend trading in that particular scrip. Such heavy movement in price is called "hitting the circuit breaker". Stock exchanges fix price bands for individual stocks. Stocks that are included for trading in the derivatives market do not have a price band, though the exchange may fix an operating range to prevent erroneous price entries. The halting of trade is to allow the market players to assess the situation, instead of putting through panic-driven transactions that can push the price down or up by too much, leading to a possible payment crisis during settlement.

Daily price bands for individual stocks are fixed at 2 percent, 5 percent, 10 percent, or 20 percent, depending on factors such as liquidity, volatility and trading activity. Exchange authorities can

narrow the price bands in specific scrips in order to contain volatility or speculative activity. Stocks on which no derivative products are available but which form part of an index derivative will also have appropriate price bands.

Market-wide circuit breakers are triggered by movements in the specified index (either way) that are seen as too volatile by the exchange authorities. All trading in equity and equity derivatives markets is halted when circuit limits for the index are hit. The market-wide circuit breakers are triggered by the movement of either the BSE Sensex or the Nifty 50, whichever is breached earlier. The market re-opens after the halt with a pre-open call auction session. The market-wide circuit breaker limits are calculated on a daily basis based on the previous day's closing level of the index rounded off to the nearest tick size.

The trading halts and pre-open call auction sessions are prescribed on the basis of the time and percentage amount of decline in the index. (See Table: 4.1 below)

Table 4.1: Market-wide Circuit Breaker

Percentage change in index	Time of occurrence	Trading Halt Duration	Pre-open Call Auction Duration (post market halt)
10 percent	Before 1 p.m.	45 minutes	15 minutes
	At or after 1 p.m. upto2.30 p.m.	15 minutes	15 minutes
	At or after 2.30 p.m.	No halt	Not applicable
15 percent	Before 1 p.m.	1 hour 45 minutes	15 minutes
	At or after 1 p.m. before 2 p.m.	45 minutes	15 minutes
	On or after 2 p.m.	Rest of the Day	Not applicable
20 percent	Any time during market hours	Rest of the Day	Not applicable

4.5.6 Contract Note

A contract note is a confirmation of trades in equity shares completed on a particular day for and on behalf of a client. The broker has to issue a contract note in the prescribed format that contains

details of the trade, settlement, brokerage, securities transaction tax and goods and services tax information. The contract note is a proof of transaction for both parties and is referred to in case of dispute over the transaction.

In order to be considered valid, a contract note should conform to these specifications:

- Should be signed by the authorised signatory of the trading member.
- Should be in the format prescribed by SEBI and the stock exchanges.
- Must contain the unique client code and PAN of the client.
- Must contain the name, address and SEBI registration number of the trading member.
- Must contain details of trade, viz. order number, trade number, trade time, security name, quantity, price, brokerage, settlement number and details of any other levies, such as securities transaction tax (STT), goods and services tax (GST) on the brokerage or any penalties.
- Should show separately the trade price for the shares and the brokerage and any other levies charged.
- Should display the arbitration clause stating that the trade is subject to the relevant jurisdiction.

A trading member has to ensure that contract notes are issued within 24 hours of execution of trades on the exchange. Two copies of the contract note are generated: one each for the broker and the client. Once the client has verified the details in the note, the second copy of physical contract note should be returned to the trading member duly signed and acknowledged by the client.

Electronic Contract Notes (ECNs) may be sent to a client by email only on the consent of the client. ECNs are required to be digitally signed, tamper-proof and password protected. They are simultaneously published on the website of trading member and clients are given secured access to the same by way of client specific login and password.

Contract notes have to be carefully verified by the client. Details in the note should match the trade details in the trade confirmation slip. The client should report any discrepancy to the trading member.

4.5.7 Cost of Trading

All trading transactions on a stock exchange involve costs, in addition to the price paid for purchasing shares. These additional costs are called trading costs. Trading costs can be classified into three categories:

- User charges
- Statutory levies
- Spread and impact cost

User Charges

Investors pay user charges for using the infrastructure of brokers. The commission charged by brokers is known as brokerage. Stock exchanges collect exchange transaction charges from brokers who are members of the exchange. Depositories charge DPs, who in turn charge investors for the demat transactions.

The maximum brokerage that can be charged by a broker has been specified in the Stock Exchange Regulations. Brokerage on intra-day transactions is usually lower as compared to delivery trades. There is a wide range of brokerage rates in the market. Clients who trade for large amounts may be able to negotiate lower rates than the prevailing market rate.

Statutory Charges

The statutory charges imposed on trading are:

- Securities Transaction Tax (STT)
- Goods and Services Tax (GST)
- Stamp Duty
- SEBI's Turnover Tax

The **Securities Transaction Tax** (STT) rates as currently applicable for trades executed in the Equity segment of the Stock Exchange are presented below:

Sr. No.	Taxable securities transaction	Rates	Payable by
1.	Purchase of an equity share of a company, where such contract is settled by the actual delivery or transfer of such share or unit.	0.100 percent	Purchaser- on the value of taxable securities transaction based on the volume weighted average price.
2.	Sale of an equity share of a company, where such contract is settled by the actual delivery or transfer of such share or unit.	0.100 percent	Seller - on the value of taxable securities transaction based on the volume weighted average price.
3.	Sale of a unit of an equity oriented mutual fund, where such contract is settled by the actual delivery or transfer of such unit.	0.001 percent	Seller - on the value of taxable securities transaction based on the volume weighted average price.

Sr. No.	Taxable securities transaction	Rates	Payable by
4.	Sale of an equity share in a company or a unit of an equity oriented mutual fund, where such contract is settled otherwise than by the actual delivery or transfer of such share or unit.	0.025 percent	Seller - on the value of taxable securities transaction based on the volume weighted average price.

Source: NSE website

The following STT rates are currently applicable for transactions executed in the Derivatives Segment of the Stock Exchange:

Sr.No.	Taxable securities transaction	Rates	Payable by
1.	Sale of an option in securities.	0.1 percent	Seller – on the option premium.
2.	Sale of an option in securities, where option is exercised.	0.125 percent	Purchaser – on intrinsic value.
3.	Sale of a futures in securities.	0.02 percent	Seller – on the price at which such futures is traded.

Source: NSE website

Goods and Services Tax (GST) is charged at 18 percent on brokerage. Both STT and GST go to the Central Government.

Stamp duty is levied on the value of shares transferred. Government of India has introduced regime of uniform stamp duty rates across the country thereby simplifying the collection process. The stamp-duty on sale of securities, transfer of securities and issue of securities are collected on behalf of the State Government by the Stock Exchange or Clearing Corporation authorized or Depositories. The Central Government has also notified the Clearing Corporation of India Limited (CCIL) and the Registrars to Issue and / or Share Transfer Agents to act as collecting agents. For facilitating such service, the collecting agents deduct a specified percent of the collected stamp duty before transferring the same to the state government.[38]

[38]The amendments to the Indian Stamp Act, 1899 brought through Finance Act, 2019 and Rules made thereunder w.e.f. 1st July, 2020 vide notifications dated March 30, 2020. [https://dea.gov.in/sites/default/files/FAQs%20for%20Implementation%20of%20Amendments%20in%20the%20Indian%20Stamp%20Act%2C%201899%20and%20Rules%20made%20thereunder%20from%201st%20July%2C%202020.pdf]

In addition, SEBI imposes **Turnover Fees** at the following rates:

Sr. No.	Nature of securities	Rate of Fee
1.	All sale and purchase transactions in securities other than debt securities.	0.0001 percent of the price at which the securities are purchased or sold (Rs. 10 per crore)
2	All sale and purchase transactions in debt securities.	0.000025 percent of the price at which the securities are purchased or sold (Rs. 2.5 per crore)

Source: NSE website

Bid-Ask Spread

Spread and impact cost are not fees that are directly imposed on investors. These are costs that arise because of market imperfections or lack of liquidity. The investor pays higher price for buying and receives a lower price on selling due to these costs.

Consider an order book with four buy and four sell orders for a particular security as shown below:

Buy			Sell		
Sr. No.	Quantity	Price	Quantity	Price	Sr. No.
1	1000	350	2000	400	5
2	1000	340	1000	405	6
3	2000	340	500	420	7
4	1000	330	100	425	8

If an order to buy 1000 shares is placed, it would be matched with the best sell price in the order book, which is Rs.400. If the order is for selling 1000 shares, the best price available is Rs.350. If an investor buys 1000 shares and sells them off immediately, he has lost Rs.50 per share at the best prices available in the market at that time. This gap between buying and selling prices is known as the bid-ask spread. The more illiquid the market, the fewer the trades and the greater would be the bid-ask spread.

Impact Cost

Impact cost is a measure of the cost incurred due to the bid-ask spread. In order to calculate impact cost, we determine the "ideal" or the average price and then calculate the deviations from it. In the above example, the ideal price is the average of best buy and sell prices [375 = (350+400)/2]. The buy price is Rs25, or 6.67 percent higher than the ideal price. The sell price, at Rs.350 is 6.67 percent lower than the ideal price. We say that the impact cost of buying 1000 shares is 6.67 percent.

Stock exchanges publish data on impact costs of individual securities as well as indices on a regular basis. Lower the impact cost, higher is the liquidity and lower is the trading cost to the investor. See the table below for an illustration of the impact cost of selected shares for June 2019 traded on BSE.

Company Name	**Avg. Impact Cost**
BANK OF INDIA	0.05%
CIPLA LTD.	0.03%
SKF INDIA LTD.	0.12%
RELIANCE POWER LTD.	0.15%

Illustration: Cost of Trading

The cost of trading varies by security type, investor type and by intermediary. Institutional investors often pay lower brokerage as compared to retail investors. Brokerage fees are different for equity, debt and derivatives.

Illustrative Direct Cost associated with trading: Traded Value Rs.1 Lakh

	Rate	**Cost (Rs)**
Brokerage	0.3%	300
DP charges	0.02%	20
STT	0.1%	100
GST	18% on brokerage	54
Stamp Duty	0.015%	15

SEBI Turnover Tax	0.0001%	0.10
Total Cost of Trading	**0.4891%**	**489.10**

Brokers have to pay user charges and statutory charges to the exchange and the regulator, which they do not directly recover from the client.

4.6 Clearing and Settlement of Trades

4.6.1 Delivery and Squaring-off

A trade can be settled in two ways. (a) The first option is to settle all trades taking place over a trading cycle (day = T) on the first working day following the trade (i.e. T+1 day). This is called a rolling settlement and the trades settled in this manner are called trades for delivery. Delivery based trades are sometimes known as inter-day trading, as the trade is settled over 1 working day. The exchanges had announced implementation of T+1 settlement in a phased manner from February 2022. Since January 27, 2023, all trades in equity shares, exchange-traded funds and bonds traded in the equity segment of the stock exchange are settled on a T+1 basis.

(b) Traders can also buy or sell a share on a trading day and reverse their trade before the market closes on the same day. This is called squaring off a trade. For example, suppose an investor buys 100 shares of ABC Ltd. at 11.30 am on April 24, 2023 and sells it off at 2.30 pm on the same day. The investor is said to have squared off his buy position. If an investor sells 100 shares of ABC Ltd. in the morning, and buys it back before the close of market trading on the same day, he is said to have squared off his sell position. The net position in a square-off is nil, though there have been two trades of the same stock (one buy and one sell) same quantity during the day. Since there are no outstanding delivery positions from these trades, squaring off is also known as intra-day or day-trading. Day traders rely on small movements in prices to make profits. Brokerage charges and statutory levies are lower on day trading transactions.

4.6.2 Determination of Settlement Obligation

Trades on Indian exchanges are now cleared and settled under T+1 rolling settlement. The period from day T to the completion of all settlement obligation is called a settlement cycle. Each settlement cycle has a specific settlement number.

A trading member settles with the clearing corporation their own trades and trades executed on behalf of their clients. There are certain categories of clients, such as Indian institutional clients, foreign institutional clients, NRIs, PMS clients who are required to settle their trades through a SEBI registered custodian. In case of these types of clients, the respective custodians settle their trades through the Clearing Corporation.

The outstanding obligations are netted at client level and trading member level. At the trading member level netting is across all securities so that each trading member has to either pay or receive funds.

Example of Netting

An investor has made the following transactions in a settlement cycle:

- Bought 100 shares of XYZ Ltd.
- Sold 50 shares of XYZ Ltd.
- Bought 100 shares of MNO Ltd.
- Bought 50 shares of DEF Ltd.
- Sold 150 shares of DEF Ltd.

At the end of the settlement cycle, the investor will pay for and receive delivery of 50 shares of XYZ Ltd. and 100 shares of MNO Ltd. and deliver securities and receive funds for selling a net 100 shares of DEF Ltd. The trades have been "netted" to arrive at the outstanding position. Not all trades are settled (that is called gross settlement) only net positions are settled (net settlement).

4.6.3 Settlement Cycle, Pay-in and Pay-out

In a rolling settlement cycle running from day T when the trade was executed to the day when payout is normally completed, the three broad steps are followed:

- Identification and communication of settlement obligation
- Pay-in
- Pay-out

Net outstanding obligations of clearing members is first determined and communicated to them by the clearing corporation. Members then confirm their obligations.

Then the trading members are required to make payment of funds or deliver securities. Pay-in involves two processes:

- **Securities Pay-in:** The process of delivering securities to the clearing corporation to effect settlement of a sale transaction.
- **Funds Pay-in:** The process of transfer of funds to the clearing corporation to pay for purchase transactions.

The clearing corporation has to ensure the pay-out of funds or securities to complete the settlement. Pay-out involves two processes:

- **Securities Pay-out:** The process of receiving securities from the clearing corporation to complete the securities settlement of a purchase transaction.

- **Funds Pay-out:** The process of transfer of funds from the clearing corporation to complete the funds settlement of a sale transaction.

If a security is not delivered it comes into auction. If a security, that is delivered, is rejected by the depository for technical reasons such as incorrect signatures or names or details it is a bad delivery and has to be rectified.

4.6.4 Margins and cross-margining

A margin is the amount of funds that one has to deposit with the clearing corporation in order to cover the risk of non-payment of dues or non-delivery of securities.

Suppose an investor purchases 100 shares of Company X at Rs.100 each on July 3, 2023. He has to pay in Rs.10,000 by July 4, 2023. The risks in this transaction are that:

- The buyer may not be able to bring in the required funds by the due date
- The seller may not be able to deliver securities at the due date

In order to minimise this default risk, both buyers and sellers of equity are required to pay a percentage of their dues upfront at the time of placing their order. This payment is known as margin. For example, if the margin is set at 17 percent, the buyer would pay Rs.1700 in advance. Margins are collected by brokers when the order is placed. Stock exchanges collect margins from brokers when the order is executed.

All securities are not charged margin at the same rate. This is because the tendency to default on funds payment or delivery of shares is higher when share prices vary a lot, rather than when they are less volatile. An equity share whose price shows greater variation in either direction (both up and down) is said to have higher volatility as compared to a share whose prices show less up-and-down movement. Volatility is a measure of riskiness in share prices.

Volatility creates default risk because of the probability that share prices may decline between purchase and pay-in period. Suppose, in the above example, assume that the price of the share falls to Rs.80 at the close of trading on July 3, 2023. Then the investor has incurred a notional loss of Rs.2000 on his purchase. He may be less inclined to pay Rs.10,000 on the next day, at the time of settlement. . Alternately, if prices go up, the seller may not want to give delivery at the lower price. This means that shares with greater price volatility have higher default risk and therefore higher margin requirements.

The margin on equity shares traded on an exchange is imposed on a daily basis, and is the sum of these three margins:

a. Value at Risk (VaR) Margin

A statistical technique called Value at Risk (VaR) is used to measure the probability of loss of value in a stock over a period, based on an analysis of historical prices and volatility. VaR margin is defined as a multiple of volatility and expressed as a percentage of the stock price. VaR margin rates are updated at least five times each trading day, to give market participants better information about volatility and risk management.

b. Extreme Loss Margin (ELM)

The extreme loss margin aims at covering the losses that could occur outside the coverage of VaR margins. The Extreme Loss Margin shall be 3.5% for any stock.[39]

c. Mark to Market (MTM) Margin

Mark to market margin is computed at the end of each trading day by comparing transaction price with the closing price of the share. It is payable at the start of the next trading day.

The members in the cash segment are mandatorily required to collect upfront VaR margins and ELM from their clients. A penalty structure has also been formulated by SEBI for short-collection/ non-collection of margins and false/incorrect reporting of margin collection from client by trading members/ clearing members. It has been specified that if the member collects minimum 20 percent upfront margin in lieu of VaR margin and ELM from the client, then penalty for short-collection or non-collection is not applicable.[40]

Cross-margining

Exchanges provide cross margin benefit in respect of trades executed across cash and derivatives segment. This benefit is in the form of a reduction in the margin payable on the trades. The benefit is available when the client's positions in the cash and derivatives segment offset each other. For example, Mr. A, a client of broker XYZ, has bought shares of MNO Industries Ltd in the cash segment and simultaneously has taken a short position in MNO futures equivalent to the number of shares purchased. Since the long position in the equity market is hedged by a short position in the futures segment, the overall risk is negligible. The exchange, therefore, charges a spread margin equal to 25 per cent of the applicable upfront margin on the positions in the cash and futures segment that offset each other. The normal applicable margin is charged on the remaining part of the portfolio which does not contain offsetting positions. The cross-margin benefit is defined as the difference between the margins on the total portfolio and margins on the portfolio

[39] SEBI Circular No. SEBI/HO/MRD2/DCAP/CIR/P/2020/27 dated February 24, 2020 on Review of Margin Framework for Cash and Derivatives segments (except for Commodity Derivatives segment).

[40] SEBI Circular No. SEBI/HO/MIRSD/DOP/CIR/P/2020/146 dated July 31, 2020 on Collection and Reporting of Margins by Trading Member (TM) /Clearing Member (CM) in Cash Segment.

after excluding the offsetting positions less the spread margin charged on the offsetting positions. The benefit is available in respect of the following types of positions:

(i) Positions in index futures hedged by opposite positions in the futures contracts of the individual stocks comprising the index

(ii) Positions in index futures hedged by positions in the cash segment in individual stocks comprising the index

(iii) Positions in individual stocks in the cash segment hedged by positions in futures contracts on the individual stocks

(iv) Positions in ETFs and constituent stocks (in the proportion specified for the ETF) to the extent they offset each other

(v) Positions in ETFs and constituent stocks futures (in the proportion specified for the ETF) to the extent they offset each other

(vi) Positions in ETFs and relevant Index Futures to the extent they offset each other

Cross-margining benefits market participants who undertake cash-futures arbitrage or who hedge their positions in one segment by taking opposite positions in the other segment. It greatly helps to lower the margin requirement and overall transaction cost for such transactions which have insignificant risk.

SEBI has extended the cross margining facility to off-setting positions in highly co-related equity indices in order to facilitate efficient use of collateral by market participants. The stock exchanges are to charge a spread margin of 30 percent of the total applicable margin on the eligible off-setting positions.

4.6.5 Short Delivery and Payment

Auction

Members are required to pay-in funds or securities on the settlement day. If a member is not able to pay-in securities (either fully or partially) on the settlement day, it is known as securities shortage or short delivery. If the shares are delivered but rejected by the depository for technical reasons, it is a bad delivery. In both cases, the buyer has paid good money, and needs to receive delivery of shares. The clearing corporation conducts an auction session to buy the required shares and deliver to the buyer.

The clearing member has to close out this short delivery by paying to the clearing corporation an amount equal to the value of the short delivery. This is number of shares that are short times the last closing price of the shares on the settlement day. The clearing corporation will then buy the shares through an auction trade in the market and deliver it to the buyer. The auction is conducted

on the trading system and any difference in price paid to acquire the shares in the auction has to be made good by the clearing member.

Funds Shortage

Members have to make sure that they have adequate funds in their clearing bank accounts to meet their pay-in obligations on settlement day. A penal charge on the amount outstanding at the end of the day has to be paid until full payment has been made. The trading or clearing facility is withdrawn until the shortages are made up. Repeat defaulters may be asked to maintain a deposit equal to their cumulative funds shortage with the clearing corporation as 'funds shortage collateral'.

4.6.6 Corporate Actions

There are corporate actions such as bonus, rights, split, merger, dividends or warrants that impact the price of the equity share. These actions can be divided into two categories: stock benefits and cash benefits. Apart from cash dividends, all other corporate actions are categorised as stock benefits. Benefits of corporate actions impact share prices and variations in prices purely due to corporate actions have to be adjusted.

For example, if dividend is the relevant corporate action, then during cum-basis trading, the share price will reflect the fact that dividends are going to accrue to the buyer. Once the share goes ex-dividend, the buyer will no longer receive dividend (the seller’s name will be the owner on record date) so the share price will fall to incorporate this fact.

Record Date

The record date is the date on which all those who are on record as shareholders of a company get the benefit of corporate actions of that company. For example, a 1:1 bonus implies that all shareholders on record at the record date get one additional equity share for each share owned.

Cum basis and Ex basis

When a security is traded on cum basis, it means that it incorporates the benefit of the corporate action in its price. Once it goes ex-basis, the buyer no longer has the benefit of the corporate action.

Price Adjustments

The stock exchange carries out adjustments to traded price on the last day on which a security is traded on cum basis in the market, after the close of trading hours. The principle used in adjusting the prices is that the value of a position on the cum and ex dates remain the same.

Example

A share has a face value of Rs.10 and it is trading in the stock market at a price of Rs.500 a share. It announces a split that reduces the face value to Rs.2 a share. What would happen to the prices on the ex-date? What is the adjustment the exchange will make?

Those who bought say 1 share at the cum-price of Rs.500 would now get 5 shares after the record date. If they returned to the market with their shares and like to sell them, they would find that on the cum-date after trading hours, the price would have been adjusted by the same factor of the split to Rs.100 per share. This would be the price on the ex-date. So the investor who had 1 share of Rs.500 each will now have 5 shares of Rs.100 each.

The purpose of price adjustment for a corporate action is to prevent gains or price fluctuations due to such events.

4.6.7 Interoperability of Clearing Corporations

Stock exchanges, depositories and clearing corporations of the stock exchanges are the major market infrastructure institutions. Regulations require that each stock exchange must set up a clearing corporation (CC) to handle clearing and settlement of trades on the exchange and such CC must be a separate legal entity. Each of the three main nation-wide exchanges, therefore, established their own CC as subsidiaries of the exchange. The arrangement is that trades executed on the trading platform of an exchange have to be cleared and settled by the CC of the same exchange. Therefore, brokers have to obtain membership of each exchange as well as its CC in order to access the trading platforms of the different exchanges. This results in brokers having to deploy separate margins and adhere to the different capital requirements of each of the three exchanges. The outcome is less-than optimal utilization of resources and higher transaction costs for brokers and other market participants. To overcome this problem SEBI introduced a framework for interoperability of clearing corporations in 2018.

The objective of interoperability is to link the CCs of the three exchanges so that brokers can clear and settle their trades on a single CC regardless of the exchange platform on which trades were executed. This arrangement has the following benefits:

- Brokers can maintain margin deposits and capital funds at a single CC without having to do so at three different CCs. This leads to efficient capital allocation which leads to cost reduction for brokers and their clients.
- For the purpose of computing margins, a client's positions in the cash segment, equity derivatives and currency derivatives segments are computed by netting off his security positions and derivatives positions in the same expiry months and same strike price across all exchanges. This reduces the margin requirement of the client. For instance, if a client has a long position in 10 lots of XYZ September futures on NSE and a short

position in 6 lots of the same contract on BSE, the net position will be determined as long 4 contracts and margin will be computed accordingly.

- Interoperability allows brokers to freely trade on multiple exchanges with a smaller amount of capital deployment at a single CC. This can contribute to healthy competition among the CCs which could lead to improvement in their pricing and services.

Interoperability of CCs was implemented in June 2019. This facility is allowed for capital market segment, equity derivatives, currency derivatives and debt segments; except commodity derivatives segment.

4.7 Trading and settlement process from investor's point of view

An investor who wishes to trade in the stock markets has to open a 3-in-1 account which is a brokerage (i.e. trading) account, bank account and demat account all bundled together. This allows seamless transfer of funds from the investor's bank account to meet the payment obligation when the investor buys securities and smooth transfer of securities from the investor's demat account in case of sale of securities. Some important features of the process of trading and settlement are as below:

- The investor must ensure sufficient funds in his linked bank account before placing a purchase order. After depositing funds in the bank account, the investor must ''allocate'' the required amount of funds for trading. This ensures that the required funds are earmarked or blocked for trading and cannot be withdrawn by the investor.

- If the investor wishes to withdraw funds from his account, he can ''de-allocate" funds which are not blocked against any pending orders and then withdraw the same,

- The investor can place different types of orders on the broker's online platform or mobile application, including market orders, limit orders, Good-till-Date orders etc. Orders can be modified before their execution at any time during market hours.

- The broker sends an email at the end of each day, showing the details of all orders placed by the investor.

- The investor gets immediate online confirmation of any orders placed on the online platform. Similarly, the broker immediately confirms the execution of any order. The online trade book shows details of all orders executed during the day while the online order book shows the status of various orders placed by the client.

- Contract notes for purchase and sale of securities during each trading day are sent digitally within 24 hours.
- Brokers usually allow clients to do a short sale of securities in the Margin segment. A short sale refers to selling of securities which are not owned by the client. Such short positions have to be compulsorily squared off before the time specified by the broker before the end of the trading days. Short sale positions cannot be carried overnight.
- When an investor purchases a security on an online platform, the broker deducts the purchase consideration from the linked bank account on the trade date itself.
- In case of a purchase of a security by the client, the security is credited to the client's demat account on the settlement of the pay-out of securities. If there is a short delivery by the selling broker, the exchange obtains the shares by conducting an auction for the same and delivers it to the buying investor's broker. Thus, there can be a delay of a few days in receiving the security when there is securities pay-in default by the counterparty broker.

4.7.1 Trading supported by Blocked Amount in Secondary Market[41]

Traditionally, investors transfer funds upfront to trading members to trade in secondary market. In addition, the investors will have the following facilities provided by the Qualified Stock Brokers for trading in secondary market:[42]

- trading supported by blocked amount in the cash segment, using UPI block mechanism; or
- 3-in-1 account

The investors will have the option to opt any of the facilities stated above.

4.7.2 Securities Lending and Borrowing Mechanism (SLBM)

SLBM refers to a facility of borrowing of securities on a temporary basis from a lender of securities for an agreed period of time and in return for a specific fee. While this practice is widely prevalent in developed countries it is usually an activity conducted in the OTC market in those countries. In India, however, this activity is being conducted on the exchange platform since it was introduced in 2008. SLBM is useful for market participants who wish to do a short sale. Short-selling refers to selling securities which one does not own. Short-sellers try to borrow on the SLB segment shares of certain companies which they wish to short. Institutional investors such as mutual funds, insurance companies and high net worth investors who own large quantities of eligible shares can lend these shares on the SLB segment for a fee.

[41] SEBI Circular No.: SEBI/HO/MRD/MRD-PoD-2/P/CIR/2024/153 dated November 11, 2024.
[42] These provisions will be effective from February 1, 2025.

The contracts for such borrowing and lending are listed on the stock exchanges. Exchanges offer monthly and yearly contracts to borrow and lend shares on all securities that are available for trading in the futures and options (F&O) segment. Securities lending and borrowing is permitted in dematerialized form only. The lending fee for the shares is market-determined and depends upon the demand for and supply of the security.

Each SLB contract has two legs. The first leg involves the delivery of the security by the lender to the borrower. The second leg is known as the reverse leg and refers to the return of the borrowed security by the borrower to the lender. The duration of the borrowing depends upon the expiry date which is the date of the reverse leg. The borrower and lender are both allowed to repay or recall the security respectively, before the expiry date of the contract. The most important feature is that the settlement of the contract is guaranteed by the clearing corporation of the exchange. The clearing corporation of the Exchange has put in place a mechanism to handle shortages in SLB Scheme.

The SLBM allows market participants to implement several strategies such as (a) short-selling to execute a bearish view on the stock (b) reverse cash-and-carry arbitrage to profit from an undervalued futures contract (c) pairs trading which involves buying an undervalued security and shorting an overvalued security. It helps in meeting any delivery shortages for settlement completion.

SLBM offers benefits to lenders of securities such as: (a) earning risk-free income by lending securities on the exchange platform (b) protection of all rights as an owner of securities (c) settlement guarantee from the clearing corporation (d) improvement in portfolio performance by earning additional income.

Suppose that Mr. A is very bearish about the prospects of ABC Ltd and is of the view that the stock price of ABC Ltd will decline over the immediate future. The current stock price is Rs.180 and Mr. A feels that the same will fall to at least Rs. 85 in the next two months. Mr. A plans to sell the shares at the current price and buy-back the shares at a much lower price, two months from today. Thus, he intends to ''sell high and buy low" and thereby make a profit. However, a sale of shares on T day would require Mr. A to deliver the shares to his broker on the securities pay-in date. How can the delivery be made if Mr. A does not hold any of the shares in his demat account? To make good this delivery, Mr. A can borrow the security on the SLB segment by paying the lending fee and then sell the security in the cash segment. He can then buy back the same security after a few weeks at a lower price and return it against his SLB contract and close his borrowing.

4.8 Market Information and Regulation

4.8.1 Market Size and Activity

Market Capitalisation

Market capitalisation (or market cap) of a company is the number of shares outstanding multiplied by the market price per share. The market cap of a company measures the market value of its share capital. Traded stocks are often categorised by market cap.

- Blue-chip stocks represent the largest companies by market cap that also enjoy a high level of liquidity. These are also called large cap stocks.
- Mid cap stocks refer to those companies which enjoy a good level of liquidity but are medium in terms of size.
- Small cap stocks are those stocks that are smaller in size and therefore do not enjoy much liquidity.

In terms of return performance, large cap stocks tend to be less volatile than mid-cap stocks. In bull markets, mid-caps tend to run ahead of large caps, and in bear markets, they tend to fall more than large caps. If large cap stocks represent liquidity and stability, mid-caps represent momentum and opportunity.

Market cap is also used as an indicator of the size and importance of the stock market of a country. The ratio of market cap to GDP of a country is one such measure.

Market Turnover

Market turnover of a stock indicates how much trading activity took place in it on a given business day. Turnover can be represented in value terms (in rupees) or in terms of volume (number or quantity of shares traded). Higher the turnover in a stock, better the liquidity. The turnover ratio for the market as a whole is computed as the ratio of turnover in rupees to market capitalisation. Higher is the liquidity in the market, higher will be the turnover ratio.

Trading activity is measured in two ways: traded values in rupees and traded volume in number of shares. It is usual for large cap stocks to have a high traded value and high traded volume. Sometimes due to specific events or news, certain stocks may also show a high traded volume.

The percentage of stocks traded for delivery indicates how much of trading activity resulted in settlement and therefore might have been bought by investors than traders.

Market Indices

A market index tracks the market movement by using the prices of a small number of shares chosen as a representative sample. Most leading indices are weighted by market capitalisation to take into account the fact that more the number of shares issued, greater the number of portfolios in which they may be held. Stocks included in an index are also quite liquid, making it possible for

investors to replicate the index at a low cost. Narrow indices are usually made up of the most actively traded equity shares in that exchange. Other indices to track sectors or market cap categories are also in use.

The most widely tracked indices in India are the S&P BSE Sensitive Index (Sensex) and the Nifty 50 Index (Nifty). The S&P BSE Sensex has been computed since January 1986 and is India's oldest stock index. The base value of the S&P BSE Sensex was set at 100 on April 1, 1979 and the index was back calculated to 1979 when it was released. It is the market cap weighted index of 30 chosen stocks to track the market movement of the most liquid stocks.

The Nifty 50 is composed of 50 most representative stocks listed on the National Stock Exchange. The base period for Nifty 50 is November 3, 1995, and the base value of the index has been set at 1000. The shares included in Nifty are chosen on the basis of factors such as liquidity, availability of floating stock and size of market capitalization.

The SX40 is composed of 40 most representative stocks listed on MSEI. The base period for SX40 is March 31, 2010 and the base value of the index has been set at 10,000. SX40 is a free float based index consisting of 40 large cap liquid stocks representing diversified sectors of the economy.

The composition of stocks in the index is reviewed and modified from time to time to keep the index representative of the underlying market. It is common for underperforming and less liquid stocks to pave way for profitable and highly liquid stocks. These indices are used as a benchmark for estimating returns from investing in equity.

Some of the other common indices in India are listed below:

- Nifty Next 50
- Nifty 100
- Nifty 500
- Nifty MidCap 150
- Nifty SmallCap 250
- S&P BSE 100
- S&P BSE 500
- S&P BSE MidCap
- S&P BSE SmallCap

There are also sector indices for banking, information technology, pharmaceuticals, fast-moving consumer goods and such other sectors, created by the exchanges to enable tracking specific sectors.

A stock market index has several uses:

- Indices are widely reported in the news, financial press and electronic information media and thus real time data on market movements is easily available to the investing public.

- The index value is a leading indicator of overall economic or sector performance and effectively captures the state of financial markets at a point of time.
- A representative index serves as a performance benchmark. The returns earned by equity mutual funds or other investment vehicles are often compared with the returns on the market index.

4.8.2 Reading Market Prices

When the market is live, prices of traded stocks and updated value of indices run as a ticker tape. This tape shows the last traded price and the change in price in comparison with the previous day's closing price. A green upward arrow shows that the stock price has moved up compared to previous day's closing; a red downward arrow shows that the price has fallen compared to previous day's closing. The ticker tapes can be seen on television channels, billboards, websites or any other media that subscribe to this information from the exchange.

During market hours, a live snapshot of trading activity is available for listed stocks, which shows the summary of market activity. Before making a decision to buy or sell a stock, investors may like to look up this information to get more detail about the stock they like to transact in.

4.8.3 Disclosures by Listed Companies

Companies that wish to get listed have to sign a Listing Agreement with the stock exchange where they seek listing, agreeing to the terms of listing and the fees payable. This is executed under the common seal of a company. Under this agreement, listed companies are required to make certain disclosures and perform certain acts, failing which the company may face some disciplinary action, including suspension or delisting of securities. The following is a summary of undertakings under the Listing Agreement:

- To provide facilities for prompt transfer, registration, sub-division and consolidation of securities.
- To give proper notice of closure of transfer books and record dates.
- To forward copies of unabridged Annual Reports, Balance Sheets and Profit and Loss Accounts to the Exchanges.
- To file shareholding patterns and financial results on periodic intervals.
- To intimate promptly to the Exchange the happenings which are likely to materially affect the financial performance of the Company and its stock price. This includes compliance with regulations on insider trading, and regulations on takeovers and acquisitions.
- To comply with the conditions of Corporate Governance, etc.

The Listing department of the Exchange monitors the compliance by the companies with the provisions of the Listing Agreement, especially with regard to timely payment of annual listing fees, submission of results, shareholding patterns and corporate governance reports on a quarterly basis. Penal action is taken against defaulting companies.

4.9 Risk Management Systems

When a large volume of trades happen on a stock exchange it makes the market very liquid, efficient and low cost. However, the systemic risk also increases. Default of a member can have disastrous and catastrophic impact on the other members and the exchange as a whole. Risk management systems of stock exchanges are set up to mitigate the risk of members of the exchange defaulting on payment or delivery obligations.

4.9.1 Capital Adequacy Norms

In order to be eligible to be trading and clearing, members, individual and corporate entities, have to meet and maintain minimum paid-up capital and net worth norms prescribed under regulations. Members of a stock exchange have to deposit and maintain liquid assets with the stock exchange and the clearing corporation. Total liquid assets of members are divided into Base Minimum Capital (BMC) and additional capital.

SEBI has stipulated following slabs of Base Minimum Capital for various categories of trading members. No exposure is granted against such BMC deposit:

Categories	BMC Deposit
Only Proprietary trading without Algorithmic trading (Algo)	Rs. 10 Lacs
Trading only on behalf of Client (without proprietary trading) and without Algo	Rs. 15 Lacs
Proprietary trading and trading on behalf of Client without Algo	Rs. 25 Lacs
All Trading Members/Brokers with Algo	Rs. 50 Lacs

Minimum 50 percent of the BMC shall be in the form of cash and cash equivalents. The Stock Exchanges prescribe suitable deposit requirements, over and above the SEBI prescribed norms, based on their perception and evaluation of risks involved.

At all points of time, the liquid assets of the trading member are required to be adequate to cover MTM Losses, VAR Margins, Extreme Loss Margins and BMC. The liquid assets consist of Cash, Fixed Deposits (FDs), Bank Guarantees (BGs), Government Securities, securities traded on the Exchange.

4.9.2 Margins and Penalties for Shortfall/Default

In case of shortfall of margins, the terminals of the trading member are immediately de-activated. Margins are required to be made by members before the pay-in date in order to cover the possibility of default. Imposition of margins allows stock exchanges to insure against default risk. Once pay-in is successfully completed, margins are returned to respective members. Margins are collected by adjusting payments due against total liquid assets of a member (excluding base minimum capital).

Pay-in Shortfall Penalties

If the member has a shortfall in the pay-in amount due, then his trading facilities are withdrawn and securities pay-out is withheld. The exchange will levy a penalty on the shortfall on a daily basis.

4.9.3 Core Settlement Guarantee Fund (SGF)

The clearing corporation is the counterparty to all trades in the stock exchange. This implies that it assumes counterparty risk completely, by settling all trades even if the trading member defaults on pay-in or pay-out. Some of this counter party risk is managed through the levy of margins. Any residual risk is funded by a separate pool of funds known as the Core Settlement Guarantee Fund.

4.9.4 On-line Monitoring of brokers' positions

Regular on-line monitoring of brokers' transactions and positions is carried out. The system is designed to give alerts if members build up abnormal sale or purchase positions or if margins are inadequate relative to exposure. The clearing corporation can pro-actively carry out a detailed check of members trading and reduce his open positions, if necessary. Any news or media information that leads to unusually large price/volume movements are also scrutinised and investigated by surveillance officers of the stock exchange.

4.9.5 Price Monitoring and Action

On surveillance of abnormal price movements, stock exchanges can take the following actions to minimise volatility:

- Imposition of special margins on scrips that have shown unusually large movements in price or volume. Depending on the situation, the margins may be imposed on client-wise net outstanding purchases, or sales or both.
- Circuit filter limits may be reduced to keep prices under control. This will ensure that trading will halt with a smaller rise in prices than usual.
- Shifting a scrip from settlement to the trade-to-trade segment forces members to give/take delivery in that scrip, and so minimises any volatility due to intra-day closing.

4.9.6 Inspection of Books

The stock exchange conducts an inspection of the books of trading members of each market segment at least once a year. The purpose of the inspection is to check member compliance with the applicable rules and regulations. Any violations observed results in disciplinary action by the Exchange.

4.10 Rights, Obligations and Grievance Redressal

Investors in secondary market deal through trading members who are registered on a stock exchange. Ideally, they want to buy and sell securities at the best possible price, receive their dues on time, have access to necessary proof of trade, and have access to fair grievance redressal

systems. In return, investors have the obligation to understand the product that they are investing in, be aware of risks, provide appropriate supporting documents, and seek redress if they have a complaint.

Investors have a right to:

- Get Unique Client Code (UCC) allotted
- Get a copy of KYC and other documents executed
- Get trades executed in only his/her UCC
- Place order on meeting the norms agreed to with the Member
- Get best price
- Get Contract note for trades executed
- Know details of charges levied
- Receive funds and securities on time
- Receive statement of accounts from trading member
- Ask for settlement of accounts
- Take up a complaint against member with the exchange
- Take up a complaint against listed company
- File arbitration against member if there is a dispute
- Challenge the arbitration award before court of law

Investors have the obligations to:

- Execute Know Your Client (KYC) documents and provide supporting documents
- Understand the voluntary conditions being agreed with the member
- Understand the rights given to the Members
- Read Risk Disclosure Document
- Understand the product and operational framework and deadlines
- Pay margins
- Pay funds and securities for settlement on time
- Verify details of trades
- Verify bank account and Depository Participant (DP) account for funds and securities movement
- Review contract notes and statement of account
- Take up complaint within reasonable time
- Support complaints with appropriate documents
- Provide additional information that is called for dispute resolution
- Participate in dispute resolution meetings

SEBI has issued a host of Investor Charters specifying about the roles of the intermediaries, rights and responsibilities of the investors and disclosure of grievance redressals by the intermediaries to facilitate investor awareness.

4.10.1 Grievance Redressal

Stock exchanges have special cells that deal with the complaints of investors against members or against listed companies. Investors can approach the Investors Grievance Division (IGD) of the exchange for redressal of their grievances. Investors could lodge their complaints in the format prescribed by the Exchange along with the supporting documents. The Exchange has a mechanism of resolving disputes by coordinating with the member and the complainant.

The exchange may be unable to resolve some complaints against trading members or listed companies. Examples of such grievances include claim for notional loss, opportunity loss for the disputed period or trade; complaints pertaining to trades not executed on the trading system of the Exchange, or compensation for mental agony and harassment.

Investors or members whose grievances are not resolved or who are not satisfied with the resolution also have the option of taking their complaint through the process of arbitration. Arbitration is a quasi-judicial process of settling disputes between trading members, brokers, investors or clearing members. Once arbitration proceeds are initiated, investors do not have recourse to the other grievance redressal panels of the exchange. The process of arbitration is governed by the rules and regulations prescribed by SEBI and the exchange from time to time.

The stock exchange is required to appoint the arbitrator within stipulated timeframe. Depending upon the amount of the claim, the stock exchange may appoint a single arbitrator or a panel of arbitrators. The arbitrator is required to issue his award within 30 days from the date of its appointment (extension of 30 days are also allowed). Since online proceedings are faster and save time and money for the applicants, SEBI permitted the proceedings of the Grievance Redressal Committee/ Arbitration to be conducted in the hybrid mode, since July 2022.[43]

Any party aggrieved by the arbitrator's award may appeal to the appellate panel of arbitrators within 7 days of receiving the award. The appellate panel must dispose of the appeal within stipulated time from the date of its appointment. A party who is aggrieved with the decision of the appellate arbitrator may appeal to the High Court.

The scope of arbitration mechanism has been enlarged to include disputes between a shareholder and a listed company/ Registrars to the Issue/Share Transfer Agents arising from investor service

[43] SEBI Circular No. SEBI/HO/MRD 1/ICC 1/CIR/P/2022/94 dated July 4, 2022 Investor Grievance Redressal Mechanism and Amendment to SEBI Circular no. SEBI/HO/DMS/CIR/P/2017/15 dated February 23, 2017

requests pertaining to transfer/transmission of shares, demat/remat of securities, issue of duplicate shares, corporate benefits etc.[44]

In order to speed up the grievance redressal mechanism, exchanges can release the interim relief to the investor in a phased manner, according to the stage of the grievance redressal process.

4.10.2 SEBI Complaints Redress System (SCORES)

SCORES is the online investor grievance redressal mechanism set up by SEBI to deal with the complaints of investors related to all products and entities regulated by it. This includes complaints against companies who have made share issues in which the investor has invested in the primary or secondary markets, or against investment companies such as mutual funds, providers of portfolio management schemes, venture capital funds and others. Scores can also be used to register a complaint against intermediaries who facilitate investing in the product or securities, and servicing such investments such as brokers, merchant bankers, depositories and depository participants, registrars to the issue and transfer agents, distributors and financial advisors.

Complaints can be made online and acknowledgement is generated instantaneously, acknowledging the receipt of complaint and allotting a unique complaint registration number to the complainant for future reference and tracking. The complaint is forwarded online to the entity (market participant) concerned for its redressal and the entity concerned should upload an Action Taken Report (ATR) on the complaint. The entity must resolve the complaint within 21 days after receiving intimation from SEBI under SCORE.

4.10.3 Online Dispute Resolution

SEBI has strengthened the mediation/ conciliation and arbitration mechanism administered by the MIIs and extended the mechanism to the resolution of complaints against all intermediaries in the Indian securities market.[45]

An investor/client is first required to take up the grievance with the market participant by lodging a complaint directly with the concerned market participant. If the grievance is not redressed satisfactorily, the investor/ client may escalate the same through the SCORES Portal in accordance with the process laid out therein. After exhausting all available options for resolution of the grievance, if the investor/ client is still not satisfied with the outcome, then dispute online resolution through the ODR (online dispute resolution) portal can be initiated.

Alternatively, an aggrieved investor/ client can initiate dispute online resolution through the ODR portal, if the grievance lodged with the concerned market participant was not satisfactorily

[44] SEBI Circular No. SEBI/HO/MIRSD/MIRSD_RTAMB/P/CIR/2022/76 dated May 30, 2022, Standard Operating Procedures (SOP) for dispute resolution under the Stock Exchange arbitration mechanism for disputes between a Listed Company and/or Registrars to an Issue and Share Transfer Agents (RTAs) and its Shareholder(s)/Investor(s).

[45] SEBI Circular No. SEBI/HO/OIAE/OIAE_IAD-1/P/CIR/2023/131 dated Jul 31, 2023, Online Resolution of Disputes in the Indian Securities Market.

resolved or are pending at any stage of the subsequent escalations. The concerned market participant may also initiate dispute resolution through the ODR portal after giving due notice (as stipulated) to the investor/client for resolution of the dispute which has not been satisfactorily resolved between them.

All MIIs have established a common Online Dispute Resolution (ODR) portal where all listed companies, specified intermediaries and regulated entities in the securities market have enrolled. MIIs have also empaneled ODR Institutions to operate the ODR portal. These ODR institutions, in turn, provides the services of qualified arbitrators and conciliators and charge a fee for the proceedings. The ODR Institutions conduct conciliation and arbitration in online mode, enabling online/audio-video participation by the investor/client, the Market Participant and the conciliator or the arbitrator as the case may be.

4.10.4 Investor Protection Fund

Participation of investors is important for the growth and development of the securities market. Protecting the interests of investors is one of the main functions of SEBI as a regulator. One of the measures adopted by SEBI to achieve this objective is to make it mandatory for stock exchanges to set up and maintain a separate fund for the protection of investors.

Accordingly, stock exchanges have set up their own Investor Protection Funds (IPF) to compensate investors who have suffered losses due to default by some broker who is a member of the exchange. The IPF is administered by a Trust. The IPF Trust compensates investors when the defaulting broker's assets are not sufficient to meet the admitted claim of the investor. The maximum amount to be paid per investor is decided by the Exchange. The IPF is also used for promoting investor education, awareness and research. The IPF generally collaborates with educational institutions, research centres etc. to support events, seminars, training programmes etc. for investor education and awareness.

SEBI has created a separate Investor Protection and Education Fund under the SEBI (Investor Protection and Education Fund) Regulations. This fund is created out of contributions from SEBI, donations from the government and other sources specified in the Regulations. It is required to be used mainly for protection of the interests of investors and educational activities to promote investor education and awareness. Amounts disgorged from any person who has made profits by violating any securities law are also credited to the IPEF. Such amounts can be used to make restitution or compensate eligible investors who have suffered losses as a result of violation of securities laws. An aggrieved investor can claim restitution from the disgorged amount only up to 7 years from the date on which such claims were invited by SEBI. Any amount remaining out of the disgorged amount after compensating the eligible investors can be used for the purpose of investor education and awareness.

4.11 Secondary market trading and reporting for debt securities

The secondary market trading of government securities and treasury bills largely happens on the Negotiated Dealing System – Order Matching (NDS-OM) platform. This is an electronic trading platform that is owned by the RBI and managed and operated by the Clearing Corporation of India Ltd (CCIL). It facilitates anonymous, screen-based trading of government securities, treasury bills and other securities between banks and other financial institutions who are primary members of the system. Recently, RBI has permitted access of the NDS-OM platform to SEBI registered stock brokers to participate in G-Secs market for facilitating trades of retail investors under a Separate Business Unit (SBU).[46] Trades which are negotiated over the telephone (outside the NDS-OM platform) have to be compulsorily reported on the NDS-OM. Secondary market trading of G-Sec is also available on exchange platforms.

RBI has introduced the RBI Retail Direct Scheme which facilitates retail individual investors in accessing both primary and secondary government securities markets.[47]

Unlike the anonymous, screen-based trading in the government securities market, corporate bonds are still mainly traded in the OTC market. The deals are negotiated directly between the buyer and seller and the settlement is bilateral. The corporate bond market in India is much smaller and lacks the breadth and depth of the government securities market. SEBI has initiated a number of measures over the years in order to broaden and deepen the corporate bond market and improve its liquidity and transparency.

There is very little price-volume information about secondary market trades in corporate bonds as such trades mainly take place over-the-counter. In order to improve transparency, SEBI authorized stock exchanges in 2007 to set up reporting platforms in order to capture the details of OTC trades in corporate bonds. This information was to be reported on the exchange website on a real-time basis. Later SEBI made it mandatory for brokers to report all OTC trades in corporate bonds on the reporting platforms of any of the exchanges within 15 minutes of the trade.

A centralized database of corporate bonds has been created by the depositories, NSDL and CDSL. This information is available in the public domain. The two depositories are a repository of all information pertaining to corporate bonds. This move also aims at improving the transparency in the corporate bond market.

In 2009 SEBI made it compulsory for OTC trades in corporate bonds to be cleared and settled by the clearing corporations of any of the exchanges. Earlier such trades were bilaterally settled

[46] Vide RBI Master Direction: RBI (Access Criteria for NDS-OM) Directions, 2025 dated February 7, 2025 and SEBI Circular No.: SEBI/HO/MIRSD/MIRSD-PoD/P/CIR/2025/14 dated February 11, 2025

[47] Detailed information on RBI Retail Direct is available at: https://rbiretaildirect.org.in/#/FaqRbiRetailDirect

between the buyer and the seller. Shifting the clearing and settlement to the clearing corporation of the exchange was aimed at mitigating the settlement risk in the trade.

SEBI laid down guidelines in 2013 for introducing a dedicated debt segment on stock exchanges. The debt segment enables trading, reporting, clearing and settlement of corporate bonds. It offers a screen-based trading system. Both online and mobile trading facilities are available on the segment. The segment provides two separate trading platforms: one for retail investors and the other for institutional investors. The retail platform is for trading publicly issued bonds while the Institutional platform is for trades in privately placed bonds with a minimum market lot of Rs.1 crore. The NSE has introduced in 2015 a web-based 'negotiated trade platform' on which trades negotiated between buyers and sellers of corporate bonds are reported.

The **Request for Quote (RFQ) for the corporate bond market** can be accessed by all regulated entities such as listed companies, institutional investors etc. It is an electronic platform where institutional investors like mutual funds, insurance companies etc. can request a quote for buying or selling corporate bonds and negotiate a trade. This facility is expected to lead to pre-trade transparency in the corporate bond market. Earlier, SEBI has made it mandatory for mutual funds and portfolio management services to execute a certain portion of their secondary market trades in Corporate Bonds on the RFQ platform.[48] The idea is to boost liquidity and transparency in the corporate bond market by ensuring a minimum level of participation by mutual funds and portfolio management services who are large players in this market. SEBI has further allowed the following market intermediaries to use the RFQ platform to place/ seek bids:[49]

- Stock Brokers, registered under Debt segment of the Stock Exchanges
- Alternative Investment Funds (AIFs)
- Foreign Portfolio Investors (FPIs)

[48] Vide SEBI Circular Nos: SEBI/HO/IMD/DF3/CIR/P/2020/130 dated July 22, 2020, SEBI/HO/IMD/IMD-II DOF3/P/CIR/2021/641 dated October 6, 2021 and SEBI/HO/IMD/IMD-I/DOF1/P/CIR/2021/678 dated December 9, 2021 on Transaction in Corporate Bonds through RFQ platform.

[49] Vide SEBI Circular Nos.: SEBI/HO/DDHS/DDHS_Div1/P/CIR/2022/142 dated October 19, 2022, SEBI/HO/AFD/PoD/P/CIR/2023/017 dated February 1, 2023 and SEBI/HO/AFD/AFD-POD-2/P/CIR/2023/138 dated August 7, 2023.

Chapter 4: Sample Questions

1. **Which of the following is the primary function of the secondary markets?**
   a. **Provide liquidity for securities issued**
   b. Provide a platform for making public issues
   c. Provide information about pubic companies
   d. Provide greater disclosures to the investors

2. **The document that confirms a trade executed on the stock exchange is called _____.**
   a. Confirmation slip
   b. Delivery note
   c. **Contract note**
   d. Delivery instruction slip

3. **The risk of default on obligations arising out of trading is controlled by the Exchange by _____.**
   a. Restricting types of investors
   b. Blocking high value trades
   c. Imposing circuit filters
   d. **Imposing margins**

4. **A trade that is squared-off during the day _____.**
   a. **Does not require delivery of shares**
   b. Is not guaranteed by the exchange
   c. Is cancelled by the exchange
   d. Is not considered in calculating trading volumes

5. **Market capitalization of a stock is impacted by _____.**
   a. Changes in market index
   b. **Changes in price of the stock**
   c. Level of trading volumes
   d. Liquidity in the market

CHAPTER 5: MUTUAL FUNDS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Meaning and description of a mutual fund, terminology related to mutual fund and working of mutual fund
- Mutual Fund regulations
- Concept of systematic transaction in mutual funds
- Reading mutual fund information
- Benefits and Costs of Investing in Mutual Funds

5.1 Meaning and Description of a Mutual Fund

Investors buy equity shares, debentures, jewellery and gold coins, residential and commercial property with their savings. This is the direct way of investing where assets bought are held directly in their names.

Direct investments impose on the investors, the following responsibilities of selecting and managing the investments:

- Selection: Is it the right stock or bond or property to buy?
- Price: Is it the correct price given for the underlying stock/ asset?
- Timing: Is the time right to buy the investment?
- Weighting: How much of each type to buy? How should a portfolio be created?
- Evaluation: Is there a reason to think that the value of the asset will increase or decrease?
- Exit: Is it the right time to sell the investment? Will it be possible to sell it easily?
- Operations: Are the operational requirements, such as trading and depository accounts, safe deposit facilities, legal and regulatory compliances in place?

Not all investors may have the ability to do all that is required to make direct investments. Some may be unwilling to take on all the activities associated with direct investing; some may find the cost and time spent on direct investing avoidable.

Investors, who like to invest in the securities markets and other assets but like to engage someone else to create and manage their portfolio, choose mutual funds. Mutual funds invest and manage the investors' money by selecting the investments after evaluating their prospects, price and performance. Mutual funds take up these tasks for a fee that the investor pays.

5.1.1 Basic Features of a Mutual Fund

- A mutual fund is a pool of investors' money that is managed by specialist investment management firms.
- Mutual funds offer products (also called funds, schemes, plans) to investors, stating upfront the objectives with which the pooled money will be invested.
- Investors who invest money in a fund are allotted mutual fund units which represent their proportional participation in the assets of the mutual fund scheme.
- The money that is mobilised is invested in a portfolio of securities in accordance with the objectives.
- The portfolio is monitored and managed on behalf of investors by the mutual fund, without the investors having to directly transact in securities.
- Details about the securities in which the fund has invested and the performance in terms of risk and return are periodically disclosed to the investors.
- Investors can buy or sell mutual fund units from the fund itself or in the secondary markets if the schemes are listed.
- Investors in a mutual fund are unit holders, just as investors in equity are shareholders. The risk of the portfolio of securities is directly borne by them, without any assurances or guarantees.
- Mutual funds in India are not permitted to borrow in order to invest in a portfolio. Unit holders are the sole owners of the assets of the mutual fund.
- The activities of a mutual fund including collecting money from investors, creating and managing the portfolio are subject to SEBI regulations.

5.1.2 Features of Mutual Fund Products

There are several mutual fund products in the market. The following are the features that distinguish one mutual fund product from another:

- **Asset allocation:** Proportions in which the fund will invest in securities such as equity, debt, gold, real estate exclusively or in a combination.
- **Investment objective:** The focus in creating and managing the portfolio – growth and capital appreciation, generation of regular income or a combination of both.
- **Costs and fees:** The costs to be borne by the investor on an annual basis for the management of the fund and charges while leaving the fund.
- **Operational details:** The terms for subscription, redemption and ongoing transactions in the fund.

5.2 Terms and Concepts Related to Mutual Funds

Mutual Fund

The term mutual fund refers to the common pool of funds contributed by investors. When investors invest in a mutual fund, they give their concurrence to their money being managed in the way that the investment management company has stated upfront. The funds and investments of the mutual fund are held in a trust of which the investors alone are the joint beneficial owners. Trustees oversee the management of the investors' money by the investment manager. The term "mutual fund" is also used for the fund house that manages several funds using the same investment manager.

Mutual Fund Scheme

A mutual fund may offer multiple products, variously called schemes, plans and funds to investors. Different schemes launched by a Mutual Fund should ideally be distinct in terms of asset allocation, investment strategy and other essential aspects. This aspect helps an investor to evaluate the different types of investment options available in mutual funds and accordingly take an informed decision to invest in a mutual fund scheme.

With this underlying objective, SEBI has broadly classified mutual funds into 5 categories:

- Equity
- Debt
- Hybrid
- Solution Oriented
- Others

Further, SEBI has enlisted the different categories of schemes under the above mentioned group. Only one scheme per category is permitted, except for:

(a) Index Funds/ ETFs replicating/tracking different indices
(b) Fund of Funds having different underlying schemes
(c) Sectoral/ thematic funds investing in different sectors/ themes.

The mutual fund houses are expected to put out explicitly the 'type of scheme' in their offer documents/ advertisements/ marketing material for their mutual fund schemes.

Pooling and Proportionate Representation

Mutual fund pools the money contributed by investors to a scheme and invests them in a portfolio of securities. The investments made by the fund belong to the investors, who will share the profits or losses made and the costs incurred in proportion to their investment.

Example:

- Three investors invest Rs. 10,000, Rs. 20,000 and Rs. 30,000 respectively in a mutual fund. The pooled sum is Rs. 60,000 and their proportionate holding is in the ratio 1:2:3
- The money is invested in equity shares. After some time, the shares in which the funds were invested appreciates in value and are now worth Rs. 72,000.
- The value of the investors' holding in the mutual fund also goes up proportionately (in the ratio of 1:2:3) to Rs. 12,000, Rs. 24,000 and Rs.36,000 respectively.

Units and Unit Capital

An investor's investment in a mutual fund is represented by the number of units holding and a mutual fund investor is called a unit holder. Each unit has a face value, typically Rs.10. In the above example, if the investors bought the units at the face value, the number of units that will be allotted to them is 1,000 units (Rs.10,000/Rs.10), 2000 units (Rs.20,000/Rs.10) and 3000 units (Rs.30,000/Rs.10) respectively.

The face value is relevant from an accounting perspective. The number of units issued by a scheme multiplied by its face value (Rs. 10) is the capital of the scheme i.e. its Unit Capital. In the above example, the unit capital of the scheme is Rs. 60,000 [(1000+2000+3000)*Rs.10].

Mark to Market (MTM)

The money contributed by investors in a mutual fund is invested in a portfolio of securities. The value of these securities will fluctuate and lead to an increase or decrease in the value of the portfolio. A mutual fund has to calculate and declare to its investors the current market value of each unit every day by taking the current market price of the securities held in the portfolio. This process of valuing the securities at its current market price is called marking to market (MTM). In the example above, the cost of investment was Rs.60,000 and its MTM value was Rs.72,000.

Net Asset Value (NAV)

The NAV is the current value of a mutual fund unit. This will depend upon the current MTM value of the securities held in the portfolio of the fund and any income earned such as dividend and interest. From this value, the costs and expenses charged for managing the fund are deducted. The value remaining is called the net assets of the fund. The net assets divided by the number of outstanding units give the Net Asset Value of the fund.

Consider the example we used earlier:

- There were 6000 units of Rs.10 each issued.
- The current market value of the portfolio was Rs. 72,000.
- Assume dividend income of Rs.3000 and expenses of Rs.600.

- The net assets are calculated by adding income earned and deducting expenses incurred from the current market value of the portfolio. The net asset is Rs.74, 400.
- The number of units issued were 6000, so the net asset value per unit is 74,400/6000 = Rs.12.40
- The NAV of the fund has moved up from Rs.10 per unit to Rs.12.40 per unit.

The NAV of a fund is calculated every business day so that the investors know the value of their investments. Investors buy and sell units at a price based on NAV.

Pricing of Transactions

It is common for mutual funds to be "**open-ended**". This means there is no fixed maturity date for the fund, and investors can buy (purchase) or sell (redeem) units on any business day as per their convenience (business day is the day on which a fund is open for transactions, and typically excludes holidays). Investor's transactions are done at a price linked to the NAV (NAV adjusted for any charges associated with buying or selling). Transactions are priced using the NAV to ensure parity among investors that buy new units, investors that stay in the fund, and investors that move out of a fund.

Example:

The fund in our earlier example had 6000 units, whose current market value is Rs.74,400. The face value per unit is Rs.10; the NAV per unit is Rs.12.40.

A. New investor buys 1000 units and pays the face value of Rs.10 per unit.

- Assets of the fund are now 74400+10000 = 84400.
- The NAV will be = 84400/7000 = Rs.12.05.

The NAV has dropped from 12.40 to 12.05, not because the portfolio lost in market value, but because a new investor came in. Existing unit holders face a loss in NAV due to the entry of the new investor at face value.

B. New investor buys 1000 units and pays the NAV of Rs.12.40 per unit.

- Assets of the fund are now 74400+12400 = 86800.
- The NAV will be = 86800/7000 = Rs.12.40.

The NAV has remained unchanged since the incoming investor paid the NAV, not the face value.

C. Existing investor sells 1000 units and receives the face value of Rs.10 per unit.

- Assets of the fund are now 74400 - 10000 = 64400.
- The NAV will be = 64400/5000 = Rs.12.88.

The NAV has increased from 12.40 to 12.88, not because the portfolio gained in market value, but because an existing investor left. Existing unit holders face a gain in NAV due to the exit of investors at face value.

D. Existing investor sells 1000 units and receives the NAV of Rs.12.40 per unit.

- Assets of the fund are now 74400 - 12400 = 62000.
- The NAV will be = 62000/5000 = Rs.12.40

The NAV has remained unchanged since the outgoing investor received the NAV, not face value.

The NAV remains the same after the fresh purchase of units or redemption of existing units, if the units are priced at the current NAV.

Fund Running Expenses

Apart from the fees payable to the asset management company, direct expenses incurred in managing the investment portfolio are charged to investors. The specific types of expenses that can be charged to the investors and the limits to these expenses are stipulated by regulation. Expenses are calculated as a percentage of the daily average net assets managed by the fund. After marking the assets to market for purposes of computing NAV, funds deduct the expense for each day from the value of the investments. The NAV is lower to the extent of the expenses. Investors do not pay the expenses separately; it is already reflected in the NAV. It is common to refer to expenses in terms of the total expense ratio (TER) as a percentage of assets under management (AUM). The rates of TER differ with the type of mutual funds (i.e. equity or debt or index funds etc.).

Loads

Mutual funds may impose a charge on the investors at the time of exiting from a fund called the exit load. Mutual funds charge an exit load linked to the period of holding of the investor. It is calculated as a percentage of the NAV and reduced from the NAV to arrive at the price that the investor will get on exiting from the investment.

Example: A mutual fund charges an exit load of 1 percent of the NAV if the funds are redeemed by the investor within 1 year from the date of purchase. Redemption of units post 1 year from the date of purchase will not levy any exit load.

If the NAV is Rs. 12, then the exit load will be 1 percent of Rs. 12 which is 0.12 (if redeems within 1 year of purchase). The price that the investor will get when he redeems his units (within 1 year of purchase) is Rs. 11.88 (Rs.12-0.12). Currently, entry loads are prohibited by SEBI.

Relative Performance

A mutual fund invests in a portfolio of securities, whose value changes depending on the changes in the market. A mutual fund therefore cannot assure or guarantee a rate of return. The return a fund generates will reflect the return generated by that asset class. For example, equity funds will generate returns in line with equity markets and with the volatility that equity investments have. When equity market rise, the equity funds' performance will also be good and it will decline when equity markets fall. A fund tries to replicate or better the return of an asset class (usually represented by a market index).

Diversification

The value of a portfolio depends upon the price of the securities held in it, which can be volatile and move up and down over time. However, not all such prices will rise and fall together or in equal value at any point in time. If prices of banking stocks are moving up, the prices of technology stocks may be moving down, since these sectors are influenced by different factors. Even if the banking sector stocks are moving up, every banking stock may not appreciate to the same extent. Diversification means creating a portfolio of securities such that the overall portfolio is well balanced across multiple sectors and securities, so that the rise or fall in prices of the components is smoothened out. Most mutual fund portfolios are well diversified, unless they are specifically designed to focus on a single sector. A portion of a well-diversified portfolio can be bought while investing in a mutual fund even with a small investment of say, Rs.5000. It may otherwise not be feasible to replicate a diversified portfolio with such a small amount.

Pass through Entity

A mutual fund's portfolio earns taxable income and capital gains on the investments held in normal course. The fund may distribute the realised gains and income as dividend (recall that contributions to unit capital are not a loan, but capital). Investors may also earn the unrealised capital gain included in the NAV, when they redeem or sell their units. The underlying income is the same, but it is accrued once in the books of the mutual fund, and again in the books of the investor. In order to prevent the same income from being taxed twice, mutual funds are classified as "pass-through" entities under the income tax laws. The income of a mutual fund registered with SEBI, is completely exempt from tax. The income is earned on behalf of the investors and passed through to them, and is therefore taxed only in the hands of the investors.

Open-ended, Closed End and Interval Funds

Units of mutual funds are first issued to investors when the scheme is launched. Subsequently, the investors' purchase and sale transactions with the fund depend upon the structure of the mutual fund.

I. Open-Ended Funds

- An open-ended mutual fund does not have a fixed maturity date.
- Investors can buy additional units from the fund at any time at the current NAV-linked price.
- Existing investors can sell their units back to the fund at current NAV-linked prices.
- An open-ended fund may also be listed on the stock exchanges for trading.

II. Closed-End Funds

- A closed-end mutual fund issues units to the investors only when the scheme is launched i.e. during its new fund offer (NFO) period.
- The fund is closed for subscription and additional units are not issued after the NFO period by the fund.
- These funds have a fixed maturity date when the fund buys back the units from the investors at the prevailing NAV-linked price and the fund is wound-up.
- The units of closed-end schemes are mandatorily listed on stock exchanges where investors can buy and sell among themselves. The mutual fund is not involved in these transactions.

III. Interval Funds

- These funds have features of both open-ended and closed-ended fund.
- Units are allotted to investors when the scheme is launched.
- The fund specifies transaction periods, such as three days every quarter, when investors can buy units and sell units directly with the fund.
- The funds are listed on the stock exchanges where the investors can buy and sell the units among themselves.

Dividend and Growth Options

Investors are offered two options to receive the returns that the fund has generated- growth and dividend. Dividend plans may offer a further choice of pay-out or re-investment.

- In the growth option, the gains made in the portfolio are not distributed but retained in the fund. The gains are reflected in the rising NAV. Investors can realise the gains by selling the units.
- In the pay-out of Income Distribution cum Capital Withdrawal (IDCW) option, the fund declares dividends from the realised profits in the mutual fund portfolio and distributes

the same to the unitholders. This option is renamed as pay-out of income distribution cum capital withdrawal option.

- In the re-investment of Income Distribution cum Capital Withdrawal (IDCW) option, the dividend declared by the fund is not paid out, but is re-invested in the same scheme by buying additional units for the investor. This option is renamed as re-investment of income distribution cum capital withdrawal option.[50]

Working of a Mutual Fund

The **Asset Management Company** (AMC) is the specialist investment manager that manages the mutual fund. The fund manager and other persons who conduct the day-to-day operations of the mutual fund are all employees of the AMC. The AMC launches mutual fund schemes, collects money from investors and manages it. For this the AMC charges a fee from the investors who invest in the fund. The AMC is the entity with whom the investors of a mutual fund deal with for all their requirements. The activities of the AMC are supervised by its own board of directors and by the **board of trustees** of the mutual fund who act in the interest of investors. All major decisions taken by the AMC are subject to trustee approval. Trustees meet at least 6 times a year to monitor and review the activities of the fund.

A mutual fund scheme is first offered to investors in a new fund offer (NFO). This is the primary market issue for a fund product. The details of the scheme are provided in the **scheme related document** (i.e. Scheme Information Document, Statement of Additional Information and Key Information Memorandum) to enable investors to assess the scheme before buying the units.

Mutual fund schemes are distributed through a large network of institutional distributors such as banks and brokers, as well as individual distributors. These **distributors** are empanelled by mutual funds to sell their schemes. They receive a commission from the fund called 'trail' commission, which is paid periodically as a percentage of net assets brought in by the distributor for as long as the investor's money is held in the fund. Investors can also choose to invest directly in a fund without involving a distributor.

Investors apply for mutual fund units using the prescribed application form and paying for the units purchased through banking channels. The NFO price is usually the face value, typically Rs.10 per unit. Ongoing purchases in open-ended schemes are at NAV-linked prices. Mutual funds will define the minimum investment amount for a scheme, which can vary from Rs.500 for a few schemes, Rs. 5,000 for most schemes, and Rs.10,000 for a few others. Investors are allotted units at the price applicable on the date of transaction. The details of the investor's holding and

[50] In order to clearly communicate the investors that, under dividend option of a Mutual Fund Scheme, certain portion of his capital can be distributed as dividend, SEBI vide Circular No.: SEBI/HO/IMD/DF3/CIR/P/2020/194 dated October 5, 2020, has renamed the dividend options of all the existing and proposed mutual fund schemes.

transactions are maintained under unique folio numbers created for each investor. **Registrar and transfer agents** (R&T agents) facilitate investor services for most funds.

The money mobilised from investors is not held by the AMC in its bank account, but by a specifically appointed **custodian**. The custodian bank holds the funds as well as securities on behalf of the investors. The sales teams of the AMC mobilise money through the distribution channels. The treasury and operations teams work with R&T agents and custodians to invest and maintain the funds and investor records.

The **investment management team** (also called fund managers, who are employees of the AMC) are the specialists who create and manage the portfolio. They are responsible for the returns and performance of the scheme. They work with brokers, research teams, and issuers to identify the securities to invest in. The brokers execute the trades resulting from the investment decisions taken by the fund managers. The custodian bank settles these transactions by making and receiving delivery of funds and securities.

The valuation of the investment portfolio of a fund is done every business day. Incomes and expenses are accrued, and the portfolio is marked to market. The NAV is declared by the end of the day and published on the website and in the media. These activities may be done by the **valuation team** in-house or by the custodian if the fund chooses to out-source the work. Mutual funds are required to disclose the complete investment portfolio and accounts (balance sheet and profit and loss accounts) of each scheme to investors periodically.

The specialist agencies that do non-core functions (other than investment management), for an AMC, are called constituents. They must be registered with SEBI and appointed only with the approval of the trustees. They are paid a fee for their services by the mutual fund.

Constituent	Role
Custodian	Holds and settles funds and securities
R&T Agent	Keeps and services investor records
Banks	Enable collections and payments
Auditor	Audits scheme accounts
Distributors	Distribute fund products to investors
Brokers	Execute transactions in securities

5.3 Types of Open-ended Mutual Fund Products

Mutual funds provide a convenient way for investors to invest in different asset classes. The investment objective of the fund will determine the asset class in which the fund invests and the portfolio of securities created. For example, if the investment objective of the fund is to provide growth and appreciation in the value of the investment, the portfolio is likely to hold equity instruments. If the objective is to provide regular income then the portfolio will have debt securities.

SEBI has broadly classified the open ended mutual funds into 5 categories:

- Equity
- Debt
- Hybrid
- Solution Oriented
- Other

5.3.1 Types of Equity Schemes

Equity funds invest in a portfolio of equity shares and equity related instruments. The return and risk of the fund will be similar to investing in equity. Investors in equity funds seek growth and capital appreciation as their primary objective and should ideally have a long investment horizon that will allow time for the investment to appreciate in value and not be affected by short-term fluctuations.

The types of equity funds are as follows:

Multi Cap Fund: An open ended equity scheme investing across large cap, mid cap, small cap stocks.[51] The minimum investment in equity and equity related instruments shall be 75 percent of total assets with minimum investment of 25 percent in equity and equity related instruments each in large cap, mid cap and small cap companies.[52]

[51] Large Cap companies are 1st-100th companies in term of full market capitalisation. Mid cap companies are 101st - 250th companies in term of full market capitalisation. Small cap companies are 251st company onwards in terms of full market capitalisation. (Note: If a stock is listed on more than one recognised stock exchange, an average of full market capitalisation of the stock on all such stock exchanges will be computed. In case a stock is listed on only one stock exchange, the full market capitalisation of that stock on such an exchange will be considered. This list would be uploaded on the AMFI website and the same would be updated every six months based on the data as on the end of June and December of each year. The data shall be available on the AMFI website within 5 calendar days from the end of 6 months period.)

[52] SEBI Circular No.: SEBI/HO/IMD/DF3/CIR/P/2020/172 dated September 11, 2020 on Asset allocation on Multi Cap Funds.

Large Cap Fund: An open ended equity scheme predominantly investing in large cap stocks. The minimum investment in equity and equity related instruments of large cap companies shall be 80 percent of total assets.

Large and Mid Cap Fund: An open ended equity scheme investing in both large cap and mid cap stocks. The minimum investment in equity and equity related instruments of large cap companies shall be 35 percent of total assets. The minimum investment in equity and equity related instruments of mid cap stocks shall be 35 percent of total assets.

Mid Cap Fund: An open ended equity scheme predominantly investing in mid cap stocks. The minimum investment in equity and equity related instruments of mid cap companies shall be 65 percent of total assets.

Small cap Fund: An open ended equity scheme predominantly investing in small cap stocks. Minimum investment in equity and equity related instruments of small cap companies shall be 65 percent of total assets.

Flexi Cap Fund: An open-ended, dynamic equity scheme that invests across different market capitalizations (i.e. large cap, mid-cap, and small cap). The minimum investment in equity and equity-related instruments should be 65 percent of the total assets of the scheme.[53]

Dividend Yield Fund: An open ended equity scheme predominantly investing in dividend yielding stocks. Scheme should predominantly invest in dividend yielding stocks. The minimum investment in equity shall be 65 percent of total assets.

Value Fund or Contra Fund: A value fund is an open ended equity scheme following a value investment strategy. Minimum investment in equity & equity related instruments shall be 65 percent of total assets. A contra fund is an open ended equity scheme following contrarian investment strategy. Minimum investment in equity & equity related instruments shall be 65 percent of total assets. Mutual Funds are permitted to offer either Value fund or Contra fund.

Focused Fund: An open ended equity scheme investing in maximum 30 stocks (the scheme needs to mention where it intends to focus, viz, multi cap, large cap, mid cap, small cap). Minimum investment in equity & equity related instruments shall be 65 percent of total assets.

Sectoral/ Thematic: An open ended equity scheme investing in a specific sector such as bank, power is a sectoral fund. While an open ended equity scheme investing in line with an investment theme such as housing, infrastructure is a thematic fund. For example, an infrastructure thematic fund might invest in shares of companies that are into infrastructure, construction, cement, steel,

[53] SEBI vide Circular No.: SEBI/HO/IMD/DF3/CIR/P/2020/228 dated November 6, 2020 has introduced a new category of funds under Equity scheme.

telecom, power etc. The minimum investment in equity & equity related instruments of a particular sector/ particular theme shall be 80 percent of total assets.

Environmental, Social and Governance (ESG) Investing:[54] In order to increase the quantum of and facilitate green financing, SEBI has introduced a separate sub-category for ESG investments under the thematic category of Equity schemes. Mutual Funds may launch any schemes under this sub-category with one of the following ESG strategies:

a. Exclusion
b. Integration
c. Best-in-class & Positive Screening
d. Impact investing
e. Sustainable objectives
f. Transition or transition related investments

Equity Linked Savings Scheme (ELSS): An open ended equity linked saving scheme with a statutory lock in of 3 years and tax benefit. The minimum investment in equity and equity related instruments shall be 80 percent of total assets (in accordance with Equity Linked Saving Scheme, 2005 notified by the Ministry of Finance).

ELSS provides tax benefits in the form of deductions under section 80C of the Income Tax Act for the amount invested. The maximum limit for claiming deduction u/s 80C is Rs. 1.5 lakh per financial year. These investments are subject to a three-year lock-in period to get the tax benefit.

5.3.2 Types of Debt Schemes

Debt funds invest in debt securities issued by the government, public sector units, banks and private limited companies. Debt securities may have different features. For example:

- They may be short-term or long-term. Short term securities include treasury bills of the government, commercial paper and certificates of deposit. Long-term securities include government securities and bonds issued by public sector units (PSU) and companies.
- They may have credit risk or the risk of default, such as corporate bonds or have no credit risk, such as government securities.
- They may have high or low mark to market (MTM) risk, which is the change in the price of the securities in response to a change in interest rates. The market value of a debt security changes are inversely proportionate to changes in the market interest rates. Higher the tenor of the

[54] SEBI Circular No.: SEBI/HO/IMD/IMD-I-PoD1/P/CIR/2023/125 dated July 20, 2023 on New category of Mutual Fund Schemes for ESG Investing and related disclosures by Mutual Funds.

security greater is the impact of change in interest rates on the price of the security. This means:

- If interest rates increase, value of debt instruments fall. Higher the tenor of the instrument, greater the fall in mark-to-market value.
- If interest rates fall, value of debt instruments rise. Higher the tenor of the instrument, greater the rise in mark-to-market value.

Debt funds create different portfolios whose returns will be drawn from various combinations of coupon income and appreciation or depreciation from a change in price.

- A fund with short-term debt securities will earn primarily coupon income. There will be very low gains or losses from MTM risks. If interest rates are moving up, these funds will post a higher return from higher coupon incomes reflecting the higher rate, and lower impact from MTM loss from increase in interest rates, due to the shorter tenor of the securities held in the portfolio.
- A fund with long-term debt securities will earn higher coupon income because the tenor of the securities is longer. They will also earn higher capital gains or losses from MTM due to the long tenor. If the interest rates fall, these funds will post a higher return reflecting the higher MTM gains from decrease in interest rates, due to their higher average maturity.

A fund holding bonds with credit risk earns higher coupon income since the issuers have to pay higher interest rates to compensate the investors for default risk. The credit risk associated with the fund is indicated by the credit rating of the securities held in the portfolio.

The types of debt funds are as follows:

Overnight Fund: An open ended debt scheme investing in overnight securities. The investment is in overnight securities having maturity of 1 day.[55]

Liquid Fund: An open ended liquid scheme whose investment is into debt and money market securities with maturity of upto 91 days only.[56]

Ultra Short Duration Fund: An open ended ultra-short term debt scheme investing in debt and money market instruments with Macaulay duration between 3 months and 6 months.

[55] Provisions of SEBI Circular No SEBI/IMD/DF/19/2010 dated November 26, 2010 shall be followed for Uniform cut-off timings for applicability of Net Asset Value in respect of Liquid Fund and Overnight Fund.

[56] All provisions mentioned in SEBI circular SEBI/IMD/CIR No.13/150975/09 dated January 19, 2009 in respect of liquid schemes shall be applicable. Also, provisions of SEBI Circular No SEBI/IMD/DF/19/2010 dated November 26, 2010 shall be followed for Uniform cut-off timings for applicability of Net Asset Value in respect of Liquid Fund and Overnight Fund.

Low Duration Fund: An open ended low duration debt scheme investing in debt and money market instruments with Macaulay duration between 6 months and 12 months.

Money Market Fund: An open ended debt scheme investing in money market instruments having maturity upto 1 year.

Short Duration Fund: An open ended short term debt scheme investing in debt and money market instruments with Macaulay duration between 1 year and 3 years.

Medium Duration Fund: An open ended medium term debt scheme investing in debt and money market instruments with Macaulay duration of the portfolio being between 3 years and 4 years. Portfolio Macaulay duration under anticipated adverse situation is 1 year to 4 years.

Medium to Long Duration Fund: An open ended medium term debt scheme investing in debt and money market instruments with Macaulay duration between 4 years and 7 years. Portfolio Macaulay duration under anticipated adverse situation is 1 year to 7 years.

Long Duration Fund: An open ended debt scheme investing in debt and money market instruments with Macaulay duration greater than 7 years

Dynamic Bond: An open ended dynamic debt scheme investing across duration.

Corporate Bond Fund: An open ended debt scheme predominantly investing in AA+ and above rated corporate bonds. The minimum investment in corporate bonds shall be 80 percent of total assets (only in AA+ and above rated corporate bonds)

Credit Risk Fund: An open ended debt scheme predominantly investing in AA and below rated corporate bonds. The minimum investment in corporate bonds shall be 65 percent of total assets (only in AA (excludes AA+ rated corporate bonds) and below rated corporate bonds).[57]

Banking and PSU Fund: An open ended debt scheme predominantly investing in debt instruments of banks, Public Sector Undertakings, Public Financial Institutions and Municipal Bonds. The minimum investment in such instruments should be 80 percent of total assets.

Gilt Fund: An open ended debt scheme investing in government securities across maturity. The minimum investment in G-secs is defined to be 80 percent of total assets (across maturity).

[57] Vide SEBI Circular (SEBI/HO/IMD/DF3/CIR/P/2017/114 October 6, 2017**)** words/ phrases that highlight/ emphasize only the return aspect of the scheme shall not be used in the name of the scheme (for instance Credit Opportunities Fund, High Yield Fund, Credit Advantage etc.)

Gilt Fund with 10-year constant duration: An open ended debt scheme investing in government securities having a constant maturity of 10 years. The minimum investment is defined to be 80 percent of total assets such that the Macaulay duration of the portfolio is equal to 10 years.

Floater Fund: An open ended debt scheme predominantly investing in floating rate instruments (including fixed rate instruments converted to floating rate exposures using swaps/derivatives). Minimum investment in floating rate instruments (including fixed rate instruments converted to floating rate exposures using swaps/derivatives) shall be 65 percent of total assets.

5.3.3 Types of Hybrid Schemes

Hybrid funds hold a portfolio of both equity and debt securities. The investment objective of the fund will determine the allocation of the portfolio between the two asset classes. A hybrid fund is a debt and an equity fund, rolled into one. The risk in a hybrid fund will primarily depend upon the allocation between equity and debt, and the relative performance of these asset classes. The higher the equity component in the portfolio, the greater will be the overall risk.

The types of hybrid funds are as follows:

Conservative Hybrid Fund: An open ended hybrid scheme investing predominantly in debt instruments. Investment in debt instruments shall be between 75 percent and 90 percent of total assets while investment in equity and equity instruments shall be between 10 percent and 25 percent of total assets.

Balanced Hybrid Fund: An open ended balanced scheme investing in equity and debt instruments. The investment in equity and equity related instruments shall be between 40 percent and 60 percent of total assets while investment in debt instruments shall be between 40 percent and 60 percent. No arbitrage is permitted in this scheme.

Aggressive Hybrid Fund: An open ended hybrid scheme investing predominantly in equity and equity related instruments. Investment in equity and equity related instruments shall be between 65 percent and 80 percent of total assets while investment in debt instruments shall be between 20 percent and 35 percent of total assets.

Mutual funds in India are permitted to offer either Aggressive Hybrid Fund or Balanced Fund.

Dynamic Asset Allocation or Balanced Advantage: An open ended dynamic asset allocation fund with investment in equity/debt that is managed dynamically.

Multi Asset Allocation: An open ended scheme investing in at least three asset classes with a minimum allocation of at least 10 percent each in all three asset classes. Foreign securities are not treated as a separate asset class in this kind of scheme.

Arbitrage Fund: An open ended scheme investing in arbitrage opportunities. The minimum investment in equity and equity related instruments shall be 65 percent of total assets.

Arbitrage funds aim at taking advantage of the price differential between the cash and the derivatives markets. Arbitrage is defined as simultaneous purchase and sale of an asset to take advantage of difference in prices in different markets. The difference between the future and the spot price of the same underlying is an interest element, representing the interest on the amount invested in spot, which can be realised on a future date, when the future is sold. The price differential between spot and futures is locked in if positions are held until expiry of the derivative cycle. On settlement date both positions are closed at the same price, to realize the difference. A completely hedged position makes these funds a low-risk investment proposition. They feature lower volatility in NAV, similar to that of a liquid fund.

Equity Savings: An open ended scheme investing in equity, arbitrage and debt. The minimum investment in equity and equity related instruments shall be 65 percent of total assets and minimum investment in debt shall be 10 percent of total assets. The minimum hedged & unhedged investment needs to be stated in the Scheme Information Document (SID). Asset Allocation under defensive considerations may also be stated in the Offer Document.

5.3.4 Solution Oriented Schemes

The solution oriented mutual fund schemes help in attaining goals such as retirement and higher education for children.

Retirement Fund: An open ended retirement solution oriented scheme having a lock-in of 5 years or till retirement age (whichever is earlier).

Children's Fund: An open ended fund for investment for children having a lock-in for at least 5 years or till the child attains age of majority (whichever is earlier).

5.3.5 Other Schemes

Index Funds/ Exchange Traded Fund: An open ended scheme replicating/ tracking a specific index. The minimum investment in securities of a particular index (which is being replicated/ tracked) shall be 95 percent of total assets.

Exchange traded funds (ETF) combine features of an open-ended fund and a stock. Units are issued directly to investors when the scheme is launched. Post this period, units are listed on a stock exchange like a stock and traded. Units purchased at the time of launch or bought from the stock

markets are credited to the demat account of the investor. Transactions are done through brokers of the exchange. Investors need a broking account and a demat account to invest in ETFs. The prices of the ETF units on the stock exchange are linked to the NAV of the fund, but prices are available on a real-time basis depending on trading volume on the stock exchanges.

Gold ETFs are ETFs with gold as the underlying asset. The following are the features:

- It provides a way to hold gold in electronic form rather than in physical form.
- Typically, each unit of gold ETF represents one gram of gold.
- The fund holds physical gold and gold receipts representing the units issued.
- Price of the units will move in line with the price of gold.

Amendments were notified to SEBI (Mutual Funds) Regulations to introduce Silver ETFs in Indian securities markets. Silver ETFs are mutual fund schemes that invest primarily in silver and silver related instruments. SEBI in its recent circular has detailed out the operating norms of silver ETFs.[58]

The commodity based funds, such as Gold ETFs and Silver ETFs, are to be managed by a dedicated fund manager with relevant skill and experience in commodities market including commodity derivatives market. The NAV of these ETFs are to be disclosed on a daily basis on the website of the AMC.

Fund of Funds (Overseas/ Domestic): An open ended fund of fund scheme investing in an underlying fund. The minimum investment in the underlying fund shall be 95 percent of total assets.

Fund of Funds (FoF) selects funds that meets its investment objectives and invests in them. Its portfolio is not made up of securities, but is a portfolio of other funds. Most FoFs invest in schemes of the same mutual fund. Some FoFs consider schemes across fund houses which meet the FoF's investment objective for inclusion in the portfolio.

5.4 Types of Closed ended Mutual Fund Schemes

Some of the closed ended mutual fund schemes are discussed below:

5.4.1 Fixed Maturity Plans

Fixed Maturity Plans (FMP) are closed-ended funds that invest in securities whose maturity matches the term of the scheme. The scheme and the securities that it holds mature together at the end of the stated tenor. The fund pays out the maturity proceeds of the portfolio on the closing date. Investors who are able to hold the scheme to maturity will be able to benefit from the returns

[58] Vide SEBI Circular No.: SEBI/HO/IMD/DF2/CIR/P/2021/668 dated November 24, 2021 on Norms for Silver ETFs and Gold ETFs.

of the FMP that are locked in when the portfolio is created. There is no risk of the value of the securities being lower at the time when the fund matures (unless there is a default) since the instruments will also be redeemed at their face value on maturity.

- The time for which the investor is willing to invest must match the term of the fund.
- The primary risk in FMPs is credit risk from a possible default by the issuer.

As closed-end funds, these schemes are listed on stock exchanges where they may be traded at prices related to the NAV.

5.4.2 Infrastructure Debt Funds

Infrastructure Debt Funds (IDF) are closed-ended schemes with a tenor of at least five years that invest in debt securities and securitised debt of infrastructure companies. 90 percent of the fund's portfolio should be invested in the specified securities. The remaining can be invested in the equity shares of infrastructure companies and in money market instruments. The NAV of the scheme will be disclosed at least once each quarter. The minimum investment allowed in these schemes is Rs. 1 crore and the minimum face value of each unit shall be Rs. 10 lakh. As a closed-ended scheme the units of the scheme will be listed on a stock exchange. An Infrastructure Debt Fund can be set up by an existing mutual fund or a new fund set up for this purpose. The sponsor and key personnel must have adequate experience in the infrastructure sector to be able to launch the scheme.

5.4.3 Real Estate Mutual Funds

Real estate mutual funds invest in real estate either in the form of physical property or in the form of securities of companies engaged in the real estate business. SEBI regulations require that at least 35 percent of the portfolio should be held in physical assets. Securities that these funds can invest in include mortgage-backed securities and debt issuances of companies engaged in real estate projects. Not less than 75 percent of the net assets of the scheme shall be in physical assets and such securities. Assets held by the fund will be valued every 90 days by two valuers accredited by a credit rating agency. The lower of the two values will be taken to calculate the NAV. These funds are closed-end funds and have to be listed on a stock exchange.

5.5 Investment approaches – active and passive

Mutual funds follow either of two main investment approaches: active or passive.

5.5.1 Active Investing

Active mutual funds are those which are managed actively by the fund manager and his team. The objective of such funds is to generate returns that are higher than its benchmark and thus outperform the benchmark. To achieve this objective the fund manager and his team actively

research different sectors and select stocks based on certain defined parameters. They also continuously monitor their portfolio and buy and sell stocks whenever they see the right opportunity. Since in-depth research is expensive, active mutual funds charge high fees. The frequent buying and selling of securities can add substantially to the costs of managing the fund. Although some actively managed funds manage to outperform their benchmark, others may not. It has been observed that in developed markets such as the United States, actively managed funds find it difficult to beat the returns of their benchmark.

5.5.2 Passive Investing

Passive mutual funds do not seek to beat or outperform their benchmark but aim at generating returns that are in line with the benchmark returns. They achieve this by simply 'mimicking' or replicating the index. Thus, the fund buys all the stocks that are constituents of the index in the same proportion of their weights in the index. The fund sells any stock that has been removed from the index and replaces it with the new stock that is included in the index. Thus, a passively managed fund does not have a fund management team for making investment decisions. Hence the management fees charged by passive funds are lower than those of active funds. The returns of the passive fund can differ marginally from that of its benchmark. This difference is known as the 'tracking error' and ideally should be as close to zero as possible.

Index funds and exchange-traded funds (ETFs) are both examples of passively managed funds. Index funds are bought and sold like mutual funds. An investor buying or selling units of an index fund does so at the NAV determined according to the cut-off timings for that fund, the category of the fund and the amount of investment/redemption. ETFs are however, traded on an exchange just like stocks. Investors can buy or sell units of an ETF at traded prices at any time during the day. The price of an ETF can rise or fall in accordance with the prices of its constituent stocks. This makes it possible for an investor to time his purchases and sales of units of ETFs by placing limit orders to buy and sell at prices below or above the prevailing price.

Passive Funds provide various advantages such as transparency, lower costs, diversification etc. to its investors over active funds. With the growing popularity of these passive funds among investors globally, SEBI issued a detailed guideline on development of passive funds, following are a few pointers:[59]

1. In order to enhance liquidity in units of ETFs on stock exchange platform, direct transaction with AMCs are facilitated for investors only for transactions above a specified threshold of Rs. 25 crore.
2. Indicative NAV (iNAV) of an ETF (i.e. the per unit NAV based on the current market value of its portfolio during the trading hours of the ETF) are disclosed on a continuous basis on the Stock Exchange(s), where the units of these ETFs are listed and traded.

[59] SEBI Circular No.: SEBI/HO/IMD/DOF2/P/CIR/2022/69 dated May 23, 2022 on Development of Passive Funds.

3. Mutual Funds can launch Equity Linked Savings Scheme (ELSS) as: (a) Active ELSS under 'Equity Schemes' category or (b) Passive ELSS under 'Other Schemes' category. The passive ELSS scheme shall be based on one of the indices comprising of equity shares from top 250 companies in terms of market capitalization.
4. The closing price of the units of ETFs on Stock Exchange are used for valuation by Fund of Funds (FoFs) investing in such ETFs.

5.6 Processes for Investing in Mutual Funds

5.6.1 Offline and online investment modes

Investment in mutual funds can be made in the offline or online mode. In the offline mode, the investor can contact a representative of the AMC or its approved distributor or their Registrar and Transfer Agent (RTA) by visiting their office and obtain an application form along with the Know Your Customer (KYC) form. After completing the KYC process as explained below and filling up the application form, the investor can hand over a cheque for the amount that he plans to invest. The mutual fund will then allot the investor a folio number. The investor will receive an Account Statement after the processing of the transaction.

Online investment can be done through the website of the AMC or through the websites of the RTA and the KYC process can be completed online. The investor is required to create an account on the website of the AMC after entering the required details contained in the application form. He then has to choose the desired mutual fund scheme, the investment option (dividend or growth), the investment type (lump sum or in installments through a Systematic Investment Plan), mode of payment and bank details. The transaction is completed after the investor has verified all the details entered.

Stock exchanges also provide platforms to investors for investing in mutual funds. Investors can buy mutual fund units through NSE MFSS and BSE StAR MF just like company shares. The investors are required to complete the one-time registration process with NSE and BSE to avail the facility.

Mutual Fund Utilities (MFU) is a shared service platform for mutual fund transactions promoted by the mutual fund industry. Investors can invest in mutual fund units through MFU platform both in online and offline modes.

5.6.2 Permanent Account Number (PAN) and Know Your Customer (KYC) Norms

All investors in mutual funds must have a Permanent Account Number or PAN. The PAN is mandatory information that has to be provided at the time of applying for units. The only exception where PAN need not be provided is where investments made by an individual investor, either as lumpsum or systematic investment plans, do not exceed Rs. 50,000 per annum per mutual fund.

SEBI regulations prescribe the categories of investors who are eligible to invest in mutual fund in India. This includes resident individuals, Non Resident Indians (NRIs), Persons of Indian Origin (PIOs), foreign nationals, Institutions and Trusts.

Eligible investors in a mutual fund have to undergo a 'Know Your Customer' (KYC) procedure prescribed by SEBI to be able to invest in mutual funds. It needs to be done only once at the time of the first mutual fund or other capital market transaction, and is valid across mutual funds and other capital market intermediaries. The KYC procedure may be conducted by an AMC or other authorised entity. It involves collecting information about the investor in the specified format and conducting an In-Person Verification (IPV) to verify identity, address and other personal information. SEBI has allowed Aadhaar based KYC (eKYC) to be used for MF investments, for the convenience of investors. eKYC completely eliminates paperwork and IPV to complete the KYC process. CAMS / KfinTech as a KYC User Agency (KUA) is approved by UIDAI to accept investor's Aadhaar number and complete KYC Verification with one-time password (OTP).

5.6.3 FATCA and CRS

To comply with the requirements of Foreign Account Tax Compliance Act (FATCA) and Common Reporting Standards (CRS) provisions, financial institutions, including mutual funds, are required to undertake due diligence process to identify foreign reportable accounts and collect such information as required under the said provisions and report the same to the US Internal Revenue Service/any other foreign government or to the Indian Tax Authorities for onward transmission to the concerned foreign authorities. The application form requires information to be provided if the citizenship/nationality/place of birth/tax residency are places other than India for all categories of investors. The countries of tax residency and respective tax payer reference ID has to be provided. Once an investor is identified as covered under the said regulation, the entire investment value of all the folios held will be reported. The identity of the investors and their direct and indirect beneficiaries and controlling persons will be reported. If there is a change in the status of the investor after the information is first provided then the same has to be reported to the mutual fund within 30 days.

5.6.4 Purchase Transactions

Investing in an NFO

Units of a mutual fund are first available for investing when the scheme is launched in a New Fund Offer (NFO).

- The mutual fund issues scheme related documents giving all the details of the scheme being launched.
- The application form for the NFO is available along with a document called the Key Information Memorandum (KIM) which gives the important information about the scheme and procedures for investing.

- The NFO (except ELSS) will be open for a period of 15 days during which the investor has to make the application. Payment for the units can be made only through approved payment modes that are mentioned in the offer document. These include cheque and online payment facilities like internet banking (NEFT and RTGS), Application Supported by Blocked Amount (ASBA) etc.
- A folio is created for each investor under which the investor's personal information such as name, status, address, PAN, bank account details and investment information is captured.
- The units of mutual fund (except ELSS) will be allotted to investors within 5 business days from the NFO closing date. The account statement giving details of the units allotted will be sent to the investor.

Investing in the Continuous Offer

Investors can invest in open-ended funds after the NFO period also. Sale of units on an ongoing basis by an open-ended fund is called continuous offer. The price of units in the continuous offer depends on the NAV of the fund, and is declared for every business day.

- New investors use the application form to invest in a fund on continuous offer.
- Existing investors invest using a transaction slip which requires only the folio number to be provided to identify the investor, apart from the investment details.

Investors submit the completed application form or transaction slip along with the payment instrument at an Official Point of Acceptance (OPoA). This could be the office of the AMC or an Investor Service Centre (ISC).

Units are allotted to the investor based on the purchase price applicable to the transaction, which in turn is based on the applicable NAV at the time of the transaction. Information on units allotted is communicated to the investor through a Statement of Account (SoA).

Scheme related documents

SEBI requires that AMCs provide relevant and complete information to help the investor take an informed decision to invest in mutual funds. All such information is provided in the scheme related documents.

The Scheme related Documents are available free of cost at any of the Investor Service Centres (ISCs) or AMC offices. The documents have to be in the format prescribed by SEBI. Mutual Fund scheme related documents consist of:

a. **Statement of Additional Information (SAI)** which has statutory information about the mutual fund or AMC offering the scheme.
b. **Scheme Information Document (SID)** which has details of the particular scheme.
c. **Key Information Memorandum (KIM)** which contains all the key information that an investor must know before investing in the scheme.

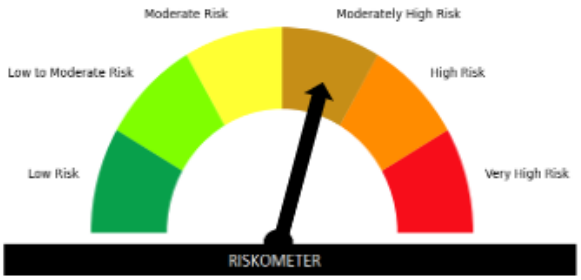
Riskometer

Mutual funds depict the level of risk in the schemes through a pictorial meter called "Riskometer". The riskometer for each scheme are provided on the from pages of:

i. New Fund Offer Application Form
ii. Scheme Information Document (SID) and
iii. Key Information Memorandum (KIM)

Also, riskometer of a mutual fund scheme is displayed on the advertisements for better understanding of the prospective investors about the potential risk.

"Riskometer: Risk level of the scheme shall be depicted by "Risk-o-meter" as given below –



The risk of the scheme/benchmark is [level of risk]

For example, the risk depicted in the above risk-o-meter is Moderately High"

Fund Fact Sheet

Apart from scheme related documents, information to investors are also provided through fund Fact Sheet. A Fund Factsheet is a monthly report made available to investors by a mutual fund manager. This factsheet discloses all information as required by SEBI such as the objective of the fund, its category, plan options offered to investors, Assets under Management, its benchmark, minimum amount required to be invested and exit load. The factsheet also reveals the riskiness of the fund using the Riskometer. Details of the fund manager's experience, educational qualifications and performance details of other funds are provided. The factsheet details the portfolio allocation, the top 10 holdings and sector-wise and company-wise allocation. Data about historical performance of the fund are also provided along with key ratios and their significance.

Stock Exchange Channel

Units of mutual funds can be transacted on the stock exchange through the stock brokers who have obtained an AMFI Registration Number (ARN) and are certified mutual fund distributors who have obtained the necessary permission from the stock exchange. Both purchase and redemption

of units can be done using this channel. The units need to be held in dematerialised form to be able to conduct transactions through this channel. Units purchased will be credited to the investor's demat account and funds on redemption to their bank account.

Payment Instruments

Investors can make payments for investments in mutual funds using cash, cheques and electronic payment modes such as NEFT, RTGS, ASBA[60] etc. Payments must be made from a bank account in which the first holder of the mutual fund folio is an account holder. Cash payment permitted upto Rs.50,000 per mutual fund house for purchases and demand draft is accepted as payment instrument only in specific situations as specified by the mutual fund.

Joint Holders

A mutual fund folio can have up to three holders as joint holders. The requirements of PAN and KYC formalities have to be undergone by all the holders. The mode of operating the investment account can be specified as' joint' where all the holders will jointly operate the account by signing for all transactions. Or the account can be operated as 'either or survivor' where any of the holders can sign to conduct transaction.

5.6.5 Redemptions

Redemption refers to encashing or withdrawing the investment made in a mutual fund by selling the units back to the mutual fund. Investments made in an open-ended fund can be redeemed at any time at the current applicable NAV. Units of a closed-ended fund can be redeemed only when the fund matures.

Investors redeeming units have to specify the amount being redeemed or the number of units. The redemption request has to be signed by the holders according to the mode of holding. If the mode of holding is 'joint' then all the holders have to sign. If it is 'either or survivor' then any one holder can sign. The redemption request has to be sent to the AMC offices or investor service centre. The applicable NAV is adjusted for any exit loads before calculating the redemption amount.

Example:

Units redeemed 500

Applicable NAV: Rs. 24

Exit load: 1 percent

[60] *Application Supported by Blocked Amount* - This is a facility where the investment application is accompanied by an authorization to the bank to block the amount of the application money in the investor's bank account. *ASBA,* which was originally envisaged for public issues in the capital market, has now been extended to mutual fund NFOs.

Price per unit for redemption: Rs.24 x (1-0.01) = Rs.24- 0.24 = Rs. 23.76

Redemption Amount: 500 x Rs.23.76 = Rs. 11880

SEBI has made it mandatory for investors to provide their bank account details to the mutual fund in the application form at the time of buying the units. Redemptions are either made directly into the bank account, or by cheque on which the bank account details are pre-printed. This is to avoid fraudulent encashment of redemption cheque in case they are intercepted before they reach the investor. Investors can register up to 5 bank accounts with a mutual fund. One of the accounts is designated as the default account into which credits are made. Investors can choose to receive credits to any of the other accounts registered, change the default account or the registered accounts by following the procedure prescribed for the same.

5.6.6 Non-Financial Transactions

Investors in a mutual fund may need to conduct certain transactions that do not have a financial implication. This includes change in the address, bank account details, joint holder information and the like. The transaction slip with the folio number to identify the investor and details of the change and supporting documents have to be provided to the appropriate agency as indicated by the fund to affect the change. It is possible to effect changes to details such as address for communication, KYC changes, across various mutual funds using such centralised agencies. The changes will be verified and communicated to R&T agents to update the records of the investor.

5.6.7 Proof of Investment and Transaction: Statement of Accounts

Statement of account (SoA) is the proof of the investment made by the investor in a mutual fund. The R&T agents, on behalf of mutual funds, dispatch a SoA after every transaction. A consolidated account statement (CAS) across mutual fund holdings is sent to the investor for each calendar month where there have been transactions in a folio. Folios where no transactions have taken place during a six-month period will receive a statement at the end of such six-month period.

A SoA is first sent when an investor makes a fresh purchase transaction. The amount, price, and units are shown in the statement. For subsequent transactions, apart from these details, the balance units in the folio, their NAV, their current market value, average Total Expense Ratio and gross commission paid to distributors are also shown.

Units in Demat Form

Investors in mutual funds are also given the option of holding the units in dematerialised form. The units allotted will be credited to the demat account of the investor. Existing units can also be dematerialised. Purchases and sale of units held in this form are done through a stock broker. The investor will have to directly bear the costs of maintaining the demat account and transacting through the broker.

5.6.8 Distributor Commission

Mutual funds pay a trail commission which is based on the period for which the investment brought in remains with the fund and is a percentage of the current value of the investments. Trail commission is paid periodically to distributors and represents a steady source of income as long as the investor stays in the fund. SEBI has allowed mutual funds to adopt full trail model of commission in all schemes, without payment of any upfront commission or upfronting of any trail commission. However, upfronting of trail commission is allowed only in case of inflows through Systematic Investment Plans (SIPs) subject to certain conditions as mentioned in relevant circulars.

5.6.9 Transaction charges

SEBI regulations allow a transaction charge to be paid to the distributor out of the money invested by the investor. This is capped at Rs.150 per transaction for purchases of Rs.10,000 and above by new investors and Rs.100 for existing investors. Distributors have to specifically "opt in" to receive such payments from the fund on purchase transactions made by their investors. There are no transaction charges on direct investments.

5.7 Systematic Transactions

Transactions with mutual funds can be automated by signing on for the facility of systematic transactions offered by mutual funds. This can be for purchases, redemptions or transfers from one scheme to another. Investors specify the details of the periodic transactions to be done at the time of initiating the facility. The mutual fund will periodically execute the systematic transactions as directed. The details that have to be specified are:

- Type of transaction: Purchases, redemptions, transfers.
- Period: Length of time for which the transactions will run, say one year.
- Periodicity of transactions: The frequency of transactions, say monthly, quarterly, half yearly.
- Day of transaction: the day of the month on which each transaction will be executed, say 15th of the month.
- Amount: For each transaction and the total amount intended to be invested over a defined period.

5.7.1 Systematic Investment Plans (SIP)

SIPs enable investors to invest a fixed sum periodically into a mutual fund scheme. Assume that an investor registers an SIP for Rs.5000 over a year, to be executed monthly on the 5th. This means the following:

- Rs.5000 will be debited from the investor's bank account and invested in the mutual fund scheme on the 5th of every month.

- Rs.60000 will be invested over the 12-month period.
- The number of units bought will depend on the NAV on each date of investment.
- A statement of accounts showing the units balance and their value will be sent on a quarterly basis to the investor.
- The investor can continue the SIP after 12 months, or keep the money invested. Redemption can be done at any time as required by the investor.

The investment is thus staggered over time, reducing the risk of investing a lump sum at a specific time. Since a fixed amount is being invested, larger number of units is bought when price is low and smaller number of units is bought when price is high. Systematic investment thus lowers the average cost of purchase. This strategy is called as rupee cost averaging.

5.7.2 Systematic Withdrawal Plans (SWP)

SWPs allow investors to make periodic redemptions from their existing mutual fund investments at the prevailing NAV related price. Assume an investor initiates an SWP for a 12- month period to withdraw Rs.5000 each month starting on the 5th September. This means the following:

- On 5th of each month starting from September the fund will automatically redeem the number of units required to get a value of Rs. 5000. For example, if the NAV on 5th September is Rs.20 and there is no exit load then 250 units (Rs.5000/Rs.20) will be redeemed.
- The amount will be sent to the investor by cheque or credited to his bank account, according to the mode chosen by him.
- The investor's unit balance will reduce each month to the extent of units redeemed. The number of units redeemed each month will be different depending upon the NAV on the 5th of the month.
- A statement of accounts showing the details of the transactions done, the balance units and their value will be sent every quarter.
- The redemption will continue for a 12- month period from the starting month.
- If on any redemption date, the balance units available in the folio are insufficient to generate Rs.5000, then the entire units will be redeemed and the folio will be closed.
- At the end of the period specified the withdrawal will stop and the remaining units will stay in the investor's folio.

SWP enables investors to periodically book their profits in an investment. Investors are also able to generate a regular income by redeeming few units periodically.

5.7.3 Systematic Transfer Plans (STP)

STPs permit investors to periodically transfer a specified sum from one scheme to another within the same fund house. The transfer is considered as redemption from the scheme from which transfer is made (source scheme) and investment into the scheme in which the redemption proceeds are invested (destination scheme). In effect it is an SWP from the source scheme and an SIP into the destination scheme, on the specified dates.

An investor starts a monthly STP from a liquid fund to an equity fund over a 6 month period starting from 5th September for an amount of Rs. 10,000. This means the following:

- The source scheme is the liquid fund and the destination scheme is the equity fund.
- On the 5th of September, Rs. 10,000 worth of units will be redeemed from the liquid fund at the NAV prevailing on that date. NAV has to be adjusted for exit loads, if applicable.
- On the same date the amount will be invested in the equity fund at the NAV of the fund.
- The number of units redeemed from the liquid fund and the number of units bought in the equity fund will not be the same each month but will depend upon the NAV prevailing at the time in each scheme.
- The STP will stop at the end of six months. The holding in the liquid fund would have reduced over the period and the holding in the equity fund would have increased.
- A statement of account giving the details of the transactions done and the unit balances and value will be sent to the investor every quarter.

5.8 Switches

Switch is redemption and purchase transaction rolled into one and can be done for any amount and on any date as required by the investor. Switch is a single transaction executed on a given date and is not a series of transactions. The scheme from which units are redeemed and money is switched out is called the source scheme. The destination or target scheme is the scheme into which money is switched in and units purchased. Switch can also be done from one option to another. For example, an investor who has chosen a growth option can switch to a dividend option. The transaction slip is used for directing the switch and the details of the existing scheme, the new scheme, and the amount to be switched need to be provided. On the date of the submission of the switch request, the amount will be redeemed from the existing scheme at the applicable NAV after considering loads and invested into the new scheme at the current NAV. A statement of account will be sent giving details of the transaction.

5.9 Reading Mutual Fund Information

Investing in a mutual fund requires information to assess the suitability and the performance of the fund.

Mutual funds are required by regulation to provide information periodically to investors.

- The Scheme related Document are issued and updated periodically so that investors have the latest information.
- Product brochures issued by the mutual fund provide information about the performance, portfolio and strategies of a fund.
- Fund factsheets disclose the scheme portfolios and returns generated by the fund relative to the benchmark on a monthly basis.
- Other sources of information include SEBI and AMFI's website and the publications by investment websites, magazines and other rating and ranking agencies.

5.10 Benefits and Costs of Investing in Mutual Funds

Mutual funds offer investors an alternate investment route to invest in asset classes such as equity, debt, real estate securities with the benefit of a diversified portfolio managed by professional investment managers. The benefits of investing in mutual funds are summarized below:

- ***Diversification***

Investors can invest in a diversified portfolio with small amounts, sometimes as low as Rs.500. Investors will find it difficult to bring meaningful diversification to a self-managed portfolio with such a small amount.

- ***Professional Management***

Investment decisions in a mutual fund are made by fund managers who have the expertise, information and knowledge to make better decisions than what a typical individual investor may be able to make.

- ***Liquidity***

Mutual funds are liquid. Investors can withdraw their investments at any time by either redeeming units from the fund or selling the units on the stock exchange where it is listed at a price that reflects the current value of the portfolio.

- ***Flexibility***

Mutual funds allow investors the flexibility to structure their investments in a way that suits them. They can choose to make lump-sum investments or periodic small investments. Similarly, they can choose to receive periodic returns in the form of dividends or to allow the returns to grow in value over time.

- ***Tax efficiency***

Mutual funds provide tax-efficient returns since the income is earned and gains are made by the fund. The mutual fund itself is exempt from paying taxes. Taxes may apply on income earned/ capital gains realised by the investor, subject to prevalent tax laws.

- ***Accessibility***

Mutual funds invest in securities that investors may otherwise not be able to access. Instruments such as wholesale debt instruments, privately placed and unlisted securities may not be accessible to the retail investor. Mutual funds can invest in them on behalf of the investor.

However, these benefits come at a cost to the investor.

- ***Costs and Fees***

The investor pays a fee for the benefit of holding a managed portfolio of securities. The expenses charged include the fee for fund management and the costs associated with the operations of the fund, such as transactions done and fees paid to the various constituents used by the fund.

- ***Limited Control***

The investors of a mutual fund do not approve or authorize any investment decision made by the fund manager. The control the investors have in the way the fund is managed is limited.

- ***Indirect Ownership***

The investments made by the mutual fund from the investors' money are held in the name of the mutual fund trust and not directly in the name of the investors. The investors are only the beneficial owners of the investments.

5.11 Regulation of Mutual Funds

A mutual fund is authorised by regulations to pool funds from investors and invest the funds on their behalf. SEBI is the primary regulator of mutual funds in India. Only entities registered with SEBI under the SEBI (Mutual Funds) Regulations, 1996 can conduct the business of a mutual fund.

The regulatory provisions are designed to protect the interests of the investors who invest in a fund.

5.11.1 Features of Mutual Fund Regulation

- A mutual fund is created as trust. The investors' funds and investments are held in this trust. The trust has trustees who are responsible for ensuring that the fund's managers manage the funds in the investors' interest and according to the stated objectives and regulations. Investor's money is held independently and not in the AMC's balance sheet.
- The track record and capital that the promoters of AMCs should have and the role and responsibilities of the trustees and AMC have been defined in the regulations.
- Mutual fund schemes cannot be offered to the public before the approval of the trustees and SEBI. The format and details of disclosures to be provided in the scheme related documents is defined in the regulations.
- The investment portfolio has to adhere to the scheme objectives and be well diversified. The regulations specify limits on investments that the fund manager can make in a portfolio so that the risk to the investor is managed. The valuation of securities held in a portfolio and accounting for income and expenses are defined by SEBI regulations. This ensures that investors get a correct representation of the value of their investments.
- The types of expenses that a mutual fund can charge to a scheme and the limits on these expenses are subject to SEBI regulations. This is to ensure that investors do not pay an unreasonably high fee for the services of the fund managers.
- SEBI regulation prescribes periodic reporting of the fund's performance and investment details to the investors. The content and format of reporting information is specified by SEBI. For example, an equity fund has to publish its returns along with the return of the benchmark indices with which the AMC and trustees would compare the performance of the scheme so that investors are able to assess how the fund has performed relative to the markets in which the fund has invested.
- The AMC has to make periodic reports and disclosures to SEBI, trustees and the Board of Directors of the AMC.

- SEBI has laid down a detailed Risk Management Framework for mutual funds, which lays down the roles of top management officials of the mutual fund. Mutual funds are required to identify the major risks faced by the mutual fund, measure and manage such risks and report the same to SEBI.

5.12 Investor Service Standards

SEBI regulations lay down the rights of investors and the time frame within which the service has to be provided. Some of the important services that investors need to be provided with include:

- Investors have to be given information on the NAV, sale and redemption prices on a daily basis.

- Units should be allotted within 5 business days of the closing date of the NFO and on the transaction date for on-going funds, subject to rules regarding realisation of payments made by investors.
- Investors should be sent periodic account statements on their transactions and investment balances.
- Dividends and redemption proceeds should be sent to the investor within 15 days of dividend declaration[61] and 10 working days of redemption request respectively.[62]
- Investor Charter for the Mutual Funds is issued by SEBI that details out the types of services provided by the mutual fund along with timelines.63 The investor charter is to be displayed on the websites of the AMCs.
- The Association of Mutual Funds in India (AMFI) is the industry body that recommends best practices and code of conduct to be followed by the AMCs and distributors of mutual funds in the interests of the investors.
- To ensure that mutual funds exercise their voting rights at company general meetings in the interest of their unit holders, SEBI has made it compulsory for mutual funds to vote on specified resolutions. These resolutions include matters of corporate governance, changes to the company's capital structure, management compensation, social and corporate responsibility issues, appointment and removal of directors, related party transactions and such other issues, which could affect the interest of the unitholders.[64]

5.13 Specialized Investment Fund[65]

SEBI in its recent amendment to SEBI (Mutual Funds) Regulations, has introduced a new product line under mutual funds known as Specialized Investment Fund (SIF). SIFs are sophisticated mutual funds where the minimum required investment amount is Rs. 10 lakhs from the investors across all investment strategies.

[61] Vide SEBI (Mutual Funds) (Amendment) Regulations, 2021 effective from March 5, 2021.
[62] In the event of delays in dispatching dividend warrants or redemption/repurchase cheques, the AMC has to pay the unitholder, interest at the rate of 15 percent p.a. This expense has to be borne by the AMC i.e. it cannot be charged to the scheme.
[63] Vide SEBI Circular No.: SEBI/HO/IMD-II/IMD-II_DOF10/P/CIR/2021/00677 dated December 10, 2021 on Investor Charter and disclosure of investor complaints by Mutual Funds on their websites and AMFI websites.
[64] SEBI Circular No.: SEBI/HO/IMD/DF4/CIR/P/2021/29 dated March 5, 2021, on Guidelines for votes cast by Mutual Funds.
[65] Vide SEBI (Mutual Funds) (Third Amendment) Regulations, 2024 w.e.f. December 16, 2024.

Chapter 5: Sample Questions

1. **The net asset value of a mutual fund primarily reflects which one of the following?**
    a. The expenses of the AMC
    b. The dividends and interest payable to investors
    c. The current market value of the fund's portfolio
    d. The income of the fund's constituents

2. **An investor wanting to purchase the units of an ETF will transact with _____ and receive the units in _____.**
    a. Distributors; Account statement
    b. Brokers; demat account
    c. AMC, account statement
    d. Distributor, demat account

3. **The KYC requirements for a mutual fund folio have to be completed by _____.**
    a. First holder only
    b. All holders, except minors
    c. All holders including minors
    d. First and second holders only

4. **Units of a mutual fund can be purchased by investing a pre-determined amount periodically. This facility is called _____.**
    a. Systematic Investment Plan
    b. Systematic withdrawal plan
    c. Systematic dividend plan
    d. Dividend re-investment plan

5. **Investors have to be given information on the NAV on a daily basis. State whether True or False.**
    a. True
    b. False

CHAPTER 6: DERIVATIVES MARKETS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Definition of derivatives and the concepts underlying derivatives
- Types of derivative products
- Trading and Settlement of Derivatives
- Risk Management in Derivatives
- Benefits, costs and risk of derivatives

6.1 Derivatives

A derivative refers to a financial product whose value is derived from another. A derivative is always created with reference to the other product, also called the underlying.

A derivative is a risk management tool used commonly in transactions where there is risk due to an unknown future value. For example, a buyer of gold faces the risk that gold prices may not be stable. When one needs to buy gold on a day far into the future, the price may be higher than today. The fluctuating price of gold represents risk. If it were possible to fix today, the price for a transaction on a later date in future, such risks can be managed better.

A derivative market deals with the financial value of such risky outcomes. A derivative product can be structured to enable a pay-off and make good some or all of the losses if gold prices go up as feared. Similarly, many other financial assets and physical commodities can be hedged by the use of derivatives.

6.1.1 Managing Risk with Derivatives

A derivative market is formed when different players with different needs, to manage their risks, come together and try to secure themselves from the respective risky events that they fear in the future.

Coming back to the example of gold given above, let's think about the seller. If the buyer is worried about buying gold at a higher price when the need arises, the seller is worried about gold prices falling in the future. Both of them face the risk of the unknown future price of gold. But one is negatively affected by a fall in price; the other is negatively affected by a rise in price. If they both are able to get into a contract, in which they agree on the price at which they will sell and buy gold on a future date, they have a “forward” contract. The buyer and the seller are then "counterparties" to the contract, meaning they represent opposing interests. Such a contract gives comfort to both parties but one party's loss will be the other's gain.

Assume that the buyer and the seller agree to exchange 10 grams of gold at a price of Rs.30,000 one year from now. This is a forward contract. The price at which gold will be sold and bought has been agreed upon today, but the actual exchange will happen sometime forward, a year from today hence the name, forward contract.

A forward is a derivative contract where two parties agree to exchange a specific good at a specific price, on a specific date in the future. A forward contract reduces the risk of an unknown price to both the seller and the buyer. If the prices fall, the buyer still pays only the price agreed, but he gives up a possible gain if he had not bought the forward contract; the seller on the other hand gains when prices falls, since he has sold his gold using a forward, at a better price. If gold price were to rise, the seller would lose and the buyer would gain in a forward contract arrangement.

Consider these possibilities one year from now:

A. Price of gold remains unchanged at Rs.30,000.
Outcome: Neither party loses. They buy and sell at Rs.30,000.

B. The price of gold moves up to Rs.35,000
Outcome: The buyer gains.
He pays only Rs.30,000 while the market price is Rs.35,000.
The seller loses.
He is able to get only Rs.30,000 while the market price is Rs.35,000.

C. The price of gold falls to Rs.25,000.
Outcome: The seller gains.
He is able to get Rs.30,000 while the market price is lower.
The buyer loses.
He pays Rs.30,000 while he could have bought in the market at a lower price of Rs.25,000.

It is clear that one of the two parties tends to lose, while the other gains. This is because both of them did not accurately know what the price of gold would be in the future. Their contract was structured to enable them to pay a pre-determined fixed price. Such a contract is called a "forward". A forward is one of the examples of a derivative contract.

If one carefully examined the forward contract above, the risk being managed here pertains to the price of the gold, measurable in money terms. Derivative markets are structured to deal with risk arising out of changes in value of something else in monetary terms. In our example it is gold. This is known as the underlying. The underlying is subject to risk that is being managed using the derivative. Therefore, the derivative, its price and value, is intricately linked with the underlying.

6.1.2 Structuring a Derivative Product

A derivative product is defined by a set of payoffs, based on a specific set of criteria. For example, a forward pays off the difference between the current price and the agreed forward price, irrespective of whether the price is higher or lower. Some derivative contracts can be set up to payoff only if there is rise in price, or a fall in price, but not both. There are various innovative ways in which derivative payoffs are structured, making derivatives some of the more complex financial products.

The primary objective in a derivative contract is to transfer the risk from one party to another. The buyer of gold transfers the risk of a possible rise in prices to the seller; the seller of gold transfers the risk of a possible fall in prices to the buyer. Depending on how the risk is defined spliced and how many parties are there to the contract, the derivative product can be structured differently.

Consider the following examples:

a. A farmer faces the risk of crop loss if the monsoon fail. He can enter into a derivative contract whose payoff depends on the amount of rainfall. This is a weather derivative.

b. A borrower faces the risk of paying a floating interest rate that varies with the benchmark rate. His business situation needs a steady and fixed cash outflow. He can enter into a derivative contract where he receives a floating rate and pays a fixed rate. This is an interest rate swap.

c. An Indian importer has to pay in US Dollars for the goods he has ordered in the international markets. He is worried about the rupee depreciating in value, which will increase the amount of rupees he needs, in order to pay the same amount of dollars when his order is shipped. He can enter into a contract that fixes the exchange rate of the rupee to the dollar on the future date when his payment is due. This is a currency derivative.

d. A portfolio manager faces the risk that the value of his portfolio will fall if the equity markets fall in the future. He has to make a few pay-outs to his investors, which will come under risk if the value of his portfolio falls. He enters into a contract where he will receive a payoff depending on the value of the equity index, if it were to fall. This is an index derivative.

The underlying is different in each one of the above. The derivative is used to manage risks arising out of the changes in the value of the underlying.

6.2 Underlying concepts in Derivatives

6.2.1 Zero Sum Game in Futures

In a derivative contract, the counterparties who enter into the contract have opposing views and needs. The seller of gold futures thinks prices will fall, and benefits if the price falls below the price at which he entered into the futures contract. The buyer of gold futures thinks prices will rise, and

benefits if the price rises beyond the price at which he has agreed to buy gold in the future. The sum of the two positions is zero.

In a derivative market, there is a "long" position of a buyer, and there is a corresponding "short" position of a seller. The willingness of both parties to agree to an exchange at a specific term, on a specific date in the future, creates the derivative position. Therefore, by definition, the net economic value of all derivative positions should be zero. There is no new asset or no new underlying created because of derivative contracts on the underlying asset.

6.2.2 Settlement Mechanism

Earlier most derivative contracts were settled in cash. Cash settlement is a settlement method where upon expiration or exercise of the derivatives contract, the counterparties to the contract settle their position through exchange of the price differentials and do not deliver the actual (physical) underlying asset.

Since October 2019, SEBI has mandated physical settlement (settlement by delivery of underlying stock) for all stock derivatives i.e. all positions in futures and options on individual securities which remain open on the expiry date of the contract are to be settled by physical delivery only. However, Index futures and Index options contracts continue to be settled in cash.

6.2.3 OTC and Exchange Traded Derivatives

Some derivative contracts are settled between counterparties on terms mutually agreed upon between them. These are called over the counter (OTC) derivatives. They are non-standard and they depend on the trust between counterparties to meet their commitment as promised. These are prevalent only between institutions, which are comfortable dealing with each other.

Exchange-traded derivatives are standard derivative contracts defined by an exchange, and are usually settled through a clearing corporation. The buyers and sellers maintain margins with the clearing corporation, which enables players that do not know one another (anonymous) to enter into contracts on the strength of the settlement process of the clearing corporation.

Forwards are OTC derivatives; futures are exchange-traded derivatives.

6.2.4 Arbitrage

The law of one price states that two goods that are identical, cannot trade at different prices in two different markets. It is easy to buy from the cheaper market and sell at the costlier market, and make riskless profits. However, such buying and selling itself will reduce the gap in prices. The demand in the cheaper market will increase prices there and the supply into the costlier market will reduce prices, bringing the prices in both markets to the same level. Arbitrageurs are specialists who identify such price differential in two markets and indulge in trades that reduce such differences in price. Prices in two markets for the same tradable good will be different only

to the extent of transaction costs. These costs can include transportation, storage, insurance, interest costs and any other cost that impacts the activities of buying and selling.

In the derivative market, the underlying asset is the same as it is in the cash market. But the price to buy the same asset in the derivative market can be different from that of the cash market due to the presence of other costs such as physical warehousing or interest costs. The pricing of derivatives includes these costs.

6.3 Types of Derivative Products

The four commonly used derivative products are:

- Forwards
- Futures
- Options
- Swaps

6.3.1 Forwards

Forwards are over the counter (OTC) derivatives that enable buying or selling an underlying on a future date, at an agreed upon price. The terms of a forward contract are as agreed between counterparties.

Example:

A farmer agrees to sell his produce of wheat to a miller, 6 months later when his crop is ready, at a price that both counterparties agree today.

This is a forward contract since it will be completed later (forward). It is also an OTC contract. It can be settled in cash or result in actual delivery of wheat. The settlement terms such as quantity and quality of wheat to be delivered, the price and payment terms are as decided by the counterparties. A forward contract is a non-standard futures contract. It carries counterparty risk if either one fails to honor their side of the contract. It is therefore always entered into between known parties, and leans on informal protection mechanisms to ensure that the contract is honored. The concentration of commodity futures trading in certain geographical locations, or between a few communities is to ensure such informal protection against counterparty risks. The forward markets in commodities in several parts of India are based on mutual trust and are functional despite the risks involved.

6.3.2 Futures

Futures are exchange-traded forwards. A future is a contract for buying or selling a specific underlying, on a future date, at a price specified today, and entered into through a formal mechanism on an exchange. The terms of the contract are specified by the exchange.

Example:

Wheat futures traded on the Multi Commodity Exchange (MCX) of India has the following specifications (among others):

Trading unit: 10MT

Minimum order size: 500MT

Maximum position per individual: 5000 MT

Quality: Standard Mill Quality as specified by the exchange

Contract begin date: 21st of the month

Delivery options: Physical delivery only

Delivery date: 20th of the month

Delivery centre: Exchange approved warehouses

Futures are thus forward contracts defined and traded on an exchange. Another important feature of an exchange-traded futures contract is the clearing corporation. The counterparty for each transaction is the clearing corporation. Buyers and sellers are required to maintain margins with the clearing corporation, to ensure that they honor their side of the transaction. The counterparty risks in a futures contract are eliminated using the clearing corporation mechanism.

6.3.3 Options

An Option is a contract that gives its buyers the right, but not an obligation, to buy or sell the underlying asset on or before a stated date/day, at a stated price, for a price. The party taking a long position i.e. buying the option is called buyer/ holder of the option and the party taking a short position i.e. selling the option is called the seller/ writer of the option. The option buyer has the right but no obligation with regards to buying or selling the underlying asset, while the option writer has the obligation in the contract. Therefore, option buyer/ holder will exercise his option only when the situation is favourable to him, but, when he decides to exercise, option writer would be legally bound to honour the contract. Options may be categorized into two main types:

- Call Options
- Put Options

Option, which gives buyer a right to buy the underlying asset, is called Call option and the option which gives buyer a right to sell the underlying asset, is called Put option.

Option Terminology

Arvind buys a call option on the Nifty index from Salim, to buy the Nifty at a value of Rs. 10,000, three months from today. Arvind pays a premium of Rs 100 to Salim. What does this mean?

- Arvind is the buyer of the call option.
- Salim is the seller or writer of the call option.
- The contract is entered into today, but will be completed three months later on the settlement date.
- Rs.10,000 is the price Arvind is willing to pay for Nifty, three months from today. This is called the strike price or exercise price.
- Arvind may or may not exercise the option to buy Nifty at Rs.10,000 on the settlement date.
- But if Arvind exercises the option, Salim is under the obligation to sell Nifty at Rs.10,000 to Arvind.
- Arvind pays Salim Rs.100 as the upfront payment. This is called the option premium. This is also called as the price of the option.
- On the settlement date, Nifty is at Rs. 10,200. This means Arvind's option is "in-the-money." He can buy the Nifty at Rs.10,000, by exercising his option.
- Salim earned Rs.100 as premium, but lost as he has to sell Nifty at Rs.10,000 to meet his obligation, while the market price was Rs. 10,200.
- On the other hand, if on the settlement date, the Nifty is at Rs. 9800, Arvind's option will be "out-of-the-money."
- There is no point paying Rs.10,000 to buy the Nifty, when the market price is Rs. 9800. Arvind will not exercise the option. Salim will pocket the Rs.100 he collected as premium.

6.3.4 Swaps

A swap is a contract in which two parties agree to a specified exchange on a future date. Swaps are common in interest rate and currency markets.

Example:

A borrower has to pay a quarterly interest rate defined as the Treasury bill rate on that date, plus a spread. This floating rate interest payment means that the actual obligation of the borrower will depend on what the Treasury bill rate would be on the date of settlement. The borrower however prefers to pay a fixed rate of interest.

He can use the interest rate swap markets to get into the following swap arrangement:

- Pay a fixed rate to the swap dealer every quarter
- Receive T-bill plus spread from the swap dealer every quarter

The swap in this contract is that one party pays a fixed rate to the other, and receives a floating rate in return. The principal amount on which the interest will be computed is agreed upon between counterparties. Only the interest rate on this amount is exchanged on each settlement date (every quarter) between counterparties.

The borrower will use the floating rate that he has received from the swap market and pay the floating rate dues on his borrowing. These two legs are thus cancelled, and his net obligation is the payment of a fixed interest rate to the swap dealer. By using the swap market, the borrower has converted his floating rate borrowing into a fixed rate obligation.

Swaps are very common in currency and interest rate markets. Though swap transactions are OTC, they are governed by rules and regulations accepted by swap dealer associations.

6.4 Structure of Derivative Markets

In India the following derivative products are available on various stock exchanges:

- Equity index options
- Equity index futures
- Individual stock options
- Individual stock futures
- Currency options and futures on select currency pairs
- Interest rate futures
- Interest rate options
- Commodity futures and options for a select set of commodities

Apart from the above, forward markets for agricultural commodities and swap markets for interest rates are available in the OTC markets. We will discuss the markets for equity derivatives in this chapter. Currency and interest rate derivatives are more advanced topics that can be pursued later as specialized areas of study.

6.4.1 Equity Derivatives Market

After necessary approvals from SEBI, derivative contracts in the Indian stock exchanges began trading in June 2000, when index futures were introduced by the BSE and NSE. In 2001, index options, stock options and futures on individual stocks were introduced. India is one of the few markets in the world where futures on individual stocks are traded. Equity index futures and options are among the largest traded products in derivative markets world over. In the Indian markets too, volume and trading activity in derivative segments is far higher than volumes in the cash market for equities. Other highly traded derivatives in global markets are for currencies, interest rates and commodities.

6.4.2 Market Structure

Equity derivative markets in India are structured as fully automated, nationwide screen-based trading systems. Orders are placed anonymously and electronically and executed using an automated order matching system. Clearing and settlement happens through the clearing corporation. The derivative trades in Indian markets are guaranteed for settlement through a

rigorous risk management mechanism that includes capital adequacy norms, intra-day monitoring of position limits and margins.

Derivative transactions have to be routed through the registered members of the stock exchange where the derivative is listed and traded. Participants in the transactions can be individuals or institutions, who have to trade through a trading member. Trading members settle their transactions through clearing members. Some clearing members are also trading members who settle their own trades and the trades of other participants and trading members.

Exchanges collect transaction charges from members for enabling them to trade in derivative contracts defined by them on their electronic platforms. Transaction costs are levied based on value of contract for futures and amount of premium for options, and may be collected from both parties to a transaction. Securities transaction tax (STT) at the rate fixed by the government is also payable on derivative transactions conducted on the exchange.

6.4.3 Derivative Products for Trading

Futures and options are available on specific indices such as on Nifty 50 index, Nifty Bank Index, S&P BSE Sensitive Index etc, as may be notified by the exchange. Individual stock options and futures are available for specific listed stocks that are chosen by the exchange. There are specific criteria for selecting indices and stocks on which derivative contracts will be available for trading. These specifications mostly pertain to size (market capitalization) and trading volume so that the derivatives are liquid and can be traded at lower costs. SEBI issues guidelines and circulars for eligibility criteria. Exchanges choose stocks and indices using these criteria. They may also impose more stringent criteria than advised by the regulator.

6.5 Trading and Settlement Process: Equity Futures and Options

6.5.1 Contract Specification

A futures contract is specified in terms of the underlying and the expiry date.

A futures contract can be bought or sold on the exchange, as orders placed by buyers and sellers on the electronic trading screen are matched. The price of the futures contract moves based on trades, just as it does in the cash or spot market for stocks.

The exchange at which the contract is traded also provides other specifications about how it will be traded and settled. For example, the following are the specifications of the NSE for futures contracts:

Expiry Date

The monthly contracts expire on the last Thursday of every calendar month. At any time, there would be three contracts available to trade:

a. The NEAR month contract expiring on the last Thursday of the current month.
b. The NEXT month contract expiring on the last Thursday of the next month.
c. The FAR month contract expiring on the last Thursday of the third month.

If the Thursday of a month is a trading holiday for the exchange where the contract is traded, it expires on the previous trading day.

However, different weekly index options expire on different days of a week.

Trading Cycle

The exchange also specifies contracts for three quarterly months of the cycle March, June, September and December and 8 following semi-annual months of June and December. These are long maturity contracts that do not trade very frequently. New contracts are introduced on the maturity of a near month contract. In case of weekly index options, seven weekly expiry contracts excluding the expiry week of monthly contract are made available for trading. New serial weekly options contract is introduced after the expiry of the respective week's contract.

Trading Lot

The trading lot for a futures contract is specified such that the value of the lot at the time of introduction is not less than Rs.5 lakhs. This means the trading lot is different for each contract and can also vary over time depending on the value of the underlying especially for single stock futures.

Base Price and Price Steps

When a contract is introduced for the first time, its base price is given by the exchange. It is usually the theoretical futures price based on the price of the underlying and implied interest cost for the period until the expiry date, using a benchmark as the indicative interest rate. On the subsequent days, the base price is the daily settlement price of the contract.

The price step (also called the tick size) for futures contracts is Re.0.05. The change in prices from one trade to another has to be at least 5 paisa or multiple of 5 paisa. For example, if one trade was executed at 5610.50, then the next trade cannot be executed at 5610.52, but at 5610.55 or 5610.45.

Price and Quantity Freeze

The prices of the futures contracts traded on the exchange are freely determined by buyers and sellers. However, to ensure that any error in order entry does not create problems in the market, exchanges specify a range for price movement and a limit for order quantity. The trading member has to confirm to the exchange that there was no error and it was a genuine order. It is then approved and allowed in the market. The exchange may not allow an order under quantity freeze if it exceeds the exposure limit of the member, or traded volume for the contract is too low.

6.5.2 Trading

Derivatives can be traded on all weekdays (Monday to Friday). The Exchange also announces a list of trading holidays when it would be closed. Trading holidays may be modified, if a need arises. On all trading days, the market timing for equity derivative contracts on the NSE is:

- Normal market open time: 09:15 hrs
- Normal market close time: 15:30 hrs
- Trade modification end time: 16:00 hrs

Orders

Trades are entered in the F&O segment of the trading screen of the trading member and are electronically stamped by the exchange. It is executed as soon as a match is found. Different types of orders are kept in different books and matched according to their type. The order type can be any of the following:

- Regular lot order
- Stop loss order
- Immediate or cancel order
- Day order

A regular lot order can be a market or limit order. A market order is executed at the prevailing price. A limit order is executed only if the indicated price or better is available in the market. Orders remain passive until they are matched by another order and executed. All unmatched orders, even if they are partially unmatched, are cancelled at the end of the trading day. An order placed as immediate or cancel, is cancelled if not executed immediately.

A stop loss order is triggered only when the desired price at which the trade should be executed is reached. It is a sell order against a buy order already executed and aims to protect from adverse movement in price that an investor may not notice. Placing a buy order along with a stop loss ensures that the position is closed before the loss becomes steeper.

A spread order is placed when two positions are simultaneously managed and is defined for triggering a trade execution when the difference (spread) between the two positions reaches a specified level.

Corporate Action Adjustments

There may be corporate actions such as bonus, rights, split, merger, dividends or warrants that impact the price of the underlying. The exchange will carry out adjustments to traded price, on the last day on which a security is traded on cum basis in the underlying equities market, after the close of trading hours. The principle used in adjusting the prices is that the value of a position on the cum and ex dates remain the same.

6.5.3 Settlement of Traded Contracts

Trades are settled and cleared with the clearing corporations by the clearing member, who has the responsibility of determining the settlement position of all their trading members. There are three types of clearing members in the derivatives market:

- Trading member clearing member (TM-CM): They trade as well as clear, their own trades as well as trades of other trading members.
- Professional clearing member (PCM): These are not trading members. They are banks or custodians who only function as clearing members.
- Self-clearing Member (SCM): They are TM-CMs who settle only their own trades.

There are two types of settlements in a derivative contract:

- Daily settlement (Mark-to-market settlement)
- Final settlement

Daily Settlement (MTM)

All derivative contracts are settled on T+1 basis by computing the difference between the traded price and the daily settlement price. The daily settlement price is announced by the exchange. It is the weighted average price of the last 30 minutes of trading.

The traded price is compared with the settlement price to determine if the position is in profit or loss. Therefore, the net position of a member is only in terms of funds, and is either a profit (pay-out) or loss (pay-in).

Example

Purchase of Nifty Futures	Rs. 10000
Settlement Price	Rs. 9900

This position is at a loss on a MTM basis. The purchaser of Nifty Futures at Rs. 10000 will end up with a loss of Rs.100 if his position were to be settled at the price at the end of the day. Therefore, there is a pay in obligation of Rs.5000 (Rs. 100 times lot size of 50 contracts) for this member. He has to credit the clearing bank account of the clearing member with this amount.

Clearing members paying-in must have clear funds in their primary clearing account before stipulated time on the settlement day. The pay-out is credited to the primary clearing account of those with receiving positions at stipulated time.

Final Settlement

The final settlement of a futures contract happens on its expiry date when all open positions are closed. The only difference between the MTM settlement and final settlement is the price. The

final settlement happens at the closing price of the relevant underlying index or security in the cash market on the final trading day of the futures contract.

Clearing Bank

A clearing bank is a designated bank empaneled by the clearing corporation to receive and make payments for settlement of securities transactions. Every clearing member has to open a specific clearing account with the clearing bank, at specific branches as designated by the clearing corporation. These clearing accounts have to be used only for the purposes of settlement with the clearing corporation.

6.5.4 Options: Trading and Settlement Process

Equity option contracts are specified by the exchange in the same manner as futures contracts. Options are available on the same indices and stocks on which futures are available. The expiry dates are also the same – last Thursday of the month. However, two additional features are specified for option contracts:

- **Option type:** A European option can be exercised only on expiry date; an American option can be exercised any time before or on the expiry date. In the Indian markets only European options are traded at this time. A contract specified as CE is a Call European option; PE is a Put European option.
- **Strike Price:** The option contract is specified for the strike price. The market trades the premium to be paid for the given option.

The trading lot depends on the value of the underlying such that the value of the lot at the base price at the time of introduction is not below Rs.5 lakhs. As in the case in futures, lots for individual securities can vary based on the underlying. The price step is Re. 0.05. The base value is computed as the theoretical price of the option, using MIBOR as the interest rate, when the contract is introduced. Subsequent prices depend on the transactions in the market. The price band for an option is computed by the exchange and announced every day. It is not a fixed percentage or quantity-based freeze as in the case for futures.

The trading system and order execution process is the same as we discussed for futures contracts. The settlement system for options is similar to that of futures except for the following:

a. Daily settlement is for the premium amount and is settled on T+1 basis. The premium due is paid to the clearing bank on the next trading day and is settled into the account of the seller.
b. On the expiry date of the option contract, all options that are exercised come up for settlement. They are settled at the in-the-money strike price at close of trading hours on the expiry date. Long positions are assigned at this strike price to all short positions. All exercised options are aggregated client-wise, trading member-wise and assigned to the clearing member for settlement.

6.6 Risk Management in Derivative Markets

Since derivative contracts are settled into the future, exchanges put in place risk management systems to ensure that counterparties honor their contracts. Any default in a large and interconnected market can impact a large number of people.[66]

The tools used in risk management in the derivative market are:

- Setting capital adequacy requirements for members.
- Imposing and maintaining stringent margin requirements.
- Imposing and maintaining position limits based on capital.
- Online monitoring of member positions.
- Automatic disablement from trading when limits are breached.

6.6.1 Base Capital and Liquid Net Worth

The rules and bye-laws of the Exchange and the Clearing Corporation require the amount of capital and net worth that members have to maintain. The margins that have to be maintained with the clearing corporation are also specified. A part of the net worth and margin requirements has to be in liquid assets including cash and cash equivalents. This is called the liquid net worth. The rest of the capital is called base capital.

The clearing corporation can use these assets to settle any obligations of the member. This mechanism increases the capital and funding requirement for member, and enables the exchange to guarantee the settlement of all trades executed on the exchange.

Depending on their settlement volumes and obligations, members can request a release of collaterals. This is managed through an electronic interface between the exchange and the member so that a balance is achieved between funding all settlements and the cost to members from keeping assets idle.

6.6.2 Margins

Margins represent the amount the clearing corporation will collect from its members to ensure that trades settle without default. Clients pay margins on their positions to trading members, and trading members to clearing members, who in turn pay the margins to the clearing corporation. Sophisticated systems monitor prices and open positions to compute and impose margins on a dynamic basis.

In the futures market segment, two kinds of margin are collected:

[66] A recent study by SEBI, published on January 25, 2023, revealed that 9 out of 10 individual traders in equity Futures and Options Segment, incurred net losses. One can read the research paper at: https://www.sebi.gov.in/reports-and-statistics/research/jan-2023/study-analysis-of-profit-and-loss-of-individual-traders-dealing-in-equity-fando-segment_67525.html

- Initial margin
- Exposure margin

Initial margin is collected using a formula that estimates the risk to an open position over a 2-day horizon.

Exposure margin is collected as a percentage of the notional value of an open position.

Both initial and exposure margins are payable in advance by clearing members, before they enter into trading positions. Clearing members can also set up collateral limits through an electronic interface with the clearing corporation, where they can specify trading member-wise or client-wise limits. Not paying the margin requirement attracts penalties including suspension of trading facility, disciplinary action, or closing out of open positions.

Clearing members have to send a daily report to the clearing corporation with the details of margins due and collected by them, based on the trades executed and open positions of all clients and trading members who clear their trades through them. SEBI has issued a detailed monitoring mechanism for verification of upfront collection of margins from clients.[67]

Margins for Options

The margining system for options is also the same as for futures, except for the following:

a. The buy and sell trades in options is for the premium of an option position. The initial margins are levied on the premium value of open option positions. The exposure margin is levied on notional contract value computed in terms of value of underlying representing the option position. Exposure margin is collected only on short option positions (sellers).
b. In addition to initial and exposure margins, premium margins and assignment margins are collected. Premium Margin means premium amount due to be paid to the Clearing Corporation towards premium settlement, at the client level. Premium margin is levied till the completion of pay-in towards the premium settlement. Assignment margin is collected for the final settlement obligation of the option. It is levied till the completion of pay-in towards the exercise settlement.

6.6.3 Position Limits

A clearing member's open position is computed after aggregating the open positions of all trading members, clients, or custodial participants who clear through such clearing member. Positions have to be separately grossed for proprietary trades of members and those of their clients. The open position is arrived at after setting off sells against buys, within each category, and grossed at the clearing member level.

[67] SEBI Circular No.: SEBI/HO/MRD2/DCAP/CIR/P/2020/127 dated July 20, 2020 on Framework to enable verification of upfront collection of margins from clients in Cash and Derivatives segments.

The exchange defines the limits to open positions for various derivative contracts. These are defined as percentage of market wide position limits, or in terms of contract value. If the open positions draw closer to these limits, alerts are sent to avoid further trades, or fresh positions are not allowed to be taken; only existing positions can be reduced by squaring off. The position limits are used to ensure that no single client, trading member, or clearing member, or the market as a whole reach a risky level of open positions that may pose a settlement risk.

Positions are monitored by the exchange on a real-time basis. Alerts about position limits are sent to members. Clearing members have to bring in additional base capital and make sure they maintain the minimum liquid net worth specified by the exchange. Trading members and clients are sent alerts and fresh positions are disallowed. The trading terminal is inactivated if the position limit is hit. The exchange also imposes penalties for violation of margins or position limits.

6.7 Application of Derivatives Products in Risk Management

Derivatives are typically used for three purposes:

a. Hedging
b. Speculation
c. Arbitrage

Hedging

When an investor has an open position in the underlying, he can use the derivative markets to protect that position from the risks of future price movements. This is particularly true when the underlying portfolio has been built with a specific objective in mind, and unexpected movements in price may place those objectives at risk.

Speculation

A speculative trade in a derivative is not supported by an underlying position in cash, but simply implements a view on the future prices of the underlying, at a lower cost.

A buyer of a futures contract has the view that the price of the underlying would move up and he would gain having bought it at a lower price, earlier. The cost of this long position is the margin.

Arbitrage

Arbitrageurs are specialist traders who evaluate whether the difference in price is higher than the cost of borrowing. If yes, they would exploit the difference by borrowing and buying in the cheaper market, and selling in the expensive market. If they settle both trades on the expiry date, they will make the gain less the interest cost, irrespective of the settlement price on the contract expiry date, as long as both legs settle at the same price.

6.7.1 Benefits and Costs of Derivatives

The applications of derivatives in hedging, speculation and arbitrage demonstrate the following key benefits and costs of derivative:

- Enabling hedging and better risk management by providing various alternative ways to structure symmetrical and asymmetrical pay offs.
- Enhancing the liquidity of underlying markets and reducing the overall costs of trading for cash and derivatives. The availability of derivatives increases participation, information dissemination and price discovery.
- Over the counter contracts and poorly regulated derivative markets have led to several instances of liquidity crises and counterparty risks when large positions are sought to be unwound at short notice, after the risk surfaces.

6.8 Market Indicators

6.8.1 Open Interest

In the derivative markets, the contracts are settled on a future date. An investor has sold a futures contract for delivery 30 days from today. He will complete the transaction only 30 days from today, buying from his counterparty at the price they both have agreed. Until then the contract remains open and unsettled. Such incomplete or outstanding positions in the derivative markets are called “open interest.”

Open interest is defined as the sum of all incomplete contracts in the market, represented as one-sided positions of trading members and their clients.

In computing open interest for the market, care is taken to include only open positions, since individual traders may have squared off their positions. For example, if A sold a futures contract to B, there is both an open long and an open short position in the market. If A buys a futures contract few days later, from C, with the intention to square the earlier position off, A has no open positions. But at a market level, there is no change in open positions, because, against the short position of B, there is a long position of C, instead of A.

Since open positions represent outstanding trades yet to be settled, it is not the same as the market volume in derivatives, which can be higher or lower than the open interest. Open interest is compared with the volume of trading in the derivatives market. The larger the open interest as a percentage of traded volume, the greater is the liquidity in the market. An increase in open interest is seen as an indicator of liquidity as it means fresh money is flowing into those contracts. Higher liquidity reduces the transactional costs of a trade and ensures smoother movement in prices.

6.8.2 Put Call Ratio

The ratio of outstanding put options to outstanding call options is called the put-call ratio (PCR).

PCR = Number of Put options outstanding / Number of Call options outstanding

If the number of call options is higher than the number of put options, the PCR is less than one. If the PCR is greater than one, the number of puts is greater than the number of calls. Traders interpret these signals in various ways, to interpret whether the signals are bullish or bearish.

Chapter 6: Sample Questions

1. **In a Nifty 50 futures contract the underlying is _____.**
   a. the top traded stocks of the Nifty index
   b. the average price of the stocks of the Nifty index
   c. the market capitalisation of the Nifty index
   d. the value of the Nifty 50 index

2. **The counterparty risk in a forward contract is mitigated in a futures contract primarily through _____.**
   a. collateralisation by both parties
   b. settlement on gross basis between two parties
   c. the functions of the clearing corporation
   d. the limits on positions and trading volumes

3. **The settlement price for determining daily mark-to-market margins for a futures transaction is _____.**
   a. the last traded price
   b. the average of the high, low and closing prices
   c. the weighted average price of last 30 minutes of trading
   d. the average of the last 60 minutes of trading

4. **If an option can be exercised any time before its expiry date, it is called _____.**
   a. European option
   b. American option
   c. At the money option
   d. Dynamic option

5. **Using derivative for speculative purposes is risky because _____.**
   a. the trader may default on the borrowings that funded the position
   b. the trader may not be able to close the positions in a falling market
   c. the trader may fail to pay the premium
   d. the trader may not be able to settle the exercise price of the option

Glossary of Financial Terms

Accrued Interest: The interest accruing on a security since the previous coupon date. If a security is sold between two payment dates, the buyer usually compensates the seller for the interest accrued, either within the price or as a separate payment.

Admission to Dealing: The process of granting permission to the securities of a company to be listed in a Stock Exchange and to provide trading facilities for the securities in the market.

Algorithmic Trading: A method of trading that uses algorithms based on pre-defined conditions as to price, timing and trading volume to place buy and sell orders in a financial security.

Allotment Advice: A letter sent to the successful applicant by the company stating allotment of shares or debentures or other securities against his application. The advice is not negotiable in the market.

American Option: A put or call option that can be exercised at any time prior to expiration. Most listed stock options, including those on European exchanges are US style options.

AMFI: Association of Mutual Funds in India

Analyst: A firm / company / an individual who is engaged either on his own behalf or on behalf of any other firm or organization is regularly publishing securities recommendations based on research either through print media and /or electronic media.

Arbitration: 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.

Asset Allocation: The process of determining the optimal division of an investor's portfolio among different asset classes. Most frequently this refers to allocations between debt, equity, and cash.

Asset Management: The function of managing the assets on behalf of a customer, usually for a fee.

Asset Management Company: A company which handles the day to day operations and investment decisions of a unit trust.

Auction: When a seller is not in a position to deliver the securities he has sold, the buyer sends in his applications for buying-in, so that the securities can be bought from the market and delivered

to him. This process by which the securities are procured on behalf of the defaulter is known as Auction.

Authorised Capital: The amount of capital that a company has been authorized to raise by way of equity and preference shares, as mentioned in the Articles of Association / Memorandum of Association of the company.

Back office: The part of a firm that is responsible for post-trade activities. Depending upon the organizational structure of the firm, the back office can be a single department or multiple units (such as documentation, risk management, accounting or settlements). Some firms have combined a portion of these responsibilities, usually found in the back office, particularly those related to risk management, into what they term as a middle office function.

Banker to an issue: A scheduled bank carrying on all or any of the issue related activities namely acceptance of application and application monies; acceptance of allotment or call monies; refund of application monies; and payment of dividend or interest warrants.

Basis: In a futures market, basis is defined as the cash price (or spot price) of whatever is being traded minus its futures price for the contract in question. It is important because changes in the relationship between cash and futures prices affect the values of using futures as a hedge. A hedge, however, will always reduce risk as long as the volatility of the basis is less than the volatility of the price of whatever is being hedged.

Basis Point: One hundredth of a percentage point. Basis points are used in currency and bond markets where the size of trades mean that large amounts of money can change hands on small price movements. Thus, if the yield on a Treasury bill rose from 5.25 percent to 5.33 percent the change would have been eight basis points.

Basis of Allotment: An allotment pattern of an issue among different categories of applicant.

Bear: A pessimist market operator who expects the market price of shares to decline. The term also refers to the one who has sold shares which he does not possess, in the hope of buying them back at a lower price, when the market price of the shares come down in the near future.

Bear Market: A weak or falling market characterized by the dominance of sellers.

Benchmark index: Indicators used to provide a point of reference for evaluating a fund's performance.

Beta: A measure of the volatility of a stock relative to the market index in which the stock is included. A low beta indicates relatively low risk; a high beta indicates a high risk.

Bid: An offer of a price to buy in an auction. Business on the Stock Exchange is done through bids. Bid also refers to the price one is willing to pay for a security.

Bid–Ask spread: The difference between the bid price and the ask price.

Block Trading: Buying and selling a block of securities usually takes place when restructuring or liquidating a large portfolio.

Blue Chip: The best rated shares with the highest status as investment based on return, yield, safety, marketability and liquidity.

Bonus Shares: Shares issued by companies to their shareholders free of cost by capitalization of accumulated reserves from the profits earned in the earlier years.

Book building process: A process undertaken by which a demand for the securities proposed to be issued by a corporate body is elicited and built up and the price for such securities is assessed for the determination of the quantum of such securities to be issued by means of a notice, circular, advertisement, document or information memoranda or offer document.

Book Closure: The periodic closure of the Register of Members and Transfer Books of the company, to take a record of the shareholders to determine their entitlement to dividends or to bonus or right shares or any other rights pertaining to shares.

Book Runner: A Lead Merchant Banker who has been appointed by the issuer company for maintaining the book. The name of the Book Running Lead Manager will be mentioned in the offer document of the Issuer Company.

Book Value: The net amount shown in the books or in the accounts for any asset, liability or owners' equity item. In the case of a fixed asset, it is equal to the cost or revalued amount of the asset less accumulated depreciation. It is also called as carrying value. The book value of a firm is its total net assets, i.e. the excess of total assets over total liabilities.

Boom: A condition of the market denoting increased activity with rising prices and higher volume of business resulting from greater demand of securities. It is a state where enlarged business, both investment and speculative, has been taking place for a sufficiently reasonable period of time.

Breadth of the Market: The number of securities listed on the market in which there is regular trading.

Break: A rapid and sharp decline in a security or index.

Broker: A member of a Stock Exchange who acts as an agent for clients and buys and sells shares

on their behalf in the market. Though strictly a stock broker is an agent, yet for the performance of his part of the contract both in the market and with the client, he is deemed as a principal, a peculiar position of dual responsibility.

Brokerage: Commission payable to the stockbroker for arranging sale or purchase of securities. Scale of brokerage is officially fixed by the Stock Exchange. Brokerage scales fixed in India are the maximum chargeable commission.

Broker dealer: Any person, other than a bank engaged in the business of buying or selling securities on its own behalf or for others.

Bubble: A speculative sharp rise in share prices which like the bubble is expected to suddenly burst.

Bull: A market player who believes prices will rise and would, therefore, purchase a financial instrument with a view to selling it at a higher price.

Bull Market: A rising market with abundance of buyers and relatively few sellers.

Bulk deal: A transaction in shares listed on an exchange where the total quantity of equity shares bought or sold exceeds 0.50 percent of the total number of equity shares of that company listed on the exchange.

Business Day: A day on which the Stock Exchange is open for business and trading in securities.

Buy back: The repurchase by a company of its own stock or bonds.

Buy on margin: To buy shares with money borrowed from the stockbroker, who maintains a margin account for the customer.

Cash Market: A market for sale of security against immediate delivery, as opposed to the futures market.

Cash Settlement: The settlement provision on index options and index futures contracts that do not require delivery of the underlying security. For options, the difference between the settlement price on the underlying index and the option's exercise price is paid to the option holder at exercise. For futures contracts, the exchange establishes a settlement price on the final day of trading and all remaining open positions are marked to market at that price. However, all stock derivatives contracts are settled physically as per SEBI directives.

Churning: An unethical practice employed by some brokers to increase their commissions by excessively trading in a client's account. In the context of the stock market, churning refers to a

period of heavy trading with few sustained price trends and little movement in stock market indices.

Circuit Breaker: A system to curb excessive speculation in the stock market, applied by the Stock Exchange authorities, when the index spurts or plunges by more than a specified per cent. Trading is then suspended for some time to let the market cool down.

Circular trading: A fraudulent trading scheme where sell or buy orders are entered by a person who knows that the same number of shares at the same time and for the same price either have been or will be entered. These trades do not represent a real change in the beneficial ownership of the security. These trades are entered with the intention of raising or depressing the prices of securities.

Clearing: It refers to determine a) what members of a stock exchange are due to deliver and b) what members of the stock exchange are due to receive on the settlement date.

Clearing Corporation: A department of an exchange or a separate legal entity that provides a range of services related to the clearance and settlement of trades and the management of risks associated with the resulting contracts. A clearing corporation is the central counterparty to all trades, that is, the buyer to every seller and the seller to every buyer.

Clearing member: A member of a clearing corporation or clearing house of an exchange, who may clear and settle transactions in securities.

Closing Price: The rate at which the last transaction in a security is struck before the close of the trading hours.

Co-location: Location of computer servers of trading members of a stock exchange in the same premises where the servers of the exchange are located in order to minimize latency.

Confirmation process: The procedure for verifying trade details with a counterparty. This is generally done by exchanging via fax or e-mailing a document (i.e. a confirmation) identifying the trade details and any governing legal documentation and verifying the accuracy of the information provided by the counterparty (i.e. matching).

Contract Note: A note issued by a broker to his constituent setting out the number of securities bought or sold in the market along with the rate, time and date of contract.

Counterparty risk: The risk that between the time a transaction has been arranged and the time of actual settlement, the counterparty to the transaction may fail to perform his obligation to the trade i.e. make the appropriate payment or deliver the traded security.

Cross-margin benefit: A reduction in total margin payable on offsetting positions in the cash segment and derivatives segment.

Custodian: An organization, usually a bank or any other approved institutions, that hold the securities and other assets of mutual funds and other institutional investors.

Daily Margin: The amount that has to be deposited at the Stock Exchange on a daily basis for the purchase or sale of a security. This amount is decided by the stock exchange.

Day Order: An order that is placed for execution if possible, during only one trading session. If the order cannot be executed that day it is automatically cancelled.

Delisting of securities: 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.

Delivery: Presentation of securities with transfer deeds in fulfillment of a transaction.

Dealer: A firm that enters into transactions as a counter-party on both sides of the market in one or more products.

Dematerialize: The process of transforming securities holdings in physical form to those in electronic form through a Depository Participant.

Depository: A system of organization, which keeps records of securities, deposited by its depositors. The records may be physical or simply electronic records.

Depository participant (DP): An agent of the depository through which it interfaces with the investor. A DP can offer depository services only after it gets proper registration from SEBI.

Depreciation: A fall in value of a security or security index or a currency in terms of others or its purchasing power.

Depth of Market: The number of shares of a security that can be bought or sold at the best bid or offer price.

Direct Market Access: An electronic facility that allows institutional investors to place their buy and sell orders directly on the Order Book of the stock exchange instead of placing such orders through brokers.

Exchange-traded derivative: A derivative which is listed and traded at an organized market-place. Derivatives exchanges generally provide standardized contracts and central clearing facilities for

participants.

Exchange traded funds (ETF): A security that tracks an index but has the flexibility of trading like a stock.

Ex-Dividend Date: The date on or after which the buyer of a security is not entitled to the dividend already declared.

Ex-Right Date: The date on which the official quotation for a share is marked XR i.e. ex rights, in the daily official list.

Face Value: The value that appears on the face of the scrip, same as nominal or par value of share/debentures.

Firm allotment: Allotment on a firm basis in public issues by an issuing company made to Indian and multilateral development financial institutions, Indian mutual funds, foreign portfolio investors including non-resident Indians and overseas corporate bodies and permanent/regular employees of the issuer company.

Float: The number of shares issued and outstanding of a company's stock.

Floating rate coupon: Coupon rate that varies with (floats against) a standard market benchmark or index.

Floating Stock: The fraction of the paid up equity capital of a company which normally participates in day to day trading.

Green shoe option: Green Shoe option means an option of allotting equity shares in excess of the shares offered in the public issue as a post-listing price stabilizing mechanism in accordance with the specific provisions in the SEBI (ICDR) Regulations.

Hedge Funds: Private investment pools that invest aggressively in all types of markets, with managers of the fund receiving a percentage of the investment profits.

High-frequency trading: A type of trading that uses computer programs to place a very high number of orders in fractions of a second.

Insider trading: Practice of corporate agents buying or selling their corporation's securities without disclosing to the public significant information which is known to them but which has not yet affected the price.

Institutional Investors: Organizations those invest, including insurance companies, depository

institutions, pension funds, investment companies, and endowment funds.

Interoperability of clearing corporations: A mechanism that allows the clearing house of one stock exchange to clear and settle trades executed on another stock exchange.

ISIN (International Securities Identification Number): A unique identification number allotted for each security in the depository system by SEBI.

Limit Order: An order to buy or sell a specified number of shares when a specified price is reached.

Listed Company: A company which has any of its securities offered through an offer document listed on a recognized stock exchange and also includes Public Sector Undertakings whose securities are listed on a recognized stock exchange.

Listing: Formal admission of a security into a public trading system.

Listing Agreement: An agreement which has to be entered into by companies when they seek listing for their shares on a Stock Exchange. Companies are called upon to keep the stock exchange fully informed of all corporate developments having a bearing on the market price of shares like dividend, rights, bonus shares, etc.

Long Position: A position showing a purchase or a greater number of purchases than sales in anticipation of a rise in prices. A long position can be closed out through the sale of an equivalent amount.

Margin: An advance payment of a portion of the value of a stock transaction. The amount of credit a broker or lender extends to a customer for stock purchase.

Marked-to-market basis: The process whereby the book value or collateral value of a security is adjusted to reflect current market value.

Market capitalization: The market value of a company, calculated by multiplying the number of shares issued and outstanding by their current market price.

Market Maker: A member firm who give two way quotations for particular security(ies) and who is under an obligation to buy and sell them subject to certain conditions such as overall exposure, spread etc.

Matched Transaction: A check is carried out on the computer to find out whether purchases and sales as reported by the members match. The transactions, thus compared are called matched transactions.

Merchant Banker: Any person who is engaged in the business of issue management either by making arrangement regarding selling, buying or subscribing to securities or acting as manager, consultant, adviser or rendering corporate advisory services in relation to such issue management.

MIBOR: Mumbai Interbank Offer Rates. Calculated by the average of the interbank offer rates based on quotations at nearly 30 major banks.

Odd Lot: Anything less than the standard unit of trading.

Offer Document: As per SEBI (ICDR) Regulations, 2018, offer document means a red herring prospectus, prospectus or shelf prospectus, as applicable, referred to under the Companies Act, 2013, in case of a public issue, and a letter of offer in case of a rights issue.

Offer for Sale: An offer of securities by existing shareholder(s) of a company to the public for subscription, through an offer document.

Offer period: The period between the date of entering into Memorandum of Understanding or the public announcement, as the case may be and the date of completion of offer formalities relating to the offer.

Offer Price: Price at which units in trust can be bought. It might have an entry fee. It also refers to the price at which securities are offered to the public.

Open interest: The number of contracts outstanding for a given option or futures contract.

Open Order: An order to buy and sell a security that remains in effect until it is either cancelled by the customer or executed.

Order book: It is an 'electronic book' that shows the demand and supply of the shares of the company at various prices.

OTC (Over the Counter): A financial transaction that is not made on an organized exchange. Generally, the parties must negotiate all the details of each transaction or agree to use simplifying market conventions.

Pari Passu: A term used to describe new issue of securities which have same rights as similar issues already in existence.

Pay-in / Pay-out: The days on which the members of a Stock Exchange pay or receive the amounts due to them are called pay in or pay out days respectively.

Position limit: The maximum number of listed option contracts on a single security which can be

held by an investor or group of investors acting jointly.

Price Band: The range within which the price of a security or the index of a currency is permitted to move within a given period.

Price discovery: A general term for the process by which financial markets attain an equilibrium price, especially in the primary market. Usually refers to the incorporation of information into the price.

Price sensitive information: Any information which relates directly or indirectly to a company and which if published is likely to materially affect the price of securities of the company.

Prospectus: Any document described or issued as a prospectus and includes any notice, circular, advertisement or other document inviting deposits from the public or inviting offers from the public for the subscription or purchase of any shares or debentures of a body corporate.

Proxy: One who votes for and on behalf of a shareholder at a company meeting.

Record Date: A date on which the records of a company are closed for the purpose of determining the stockholders to whom dividends, proxies, rights etc., are to be sent.

Regulatory Sandbox: A framework set up by a regulator to enable FinTech start-ups to conduct live experiments of innovations in a controlled manner under the supervision of the regulator.

Rights Issue/ Rights Shares: The issue of new securities at a pre-decided price to the existing shareholders in a fixed ratio to those already held.

Rolling settlement: The practice of settling a transaction within a fixed number of days after the trade is agreed.

Screen based trading: Form of trading that uses modern telecommunication and computer technology to combine information transmission with trading in financial markets.

Secondary Market: The market for previously issued securities or financial instruments.

Securities Lending and Borrowing Mechanism: A platform provided by stock exchanges for online, anonymous borrowing and lending of securities with settlement guaranteed by the exchange.

Settlement Date: The date specified for delivery of securities between securities firms.

Short position: In futures, the short has sold the commodity or security for future delivery; in options, the short has sold the call or the put and is obligated to take a futures position if he or

she is assigned for exercise.

Stock splits: A distribution of company's own capital stock to existing stockholders with the purpose of reducing the market price of the stock, which would hopefully increase the demand for the shares.

Trading member: A member of the derivatives exchange or derivatives segment of a stock exchange who settles the trade in the clearing corporation or clearing house through a clearing member.

Transfer Agents: An agent designated by the company to carry out the function of transfer of shares.

Underwriting: An agreement with or without conditions to subscribe to the securities of a body corporate when the existing shareholders of such body corporate or the public do not subscribe to the securities offered to them.

Value at Risk (VaR): VaR is the maximum loss over a target horizon such that there is a low, pre-specified probability that the actual loss will be larger.

Vanilla Issue: A straight fixed rate issue which has terms and conditions usually accepted as being conventional to a particular securities market.

Volume of Trading: The total number of shares which changes hands in a particular company's securities. This information is useful in explaining and interpreting fluctuation in share prices.

Voluntary delisting: Delisting of securities of a body corporate voluntarily by a promoter or an acquirer or any other person other than the stock exchange.

Voting Rights: The entitlement of a shareholder to exercise vote in the general meeting of a company.

This glossary has been compiled by NISM by referring to the following sources:

- Glossary of the Capital Market by SEBI
- Relevant SEBI Regulations
- Websites of recognized Stock Exchanges

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